

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, 2018
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 every Interactive Data File required to be submitted 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 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:

Large Accelerated Filer

Accelerated Filer

Non-accelerated filer

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, 2018
22,797,532

PART I - Financial Information

Item 1. Financial Statements (unaudited)

Condensed Consolidated Balance Sheets as of September 30, 2018 and December 31, 2017

Condensed Consolidated Statements of Operations for the Three and Nine Months Ended September 30, 2018 and 2017

Condensed Consolidated Statements of Comprehensive Income (Loss) for the Three and Nine Months Ended September 30, 2018 and 2017

Condensed Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2018 and 2017

Condensed Consolidated Statement of Equity for the Nine Months Ended September 30, 2018

Notes to Unaudited Condensed Consolidated Financial Statements

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

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Item 4. Controls and Procedures

PART II – Other Information

Item 1. Legal Proceedings

Item 1A. Risk Factors

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Item 6. Exhibits

PART I – FINANCIAL INFORMATION
Item 1. Financial Statements

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

ASSETS	September 30, 2018	December 31, 2017
Current assets:		
Cash and cash equivalents	\$ 25,674	\$ 62,280
Investments	2,432	1,624
Trade receivables	121,855	114,786
Other receivables	5,668	5,166
Inventories	429,220	391,379
Prepaid income taxes	26,697	12,557
Prepaid expenses and other	12,816	15,177
Total current assets	<u>624,362</u>	<u>602,969</u>
Property and equipment, net	187,903	190,396
Investments	15,053	14,553
Goodwill	45,153	45,732
Other long-term assets	30,993	35,929
Total assets	<u>\$ 903,464</u>	<u>\$ 889,579</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Current maturities of long-term debt	\$ 793	\$ 2,469
Accounts payable	74,419	60,417
Customer deposits	52,276	49,381
Accrued product warranty	10,912	15,410
Accrued payroll and related liabilities	21,754	23,297
Accrued loss reserves	1,891	2,504
Accrued pellet plant agreement costs	17,000	--
Other current liabilities	27,908	25,668
Total current liabilities	<u>206,953</u>	<u>179,146</u>
Long-term debt	26,506	1,575
Deferred income tax liabilities	1,309	1,509
Other long-term liabilities	22,422	20,584
Total liabilities	<u>257,190</u>	<u>202,814</u>
Shareholders' equity	645,532	685,672
Non-controlling interest	742	1,093
Total equity	<u>646,274</u>	<u>686,765</u>
Total liabilities and equity	<u>\$ 903,464</u>	<u>\$ 889,579</u>

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,	
	2018	2017	2018	2017
Net sales	\$ 256,613	\$ 252,054	\$ 854,595	\$ 872,364
Cost of sales	198,329	212,970	717,197	691,985
Gross profit	58,284	39,084	137,398	180,379
Selling, general, administrative and engineering expenses	51,054	45,494	154,396	142,836
Income (loss) from operations	7,230	(6,410)	(16,998)	37,543
Interest expense	170	188	488	638
Other income, net of expenses	23	1,113	1,536	1,886
Income (loss) from operations before income taxes	7,083	(5,485)	(15,950)	38,791
Income tax provision (benefit)	180	(2,782)	(2,301)	12,055
Net income (loss)	6,903	(2,703)	(13,649)	26,736
Net loss attributable to non-controlling interest	(92)	(36)	(238)	(137)
Net income (loss) attributable to controlling interest	\$ 6,995	\$ (2,667)	\$ (13,411)	\$ 26,873
Earnings (loss) per common share				
Net income (loss) attributable to controlling interest:				
Basic	\$ 0.31	\$ (0.12)	\$ (0.58)	\$ 1.17
Diluted	\$ 0.30	\$ (0.12)	\$ (0.58)	\$ 1.16
Weighted average number of common shares outstanding:				
Basic	22,923	23,029	23,009	23,023
Diluted	23,084	23,029	23,009	23,180
Dividends declared per common share	\$ 0.11	\$ 0.10	\$ 0.31	\$ 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,	
	2018	2017	2018	2017
Net income (loss)	\$ 6,903	\$ (2,703)	\$ (13,649)	\$ 26,736
Other comprehensive income (loss):				
Foreign currency translation adjustments	(1,536)	1,346	(7,845)	4,906
Change in unrecognized pension benefit cost	--	--	65	--
Other comprehensive income (loss)	(1,536)	1,346	(7,780)	4,906
Comprehensive income (loss)	5,367	(1,357)	(21,429)	31,642
Comprehensive income (loss) attributable to non-controlling interest	(122)	8	(407)	(117)
Comprehensive income (loss) attributable to controlling interest	\$ 5,489	\$ (1,365)	\$ (21,022)	\$ 31,759

