

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

OR

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

For the transition period from _____ to _____

Commission File Number **001-11595**

Astec Industries, Inc.

(Exact name of registrant as specified in its charter)

Tennessee

(State or other jurisdiction of
incorporation or organization)

62-0873631

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

1725 Shepherd Road, Chattanooga, Tennessee
(Address of principal executive offices)

37421
(Zip Code)

(423) 899-5898

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

YES NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

YES NO

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

Large Accelerated Filer

Accelerated Filer

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

Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

YES

NO

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class
Common Stock, par value \$0.20

Outstanding at October 24, 2017
23,069,748

PART I - Financial Information

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PART I -- FINANCIAL INFORMATION
Item 1. Financial Statements

Astec Industries, Inc.
Condensed Consolidated Balance Sheets
(in thousands)
(unaudited)

| | September 30, 2017 | December 31, 2016 |
|---|-----------------------|----------------------|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 66,379 | \$ 82,371 |
| Investments | 1,655 | 1,024 |
| Trade receivables | 105,002 | 106,659 |
| Other receivables | 4,691 | 4,014 |
| Inventories | 399,346 | 360,404 |
| Prepaid expenses and other | 32,825 | 22,361 |
| Total current assets | 609,898 | 576,833 |
| Property and equipment, net | 180,703 | 180,538 |
| Investments | 14,468 | 13,965 |
| Goodwill | 42,103 | 40,804 |
| Other long-term assets | 29,840 | 31,461 |
| Total assets | \$ 877,012 | \$ 843,601 |
| LIABILITIES AND EQUITY | | |
| Current liabilities: | | |
| Short-term debt | \$ -- | \$ 4,632 |
| Current maturities of long-term debt | 2,689 | 2,538 |
| Accounts payable | 60,107 | 57,297 |
| Income tax payable | 378 | 747 |
| Accrued product warranty | 13,989 | 13,156 |
| Customer deposits | 50,143 | 39,102 |
| Accrued payroll and related liabilities | 21,272 | 25,693 |
| Accrued loss reserves | 2,726 | 2,852 |
| Other current liabilities | 25,932 | 22,844 |
| Total current liabilities | 177,236 | 168,861 |
| Long-term debt | 2,216 | 4,116 |
| Deferred income tax liabilities | 1,812 | 1,669 |
| Other long-term liabilities | 20,546 | 20,114 |
| Total liabilities | 201,810 | 194,760 |
| Shareholders' equity | 674,024 | 647,830 |
| Non-controlling interest | 1,178 | 1,011 |
| Total equity | 675,202 | 648,841 |
| Total liabilities and equity | \$ 877,012 | \$ 843,601 |

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|-------------------------------------|------------|------------------------------------|------------|
| | 2017 | 2016 | 2017 | 2016 |
| Net sales | \$ 252,054 | \$ 247,752 | \$ 872,364 | \$ 820,868 |
| Cost of sales | 212,970 | 192,363 | 691,985 | 620,071 |
| Gross profit | 39,084 | 55,389 | 180,379 | 200,797 |
| Selling, general, administrative and engineering expenses | 45,494 | 43,950 | 142,836 | 132,716 |
| Income (loss) from operations | (6,410) | 11,439 | 37,543 | 68,081 |
| Interest expense | 188 | 264 | 638 | 1,057 |
| Other income, net of expenses | 1,113 | 505 | 1,886 | 1,324 |
| Income (loss) from operations before income taxes | (5,485) | 11,680 | 38,791 | 68,348 |
| Income taxes | (2,782) | 4,845 | 12,055 | 25,694 |
| Net income (loss) | (2,703) | 6,835 | 26,736 | 42,654 |
| Net loss attributable to non-controlling interest | (36) | (3) | (137) | (119) |
| Net income (loss) attributable to controlling interest | \$ (2,667) | \$ 6,838 | \$ 26,873 | \$ 42,773 |
| Earnings (loss) per common share | | | | |
| Net income (loss) attributable to controlling interest: | | | | |
| Basic | \$ (0.12) | \$ 0.30 | \$ 1.17 | \$ 1.86 |
| Diluted | \$ (0.12) | \$ 0.30 | \$ 1.16 | \$ 1.85 |
| Weighted average number of common shares outstanding: | | | | |
| Basic | 23,029 | 23,001 | 23,023 | 22,989 |
| Diluted | 23,029 | 23,145 | 23,180 | 23,138 |
| Dividends declared per common share | \$ 0.10 | \$ 0.10 | \$ 0.30 | \$ 0.30 |

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)
(unaudited)

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|--|-------------------------------------|----------|------------------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Net income (loss) | \$ (2,703) | \$ 6,835 | \$ 26,736 | \$ 42,654 |
| Other comprehensive income (loss): | | | | |
| Income tax benefit on change in unrecognized pension and post-retirement benefit costs | -- | 111 | -- | -- |
| Foreign currency translation adjustments | 1,346 | 69 | 4,906 | (219) |
| Income tax provision on foreign currency translation adjustments | -- | (57) | -- | (783) |
| Other comprehensive income (loss) | 1,346 | 123 | 4,906 | (1,002) |
| Comprehensive income (loss) | (1,357) | 6,958 | 31,642 | 41,652 |
| Comprehensive income (loss) attributable to non-controlling interest | 8 | (130) | (117) | (55) |
| Comprehensive income (loss) attributable to controlling interest | \$ (1,365) | \$ 7,088 | \$ 31,759 | \$ 41,707 |

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

| | Nine Months Ended September 30, | |
|--|------------------------------------|------------------|
| | 2017 | 2016 |
| Cash flows from operating activities: | | |
| Net income | \$ 26,736 | \$ 42,654 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 19,253 | 18,118 |
| Provision for doubtful accounts | 216 | 327 |
| Provision for warranties | 11,842 | 13,135 |
| Deferred compensation provision (benefit) | (725) | 1,240 |
| Stock-based compensation | 2,774 | 2,021 |
| Deferred income tax benefit | (224) | (2,019) |
| Gain on disposition of fixed assets | (292) | (322) |
| Distributions to SERP participants | (206) | (525) |
| Change in operating assets and liabilities: | | |
| Sale (purchase) of trading securities, net | 74 | (1,545) |
| Trade and other receivables | 766 | (5,224) |
| Inventories | (39,332) | (8,120) |
| Prepaid expenses and other assets | 4,601 | (3,132) |
| Accounts payable | 2,820 | 3,234 |
| Accrued product warranty | (11,072) | (11,011) |
| Customer deposits | 11,040 | 35,685 |
| Prepaid and income taxes payable, net | (16,246) | 5,655 |
| Other | (1,276) | 6,602 |
| Net cash provided by operating activities | 10,749 | 96,773 |
| Cash flows from investing activities: | | |
| Business acquisition, net of cash acquired | -- | (39,613) |
| Expenditures for property and equipment | (13,920) | (17,483) |
| Proceeds from sale of property and equipment | 337 | 577 |
| Other | (580) | (174) |
| Net cash used by investing activities | (14,163) | (56,693) |
| Cash flows from financing activities: | | |
| Payment of dividends | (6,920) | (6,912) |
| Borrowings under bank loans | -- | 1,695 |
| Repayments of bank loans | (6,583) | (5,570) |
| Sale (purchase) of Company shares held by SERP, net | 126 | (99) |
| Withholding tax paid upon vesting of restricted stock units | (501) | (1,024) |
| Purchase of subsidiary shares | (31) | (724) |
| Net cash used by financing activities | (13,909) | (12,634) |
| Effect of exchange rates on cash | 1,331 | (34) |
| Net increase (decrease) in cash and cash equivalents | (15,992) | 27,412 |
| Cash and cash equivalents, beginning of period | 82,371 | 25,062 |
| Cash and cash equivalents, end of period | \$ 66,379 | \$ 52,474 |

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statement of Equity
For the Nine Months Ended September 30, 2017
(in thousands)
(unaudited)

| | Common Stock Shares | Common Stock Amount | Additional Paid-in- Capital | Accum- ulated Other Compre- hensive Loss | Company Shares Held by SERP | Retained Earnings | Non- controlling Interest | Total Equity |
|--|---------------------------|---------------------------|-----------------------------------|---|--------------------------------------|----------------------|---------------------------------|-------------------|
| Balance, December 31, 2016 | 23,046 | \$ 4,609 | \$ 139,970 | \$ (31,562) | \$ (1,958) | \$ 536,771 | \$ 1,011 | \$ 648,841 |
| Net income | -- | -- | -- | -- | -- | 26,873 | (137) | 26,736 |
| Other comprehensive income | -- | -- | -- | 4,906 | -- | -- | -- | 4,906 |
| Change in ownership percentage of subsidiary | -- | -- | -- | -- | -- | -- | (18) | (18) |
| Dividends declared | -- | -- | 7 | -- | -- | (6,927) | -- | (6,920) |
| Stock-based compensation | -- | -- | 1,710 | -- | -- | -- | -- | 1,710 |
| Stock issued under incentive plans | 24 | 5 | (5) | -- | -- | -- | -- | -- |
| Withholding tax paid upon vesting of RSUs | -- | -- | (501) | -- | -- | -- | -- | (501) |
| SERP transactions, net | -- | -- | 173 | -- | (47) | -- | -- | 126 |
| Other | -- | -- | -- | -- | -- | -- | 322 | 322 |
| Balance, September 30, 2017 | <u>23,070</u> | <u>\$ 4,614</u> | <u>\$ 141,354</u> | <u>\$ (26,656)</u> | <u>\$ (2,005)</u> | <u>\$ 556,717</u> | <u>\$ 1,178</u> | <u>\$ 675,202</u> |

See Notes to Unaudited Condensed Consolidated Financial Statements

Note 1. Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X promulgated under the Securities Exchange Act of 1934. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the nine-month period ended September 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. It is suggested that these unaudited condensed consolidated financial statements be read in conjunction with the financial statements and the notes thereto included in the Astec Industries, Inc. Annual Report on Form 10-K for the year ended December 31, 2016.

The unaudited condensed consolidated balance sheet as of December 31, 2016 has been derived from the audited consolidated financial statements at that date but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements.

Dollar and share amounts shown are in thousands, except per share amounts, unless otherwise specified.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers", which supersedes existing revenue guidance under U.S. GAAP. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The implementation of this new standard will require companies to use more judgment and to make more estimates than under current guidance. The standard, as amended, is effective for public companies for annual periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018 using the modified retrospective method. Company management has reviewed documentation of revenue streams received from its 16 manufacturing subsidiaries to assist in its effort to determine the effect the new standard will have on its financial reporting. Numerous meetings and conference calls have been held with Company management, controllers of the manufacturing subsidiaries and outside revenue experts to discuss the information in an effort to identify areas where a change in timing of revenue recognition may be required under the new guidance. As additional documentation is currently being assimilated, reviewed and evaluated, the Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position, cash flows or results of operations.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments - Overall (Subtopic 825-10)", which requires, among other things, equity investments with readily determinable fair values, except those accounted for under the equity method of accounting or those that result in consolidation of the investee, to be measured at fair value with changes in fair value recognized in net income. The standard is effective for public companies in fiscal years beginning after December 15, 2017, and the Company expects to adopt the standard effective January 1, 2018. The Company does not expect the adoption of this standard to have a material impact on the Company's financial position, cash flows or results of operations.

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)", which significantly changes the accounting for operating leases by lessees. The accounting applied by lessors is largely unchanged from that applied under previous guidance. The new guidance requires lessees to recognize lease assets and lease liabilities in the balance sheet, initially measured at the present value of the lease payments, for leases which were classified as operating leases under previous guidance. Lease cost included in the statement of income will be calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. Lessees may make an accounting policy election to exclude leases with a term of 12 months or less from the requirement to record related assets and liabilities. The new standard is effective for public companies for fiscal years beginning after December 15, 2018. The Company plans to adopt the new standard effective January 1, 2019. The Company does not expect the adoption of this standard to have a material impact on its results of operations; however, the Company has not determined the impact the adoption of this new standard will have on its financial position or cash flows.

In March 2016, the FASB issued ASU No. 2016-08, "Revenue from Contracts with Customers (Topic 606)", which does not change the core principles of ASU No. 2014-09 discussed above, but rather clarifies the implementation guidance in order to eliminate the potential for diversity in practice arising from inconsistent application of the principal versus agent guidance. Under the new guidance, when an entity determines it is a principal in a transaction, the entity recognizes revenue in the gross amount of consideration; however in transactions where an entity determines it is an agent, the entity recognizes revenue in the amount of any fee or commission to which it expects to be entitled. The standard is effective for public companies for annual periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018. The Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position, cash flows or results of operations.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments". The standard changes how credit losses are measured for most financial assets and certain other instruments that currently are not measured through net income. The standard will require an expected loss model for instruments measured at amortized cost as opposed to the current incurred loss approach. In valuing available for sale debt securities, allowances will be required to be recorded, rather than the current approach of reducing the carrying amount, for other than temporary impairments. A cumulative adjustment to retained earnings is to be recorded as of the beginning of the period of adoption to reflect the impact of applying the provisions of the standard. The standard is effective for public companies for periods beginning after December 15, 2019 and the Company expects to adopt the new standard as of January 1, 2020. The Company has not yet determined what impact, if any, the adoption of this new standard will have on the Company's financial position, cash flows or results of operations.

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)" which clarifies how certain cash receipts and cash payments should be presented on the statement of cash flows. The statement also addresses how the predominance principle should be applied when cash payments have aspects of more than one class of cash flows. The standard is effective for public companies in fiscal years beginning after December 15, 2017, and the Company expects to adopt the standard effective January 1, 2018. The Company does not expect the adoption of this new standard to have a material impact on the Company's statement of cash flows.

In October 2016, the FASB issued ASU No. 2016-16, "Intra-Entity Transfers of Assets Other Than Inventory," which requires companies to account for the income tax effects of intercompany sales and transfers of assets other than inventory, such as intangible assets, when the transfer occurs. This is a change from current guidance, which requires companies to defer the income tax effects of intercompany transfers of assets until the asset has been sold to an outside party or otherwise recognized by being depreciated, amortized, or impaired. The new guidance will require companies to defer the income tax effects of only intercompany transfers of inventory. The standard is effective for public companies in fiscal years beginning after December 15, 2017. Early adoption is permitted as of the beginning of an annual period and requires companies to apply a modified retrospective approach. The Company plans to adopt the new standard effective January 1, 2018. The Company has not yet determined what impact the adoption of this new standard will have on the Company's financial position, cash flows or results of operations.

In January 2017, the FASB issued ASU No. 2017-01, "Business Combinations (Topic 805), Clarifying the Definition of a Business," which provides additional guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The standard is effective for public companies for annual or interim periods beginning after December 15, 2017. The Company plans to adopt the new standard effective January 1, 2018. The Company does not expect the application of this standard to have a material impact on its financial position, results of operations or cash flows.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles-Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment," which eliminates Step 2 from the goodwill impairment test for public companies. Currently, Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The new guidance stipulates that an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value, up to the amount of goodwill allocated to the reporting unit. The standard is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019 with early adoption permitted. The Company plans to early adopt this standard for its annual impairment testing to be performed as of December 31, 2017. The Company does not expect the application of this standard to have a material impact on its financial position, results of operations or cash flows.

In August 2017, the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815), Targeted Improvements to Hedging Activities", to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. The new guidance is effective for public companies for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years with early adoption permitted in any interim period after its issuance. The Company plans to adopt the new standard effective January 1, 2019. The Company does not expect the application of this standard to have a material impact on its financial position, results of operations or cash flows.

Note 2. Earnings (Loss) per Share

Basic earnings (loss) per share are determined by dividing earnings (loss) by the weighted average number of common shares outstanding during each period. Diluted earnings (loss) per share include the potential dilutive effect of restricted stock units and shares held in the Company's Supplemental Executive Retirement Plan.

The following table sets forth the computation of net income (loss) attributable to controlling interest and the number of basic and diluted shares used in the computation of earnings (loss) per share:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|--|--|----------|---------------------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| | | | | |
| Numerator: | | | | |
| Net income (loss) attributable to controlling interest | \$ (2,667) | \$ 6,838 | \$ 26,873 | \$ 42,773 |
| Denominator: | | | | |
| Denominator for basic earnings (loss) per share | 23,029 | 23,001 | 23,023 | 22,989 |
| Effect of dilutive securities: | | | | |
| Restricted stock units | -- | 79 | 94 | 85 |
| Supplemental Executive Retirement Plan | -- | 65 | 63 | 64 |
| Denominator for diluted earnings (loss) per share | 23,029 | 23,145 | 23,180 | 23,138 |

Note 3. Receivables

Receivables are net of allowances for doubtful accounts of \$1,480 and \$1,511 as of September 30, 2017 and December 31, 2016, respectively.

Note 4. Inventories

Inventories consist of the following:

| | September 30, 2017 | December 31, 2016 |
|-------------------------|-----------------------|----------------------|
| Raw materials and parts | \$ 143,523 | \$ 137,763 |
| Work-in-process | 142,603 | 115,613 |
| Finished goods | 88,094 | 84,898 |
| Used equipment | 25,126 | 22,130 |
| Total | <u>\$ 399,346</u> | <u>\$ 360,404</u> |

Raw material inventory is comprised of purchased steel and other purchased items for use in the manufacturing process or held for sale for the after-market parts business. The category also includes the manufacturing cost of completed equipment sub-assemblies produced for either integration into equipment manufactured at a later date or for sale in the Company's after-market parts business.

Work-in-process inventory consists of the value of materials, labor and overhead incurred to date in the manufacturing of incomplete equipment or incomplete equipment sub-assemblies being produced.

Finished goods inventory consists of completed equipment manufactured for sale to customers.

Used equipment inventory consists of equipment accepted in trade or purchased on the open market. The category also includes equipment rented to prospective customers on a short-term or month-to-month basis. Used equipment is valued at the lower of acquired or trade-in cost or net realizable value determined on each separate unit.

Inventories are valued at the lower of cost (first-in, first-out) or net realizable value, which requires the Company to make specific estimates, assumptions and judgments in determining the amount, if any, of reductions in the valuation of inventories to their net realizable values. The net realizable values of the Company's products are impacted by a number of factors, including changes in the price of steel, competitive sales pricing, quantities of inventories on hand, the age of the individual inventory items, market acceptance of the Company's products, actions by our competitors, the condition of our used and rental inventory and general economic factors. Once an inventory item's value has been deemed to be less than cost, a net realizable value allowance is calculated and a new "cost basis" for that item is effectively established. This new cost is retained for that item until such time as the item is disposed of or the Company determines that an additional write-down is necessary. Additional write-downs may be required in the future based upon changes in assumptions due to general economic downturns in the markets in which the Company operates, changes in competitor pricing, new product design or other technological advances introduced by the Company or its competitors and other factors unique to individual inventory items.

The most significant component of the Company's inventory is steel. A significant decline in the market price of steel could result in a decline in the market value of the equipment or parts we sell. During periods of significant declining steel prices, the Company reviews the valuation of its inventories to determine if reductions are needed in the recorded value of inventory on hand to its net realizable value.

The Company reviews the individual items included in its finished goods, used equipment and rental equipment inventory on a model-by-model or unit-by-unit basis to determine if any item's net realizable value is below its carrying value. This analysis is expanded to include items in work-in-process and raw material inventory if factors indicate those items may also be impacted. In performing this review, judgments are made and, in addition to the factors discussed above, additional consideration is given to the age of the specific items of used or rental inventory, prior sales offers or lack thereof, the physical condition of the specific items and general market conditions for the specific items. Additionally, an analysis of raw material inventory is performed to calculate reserves needed for obsolete inventory based upon quantities of items on hand, the age of those items and their recent and expected future usage or sale.

When the Company determines that the value of inventory has become impaired through damage, deterioration, obsolescence, changes in price levels, excessive levels of inventory or other causes, the Company reduces the carrying value to the net realizable value based on estimates, assumptions and judgments made from the information available at that time. Abnormal amounts of idle facility expense, freight, handling cost and wasted materials are recognized as current period charges.

Note 5. Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation of \$234,594 and \$220,444 as of September 30, 2017 and December 31, 2016, respectively.

Note 6. Fair Value Measurements

The Company has various financial instruments that must be measured at fair value on a recurring basis, including marketable debt and equity securities held by Astec Insurance Company ("Astec Insurance"), the Company's captive insurance company, and marketable equity securities held in an unqualified Supplemental Executive Retirement Plan ("SERP"). The obligations of the Company associated with the financial assets held in the SERP also constitute a liability of the Company for financial reporting purposes and are included in other long-term liabilities in the accompanying unaudited condensed consolidated balance sheets. The Company's subsidiaries also occasionally enter into foreign currency exchange contracts to mitigate exposure to fluctuations in currency exchange rates.

The carrying amount of cash and cash equivalents, trade receivables, other receivables, revolving debt, accounts payable and long-term debt approximates their fair value because of their short-term nature and/or interest rates associated with the instruments. Investments are carried at their fair value based on quoted market prices for identical or similar assets or, where no quoted prices exist, other observable inputs for the asset. The fair values of foreign currency exchange contracts are based on quotations from various banks for similar instruments using models with market based inputs.

Financial assets and liabilities are categorized based upon the level of judgment associated with the inputs used to measure their fair value. The inputs used to measure the fair value are identified in the following hierarchy:

- Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 - Unadjusted quoted prices in active markets for similar assets or liabilities; or unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active; or inputs other than quoted prices that are observable for the asset or liability.
- Level 3 - Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

As indicated in the tables below (which excludes the Company's pension assets), the Company has determined that all of its financial assets and liabilities as of September 30, 2017 and December 31, 2016 are Level 1 and Level 2 in the fair value hierarchy as defined above:

| | September 30, 2017 | | |
|-----------------------------------|--------------------|-----------------|------------------|
| | Level 1 | Level 2 | Total |
| Financial Assets: | | | |
| Trading equity securities: | | | |
| SERP money market fund | \$ 389 | \$ -- | \$ 389 |
| SERP mutual funds | 4,070 | -- | 4,070 |
| Preferred stocks | 365 | -- | 365 |
| Trading debt securities: | | | |
| Corporate bonds | 5,591 | -- | 5,591 |
| Municipal bonds | -- | 2,093 | 2,093 |
| Floating rate notes | 397 | -- | 397 |
| Asset backed securities | -- | 556 | 556 |
| U.S. Treasury notes | 1,039 | -- | 1,039 |
| Other | -- | 1,623 | 1,623 |
| Derivative financial instruments | -- | 32 | 32 |
| Total financial assets | <u>\$ 11,851</u> | <u>\$ 4,304</u> | <u>\$ 16,155</u> |
| Financial Liabilities: | | | |
| SERP liabilities | \$ -- | \$ 8,061 | \$ 8,061 |
| Derivative financial instruments | -- | 261 | 261 |
| Total financial liabilities | <u>\$ --</u> | <u>\$ 8,322</u> | <u>\$ 8,322</u> |

| | December 31, 2016 | | |
|-----------------------------------|-------------------|-----------------|------------------|
| | Level 1 | Level 2 | Total |
| Financial Assets: | | | |
| Trading equity securities: | | | |
| SERP money market fund | \$ 92 | \$ -- | \$ 92 |
| SERP mutual funds | 3,335 | -- | 3,335 |
| Preferred stocks | 475 | -- | 475 |
| Trading debt securities: | | | |
| Corporate bonds | 5,413 | -- | 5,413 |
| Municipal bonds | -- | 2,248 | 2,248 |
| Floating rate notes | 118 | -- | 118 |
| Asset backed securities | -- | 637 | 637 |
| U.S. Treasury note | 388 | -- | 388 |
| Other | -- | 2,283 | 2,283 |
| Derivative financial instruments | -- | 144 | 144 |
| Total financial assets | <u>\$ 9,821</u> | <u>\$ 5,312</u> | <u>\$ 15,133</u> |
| Financial Liabilities: | | | |
| SERP liabilities | \$ -- | \$ 7,882 | \$ 7,882 |
| Derivative financial instruments | -- | 89 | 89 |
| Total financial liabilities | <u>\$ --</u> | <u>\$ 7,971</u> | <u>\$ 7,971</u> |

The Company reevaluates the volume of trading activity for each of its investments at the end of each quarter and adjusts the level within the fair value hierarchy as needed. No investments changed hierarchy levels from December 31, 2016 to September 30, 2017.

The trading equity investments noted above are valued at their fair value based on their quoted market prices, and the debt securities are valued based upon a mix of observable market prices and model driven prices derived from a matrix of observable market prices for assets with similar characteristics obtained with the assistance of a nationally recognized third party pricing service. Additionally, a significant portion of the SERP's investments in trading equity securities are in money market and mutual funds. As these money market and mutual funds are held in a SERP, they are also included in the Company's liability under its SERP.