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,	
	2018	2017
Cash flows from operating activities:		
Net income (loss)	\$ (13,649)	\$ 26,736
Adjustments to reconcile net income (loss) to net cash provided (used)		
by operating activities:		
Depreciation and amortization	20,755	19,253
Provision for doubtful accounts	145	216
Provision for warranties	10,115	11,842
Deferred compensation benefit	(441)	(725)
Stock-based compensation	1,770	2,774
Deferred income tax provision (benefit)	1,587	(224)
Gain on disposition of fixed assets	(249)	(292)
Distributions to SERP participants	(291)	(206)
Change in operating assets and liabilities:		
Sale (purchase) of trading securities, net	(628)	74
Trade and other receivables	(7,512)	766
Inventories	(37,841)	(39,332)
Prepaid expenses and other assets	796	4,601
Accounts payable	14,047	2,820
Accrued pellet plant agreement costs	17,000	--
Accrued product warranty	(14,480)	(11,072)
Customer deposits	2,895	11,040
Prepaid and income taxes payable, net	(11,055)	(16,246)
Other	(3,498)	(1,276)
Net cash provided (used) by operating activities	(20,534)	10,749
Cash flows from investing activities:		
Expenditures for property and equipment	(17,518)	(13,920)
Proceeds from sale of property and equipment	330	337
Other	83	(580)
Net cash used by investing activities	(17,105)	(14,163)
Cash flows from financing activities:		
Payment of dividends	(7,149)	(6,920)
Stock buy-back purchases	(13,914)	--
Borrowings under bank loans	48,523	--
Repayments of bank loans	(24,741)	(6,583)
Sale of Company shares held by SERP	246	126
Withholding tax paid upon vesting of restricted stock units	(432)	(501)
Purchase of subsidiary shares	(27)	(31)
Net cash provided (used) by financing activities	2,506	(13,909)
Effect of exchange rates on cash	(1,473)	1,331
Net change in cash and cash equivalents	(36,606)	(15,992)
Cash and cash equivalents, beginning of period	62,280	82,371
Cash and cash equivalents, end of period	\$ 25,674	\$ 66,379

See Notes to Unaudited Condensed Consolidated Financial Statements

Astec Industries, Inc.
Condensed Consolidated Statement of Equity
For the Nine Months Ended September 30, 2018
(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, 2017	23,070	\$ 4,614	\$ 141,931	\$ (24,243)	\$ (1,960)	\$ 565,330	\$ 1,093	\$ 686,765
Net loss	--	--	--	--	--	(13,411)	(238)	(13,649)
Other comprehensive loss	--	--	--	(7,780)	--	--	--	(7,780)
Change in ownership percentage of subsidiary	--	--	--	--	--	--	(120)	(120)
Dividends declared	--	--	8	--	--	(7,157)	--	(7,149)
Stock buy-back program	(296)	(59)	(13,855)	--	--	--	--	(13,914)
Stock-based compensation	--	--	2,301	--	--	--	--	2,301
Stock issued under incentive plans	24	5	(5)	--	--	--	--	--
Withholding tax paid upon vesting of RSUs	--	--	(432)	--	--	--	--	(432)
SERP transactions, net	--	--	218	--	28	--	--	246
Other	--	--	--	--	--	(1)	7	6
Balance, September 30, 2018	<u>22,798</u>	<u>\$ 4,560</u>	<u>\$ 130,166</u>	<u>\$ (32,023)</u>	<u>\$ (1,932)</u>	<u>\$ 544,761</u>	<u>\$ 742</u>	<u>\$ 646,274</u>

See Notes to Unaudited Condensed Consolidated Financial Statements

ASTEC INDUSTRIES, INC.

NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Dollar and share amounts in thousands, except per share amounts, unless otherwise specified)

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, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. It is suggested that these unaudited condensed consolidated financial statements be read in conjunction with the consolidated financial statements and the notes thereto included in the Astec Industries, Inc. Annual Report on Form 10-K for the year ended December 31, 2017.

The unaudited condensed consolidated balance sheet as of December 31, 2017 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. Certain provisions of the standard were clarified in March 2016 with the issuance of ASU No. 2016-08, "Revenue from Contracts with Customers (Topic 606)", which provided additional 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. These new standards require companies to use more judgment and to make more estimates than under previous guidance and expand required disclosures to include information regarding contract assets and liabilities as well as a more disaggregated view of revenue. The standards are effective for public companies for annual periods beginning after December 15, 2017 and, as such, the Company adopted the new standards effective January 1, 2018 using the modified retrospective transition method. See Note 11, Revenue Recognition, for additional disclosures required by the standards. The adoption of the standards did not have a material impact on the Company's financial position, results of operations or cash flows, and no cumulative effect adjustment to retained earnings was necessitated.

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 new standard was further clarified by the issuance of ASU No. 2018-03, "Technical Corrections and Improvements to Financial Instruments - Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities" in February 2018. The standards are effective for public companies in fiscal years beginning after December 15, 2017, and the Company adopted the standards effective January 1, 2018. The adoption of these standards did not have a material impact on the Company's financial position, results of operations or cash flows.