Trading debt securities are comprised of marketable debt securities held by Astec Insurance. Astec Insurance has an investment strategy that focuses on providing regular and predictable interest income from a diversified portfolio of high-quality fixed income securities.

Net unrealized gains or losses incurred on investments held amounted to a net gain of \$258 as of September 30, 2017 and a net loss of \$107 as of December 31, 2016.

Note 7. Debt

On April 12, 2017, the Company and certain of its subsidiaries entered into an amended and restated credit agreement whereby Wells Fargo extended to the Company an unsecured line of credit of up to \$100,000, including a sub-limit for letters of credit of up to \$30,000. There were no borrowings outstanding under the agreement (or the previous agreement) at any time during the nine-month period ended September 30, 2017. Letters of credit totaling \$8,594, including \$6,200 of letters of credit issued to banks in Brazil to secure the local debt of Astec do Brasil Fabricacao de Equipamentos Ltda. ("Astec Brazil"), were outstanding under the credit facility as of September 30, 2017, resulting in additional borrowing ability of \$91,406 under the credit facility. The credit agreement has a five-year term expiring in April 2022. Borrowings under the agreement are subject to an interest rate equal to the daily one-month LIBOR rate plus a 0.75% margin, resulting in a rate of 1.99% as of September 30, 2017. The unused facility fee is 0.125%. Interest only payments are due monthly. The amended and restated credit agreement contains certain financial covenants, including provisions concerning required levels of annual net income and minimum tangible net worth.

The Company's South African subsidiary, Osborn Engineered Products SA (Pty) Ltd ("Osborn"), has a credit facility of \$7,007 with a South African bank to finance short-term working capital needs, as well as to cover performance letters of credit, advance payment and retention guarantees. As of September 30, 2017, Osborn had no outstanding borrowings but had \$1,044 in performance, advance payment and retention guarantees outstanding under the facility. The facility has been guaranteed by Astec Industries, Inc., but is otherwise unsecured. A 0.75% unused facility fee is charged if less than 50% of the facility is utilized. As of September 30, 2017, Osborn had available credit under the facility of \$5,963. The interest rate is 0.25% less than the South Africa prime rate, resulting in a rate of 10.0% as of September 30, 2017.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling \$4,100 as of September 30, 2017 from Brazilian banks with interest rates ranging from 10.4% to 11.0%. The loans' maturity dates range from November 2018 to April 2024 and the debts are secured by Astec Brazil's manufacturing facility and also by letters of credit totaling \$6,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various 5-year equipment financing loans outstanding with Brazilian banks in the aggregate of \$805 as of September 30, 2017 that have interest rates ranging from 3.5% to 16.3%. These equipment loans have maturity dates ranging from September 2018 to April 2020. Astec Brazil's loans are included in the accompanying unaudited condensed consolidated balance sheets as current maturities of long-term debt (\$2,689) and long-term debt (\$2,216) as of September 30, 2017.

Note 8. Product Warranty Reserves

The Company warrants its products against manufacturing defects and performance to specified standards. The warranty period and performance standards vary by market and uses of its products, but generally range from three months to two years or up to a specified number of hours of operation. The Company estimates the costs that may be incurred under its warranties and records a liability at the time product sales are recorded. The product warranty liability is primarily based on historical claim rates, nature of claims and the associated cost.

Changes in the Company's product warranty liability for the three and nine-month periods ended September 30, 2017 and 2016 are as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|--|--|-----------|---------------------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Reserve balance, beginning of the period | \$ 14,269 | \$ 11,858 | \$ 13,156 | \$ 9,100 |
| Warranty liabilities accrued | 3,594 | 4,835 | 11,842 | 13,135 |
| Warranty liabilities settled | (3,888) | (5,442) | (11,072) | (11,011) |
| Other | 14 | 256 | 63 | 283 |
| Reserve balance, end of the period | \$ 13,989 | \$ 11,507 | \$ 13,989 | \$ 11,507 |

Note 9. Accrued Loss Reserves

The Company records reserves for losses related to known workers' compensation and general liability claims that have been incurred but not yet paid or are estimated to have been incurred but not yet reported to the Company. The undiscounted reserves are actuarially determined based on the Company's evaluation of the type and severity of individual claims and historical information, primarily its own claims experience, along with assumptions about future events. Changes in assumptions, as well as changes in actual experience, could cause these estimates to change in the future. Total accrued loss reserves were \$8,361 as of September 30, 2017 and \$7,892 as of December 31, 2016, of which \$5,635 and \$5,040 were included in other long-term liabilities in the accompanying unaudited condensed consolidated balance sheets as of September 30, 2017 and December 31, 2016, respectively.

Note 10. Income Taxes

The Company's combined effective income tax rate was 50.7% and 41.5% for the three-month periods ended September 30, 2017 and 2016, respectively. The unusually high tax rate for the third quarter of 2017 is due to the high percentage (as compared to the pretax loss for the third quarter of 2017) impact of the Company's federal domestic production activities deductions, research and development tax credits and a favorable U.S. federal return to book adjustment on the Company's 2016 return. The Company's combined effective income tax rate was 31.1% and 37.6% for the nine-month periods ended September 30, 2017 and 2016, respectively. The Company's effective tax rates for the three-month and nine-month periods ended September 30, 2017 and September 30, 2016 include the effect of state income taxes and other discrete items as well as a benefit for research and development credits. The Company's effective tax rates for the three-month and nine-month periods ended September 30, 2017 also include a discrete benefit for favorable adjustments related to the 2016 tax returns.

The Company's recorded liability for uncertain tax positions as of September 30, 2017 has increased by approximately \$94 as compared to December 31, 2016 due primarily to an increase in the estimated exposure for tax positions.

Note 11. Segment Information

The Company has three reportable segments, each of which is comprised of multiple business units that offer similar products and services and meet the requirements for aggregation. A brief description of each segment is as follows:

Infrastructure Group - This segment consists of five business units, three of which design, engineer, manufacture and market a complete line of portable, stationary and relocatable hot-mix asphalt plants, wood pellet plants, asphalt pavers, material transfer vehicles, stabilizers, milling machines, paver screeds and related ancillary equipment. The other two business units in this segment primarily operate as Company-owned dealers in the foreign countries in which they are domiciled. These two business units sell, service and install products produced by the manufacturing subsidiaries of the Company, and a majority of their sales are to customers in the infrastructure industry. The principal purchasers of the products produced by this group are asphalt producers, highway and heavy equipment contractors, wood pellet processors and foreign and domestic governmental agencies.

Aggregate and Mining Group - This segment consists of eight business units that design, engineer, manufacture and market a complete line of jaw crushers, cone crushers, horizontal shaft impactors, vertical shaft impactors, material handling, roll rock crushers and stationary rockbreaker systems, vibrating feeders and high frequency vibrating screens, conveyors, inclined, vertical and horizontal screens and sand classifying and washing equipment. The principal purchasers of products produced by this group are distributors, open mine operators, quarry operators, port and inland terminal operators, highway and heavy equipment contractors and foreign and domestic governmental agencies.

Energy Group - This segment consists of five business units that design, engineer, manufacture and market a complete line of drilling rigs for the oil and gas, geothermal and water well industries, high pressure diesel pump trailers for fracking and cleaning oil and gas wells, commercial and industrial burners, combustion control systems, a variety of industrial heaters to fit a broad range of applications including heating equipment for refineries, roofing material plants, chemical processing, rubber plants, oil sands and energy related processing, heat transfer processing equipment, thermal fluid storage tanks, waste heat recovery equipment, whole-tree pulpwood and biomass chippers and horizontal grinders. The principal purchasers of products produced by this group are oil, gas and water well drilling industry contractors, processors of oil, gas and biomass for energy production and contractors in the construction and demolition recycling markets. This group includes the operations of Power Flame Incorporated, which was acquired in August 2016.

Corporate - This category consists of business units that do not meet the requirements for separate disclosure as an operating segment or inclusion in one of the other reporting segments and includes the Company's parent company, Astec Industries, Inc., and Astec Insurance. The Company evaluates performance and allocates resources to its operating segments based on profit or loss from operations before U.S. federal income taxes and corporate overhead and thus these costs are included in the Corporate category.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Intersegment sales and transfers are valued at prices comparable to those for unrelated parties.

Segment Information:

| | Three Months Ended September 30, 2017 | | | | |
|---------------------------------|---------------------------------------|----------------------------|--------------|------------|------------|
| | Infrastructure Group | Aggregate and Mining Group | Energy Group | Corporate | Total |
| Net sales to external customers | \$ 98,676 | \$ 99,474 | \$ 53,904 | \$ -- | \$ 252,054 |
| Intersegment sales | 9,041 | 3,551 | 5,627 | -- | 18,219 |
| Gross profit | 1,773 | 23,838 | 13,422 | 51 | 39,084 |
| Gross profit percent | 1.8% | 24.0% | 24.9% | -- | 15.5% |
| Segment profit (loss) | \$ (12,529) | \$ 9,565 | \$ 4,460 | \$ (2,975) | \$ (1,479) |

| | Nine Months Ended September 30, 2017 | | | | |
|---------------------------------|--------------------------------------|----------------------------|--------------|-------------|------------|
| | Infrastructure Group | Aggregate and Mining Group | Energy Group | Corporate | Total |
| Net sales to external customers | \$ 407,025 | \$ 307,205 | \$ 158,134 | \$ -- | \$ 872,364 |
| Intersegment sales | 17,500 | 13,003 | 18,234 | -- | 48,737 |
| Gross profit | 66,394 | 74,652 | 39,173 | 160 | 180,379 |
| Gross profit percent | 16.3% | 24.3% | 24.8% | -- | 20.7% |
| Segment profit (loss) | \$ 15,545 | \$ 29,360 | \$ 10,355 | \$ (27,666) | \$ 27,594 |

| | Three Months Ended September 30, 2016 | | | | |
|---------------------------------|---------------------------------------|----------------------------|--------------|-------------|------------|
| | Infrastructure Group | Aggregate and Mining Group | Energy Group | Corporate | Total |
| Net sales to external customers | \$ 109,227 | \$ 85,819 | \$ 52,706 | \$ -- | \$ 247,752 |
| Intersegment sales | 5,324 | 10,063 | 4,108 | -- | 19,495 |
| Gross profit | 24,929 | 20,935 | 9,473 | 52 | 55,389 |
| Gross profit percent | 22.8% | 24.4% | 18.0% | -- | 22.4% |
| Segment profit (loss) | \$ 9,858 | \$ 7,651 | \$ 805 | \$ (11,610) | \$ 6,704 |

Nine Months Ended September 30, 2016

| | Infrastructure Group | Aggregate and Mining Group | Energy Group | Corporate | Total |
|---------------------------------|-------------------------|----------------------------------|-----------------|-------------|------------|
| Net sales to external customers | \$ 414,817 | \$ 277,393 | \$ 128,658 | \$ -- | \$ 820,868 |
| Intersegment sales | 13,009 | 20,859 | 13,718 | -- | 47,586 |
| Gross profit | 101,349 | 72,224 | 27,069 | 155 | 200,797 |
| Gross profit percent | 24.4% | 26.0% | 21.0% | -- | 24.5% |
| Segment profit (loss) | \$ 51,394 | \$ 28,135 | \$ 3,237 | \$ (40,745) | \$ 42,021 |

A reconciliation of total segment profits (losses) to the Company's consolidated totals is as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|--|--|----------|---------------------------------------|-----------|
| | 2017 | 2016 | 2017 | 2016 |
| Total segment profit (loss) | \$ (1,479) | \$ 6,704 | \$ 27,594 | \$ 42,021 |
| Recapture (elimination) of intersegment profit | (1,224) | 131 | (858) | 633 |
| Net income (loss) | (2,703) | 6,835 | 26,736 | 42,654 |
| Net loss attributable to non-controlling interest in subsidiaries | (36) | (3) | (137) | (119) |
| Net income (loss) attributable to controlling interest | \$ (2,667) | \$ 6,838 | \$ 26,873 | \$ 42,773 |

Note 12. Contingent Matters

Certain customers have financed purchases of Company products through arrangements in which the Company is contingently liable for customer debt of \$3,765 as of September 30, 2017. The maximum potential amount of future payments for which the Company would be liable was equal to \$3,765 as of September 30, 2017. These arrangements also provide that the Company will receive the lender's full security interest in the equipment financed if the Company is required to fulfill its contingent liability under these arrangements. The Company has recorded a liability of \$659 related to these guarantees as of September 30, 2017.

In addition, the Company is contingently liable under letters of credit issued by Wells Fargo totaling \$8,594 as of September 30, 2017, including \$6,200 of letters of credit that guarantee certain Astec Brazil bank debt. The outstanding letters of credit expire at various dates through October 2020. As of September 30, 2017, the Company's foreign subsidiaries are contingently liable for a total of \$4,104 in performance letters of credit, advance payments and retention guarantees. The maximum potential amount of future payments under these letters of credit and guarantees for which the Company could be liable is \$12,698 as of September 30, 2017.

The Company is currently a party to various claims and legal proceedings that have arisen in the ordinary course of business. If management believes that a loss arising from such claims and legal proceedings is probable and can reasonably be estimated, the Company records the amount of the loss (excluding estimated legal fees) or the minimum estimated liability when the loss is estimated using a range and no point within the range is more probable than another. As management becomes aware of additional information concerning such contingencies, any potential liability related to these matters is assessed and the estimates are revised, if necessary. If management believes that a loss arising from such claims and legal proceedings is either (i) probable but cannot be reasonably estimated or (ii) reasonably possible but not probable, the Company does not record the amount of the loss, but does make specific disclosure of such matter. Based upon currently available information and with the advice of counsel, management believes that the ultimate outcome of its current claims and legal proceedings, individually and in the aggregate, will not have a material adverse effect on the Company's financial position, cash flows or results of operations. However, claims and legal proceedings are subject to inherent uncertainties and rulings unfavorable to the Company could occur. If an unfavorable ruling were to occur, there exists the possibility of a material adverse effect on the Company's financial position, cash flows or results of operations.

Note 13. Shareholders' Equity

Under the Company's long-term incentive plans, key members of management may be issued restricted stock units ("RSUs") each year based upon the annual financial performance of the Company and its subsidiaries. The number of RSUs granted to employees each year is determined based upon the performance of individual subsidiaries and consolidated annual financial performance. Generally, for RSUs granted through February 2016, each award will vest at the end of five years from the date of grant, or at the time a recipient retires after reaching age 65, if earlier. Awards granted in February 2017 and thereafter will vest at the end of three years from the date of grant or at the time a recipient retires after reaching age 65, if earlier. Additional RSUs are granted to the Company's outside directors under the Company's Non-Employee Directors Compensation Plan with a one year vesting period.

A total of 30 and 77 RSUs vested during the nine-month periods ended September 30, 2017 and 2016, respectively. The Company withheld 8 and 24 shares due to statutory payroll tax withholding requirements upon the vesting of the RSUs in the first nine months of 2017 and 2016, respectively, and used Company funds to remit the related required minimum withholding taxes to the various tax authorities. The vesting date fair value of the RSUs that vested during the first nine months of 2017 and 2016 was \$1,975 and \$3,289, respectively. The grant date fair value of the RSUs granted during the first nine months of 2017 and 2016 was \$5,399 and \$1,946, respectively. Compensation expense of \$2,057 and \$1,697 was recorded in the nine-month periods ended September 30, 2017 and 2016, respectively, to reflect the fair value of RSUs granted (or anticipated to be granted for 2017 performance) to employees amortized over the portion of the vesting period occurring during the periods.

Note 14. Other Income, Net of Expenses

Other income, net of expenses for the three and nine-month periods ended September 30, 2017 and 2016 is presented below:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|----------------------------|-------------------------------------|---------------|------------------------------------|-----------------|
| | 2017 | 2016 | 2017 | 2016 |
| Interest income | \$ 735 | \$ 178 | \$ 1,067 | \$ 621 |
| Gain (loss) on investments | (38) | (26) | 3 | (41) |
| License fee income | 301 | 247 | 626 | 503 |
| Other | 115 | 106 | 190 | 241 |
| Total | \$ 1,113 | \$ 505 | \$ 1,886 | \$ 1,324 |

Note 15. Derivative Financial Instruments

The Company is exposed to certain risks related to its ongoing business operations. The primary risk managed by using derivative instruments is foreign currency risk. From time to time the Company's foreign subsidiaries enter into foreign currency exchange contracts to mitigate exposure to fluctuations in currency exchange rates. The fair value of the derivative financial instruments is recorded on the Company's balance sheet and is adjusted to fair value at each measurement date. The changes in fair value are recognized in the accompanying unaudited consolidated statements of operations in the current period. The Company does not engage in speculative transactions nor does it hold or issue financial instruments for trading purposes. The average U.S. dollar equivalent notional amount of outstanding foreign currency exchange contracts was \$11,256 during the nine-month period ended September 30, 2017. The Company reported \$32 of derivative assets in other current assets and \$261 of derivative liabilities in other current liabilities at September 30, 2017. At December 31, 2016, the Company reported \$144 of derivative assets in other current assets and \$89 of derivative liabilities in other current liabilities. The Company recognized, as a component of cost of sales, net losses of \$291 and \$383 on the changes in fair value of derivative financial instruments in the three-month periods ended September 30, 2017 and 2016, respectively. The Company recognized, as a component of cost of sales, net losses of \$683 and \$897 on the changes in fair value of derivative financial instruments in the nine-month periods ended September 30, 2017 and 2016, respectively. There were no derivatives that were designated as hedges at September 30, 2017.

Note 16. Business Combination

The Company acquired substantially all of the assets and certain liabilities of Power Flame Incorporated ("PFI") for a total purchase price of \$39,765 on August 1, 2016. The purchase price was paid in cash with \$4,000 deposited into escrow for a period of time not to exceed two years pending final resolution of certain post-closing adjustments and any indemnification claims. The Company's allocation of the purchase price resulted in the recognition of \$12,632 of goodwill and \$17,990 of other intangible assets consisting of technology (19 year useful life), trade names (15 year useful life) and customer relationships (18 year useful life). The revenues and results of operations of PFI were not significant in relation to the Company's consolidated financial statements for the period ended December 31, 2016 and would not have been material on a proforma basis to any earlier period. PFI's operating results are included in the Energy Group beginning in the third quarter of 2016.

PFI, located in Parsons, Kansas, began operations in 1948 and manufactures and sells gas, oil and combination gas/oil and low NOx burners with outputs ranging from 400 thousand BTU's per hour to 120 million BTU's per hour as well as combustion control systems designed for commercial, industrial and process heating applications.

Note 17. Subsequent Event

On October 1, 2017, the Company acquired substantially all of the assets and liabilities of RexCon LLC ("RexCon") for a total purchase price of \$26,008. The purchase price was paid in cash with \$3,000 deposited into escrow for a period of time not to exceed eighteen months pending final resolution of certain post-closing adjustments and any indemnification claims. The revenues and results of operations of RexCon were not significant in relation to the Company's consolidated financial statements for the period ended September 30, 2017 and would not have been material on a proforma basis to any earlier period. RexCon's operating results are expected to be included in the Company's Energy Group beginning in the fourth quarter of 2017.

RexCon, located in Burlington, Wisconsin since 2009, was founded in 2003 through an asset acquisition with the original company being founded over 100 years ago. RexCon is a manufacturer of high-quality stationary and portable, central mix and ready mix concrete batch plants, concrete mixers and concrete paving equipment. RexCon specializes in providing portable, high-production concrete equipment to contractors and producers worldwide in a totally integrated turnkey production system, including customized site layout and design engineering, batch plants, mixers, water heaters and chillers, ice production and delivery systems, material handling conveyors, gensets and power distribution, cement silos and screws, central dust collection, aggregate heating and cooling systems, batch automation controls, and batch office trailers.

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

Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements contained anywhere in this Quarterly Report on Form 10-Q that are not limited to historical information are considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are sometimes identified by the words "will," "would," "should," "could," "may," "believes," "anticipates," "intends," "forecasts" and "expects" and similar expressions. Such forward-looking statements include, without limitation, statements regarding the Company's expected sales and results of operations during 2017, the Company's expected capital expenditures in 2017, the expected benefit and impact of financing arrangements, the ability of the Company to meet its working capital and capital expenditure requirements through November 2018, the amount and impact of any current or future state or federal funding for transportation construction programs, the need for road improvements, the amount and impact of other public sector spending and funding mechanisms, changes in the economic environment as it affects the Company, the market confidence of customers and dealers, the Company being called upon to fulfill certain contingencies, the expected dates of granting of restricted stock units, changes in interest rates and the impact of such changes on the financial results of the Company, changes in the prices of steel and oil and the impact of such changes generally and on the demand for the Company's products, customer's buying decisions, the Company's business, the ability of the Company to offset future changes in prices in raw materials, the change in the strength of the dollar and the level of the Company's presence and sales in international markets, the impact that further development of domestic oil and natural gas production capabilities would have on the domestic economy and the Company's business, the seasonality of the Company's business, the Company's investments, the percentage of the Company's equipment sold directly to end users, the amount or value of unrecognized tax benefits, the impact of IRS tax regulations, payment of dividends by the Company, and the ultimate outcome of the Company's current claims and legal proceedings.

These forward-looking statements are based largely on management's expectations, which are subject to a number of known and unknown risks, uncertainties and other factors discussed in this Report and in other documents filed by the Company with the Securities and Exchange Commission, which may cause actual results, financial or otherwise, to be materially different from those anticipated, expressed or implied by the forward-looking statements. All forward-looking statements included in this document are based on information available to the Company on the date hereof, and the Company assumes no obligation to update any such forward-looking statements to reflect future events or circumstances.

The risks and uncertainties identified herein under the caption "Item 1A. Risk Factors" in Part II of this Report, elsewhere herein and in other documents filed by the Company with the Securities and Exchange Commission, including the Company's Annual Report on Form 10-K for the year ended December 31, 2016, should be carefully considered when evaluating the Company's business and future prospects.

Overview

The Company is a leading manufacturer and seller of equipment for the road building, aggregate processing, geothermal, water, oil and gas, and wood processing industries. The Company's businesses:

- design, engineer, manufacture and market equipment used in each phase of road building, including mining, quarrying and crushing the aggregate, mobile bulk and material handling solutions, producing asphalt or concrete, recycling old asphalt or concrete and applying the asphalt;

- design, engineer, manufacture and market additional equipment and components, including equipment for geothermal drilling, water, oil and natural gas drilling, industrial heat transfer, wood chipping and grinding, wood pellet processing, commercial and industrial burners, combustion control systems; and

- manufacture and sell replacement parts for equipment in each of its product lines.

The Company, as we refer to it herein, consists of a total of 20 companies that are consolidated in our financial statements, which includes 16 manufacturing companies, two companies that operate as dealers for the manufacturing companies, a captive insurance company and the parent company. The forgoing does not give effect to RexCon, Inc., which was added effective October 1, 2017 as described below. The companies fall within three reportable operating segments: the Infrastructure Group, the Aggregate and Mining Group and the Energy Group.

Infrastructure Group- This segment consists of five business units, three of which design, engineer, manufacture and market a complete line of asphalt plants, asphalt pavers, wood pellet plants and related components and ancillary equipment. The two remaining companies in the Infrastructure Group primarily sell, service and install equipment produced by the manufacturing subsidiaries of the Company, with the majority of sales to the infrastructure industry.

Aggregate and Mining Group- This segment consists of eight business units that design, manufacture and market heavy equipment and parts in the aggregate, metallic mining, quarrying, recycling, ports and bulk handling industries.

Energy Group- This segment consists of five business units that design, manufacture and market heaters, gas, oil and combination gas/oil burners, combustion control systems, drilling rigs, concrete plants, wood chippers and grinders, pump trailers, commercial and industrial burners, combustion control systems, storage equipment and related parts to the oil and gas, construction, and water well industries. The forgoing does not give effect to RexCon, Inc., which was added effective October 1, 2017 as described below.