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 establishes a right-of-use ("ROU") model and 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 operations 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. Certain provisions of ASU No. 2016-02 were later modified or clarified by the issuance of ASU 2018-11, "Leases (Topic 842): Targeted Improvements" and ASU 2018-10, "Codification Improvements to Topic 842, Leases". A modified retrospective transition approach is required by the ASU and its provisions must be applied to all leases existing at the date of initial application. An entity may choose to use either (1) the standard's effective date or (2) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. The new standards are effective for public companies for fiscal years beginning after December 15, 2018. The Company plans to adopt the new standards effective January 1, 2019 using the effective date as the date of initial application. Consequently, financial information will not be updated and the disclosures required under the new standards will not be provided for periods before January 1, 2019. The standards provide a number of optional practical expedients in transition which the Company is continuing to evaluate. The Company does not expect the adoption of these standards to have a material impact on its results of operations or cash flows; however, the Company continues to evaluate the impact the adoption of the new standards will have on its financial position. While the Company continues to assess all of the effects of adoption, it currently believes the most significant effects relate to the recognition of new ROU assets and lease liabilities on its balance sheet for its operating leases and new disclosures about its leasing activities. The Company does not expect a significant change in our leasing activities between now and adoption.

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, results of operations or cash flows.

In August 2016, the FASB issued ASU No. 2016-15, "Statement of Cash Flows (Topic 230), 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 adopted the standard effective January 1, 2018. The adoption of this standard did not have a material impact on the Company's unaudited condensed consolidated statements of cash flows.

In October 2016, the FASB issued ASU No. 2016-16, "Income Taxes (Topic 740), 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 previous guidance, which required 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 requires 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. The Company adopted the new standard effective January 1, 2018. The application of this standard did not have a material impact on the Company's financial position, results of operations or cash flows.

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 adopted the new standard effective January 1, 2018. The application of this standard did not have a material impact on the Company's 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.

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement – Reporting Comprehensive Income (Topic 220), Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income", which permits companies to reclassify tax effects stranded in accumulated other comprehensive income ("OCI") as a result of tax reform impacting tax rates or other items, such as changing from a worldwide tax system to a territorial system, from OCI to retained earnings. Other tax effects stranded in OCI due to other reasons, such as prior changes in tax laws or changes in valuation allowances, may not be reclassified. Additional disclosures will also be required upon adoption of the new standard. The new standard is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company has not yet adopted this new standard. The Company does not expect the adoption of this standard to have a material impact on its financial position, results of operations or cash flows.

In March 2018, the FASB issued ASU No. 2018-05 "Income Taxes (Topic 740), amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 (SEC Update)", which addresses the accounting and disclosures around the enactment of the Tax Cuts and Jobs Act and the Securities and Exchange Commission's Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"). The Company adopted this new standard in the first quarter of 2018. See Note 10, Income Taxes, for the disclosures related to this amended guidance.

In August 2018, the FASB issued ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement" which aims to improve the overall usefulness of disclosures to financial statement users and reduce unnecessary costs to companies when preparing fair value measurement disclosures. The standard is effective for annual and interim periods beginning after December 15, 2019 with early adoption permitted. The Company has not yet adopted this new standard. The Company does not expect the adoption of this new 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 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,	
	2018	2017	2018	2017
Numerator:				
Net income (loss) attributable to controlling interest	\$ 6,995	\$ (2,667)	\$ (13,411)	\$ 26,873
Denominator:				
Denominator for basic earnings (loss) per share	22,923	23,029	23,009	23,023
Effect of dilutive securities:				
Restricted stock units	104	--	--	94
Supplemental Executive Retirement Plan	57	--	--	63
Denominator for diluted earnings (loss) per share	23,084	23,029	23,009	23,180

Note 3. Receivables

Receivables are net of allowances for doubtful accounts of \$1,285 and \$1,716 as of September 30, 2018 and December 31, 2017, respectively.

Note 4. Inventories

Inventories consist of the following:

	September 30, 2018	December 31, 2017
Raw materials and parts	\$ 166,980	\$ 146,144
Work-in-process	86,871	129,441
Finished goods	153,158	94,571
Used equipment	22,211	21,223
Total	\$ 429,220	\$ 391,379

Raw materials and parts are 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 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 consist of completed equipment manufactured for sale to customers. Finished goods inventory at September 30, 2018 includes a three-line pellet plant located at a customer's site in Georgia with an inventory value of \$59,522.

Used equipment 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 adjustment 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 \$249,390 and \$237,742 as of September 30, 2018 and December 31, 2017, 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, 2018 and December 31, 2017 are Level 1 and Level 2 in the fair value hierarchy as defined above:

	September 30, 2018		
	Level 1	Level 2	Total
Financial Assets:			
Trading equity securities:			
SERP money market fund	\$ 259	\$ --	\$ 259
SERP mutual funds	5,465	--	5,465
Preferred stocks	276	--	276
Trading debt securities:			
Corporate bonds	5,755	--	5,755
Municipal bonds	--	1,290	1,290
Floating rate notes	1,362	--	1,362
U.S. Treasury notes	1,892	--	1,892
Asset backed securities	--	455	455
Other	--	731	731
Derivative financial instruments	--	345	345
Total financial assets	\$ 15,009	\$ 2,821	\$ 17,830

Financial Liabilities:			
SERP liabilities			
SERP liabilities	\$ --	\$ 8,625	\$ 8,625
Total financial liabilities	\$ --	\$ 8,625	\$ 8,625

	December 31, 2017		
	Level 1	Level 2	Total
Financial Assets:			
Trading equity securities:			
SERP money market fund	\$ 124	\$ --	\$ 124
SERP mutual funds	4,839	--	4,839
Preferred stocks	364	--	364
Trading debt securities:			
Corporate bonds	5,661	--	5,661
Municipal bonds	--	1,912	1,912
Floating rate notes	753	--	753
U.S. Treasury notes	1,030	--	1,030
Asset backed securities	--	526	526
Other	--	968	968
Total financial assets	\$ 12,771	\$ 3,406	\$ 16,177

Financial Liabilities:			
SERP liabilities			
SERP liabilities	\$ --	\$ 8,552	\$ 8,552
Derivative financial instruments	--	112	112
Total financial liabilities	\$ --	\$ 8,664	\$ 8,664

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, 2017 to September 30, 2018.

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 net gains of \$309 and \$242 as of September 30, 2018 and December 31, 2017, respectively.

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. As of September 30, 2018, outstanding borrowings under the agreement totaled \$25,553, which are included in long-term debt in the accompanying unaudited condensed consolidated balance sheets. The highest borrowing amount outstanding at any time during the nine-month period ended September 30, 2018 was \$29,445. Letters of credit totaling \$9,546, including \$3,200 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, 2018. Additional borrowing available under the credit facility is \$64,901 as of September 30, 2018. 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 3.02% as of September 30, 2018. 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 \$6,709 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, 2018, Osborn had no outstanding borrowings but had \$576 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, 2018, Osborn had available credit under the facility of \$6,133. The interest rate is 0.25% less than the South Africa prime rate, resulting in a rate of 9.75% as of September 30, 2018.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling \$1,529 as of September 30, 2018 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 \$3,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various five-year equipment financing loans outstanding with Brazilian banks in the aggregate of \$217 as of September 30, 2018 that have interest rates ranging from 3.5% to 16.3%. These equipment loans have maturity dates ranging from January 2019 to April 2020. Astec Brazil's loans are included in the accompanying unaudited condensed consolidated balance sheets as current maturities of long-term debt (\$793) and long-term debt (\$953) as of September 30, 2018.

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, 2018 and 2017 are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Reserve balance, beginning of the period	\$ 11,544	\$ 14,269	\$ 15,410	\$ 13,156
Warranty liabilities accrued	2,586	3,594	10,115	11,842
Warranty liabilities settled	(2,998)	(3,888)	(9,674)	(11,072)
Pellet plant agreement warranty write-off	--	--	(4,806)	--
Other	(220)	14	(133)	63
Reserve balance, end of the period	\$ 10,912	\$ 13,989	\$ 10,912	\$ 13,989

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 \$8,493 as of September 30, 2018 and \$8,119 as of December 31, 2017, of which \$6,602 and \$5,615 were included in other long-term liabilities in the accompanying unaudited condensed consolidated balance sheets as of September 30, 2018 and December 31, 2017, respectively.

Note 10. Income Taxes

The Company's combined effective income tax rate was 2.5% and 50.7% for the three-month periods ended September 30, 2018 and 2017, respectively. The Company's combined effective income tax rate was 14.4% and 31.1% for the nine-month periods ended September 30, 2018 and 2017, respectively. The Company's effective tax rates for the three and nine-month periods ended September 30, 2018 and 2017 include the effect of state income taxes and other discrete items as well as a benefit for research and development tax credits. The Company's liability for uncertain tax positions as of September 30, 2018 increased by \$1,810, as compared to December 31, 2017 primarily due to the recognition of additional research and development tax credits and increased interest on existing reserves.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "Tax Act") was signed into law making significant changes to the Internal Revenue Code ("IRC"). Changes include, but are not limited to, a federal corporate tax rate decrease from 35% to 21% for tax years beginning after December 31, 2017, the transition of U.S. international taxation from a worldwide tax system to a territorial system and a one-time transition tax on the mandatory deemed repatriation of foreign earnings. The Company's fourth quarter 2017 provision for income taxes was reduced by \$1,056 (comprised of a \$1,548 reduction in income tax expense recorded in connection with the remeasurement of deferred tax assets and liabilities and \$492 of additional income tax expense recorded in connection with the transition tax on the mandatory deemed repatriation of foreign earnings) due to applying the provisions of the Tax Act. During 2018, the Company revised its estimate of the one-time transition tax from \$492 to \$1,727 and the additional \$1,235 is included in income tax expense in the third quarter of 2018.