Individual Company subsidiaries included in the composition of the Company's segments are as follows:

1. **Infrastructure Group** – Astec, Inc., Roadtec, Inc., Carlson Paving Products, Inc., Astec Australia, Pty Ltd and Astec Mobile Machinery GmbH.
2. **Aggregate and Mining Group** – Telsmith, Inc., Kolberg-Pioneer, Inc., Johnson Crushers International, Inc., Osborn Engineered Products SA (Pty) Ltd, Breaker Technology, Inc., Astec Mobile Screens, Inc., Astec do Brasil Fabricacao de Equipamentos LTDA and Telestack Limited.
3. **Energy Group** – Heatec, Inc., CEI, Inc., GEFCO, Inc., Peterson Pacific Corp. and Power Flame Incorporated (beginning in August 2016). RexCon, Inc., a manufacturer of high-quality stationary and portable, central mix and ready mix concrete batch plants, concrete mixers and concrete paving equipment was added to this group effective October 1, 2017 upon the acquisition of substantially all of the assets and liabilities of RexCon LLC.

The Company also has one other category, Corporate, that contains the business units that do not meet the requirements for separate disclosure as a separate operating segment or inclusion in one of the other reporting segments. The business units in the Corporate category are Astec Insurance Company ("Astec Insurance" or "the captive") and Astec Industries, Inc., the parent company. These two companies provide support and corporate oversight for all the companies that fall within the reportable operating segments.

The Company's financial performance is affected by a number of factors, including the cyclical nature and varying conditions of the markets it serves. Demand in these markets fluctuates in response to overall economic conditions and is particularly sensitive to the amount of public sector spending on infrastructure development, privately funded infrastructure development, changes in the price of crude oil, which affects the cost of fuel and liquid asphalt, and changes in the price of steel.

The Company believes that federal highway funding influences the purchasing decisions of the Company's customers, who are typically more comfortable making capital equipment purchases with long-term federal legislation in place. Federal funding provides for approximately 25% of all highway, street, roadway and parking construction in the United States.

In July 2012, the "Moving Ahead for Progress in the 21st Century Act" ("Map-21") was approved by the U.S. federal government, which authorized \$105 billion of federal spending on highway and public transportation programs through fiscal year 2014. In August 2014, the U.S. government approved short-term funding of \$10.8 billion through May 2015. Federal transportation funding operated on short-term appropriations until December 4, 2015 when the Fixing America's Surface Transportation Act ("FAST Act") was signed into law. The \$305 billion FAST Act approved funding for highways of approximately \$205 billion and transit projects of approximately \$48 billion for the five-year period ending September 30, 2020.

The Company believes a multi-year highway program (such as the FAST Act) will have the greatest positive impact on the road construction industry and allow its customers to plan and execute longer-term projects, but given the inherent uncertainty in the political process, the level of governmental funding for federal highway projects will similarly continue to be uncertain. In late 2016, the newly-elected administration stated one of its priorities would be a new infrastructure bill including increased funding for roads, bridges, tunnels, airports, railroads, ports and waterways, pipelines, clean water infrastructure, energy infrastructure and telecommunication needs. The funding for the bill as proposed would rely in part on direct federal spending as well as increased private sector funding in exchange for federal tax credits. Governmental funding that is committed or earmarked for federal highway projects is always subject to repeal or reduction. Although continued funding under the FAST Act or funding of a bill passed by the new administration is expected, it may be at lower levels than originally approved or anticipated. In addition, Congress could pass legislation in future sessions that would allow for the diversion of previously appropriated highway funds for other purposes, or it could restrict funding of infrastructure projects unless states comply with certain federal policies. The level of future federal highway construction is uncertain and any future funding may be at levels lower than those currently approved or that have been approved in the past.

The public sector spending described above is needed to fund road, bridge and mass transit improvements. The Company believes that increased funding is unquestionably needed to restore the nation's highways to a quality level required for safety, fuel efficiency and mitigation of congestion. In the Company's opinion, amounts needed for such improvements are significantly greater than amounts approved to date, and funding mechanisms such as the federal usage fee per gallon of gasoline, which is still at the 1993 level of 18.4 cents per gallon, would likely need to be increased along with other measures to generate the funds needed.

In addition to public sector funding, the economies in the markets the Company serves, the price of oil and its impact on customers' purchasing decisions and the price of steel may each affect the Company's financial performance. Economic downturns generally result in decreased purchasing by the Company's customers, which, in turn, causes reductions in sales and increased pricing pressure on the Company's products. Rising interest rates also typically negatively impact customers' attitudes toward purchasing equipment. The Federal Reserve has maintained historically low interest rates in response to the economic downturn which began in 2009; however, the Federal Reserve raised the Federal Funds Rate in 2016 and again in March and June 2017, and may implement additional increases in the future.

Significant portions of the Company's revenues from the Infrastructure Group relate to the sale of equipment involved in the production, handling, recycling or installation of asphalt mix. Liquid asphalt is a by-product of oil production. An increase or decrease in the price of oil impacts the cost of asphalt, which is likely to alter demand for asphalt and therefore affect demand for certain Company products. While increasing oil prices may have a negative financial impact on many of the Company's customers, the Company's equipment can use a significant amount of recycled asphalt pavement, thereby partially mitigating the effect of increased oil prices on the final cost of asphalt for the customer. The Company continues to develop products and initiatives to reduce the amount of oil and related products required to produce asphalt mix. Oil price volatility makes it difficult to predict the costs of oil-based products used in road construction such as liquid asphalt and gasoline. Oil prices rose during much of 2016 and have continued to fluctuate during the first nine months 2017 due primarily to weather related impacts. Minor fluctuations in oil prices should not have a significant impact on customers' buying decisions. Other factors such as political uncertainty in oil producing countries, interruptions in oil production due to disasters, whether natural or man-made, or other economic factors could significantly impact oil prices, which could negatively impact demand for the Company's products. However, the Company believes the continued funding of the FAST Act federal highway bill passed in December 2015 has greater potential to impact the buying decisions of the Company's customers than does the fluctuation of oil prices in 2017 and 2018.

Contrary to the impact of oil prices on many of the Company's Infrastructure Group products as discussed above, the products manufactured by the Energy Group, which are used in drilling for oil and natural gas, in heaters for refineries and oil sands, and in double fluid pump trailers for fracking and oil and gas extraction, would benefit from higher oil and natural gas prices, to the extent that such higher prices lead to increased development in the oil and natural gas production industries. The Company believes further development of domestic oil and natural gas production capabilities is needed and would positively impact the domestic economy and the Company's business.

Steel is a major component in the Company's equipment. Steel prices stabilized in the third quarter of 2017 after increasing during the first half of 2017. The Company expects seasonal declines during the fourth quarter of 2017 and moderate increases during the first half of 2018. The Company continues to utilize forward-looking contracts (with no minimum or specified quantity guarantees) coupled with advanced steel purchases to minimize the impact of any price increases. The Company will review the trends in steel prices during the fourth quarter of 2017 into early 2018 and establish future contract pricing accordingly.

In addition to the factors stated above, many of the Company's markets are highly competitive, and its products compete worldwide with a number of other manufacturers and dealers that produce and sell similar products. From 2010 through mid-2012, a weak U.S. dollar, combined with improving economic conditions in certain foreign economies, had a positive impact on the Company's international sales. From mid-2012 through September 30, 2017, the strong U.S. dollar has negatively impacted pricing in certain foreign markets the Company serves. While the exchange rates with many of the countries in which the Company operates have improved somewhat during the first nine months of 2017, the Company expects the U.S. dollar to remain strong as compared to historical rates in the near term relative to most foreign currencies. Increasing domestic interest rates or weakening economic conditions abroad could cause the U.S. dollar to continue to strengthen, which could negatively impact the Company's international sales.

In the United States and internationally, the Company's equipment is marketed directly to customers as well as through dealers. During 2016, approximately 75% to 80% of equipment sold by the Company was sold directly to the end user. The Company expects this ratio to be between 65% and 70% for 2017.

The Company is operated on a decentralized basis with a complete management team for each operating subsidiary. Finance, insurance, legal, shareholder relations, corporate accounting and other corporate matters are primarily handled at the corporate level (i.e., Astec Industries, Inc., the parent company). The engineering, design, sales, manufacturing and basic accounting functions are handled at each individual subsidiary. Standard accounting procedures are prescribed and followed in all reporting.

During 2016, the Company implemented revised profit sharing plans whereby corporate officers, subsidiary presidents and other employees at each subsidiary have the opportunity to earn profit sharing incentives based upon the Company's and/or the individual groups or subsidiaries' return on capital employed, EBITDA margin and safety. Corporate officers' and subsidiary presidents' awards when calculated at targeted performance are between 35% and 100% of their base salary, depending upon their responsibilities, and the plans allow for awards of up to 200% of the target. Each subsidiary has the opportunity to earn up to 10% of its after-tax profit as a profit sharing incentive award to be paid to its employees.

The Company also implemented revised long-term incentive plans during 2016 whereby corporate officers, subsidiary presidents and other corporate or subsidiary management employees will be awarded Restricted Stock Units ("RSUs") if certain goals are met based upon the Company's Total Shareholder's Return ("TSR") as compared to a peer group and the Company's pretax profit margin. The grant date value of corporate officers' and subsidiary presidents' awards when calculated at targeted performance are between 20% and 100% of their base salary, depending upon their responsibilities, and the plans allow for awards of up to 200% of the target. Additional RSUs may be granted to other key subsidiary management employees based upon individual subsidiary profits.

Results of Operations

Net Sales

Net sales for the third quarter of 2017 were \$252,054 compared to \$247,752 for the third quarter of 2016, an increase of \$4,302 or 1.7%. Sales are generated primarily from new equipment and parts sales to domestic and international customers. Sales increased in the Aggregate and Mining Group and the Energy Group but decreased in the Infrastructure Group. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. As the Company is financing the Georgia plant, no revenues have been recorded to date related to this order; however, the Company has been recording revenue on the Arkansas plant order under the percent of completion method. Due to the identification of the design issues in the third quarter of 2017, the Company increased its estimate of the remaining costs to complete the Arkansas pellet plant order which resulted in negative \$13,405 pellet plant revenue for the third quarter of 2017. Pellet plant revenue for the third quarter of 2016 was \$19,139. Domestic sales and backlogs not related to pellet plants continue to be positively impacted by effects of the long-term federal highway bill enacted in December 2015 and other state and local funding mechanisms. International sales are showing improvement due to increased order activity resulting from pent up demand, improved global market conditions, the stabilization of the U.S. dollar in certain foreign markets and a slight recovery in the mining and oil and gas sectors coupled with the Company's strategy of keeping its sales and service structure in place during the recent downturn. Sales reported by the Company's foreign subsidiaries in U.S. dollars for the third quarter of 2017 would have been \$1,106 lower had 2017 foreign exchange rates been the same as third quarter 2016 rates.

Net sales for the nine months ending September 30, 2017 were \$872,364 compared to \$820,868 for the same period in 2016, an increase of \$51,496 or 6.3%. Sales are generated primarily from new equipment and parts sales to domestic and international customers. Sales increased in the Aggregate and Mining Group and the Energy Group but decreased in the Infrastructure Group. Pellet plant sales were \$2,370 and \$64,589 for the nine months ended September 30, 2017 and 2016, respectively. Domestic sales not related to pellet plants continue to be positively impacted by effects of the long-term federal highway bill enacted in December 2015 and other state and local funding mechanisms. International sales improved due to increased order activity resulting from pent up demand, improved global market conditions, the stabilization of the U.S. dollar in certain foreign markets and a slight recovery in the mining and oil and gas sectors coupled with the Company's strategy of keeping its sales and service structure in place during the recent downturn. Sales reported by the Company's foreign subsidiaries in U.S. dollars for the nine months ending September 30, 2017 would have been \$1,412 lower had 2017 foreign exchange rates been the same as rates for the nine months ending September 30, 2016.

Domestic sales for the third quarter of 2017 were \$196,478 or 78.0% of consolidated net sales compared to \$199,851 or 80.7% of consolidated net sales for the third quarter of 2016, a decrease of \$3,373 or 1.7%. Domestic sales for the third quarter of 2017 as compared to the third quarter of 2016 decreased by \$14,077 in the Infrastructure Group (primarily due to the \$32,544 decline in pellet plant sales between periods discussed above) and \$175 in the Energy Group but increased \$10,879 in the Aggregate and Mining Group.

Domestic sales for the nine months ending September 30, 2017 were \$686,883 or 78.7% of consolidated net sales compared to \$676,310 or 82.4% of consolidated net sales for the same period in 2016, an increase of \$10,573 or 1.6%. Domestic sales for the first nine months of 2017 as compared to the same period in 2016 increased \$26,631 in the Energy Group (including increased sales of \$14,640 attributable to Power Flame, which was acquired on August 1, 2016) and \$16,859 in the Aggregate and Mining Group but decreased \$32,917 due to the \$62,219 decline in pellet plant sales in the Infrastructure Group.