The Tax Act also repealed the Domestic Production Activities Deduction ("DPAD") provided under IRC §199 for tax years beginning after December 31, 2017. As such, no DPAD benefit is reflected in the nine-month period ended September 30, 2018. The DPAD benefit reduced income tax expense by \$1,216 for the nine-month period ended September 30, 2017.

In March 2018, the FASB issued ASU No. 2018-05 "Income Taxes (Topic 740), amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118 (SEC Update)", which addresses the accounting and disclosures around the enactment of the Tax Act and SAB 118, which was issued in December 2017. SAB 118 was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. In accordance with SAB 118, the Company determined that the \$492 of additional income tax liability recorded at December 31, 2017 due to the provisions of the Tax Act was a provisional amount and constituted a reasonable estimate based upon the best information currently available. During the third quarter of 2018, the Company revised its estimate of the one-time transition tax from \$492 to \$1,727.

In addition to providing for a territorial tax system, beginning in 2018 the Tax Act also includes two new U.S. tax base erosion provisions: the global intangible low-taxed income ("GILTI") provisions and the base-erosion and anti-abuse tax ("BEAT") provisions.

The GILTI provisions require the Company to include, in its U.S. federal income tax return, foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. The Company elected to account for GILTI tax in the period in which it is incurred, and, therefore, did not provide any deferred tax impacts of GILTI in its consolidated financial statements as of December 31, 2017; however, a reasonable estimate of its impact has been included in the Company's effective tax rate for the three and nine-month periods ended September 30, 2018.

The BEAT provisions in the Tax Act eliminates the deduction of certain base-erosion payments made to related foreign corporations and imposes a minimum tax, if greater than regular tax. The Company does not expect it will be subject to this tax, and, therefore, has not included any tax impact of BEAT in its consolidated financial statements for the nine-month period ended September 30, 2018.

The Tax Act also provides for a new U.S. tax deduction, the foreign-derived intangible income ("FDII") provision. The FDII provision allows the Company to claim a deduction, in its U.S. federal income tax return, based upon a percentage of calculated taxable income from foreign-derived intangible income. A reasonable estimate of its impact has been included in the Company's effective tax rate for the three and nine-month periods ended September 30, 2018.

Note 11. Revenue Recognition: As discussed in Note 1, the Company adopted the provisions of ASU No. 2014-09, "Revenue from Contracts with Customers" and its related amendments effective January 1, 2018. The adoption of this standard did not have a material impact on the timing or amounts of revenues recognized by the Company, and, as such, no cumulative effect adjustment was recorded as of the adoption of the standard.

The following table disaggregates our revenue by major source for the three-month period ended September 30, 2018 (excluding intercompany sales):

	Infrastructure Group	Aggregate and Mining Group	Energy Group	Total
Net Sales-Domestic:				
Equipment sales	\$ 38,377	\$ 43,742	\$ 44,930	\$ 127,049
Parts and component sales	22,526	19,238	9,601	51,365
Service and equipment installation revenue	2,682	533	1,122	4,337
Used equipment sales	1,526	292	2,642	4,460
Freight revenue	2,527	1,887	1,439	5,853
Other	60	(395)	1,437	1,102
Total domestic revenue	67,698	65,297	61,171	194,166
Net Sales-International:				
Equipment sales	12,766	23,758	3,781	40,305
Parts and component sales	5,018	10,610	2,428	18,056
Service and equipment installation revenue	911	263	147	1,321
Used equipment sales	233	467	42	742
Freight revenue	437	1,212	241	1,890
Other	--	128	5	133
Total international revenue	19,365	36,438	6,644	62,447
Total net sales	\$ 87,063	\$ 101,735	\$ 67,815	\$ 256,613

The following table disaggregates our revenue by major source for the nine-month period ended September 30, 2018 (excluding intercompany sales):

	Infrastructure Group	Aggregate and Mining Group	Energy Group	Total
Net Sales-Domestic:				
Equipment sales	\$ 226,619	\$ 165,225	\$ 123,573	\$ 515,417
Pellet plant agreement sale charge	(75,315)	--	--	(75,315)
Parts and component sales	92,907	55,383	32,395	180,685
Service and equipment installation revenue	7,892	1,424	4,550	13,866
Used equipment sales	4,535	2,355	3,577	10,467
Freight revenue	9,781	5,608	4,389	19,778
Other	837	(1,967)	3,862	2,732
Total domestic revenue	267,256	228,028	172,346	667,630
Net Sales-International:				
Equipment sales	30,720	69,470	17,618	117,808
Parts and component sales	14,390	32,969	8,180	55,539
Service and equipment installation revenue	2,368	902	376	3,646
Used equipment sales	1,397	1,954	625	3,976
Freight revenue	1,121	3,509	918	5,548
Other	107	268	73	448
Total international revenue	50,103	109,072	27,790	186,965
Total net sales	\$ 317,359	\$ 337,100	\$ 200,136	\$ 854,595