International sales for the third quarter of 2017 were \$55,576 or 22.0% of consolidated net sales compared to \$47,901 or 19.3% of consolidated net sales for the third quarter of 2016, an increase of \$7,675 or 16.0%. International sales for the third quarter of 2017 as compared to the third quarter of 2016 increased \$3,526 in the Infrastructure Group, \$2,776 in the Aggregate and Mining Group and \$1,373 in the Energy Group. The increases in international sales occurred primarily in Canada, Brazil, the Middle East and Asia and were partially offset by decreases in sales in Mexico, Central America, Europe and the West Indies. The majority of the increase in sales was due to increased sales in the Company's mobile asphalt equipment coupled with significant growth in aggregate and mining equipment and industrial heater sales. These increased sales were achieved in spite of the continuing strength of the U.S. dollar as compared to the currencies in many of the countries in which the Company operates, low oil and gas pricing and the continuing sluggishness in the mining sector. The increased sales volumes may indicate a softening of the impact of these issues on the Company's sales; however, the issues continue to be a significant headwind to the Company regaining historical levels of international sales. The Company is continuing its strategy of keeping its sales and service structure in place during the downturn in international business.

International sales for the nine months ending September 30, 2017 were \$185,481 or 21.3% of consolidated net sales compared to \$144,558 or 17.6% of consolidated net sales for the nine months ending September 30, 2016, an increase of \$40,923 or 28.3%. International sales for the first nine months of 2017 as compared to the same period in 2016 increased \$25,125 in the Infrastructure Group, \$12,953 in the Aggregate and Mining Group and \$2,845 in the Energy Group. The increases in international sales occurred primarily in Canada, Russia, Australia, Brazil and Asia, offset by decreases in sales in South America, Japan/Korea and Central America. The majority of the increase in sales was due to increased sales in the Company's mobile asphalt equipment and asphalt plant related products coupled with significant growth in aggregate and mining equipment sales. These increased sales were achieved in spite of the continuing strength of the U.S. dollar as compared to the currencies in many of the countries in which the Company operates, low oil and gas pricing and the continuing sluggishness in the mining sector. The increased sales volumes may indicate a softening of the impact of these issues on the Company's sales; however, the issues continue to be a significant headwind to the Company regaining historical levels of international sales. The Company is continuing its strategy of keeping its sales and service structure in place during the downturn in international business.

Parts sales for the third quarter of 2017 were \$64,299 compared to \$63,082 for the third quarter of 2016, an increase of \$1,217 or 1.9%. Parts sales as a percentage of net sales remained flat at 25.5% between periods. Parts sales increased \$1,906 in the Aggregate and Mining but decreased \$559 in the Energy Group and \$130 in the Infrastructure Group.

Parts sales for the nine months ending September 30, 2017 were \$214,083 compared to \$200,974 for the same period of 2016, an increase of \$13,109 or 6.5%. Parts sales as a percentage of net sales remained flat at 24.5% between periods. Parts sales increased \$4,729 in the Infrastructure Group, \$5,333 in the Aggregate and Mining Group and \$3,047 in the Energy Group.

Gross Profit

Consolidated gross profit decreased \$16,305 or 29.4% to \$39,084 for the third quarter of 2017 compared to \$55,389 for the third quarter of 2016. Gross profit as a percentage of sales decreased 690 basis points to 15.5% for the third quarter of 2017 compared to 22.4% for the third quarter of 2016. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. Due to the identification of the design issues in the third quarter of 2017, the Company increased its estimate of the remaining costs to complete both plants which resulted in negative \$22,738 gross margin on the two orders for the third quarter of 2017. Gross margin recorded in the third quarter of 2016 on pellet plant sales was \$7,152. Non-pellet plant related gross margins improved in each segment due to increased sales, changes in product mix and improved overhead absorption driven by increased manufacturing hours being absorbed.

Consolidated gross profit decreased \$20,418 or 10.2% to \$180,379 for the nine months ending September 30, 2017 compared to \$200,797 for the nine months ending September 30, 2016. Gross profit as a percentage of sales decreased 380 basis points to 20.7% for nine months ended September 30, 2017 compared to 24.5% for the nine months ended September 30, 2016. Due to the issues discussed above and cost overruns on the construction portion of the Arkansas order during the second quarter of 2017, gross margin on pellet plant orders for the first nine months of 2017 were negative \$27,098 as compared to gross margin of \$22,826 for the first nine months of 2016. The Company expects the gross margins to be recognized in the future on the two pellet plant orders will not be material. Non-pellet plant related gross margins improved in each segment due to increased sales, changes in product mix and improved overhead absorption driven by increased manufacturing hours being absorbed.

Selling, General, Administrative and Engineering Expenses

Selling, general, administrative and engineering expenses increased \$1,544 to \$45,494 or 18.0% of net sales for the third quarter of 2017, compared to \$43,950 or 17.7% of net sales for the third quarter of 2016 primarily due to increased engineering expenses of \$1,322 (primarily research and development and outside services) and increased sales promotion expense of \$1,715, partially offset by a reduction in profit sharing expenses of \$1,597.

Selling, general, administrative and engineering expenses increased \$10,120 to \$142,836 or 16.4% of net sales for the nine months ending September 30, 2017, compared to \$132,716 or 16.2% of net sales for same period in 2016. The overall increase was primarily due to increases in ConExpo exhibit costs (\$4,578), costs incurred by Power Flame which was acquired on August 1, 2016 (\$3,578), sales promotion expense (\$2,719) and research and development costs (\$1,792), offset by reductions in SERP expense (\$1,965) and profit sharing expenses (\$917).

Interest Expense

Interest expense for the third quarter of 2017 decreased \$76 to \$188 from \$264 for the third quarter of 2016, primarily due to a reduction in bank debt at Astec Brazil.

Interest expense for the nine months ended September 30, 2017 decreased \$419 to \$638 from \$1,057 for the first nine months of 2016, due primarily to reduced interest on tax return audits and a reduction in bank debt at Astec Brazil.

Other Income, Net of Expenses

Other income, net of expenses was \$1,113 for the third quarter of 2017 compared to \$505 for the third quarter of 2016, an increase of \$608. The increase was primarily due to interest income received on pellet plant related sales.

Other income, net of expenses was \$1,886 for the nine months ended September 30, 2017 compared to \$1,324 for the nine months ended September 30, 2016, an increase of \$562. The increase was primarily due to interest income received on pellet plant related sales.

Income Tax Expense

The Company's combined effective income tax rate was 50.7% for the third quarter of 2017 compared to 41.5% for the third quarter of 2016. The unusually high tax rate for the third quarter of 2017 is due to the high percentage (as compared to the pretax loss for the third quarter of 2017) impact of the Company's federal domestic production activities deductions, research and development tax credits and a favorable U.S. federal return to book adjustment on the Company's 2016 return.

The Company's combined effective income tax rate was 31.1% for the nine months ended September 30, 2017 compared to 37.6% nine months ended September 30, 2016. The tax rate decline between periods is due to impacts of federal domestic production activities deductions, favorable state tax apportionment legislation, increased research and development tax credits and a favorable U.S. federal return to book adjustment on the Company's 2016 return.

Net Income

The Company had a net loss attributable to controlling interest of \$2,667 for the third quarter of 2017 compared to net income attributable to controlling interest of \$6,838 for the third quarter of 2016, a decrease in earnings of \$9,505 or 139.0%. Net income (loss) attributable to controlling interest per diluted share was a loss of \$0.12 for the third quarter of 2017 compared to income of \$0.30 for the third quarter of 2016, a decrease of \$0.42. Diluted shares outstanding for the quarters ended September 30, 2017 and 2016 were 23,029 and 23,145, respectively.

The Company had net income attributable to controlling interest of \$26,873 for the nine months ending September 30, 2017 compared to \$42,773 for nine months ending September 30, 2016, a decrease of \$15,900 or 37.2%. Net income attributable to controlling interest per diluted share was \$1.16 for the nine months ending September 30, 2017 compared to \$1.85 for the same period in 2016, a decrease of \$0.69. Diluted shares outstanding for the nine months ended September 30, 2017 and 2016 were 23,180 and 23,138, respectively.

Dividends

In February 2013, the Company's Board of Directors approved a dividend policy pursuant to which the Company began paying a quarterly \$0.10 per share dividend on its common stock beginning in the second quarter of 2013. The actual amount of future quarterly dividends, if any, will be based upon the Company's financial position, results of operations, cash flows, capital requirements and restrictions under the Company's existing credit agreement, among other factors. The Board retained the power to modify, suspend or cancel the Company's dividend policy in any manner and at any time it deems necessary or appropriate in the future. The Company paid quarterly dividends of \$0.10 per common share to shareholders in each quarter of 2016 and the first three quarters of 2017.

Backlog

The backlog of orders as of September 30, 2017 was \$385,454 compared to \$389,260 as of September 30, 2016, a decrease of \$3,806 or 1.0%. Domestic backlogs decreased \$16,103 or 4.9% while international backlogs increased \$12,297 or 19.3%. The September 30, 2017 backlog was comprised of 80.3% domestic orders and 19.7% international orders, as compared to 83.6% domestic orders and 16.4% international orders as of September 30, 2016. Included in the September 30, 2017 and 2016 backlogs is approximately \$60,000 for a three line pellet plant from one customer under a Company financed arrangement whereby the Company will record the related revenues when payment is received, which is expected in December 2018. A majority of the September 30, 2016 backlog pertaining to a pellet plant order from a second customer was fulfilled in the last quarter of 2016 and the nine months of 2017, resulting in a remaining backlog of \$15,373 related to this order at September 30, 2017. Excluding pellet plant orders, the Company's September 30, 2017 backlog increased \$61,083, or 24.8%, compared to September 30, 2016. No additional pellet plant orders have been received. The Company is unable to determine whether the changes in backlogs were experienced by the industry as a whole; however, the Company believes the changes in backlogs reflect the current economic conditions the industry is experiencing.

Segment Net Sales-Quarter:

| | Three Months Ended September 30, | | \$ Change | % Change |
|----------------------------|-------------------------------------|------------|-------------|----------|
| | 2017 | 2016 | | |
| Infrastructure Group | \$ 98,676 | \$ 109,227 | \$ (10,551) | (9.7)% |
| Aggregate and Mining Group | 99,474 | 85,819 | 13,655 | 15.9% |
| Energy Group | 53,904 | 52,706 | 1,198 | 2.3% |

Infrastructure Group: Sales in this group were \$98,676 for the third quarter of 2017 compared to \$109,227 for the same period in 2016, a decrease of \$10,551 or 9.7%. Domestic sales for the Infrastructure Group decreased \$14,077 or 14.4% for the third quarter of 2017 compared to the same period in 2016. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. As the Company is financing the Georgia plant, no revenues have been recorded to date related to this order; however, the Company has been recording revenue on the Arkansas plant order under the percent of completion method. Due to the identification of the design issues in the third quarter of 2017, the Company increased its estimate of the remaining costs to complete the Arkansas pellet plant order pellet plants which resulted in negative \$13,405 pellet plant revenue for the third quarter of 2017. Pellet plant revenue for the third quarter of 2016 was \$19,139. The group's domestic non-pellet plant related sales increased by \$18,467 due primarily to increased domestic asphalt plant sales offset by a reduction in mobile equipment sales as compared to the very strong third quarter 2016 level. Infrastructure Group domestic sales and backlogs continue to be favorably impacted by the increased federal funding under the FAST Act. International sales for the Infrastructure Group increased \$3,526 or 30.5% for the third quarter of 2017 compared to the same period in 2016 due primarily to an increases in mobile asphalt equipment sales coupled with increased sales by the Company-owned dealership in Australia. The Company's international sales have benefited from improved highway building activities in certain foreign countries, the release of pent up demand and improved global market conditions. The increase in international sales was also impacted by the Company's decision to market its mobile equipment products through equipment dealers in select territories in which historical direct sales efforts yielded less than desired volumes. Sales increases in Canada, Australia and the Middle East were partially offset by decreases in sales in the West Indies, Central America and Russia. Parts sales for the Infrastructure Group decreased 0.5% for the third quarter of 2017 compared to the same period in 2016.