Revenue is recognized when obligations under the terms of a contract are satisfied and generally occurs with the transfer of control of the product or services at a point in time. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring goods or providing services. The Company generally obtains purchase authorizations from its customers for a specified amount of products at a specified price with specific delivery terms. A significant portion of the Company's equipment sales represents equipment produced in the Company's manufacturing facilities under short-term contracts for a customer's project or equipment designed to meet a customer's requirements. Most of the equipment sold by the Company is based on standard configurations, some of which are modified to meet customer's needs or specifications. The Company provides customers with technical design and performance specifications and typically performs pre-shipment testing when feasible to ensure the equipment performs according to the customer's need, regardless of whether the Company provides installation services in addition to the equipment. Significant down payments are required on many equipment orders with other terms allowing for payment shortly after shipment, typically 30 days. Taxes assessed by a governmental authority that are directly imposed on revenue-producing transactions between the Company and its customers, such as sales, use, value-added and some excise taxes, are excluded from revenue. Expected warranty costs for our standard warranties are expensed at the time the related revenue is recognized. Costs of obtaining sales contracts with an expected duration of one year or less are expensed as incurred. As contracts are typically fulfilled within one year from the date of the contract, revenue adjustments for a potential financing component or the costs to obtain the contract are not made. Other contract assets are not material.

Depending on the terms of the arrangement with the customer, recognition of a portion of the consideration received may be deferred and recorded as a contract liability if we have to satisfy a future obligation, such as to provide installation assistance, service work to be performed in the future without charge, floor plan interest to be reimbursed to our dealer customers or for annual rebates given to certain high volume customers. Contract liabilities, excluding customer deposits and accrued pellet plant agreement costs, are immaterial at September 30, 2018.

Certain contracts include terms and conditions pursuant to which the Company recognizes revenues upon the completion of production, and the equipment is subsequently stored at the Company's plant at the customer's request. Revenue is recorded on such contracts upon the customer's assumption of title and risk of ownership, which transfers control of the equipment, and when collectability is reasonably assured. Additionally, in order to recognize the sale as a bill and hold, the product must be identified as belonging to the customer, be ready for physical transfer to the customer and the Company cannot have the ability to use the product or to direct it to another customer.

The Company had a pellet plant sale which was accounted for over time using the ratio of costs incurred to estimated total costs. Pellet plant sales recognized under the over-time method in the first nine months of 2018 for production activities were not significant. Penalties are accounted for as a reduction in net sales. During July 2018, the Company entered into an agreement with its pellet plant customer due to unresolved issues which inhibited the plant's ability to meet contractual provisions by the date required (June 29, 2018) in the Company's sales contract with its customer. Under the terms of the pellet plant agreement, the Company agreed to pay its customer \$68,000 over 120 days following the execution of the agreement. Considering this liability and other provisions of the pellet plant agreement, including the forgiveness of \$7,315 of accounts receivable due from the customer, a charge of \$75,315 against sales was recorded in the second quarter of 2018. During the third quarter of 2018, the Company paid the scheduled \$51,000 to its customer, leaving an unpaid liability of \$17,000 at September 30, 2018. Net contract assets/liabilities, excluding the \$17,000 remaining liability under the pellet plant agreement, were not material as of September 30, 2018. Net contract assets/liabilities were a liability of \$2,757 as of December 31, 2017.

Service and Equipment Installation Revenue – The Company often contracts with the purchaser of certain of its equipment to provide installation services. Installation is typically separately priced in the contract based upon observable market prices for stand-alone performance obligations or a cost plus margin approach when one is not available. The Company may also provide future service on equipment sold at the customer's request, which may be for equipment repairs after the warranty period expires. Service is billed on a cost plus margin approach or at a standard rate per hour.

Used Equipment Sales – Used equipment is obtained by trade-in on new equipment sales, as a separate purchase in the open market or from the Company's equipment rental business. Revenues from the sale of used equipment are recognized upon transfer of control to the customer at agreed upon pricing.

Freight Revenue - The Company records revenues earned for shipping and handling as revenue at the time of shipment, regardless of whether or not it is identified as a separate performance obligation. The cost of shipping and handling is classified as cost of goods sold concurrently.

Other Revenues – Miscellaneous revenues and offsets not associated with one of the above classifications include rental revenues, extended warranty revenues, early pay discounts and floor plan interest reimbursements.

Note 12. 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 plant equipment, 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, distributors, 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 six 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, central mix and ready mix concrete batch plants, concrete mixers and concrete paving 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, concrete plant operators and contractors in the construction and demolition recycling markets. This group includes the operations of RexCon, Inc. beginning in October 2017.

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, 2018

	Infrastructure Group	Aggregate and Mining Group	Energy Group	Corporate	Total
Net sales to external customers	\$ 87,063	\$ 101,735	\$ 67,815	\$ --	\$ 256,613
Intersegment sales	6,424	4,300	1,975	--	12,699
Gross profit	18,642	24,294	15,282	66	58,284
Gross profit percent	21.4%	23.9%	22.5%	--	22.7%
Segment profit (loss)	\$ 4,761	\$ 9,011	\$ 3,318	\$ (9,778)	\$ 7,312

Nine Months Ended September 30, 2018

	Infrastructure Group	Aggregate and Mining Group	Energy Group	Corporate	Total
Net sales to external customers	\$ 317,359	\$ 337,100	\$ 200,136	\$ --	\$ 854,595
Intersegment sales	18,065	13,308	13,838	--	45,211
Gross profit	4,105	82,625	50,376	292	137,398
Gross profit percent	1.3%	24.5%	25.2%	--	16.1%
Segment profit (loss)	\$ (43,121)	\$ 34,669	\$ 16,406	\$ (20,428)	\$ (12,474)

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

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Total segment profit (loss)	\$ 7,312	\$ (1,479)	\$ (12,474)	\$ 27,594
Elimination of intersegment profit	(409)	(1,224)	(1,175)	(858)
Net income (loss)	6,903	(2,703)	(13,649)	26,736
Net loss attributable to non-controlling interest in subsidiaries	(92)	(36)	(238)	(137)
Net income (loss) attributable to controlling interest	\$ 6,995	\$ (2,667)	\$ (13,411)	\$ 26,873

Note 13. Contingent Matters

Certain customers have financed purchases of Company products through arrangements in which the Company is contingently liable for customer debt of \$2,713 as of September 30, 2018. The maximum potential amount of future payments for which the Company would be liable was equal to \$2,713 as of September 30, 2018. 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 \$1,193 related to these guarantees as of September 30, 2018.

In addition, the Company is contingently liable under letters of credit issued by Wells Fargo totaling \$9,546 as of September 30, 2018, including \$3,200 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, 2018, the Company's foreign subsidiaries are contingently liable for a total of \$1,700 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 \$11,246 as of September 30, 2018.

The Company's sales contract with the purchaser of a large wood pellet plant, on which \$143,300 of cumulative revenue (prior to the \$75,315 charge discussed below) has been recorded through September 30, 2018 based on the over-time method, contained certain production output and operational provisions, which if not timely met, could have resulted in the Company having to refund the purchase price to the customer. Additional contract provisions required the Company to compensate the customer for production shortfalls caused by the Company and other potential costs (depending on the market price of wood pellets). As the plant did not meet the production output and operational specifications by the deadline set forth in the contract (June 29, 2018), the Company entered into an agreement with the customer on July 20, 2018 whereby the Company agreed to pay its customer \$68,000 over 120 days following execution of the agreement and to forgive \$7,315 in accounts receivables to obtain a full release of all the Company's contractual obligations under the sales contract. The terms of the pellet plant agreement resulted in the Company recording charges against sales of \$75,315 and gross margins of \$71,029 in the second quarter of 2018. During the third quarter of 2018, the Company paid the scheduled \$51,000 to its customer, leaving an unpaid liability of \$17,000 at September 30, 2018. The pellet plant agreement also stipulates that the customer will pay the Company \$7,000 if the wood pellet plant's performance satisfies certain emissions targets prior to May 1, 2019.

The Company manufactured a large wood pellet plant for a customer under a Company-financed arrangement whereby the Company deferred the recognition of revenue as payment under the arrangement was not assured. While the plant, with a September 30, 2018 inventory value on the Company's books of \$59,522, is currently operational, the customer expressed its desire to further modify its obligations under the arrangement. As a result, the parties have agreed to jointly market the plant to a new buyer. The Company is currently in discussions with potential purchasers of the plant; however, the timing and terms of such a sale, if any, including the sales price, are uncertain. Depending on the ultimate sales price, future inventory reserves or losses upon the ultimate sale of the plant may occur. As required by the arrangement with the customer, the Company is currently funding the operation of the plant and may be responsible for operational losses should they occur prior to the ultimate sale of the plant. If the sale of the plant does not occur prior to the maturity date of the note in December 2018, the customer may default on its obligations and the Company may, as a result, retake possession of the plant. If this occurs, the Company anticipates that it would operate the plant for some period and may incur operating losses and may be required to make additional investments in the plant and its operations.

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 14. 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 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 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 32 and 30 RSUs vested during the nine-month periods ended September 30, 2018 and 2017, respectively. The Company withheld 8 shares due to statutory payroll tax withholding requirements upon the vesting of the RSUs during each of the first nine-month periods in 2018 and 2017, 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 2018 and 2017 was \$1,852 and \$1,975, respectively. The grant date fair value of the RSUs granted during the first nine months of 2018 and 2017 was \$3,553 and \$5,399, respectively. Compensation expense of \$1,316 and \$2,057 was recorded in the nine-month periods ended September 30, 2018 and 2017, respectively, to reflect the fair value of RSUs granted (or anticipated to be granted for 2018 performance) to employees amortized over the portion of the vesting period occurring during the periods.