Aggregate and Mining Group: Sales in this group were \$99,474 for the third quarter of 2017 compared to \$85,819 for the same period in 2016, an increase of \$13,655 or 15.9%. Domestic sales for the Aggregate and Mining Group increased by \$10,879 or 19.1% for the third quarter of 2017 compared to the same period in 2016 due primarily to increased sales of the Company's larger aggregate equipment due to the release of pent-up demand coupled with increased sales into the Company's traditional rock quarry markets. International sales for the Aggregate and Mining Group increased \$2,776 or 9.7% in the third quarter of 2017 compared to the same period in 2016 due to an easing of pent up demand coupled with the Company's continued sales efforts in the international markets as well as an improved sales by the Company's Brazilian subsidiary. International sales increases in Canada, Brazil and Post-Soviet States were partially offset by decreases in sales into Mexico and Europe. Parts sales for this group increased 7.5% for the third quarter of 2017 compared to the same period in 2016 due primarily to international sales by the Company's subsidiary in South Africa.

Energy Group: Sales in this group were \$53,904 for the third quarter of 2017 compared to \$52,706 for the same period in 2016, an increase of \$1,198 or 2.3%. Domestic sales for the Energy Group decreased \$175 or 0.4% for the third quarter of 2017 compared to the same period in 2016. Domestic sales were favorably impacted by improved sales of industrial heaters/boilers and the impact of the Power Flame acquisition on August 1, 2016; however, sales of concrete plants fell below prior year levels with third quarter 2016 sales being higher than normal due to the sale of two large concrete plants. International sales for the Energy Group increased \$1,373 or 18.2% due primarily to increased sales of industrial boilers and sales by Power Flame which was acquired on August 1, 2016, offset by a decline in sales of wood chipping and grinding equipment. Sales increases occurred in the Middle East, China, Canada and Brazil. Parts sales for this group decreased 5.2% for the third quarter of 2017 compared to the same period in 2016 due primarily to growth in parts sales for industrial boiler and heater products as well as wood chipper and grinders.

Segment Net Sales-Nine Months:

| | Nine Months Ended | | \$ Change | % Change |
|----------------------------|-------------------|------------|------------|----------|
| | September 30, | | | |
| | 2017 | 2016 | | |
| Infrastructure Group | \$ 407,025 | \$ 414,817 | \$ (7,792) | (1.9)% |
| Aggregate and Mining Group | 307,205 | 277,393 | 29,812 | 10.7% |
| Energy Group | 158,134 | 128,658 | 29,476 | 22.9% |

Infrastructure Group: Sales in this group were \$407,025 for the nine months ending September 30, 2017 compared to \$414,817 for the same period in 2016, a decrease of \$7,792 or 1.9%. Domestic sales for the Infrastructure Group decreased \$32,917 or 8.8% for the first nine months of 2017 compared to the same period in 2016 due to a decline in pellet plant sales offset by growth in sales for mobile asphalt equipment. Pellet plant sales were \$2,370 and \$64,589 for the nine months ended September 30, 2017 and 2016, respectively. Excluding pellet plant sales, the domestic sales of this group increased by \$29,302 due to increased sales of both asphalt plants and mobile asphalt equipment. International sales for the Infrastructure Group increased \$25,125 or 63.2% for the first nine months of 2017 compared to the same period in 2016 due to growth in sales of both asphalt plants and mobile asphalt equipment as well as improved sales by the Company owned dealership in Australia. The increased international sales occurred in Canada, Russia, Australia, Mexico and the Middle East and were partially offset by decreases in sales in South America and China. Parts sales for the Infrastructure Group increased 4.9% for the nine months ending September 30, 2017 compared to the same period in 2016 due primarily to improved sales of parts for asphalt plants and mobile asphalt equipment.

Aggregate and Mining Group: Sales in this group were \$307,205 for the nine months ending September 30, 2017 compared to \$277,393 for the same period in 2016, an increase of \$29,812 or 10.7%. Domestic sales for the Aggregate and Mining Group increased by \$16,859 or 8.6% for the nine months ending September 30, 2017 compared to the same period in 2016 due primarily to improved sales to the Company's traditional rock quarry markets, increased sales of the Company's larger aggregate equipment due to the release of pent-up demand and increased sales by the Company's Northern Ireland based subsidiary into the U.S. domestic market. International sales for the Aggregate and Mining Group increased \$12,953 or 15.7% for the nine months ending September 30, 2017 compared to the same period in 2016 due to an easing of pent up demand, the Company's continued sales efforts in the international markets, and improved sales by the Company's Brazilian subsidiary, which had historically low sales in 2016. International sales increases in Canada, Brazil, Post-Soviet States, China and Australia were partially offset by decreased sales in Mexico, Japan/Korea and Central America. Parts sales for this group increased 7.2% for the nine months ending September 30, 2017 compared to the same period in 2016.

Energy Group: Sales in this group were \$158,134 for the nine months ending September 30, 2017 compared to \$128,658 for the same period in 2016, an increase of \$29,476 or 22.9%. Domestic sales for the Energy Group increased \$26,631 or 25.1% for the nine months ending September 30, 2017 compared to the same period in 2016 due primarily to \$14,640 of increased sales by Power Flame, which was acquired on August 1, 2016, as well as increases in oil and gas equipment and wood chipping and grinding equipment; however, concrete plant sales lagged behind 2016 levels due to two large concrete plants being sold in the third quarter of 2016. International sales for the Energy Group increased \$2,845 or 12.7% due primarily to sales by Power Flame which was acquired on August 1, 2016. International sales increases occurred in China, the Middle East, Africa and Brazil and were partially offset by decreases in South American and Australia. Parts sales for this group increased 10.1% for the nine months ending September 30, 2017 compared to the same period in 2016 due to the acquisition of Power Flame and increased parts sales at each subsidiary in this group.

Segment Profit (Loss)-Quarter:

| | Three Months Ended | | | |
|----------------------------|--------------------|----------|-------------|----------|
| | September 30, | | | |
| | 2017 | 2016 | \$ Change | % Change |
| Infrastructure Group | \$ (12,529) | \$ 9,858 | \$ (22,387) | (227.1)% |
| Aggregate and Mining Group | 9,565 | 7,651 | 1,914 | 25.0% |
| Energy Group | 4,460 | 805 | 3,655 | 454.0% |
| Corporate | (2,975) | (11,610) | 8,635 | 74.4% |

Infrastructure Group: Segment loss for this group was \$12,529 for the third quarter of 2017 compared to a profit of \$9,858 for the same period in 2016, a decrease in earnings of \$22,387 or 227.1%. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. As the Company is financing the Georgia plant, no revenues have been recorded to date related to this order; however, the Company has been recording revenue on the Arkansas plant order under the percent of completion method. Due to the identification of the design issues in the third quarter of 2017, the Company increased its estimate of the remaining costs to complete the orders for both pellet plants which resulted in negative \$22,738 pellet plant gross profit for the third quarter of 2017. Excluding the impact of pellet plant sales and margins in 2017, segment gross margins decreased from 22.8% for the third quarter of 2016 to 21.9% for the third quarter of 2017. Segment profits were also impacted by a \$1,563 increase in engineering expenses (primarily research and development and outside services).

Aggregate and Mining Group: Segment profit for the Aggregate and Mining group was \$9,565 for the third quarter of 2017 compared to \$7,651 for the same period in 2016, an increase of \$1,914 or 25.0%. The increase in profits between periods is due to an increase in gross profit of \$2,903 due to increased sales as gross margins remained relatively constant at 24.0% and 24.4% for the third quarters of 2017 and 2016, respectively. The improved gross profits were partially offset by increased sales promotion expense of \$1,504 which were offset by a \$463 decrease in exhibit costs between periods.

Energy Group: The Energy group had a profit of \$4,460 for the third quarter of 2017 compared to \$805 for the third quarter of 2016 an increase of \$3,655 or 454.0%. Gross profits for the segment increased by \$3,949 for the third quarter of 2017 as compared to the third quarter of 2016 impacted by a \$1,198 increase in sales between periods and a 690 basis point increase in gross margins. Gross profits were favorably impacted by improved market conditions for drilling rigs and the acquisition of Power Flame on August 1, 2016. The improved gross profits were partially offset by increased selling, general, administrative and engineering expenses of \$446 at Power Flame.

Corporate: The Corporate Group had a loss of \$2,975 for the third quarter of 2017 compared to a loss of \$11,610 for the third quarter of 2016, a favorable change of \$8,635 or 74.4%, due primarily to reductions in U.S. federal income taxes of \$6,493 and profit sharing, restricted stock unit and SERP expenses of \$1,973.

Segment Profit (Loss)-Nine Months:

| | Nine Months Ended | | | |
|----------------------------|-------------------|-----------|-------------|----------|
| | September 30, | | | |
| | 2017 | 2016 | \$ Change | % Change |
| Infrastructure Group | \$ 15,545 | \$ 51,394 | \$ (35,849) | (69.8)% |
| Aggregate and Mining Group | 29,360 | 28,135 | 1,225 | 4.4% |
| Energy Group | 10,355 | 3,237 | 7,118 | 219.9% |
| Corporate | (27,666) | (40,745) | 13,079 | 32.1% |

Infrastructure Group: Segment profit for this group was \$15,545 for the nine months ending September 30, 2017 compared to \$51,394 for the same period in 2016, a decrease of \$35,849 or 69.8%, of which \$34,955 is due to reduced gross margins. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. As the Company is financing the Georgia plant, no revenues have been recorded to date on this order; however, the Company has been recording revenue on the Arkansas plant order under the percent of completion method. Due to the identification of the design issues in the third quarter of 2017, the Company increased its estimate of the remaining costs to complete the orders for both pellet plants which resulted in negative \$22,738 pellet plant gross profit in the third quarter of 2017. Margins on pellet plants were also negatively impacted by installation cost overruns during the second quarter of 2017 resulting in total gross profits on pellet plant sales of negative \$27,098 for the nine months ended September 30, 2017. Excluding the impact of pellet plant sales and margins in 2017, segment gross margins decreased from 24.4% for the first nine months of 2016 to 23.1% for the first nine months of 2017 due primarily to product mix changes between years. Segment profit was also negatively impacted by \$2,086 of costs incurred related to ConExpo in 2017.

Aggregate and Mining Group: Segment profit for this group was \$29,360 for the nine months ending September 30, 2017 compared to \$28,135 for the same period in 2016, an increase of \$1,225 or 4.4%. Nine month gross profits for this segment increased by \$2,428 as compared to the prior year due to an increase in sales of \$29,812 and a 170 basis point decline in gross margins. The increased gross profits were partially offset by increased selling, general, administrative and engineering expenses, including \$1,935 of ConExpo related costs.

Energy Group: The Energy group had a profit of \$10,355 for the nine months ending September 30, 2017 compared to \$3,237 for the same period in 2016, an increase of \$7,118 or 219.9%. Profit for the segment was positively impacted by an increase in gross profit of \$12,104 due to a \$29,476 increase in sales and a 380 basis point increase in gross margins between periods. The improved gross profits were partially offset by increased selling, general, administrative and engineering expenses between periods, primarily due to \$3,577 of increased costs incurred by Power Flame, which was acquired on August 1, 2016.

Corporate: The Corporate Group had a loss of \$27,666 for the nine months ending 2017 compared to a loss of \$40,745 for the same period in 2016, a favorable change of \$13,079 or 32.1% primarily due to reductions in U.S. federal income taxes of \$11,527, SERP expenses of \$1,730 and profit sharing expenses of \$918.

Liquidity and Capital Resources

The Company's primary sources of liquidity and capital resources are its cash on hand, borrowing capacity under a \$100,000 revolving credit facility and cash flows from operations. The Company had \$66,379 of cash available for operating purposes as of September 30, 2017, of which \$16,857 was held by the Company's foreign subsidiaries. While the Company has no plans to transfer the cash held by its foreign subsidiaries to the U.S. in the foreseeable future, to the extent foreign earnings are eventually repatriated, such amounts may be subject to income tax liabilities, both in the U.S. and in various applicable foreign jurisdictions. At September 30, 2017 and at all times during the first nine months of 2017, the Company had no borrowings outstanding under its credit facilities with Wells Fargo Bank, N.A. Net of letters of credit totaling \$8,594, the Company had borrowing availability of \$91,406 under the credit facility as of September 30, 2017. The amended and restated credit agreement contains certain financial covenants, including provisions concerning required levels of annual net income and minimum tangible net worth. The Company was in compliance with the financial covenants of the Wells Fargo agreement at September 30, 2017.

The Company's South African subsidiary, Osborn Engineered Products SA (Pty) Ltd ("Osborn"), has a credit facility of \$7,007 with a South African bank to finance short-term working capital needs, as well as to cover performance letters of credit, advance payment and retention guarantees. As of September 30, 2017, Osborn had no outstanding borrowings but had \$1,044 in performance, advance payment and retention guarantees outstanding under the facility. The facility has been guaranteed by Astec Industries, Inc., but is otherwise unsecured. A 0.75% unused facility fee is charged if less than 50% of the facility is utilized. As of September 30, 2017, Osborn had available credit under the facility of \$5,963. The interest rate is 0.25% less than the South Africa prime rate, resulting in a rate of 10.0% as of September 30, 2017.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling \$4,100 as of September 30, 2017 from Brazilian banks with interest rates ranging from 10.4% to 11.0%. The loans' maturity dates range from November 2018 to April 2024 and the debts are secured by Astec Brazil's manufacturing facility and also by letters of credit totaling \$6,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various 5-year equipment financing loans outstanding with Brazilian banks in the aggregate of \$805 as of September 30, 2017 that have interest rates ranging from 3.5% to 16.3%. These equipment loans have maturity dates ranging from September 2018 to April 2020. Astec Brazil's loans are included in the accompanying unaudited condensed consolidated balance sheets as current maturities of long-term debt (\$2,689) and long-term debt (\$2,216) as of September 30, 2017.

Cash Flows from Operating Activities:

| | Nine Months Ended September 30, | | Increase (Decrease) |
|---|------------------------------------|------------------|------------------------|
| | 2017 | 2016 | |
| Net income | \$ 26,736 | \$ 42,654 | \$ (15,918) |
| Deferred income tax benefit | (224) | (2,019) | 1,795 |
| Depreciation and amortization | 19,253 | 18,118 | 1,135 |
| Provision for warranties | 11,842 | 13,135 | (1,293) |
| Changes in working capital: | | | |
| Trade and other receivables | 766 | (5,224) | 5,990 |
| Inventories | (39,332) | (8,120) | (31,212) |
| Prepaid expenses | 4,601 | (3,132) | 7,733 |
| Accounts payable | 2,820 | 3,234 | (414) |
| Customer deposits | 11,040 | 35,685 | (24,645) |
| Product warranty accruals | (11,072) | (11,011) | (61) |
| Prepaid and income taxes payable, net | (16,246) | 5,655 | (21,901) |
| Other, net | 565 | 7,798 | (7,233) |
| Net cash provided by operating activities | <u>\$ 10,749</u> | <u>\$ 96,773</u> | <u>\$ (86,024)</u> |

Net cash from operating activities decreased by \$86,024 for the first nine months of 2017 as compared to the first nine months of 2016 due primarily to an increase in the growth of inventories of \$31,212 related to increased sales and backlogs, a reduction in the growth of customer deposits of \$24,645 (due primarily to a large pellet plant related deposit received in 2016), a \$21,901 increase in cash used for income taxes and a \$15,918 reduction in net income.

Cash Flows Used by Investing Activities:

| | Nine Months Ended September 30, | | Increase (Decrease) |
|--|------------------------------------|--------------------|------------------------|
| | 2017 | 2016 | |
| Expenditures for property and equipment | \$ (13,920) | \$ (17,483) | \$ 3,563 |
| Business acquisition, net of cash acquired | - | (39,613) | 39,613 |
| Other | (243) | 403 | (646) |
| Net cash used by investing activities | <u>\$ (14,163)</u> | <u>\$ (56,693)</u> | <u>\$ 42,530</u> |

Net cash used by investing activities decreased by \$42,530 for the first nine months of 2017 as compared to the same period in 2016 due primarily to decreased spending on business acquisitions in the first nine months of 2017 as compared to the first nine months of 2016 due to the acquisition of Power Flame, Inc on August 1, 2016.

Total capital expenditures for 2017 are forecasted to be approximately \$22,000. The Company expects to finance these expenditures using currently available cash balances, internally generated funds and available credit under the Company's credit facilities. Capital expenditures are generally for machinery, equipment and facilities used by the Company in the production of its various products. The Company believes that its current working capital, cash flows generated from future operations and available capacity under its credit facility will be sufficient to meet the Company's working capital and capital expenditure requirements through November, 2018.

Cash Flows used by Financing Activities:

| | Nine Months Ended September 30, | | Increase (Decrease) |
|---------------------------------------|------------------------------------|--------------------|------------------------|
| | 2017 | 2016 | |
| Payment of dividends | \$ (6,920) | \$ (6,912) | \$ (8) |
| Net change in borrowings from banks | (6,583) | (3,875) | (2,708) |
| Other, net | (406) | (1,847) | 1,441 |
| Net cash used by financing activities | <u>\$ (13,909)</u> | <u>\$ (12,634)</u> | <u>\$ (1,275)</u> |

Cash used by financing activities increased by \$1,275 for the first nine months of 2017 compared to the same period in 2016 due primarily to the Company's Osborn subsidiary paying off its outstanding line of credit in 2017.

Financial Condition

The Company's current assets increased to \$609,898 as of September 30, 2017 from \$576,833 as of December 31, 2016, an increase of \$33,065 or 5.7% due primarily to an increases in inventories of \$38,942 and prepaid assets and other current assets of \$10,464 (primarily prepaid income taxes) offset by a decline in cash of \$15,992 during the first nine months of 2017.

The Company's current liabilities increased to \$177,236 as of September 30, 2017 from \$168,861 as of December 31, 2016, an increase of \$8,375 or 5.0% due primarily to an increase in customer deposits of \$11,041 offset by a reduction in short-term bank debt due to the payoff of a \$4,632 line of credit balance by the Company's Osborn subsidiary.

Market Risk and Risk Management Policies

We have no material changes to the disclosure on this matter made in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Off-balance Sheet Arrangements

As of September 30, 2017, the Company does not have any off-balance sheet arrangements as defined by Item 303(a)(4) of Regulation S-K.

Contractual Obligations

During the nine months ended September 30, 2017, there were no substantial changes in the Company's commitments or contractual liabilities.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

The Company has no material changes to the disclosure on this matter made in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Item 4. Controls and ProceduresDisclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including its principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

The Company's management, under the supervision and with the participation of the Company's principal executive officer and principal financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Company's principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) were effective.

Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

The Company is involved from time to time in legal actions arising in the ordinary course of its business. Other than as set forth in Part I, "Item 3. Legal Proceedings" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, the Company currently has no pending or threatened litigation that the Company believes will result in an outcome that would materially affect the Company's business, financial position, cash flows or results of operations. Nevertheless, there can be no assurance that future litigation to which the Company becomes a party will not have a material adverse effect on its business, financial position, cash flows or results of operations.

Item 1A. Risk Factors

In addition to the other information set forth in this Report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, which could materially affect the Company's business, financial condition or future results. There have been no material changes in the Company's risk factors from those disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. The risks described in the Company's Annual Report on Form 10-K for the year ended December 31, 2016 and in this Quarterly Report on Form 10-Q are not the only risks facing our Company. Additional risks and uncertainties not currently known to management or that management currently deems to be immaterial also may materially adversely affect the Company's business, financial condition or operating results.

Item 6. Exhibits

| <u>Exhibit No.</u> | <u>Description</u> |
|--------------------|---|
| 10.1 | Amendment to "Appendix A" of the Astec Industries, Inc. Supplemental Executive Retirement Plan, effective October 26, 2017. |
| 31.1 | Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 32* | Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extension Schema |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase |

The exhibits are numbered in accordance with Item 601 of Regulation S-K. Inapplicable exhibits are not included in the list.

* In accordance with Release No. 34-47551, this exhibit is hereby furnished to the SEC as an accompanying document and is not to be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended.

Items 2, 3, 4 and 5 are not applicable and have been omitted.

Exhibit Index

| Exhibit No. | Description |
|----------------------|---|
| 10.1 | Amendment to "Appendix A" of the Astec Industries, Inc. Supplemental Executive Retirement Plan, effective October 26, 2017. |
| 31.1 | Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 32 | Certification of Chief Executive Officer and Chief Financial Officer pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extension Schema |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase |

SIGNATURES

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.

ASTEC INDUSTRIES, INC.
(Registrant)

Date: November 6, 2017

/s/ Benjamin G. Brock

Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)

Date: November 6, 2017

/s/ David C. Silvius

David C. Silvius
Chief Financial Officer, Vice President, and Treasurer
(Principal Financial and Accounting Officer)

AMENDMENT TO "APPENDIX A" OF THE
ASTEC INDUSTRIES, INC.
SUPPLEMENTAL EXECUTIVE RETIREMENT PLAN

THIS AMENDMENT to "Appendix A" of the Astec Industries, Inc. Supplemental Executive Retirement Plan, as amended and restated as of January 1, 2008 (the "Plan"), is adopted by Astec Industries, Inc. (the "Company"), effective as of October 26, 2017.

WHEREAS, Article 2 of the Plan permits the Board of Directors of the Company (the "Board") to designate participants in the Plan from time to time, whose names and effective dates of participation shall be set forth on Exhibit A to the Plan;

NOW, THEREFORE, the Company hereby amends "Appendix A" of the Plan in the form attached hereto, to update the same for changes in Plan participation approved by the Board, by action taken on October 26, 2017.

Except as amended herein, the Plan shall continue in full force and effect.

ASTEC INDUSTRIES, INC.

Date: October 26, 2017

By: /s/ Stephen C. Anderson
Name: Stephen C. Anderson
Title: Secretary

"APPENDIX A"

Each Participant's Date of Participation

| <u>Name of Participant</u> | <u>Effective Dates of Participation</u> |
|----------------------------|---|
| W. Norman Smith | January 1, 1995 |
| Richard Patek | January 1, 1995 |
| Tim Gonigam | August 1, 2000 |
| Jeff Elliott | January 1, 2002 |
| Stephen C. Anderson | January 1, 2003 |
| Richard Dorris | January 3, 2005 |
| David C. Silvious | July 1, 2005 |
| Ben Brock | January 1, 2007 |
| Neil Peterson | January 1, 2008 |
| Joe Cline | February 1, 2008 |
| Chris Colwell | May 31, 2011 |
| Robin Leffew | August 1, 2011 |
| Matthew B. Haven | January 1, 2013 |
| Jeff May | October 1, 2013 |
| Malcolm Swanson | January 1, 2014 |
| Tom Wilkey | January 1, 2014 |
| Jeff Schwarz | July 1, 2014 |
| Steven L. Claude | August 24, 2015 |
| John Irvine | April 28, 2016 |
| Jaco Van Der Merwe | October 1, 2016 |
| Scott Barker | April 3, 2017 |
| Neil Whitworth | May 30, 2017 |
| Michael G. Anderson | July 7, 2017 |
| Jody Volner | November 1, 2017 |

Certification Pursuant To Rule 13a-14(a)/15d-14(a),
As Adopted Pursuant To

Section 302 of the Sarbanes-Oxley Act of 2002

I, Benjamin G. Brock certify that:

1. I have reviewed this quarterly report on Form 10-Q of Astec Industries, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
-

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2017

/s/Benjamin G. Brock

Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)

Certification Pursuant To Rule 13a-14(a)/15d-14(a),
As Adopted Pursuant To

Section 302 of the Sarbanes-Oxley Act of 2002

I, David C. Silvius certify that:

1. I have reviewed this quarterly report on Form 10-Q of Astec Industries, Inc.;
 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
-

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 6, 2017

/s/David C. Silvius

David C. Silvius

Chief Financial Officer, Vice President and Treasurer

(Principal Financial Officer)

**Certification Pursuant To
Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934
and 18 U.S.C. Section 1350, As Adopted Pursuant To
Section 906 Of The Sarbanes-Oxley Act Of 2002**

In connection with the Quarterly Report of Astec Industries, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Benjamin G. Brock and David C. Silvius certify, pursuant to Rule 13a-14(b)/15d-14(b) of the Securities Exchange Act of 1934 and 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 Of The Sarbanes-Oxley Act Of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Benjamin G. Brock

Benjamin G. Brock
Chief Executive Officer
(Principal Executive Officer)
November 6, 2017

/s/ David C. Silvius

David C. Silvius
Chief Financial Officer, Vice President and Treasurer
(Principal Financial Officer)
November 6, 2017