Note 15. Other Income, Net of Expenses

Other income, net of expenses for the three and nine-month periods ended September 30, 2018 and 2017 is presented below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Interest income	\$ 225	\$ 735	\$ 678	\$ 1,067
Gain (loss) on investments	(27)	(38)	(96)	3
Insurance recovery	--	--	635	--
Other	(175)	416	319	816
Total	\$ 23	\$ 1,113	\$ 1,536	\$ 1,886

Note 16. 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 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 \$11,046 during the nine-month period ended September 30, 2018. The Company reported \$345 of derivative assets in other current assets at September 30, 2018 and \$112 of derivative liabilities in other current liabilities at December 31, 2017. The Company recognized, as a component of cost of sales, a net gain of \$169 and a net loss of \$291 on the changes in fair value of derivative financial instruments in the three-month periods ended September 30, 2018 and 2017, respectively. The Company recognized, as a component of cost of sales, a net gain of \$855 and a net loss of \$683 on the changes in fair value of derivative financial instruments in the nine-month periods ended September 30, 2018 and 2017, respectively. There were no derivatives that were designated as hedges at September 30, 2018.

Note 17. Business Combination

On October 1, 2017, the Company acquired substantially all of the assets and liabilities of RexCon LLC ("RexCon") for a total purchase price of \$26,443. The purchase price was paid in cash with \$3,000 deposited into escrow for a period of time not to exceed 18 months pending final resolution of certain post-closing adjustments and any indemnification claims. The Company's allocation of the purchase price includes the recognition of \$3,488 of goodwill and \$7,778 of other intangible assets consisting of non-compete agreements (5-year useful life), technology (19-year useful life), trade names (15-year useful life) and customer relationships (18-year useful life). RexCon's operating results are 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.

Note 18. Stock Buy Back Program

On July 29, 2018, the Company's Board of Directors approved a share repurchase program authorizing the Company to repurchase up to \$150,000 of its common stock. Under the share repurchase plan, the Company may purchase common stock in open market transactions, block or privately negotiated transactions, and may from time to time purchase shares pursuant to a trading plan in accordance with Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934, as amended, or by any combination of such methods. The number of shares to be purchased and the timing of the purchases are based on a variety of factors. Through September 30, 2018, the Company has repurchased 297 shares of its stock at total cost of \$13,914 under this program. No time limit was set for completion of repurchases under the authorization and the program may be suspended or discontinued at any time.

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 2018 (including the minimum revenue to be received related to pellet plant inventory when sold), the Company's expected capital expenditures in 2018, the expected benefit and impact of financing arrangements, the ability of the Company to meet its working capital and capital expenditure requirements through November 2019, 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 impact on international sales of equipment modifications currently being designed, 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, 2017, should be carefully considered when evaluating the Company's business and future prospects.

Overview

The Company is a manufacturer of specialized equipment for asphalt road building; aggregate processing; oil, gas and water well drilling; wood processing and concrete production. The Company's primary businesses:

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

- design, engineer, manufacture and market additional equipment and components, including equipment for geothermal drilling, oil and natural gas drilling, industrial heat transfer, wood 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 21 companies that are consolidated in our financial statements, which includes 17 manufacturing companies, two companies that operate as dealers for the manufacturing companies, a captive insurance company and the parent company. 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 and pavers and other specialized industrial products as well as 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 aggregate processing and mining equipment and parts in the aggregate, metallic mining, quarrying, recycling, ports and bulk handling industries.

Energy Group - This segment consists of six business units that design, manufacture and market equipment for the extraction and production of fuels, biomass production, concrete production and drilling equipment and related parts to the industrial, oil and gas, construction and water well industries. RexCon, Inc. was added to this group 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., Power Flame Incorporated and RexCon, Inc. (beginning in October 2017). 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 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") 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 many of the Company's customers, who are typically more comfortable making capital equipment purchases with long-term federal legislation in place. Federal and state funding impacts a significant portion of all highway, street and roadway 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) has a positive impact on the road construction industry and allows public transportation agencies and contractors to plan and execute longer-term projects. 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 additional funding under future legislation passed by the federal government 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 necessary to restore the nation's highways to the 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 remains 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 increased the Federal Funds Rate several times in recent quarters, beginning in December 2016, and future rate increases are expected; however, the current Federal Funds Rate is still considered in the historically low range.

Significant portions of the Company's revenues from the Infrastructure Group relate to the sale of equipment involved in the production, handling, recycling or application of asphalt. Liquid asphalt is a by-product of oil refining. An increase or decrease in the price of oil impacts the cost of asphalt, which could alter demand for asphalt production and application, 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. 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 began rising in early 2016 and have continued their upward trend during much of 2017 and 2018, and fluctuations are expected to continue in the future. 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. 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 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 demand for the Company's oil and gas related products.

Steel is a major component in the Company's equipment. Steel prices rose substantially during the first half of 2018 but have stabilized since June 2018. The Company expects any near-term increases to be relatively small as the effects of the 232 tariffs have largely been realized. Based on this and the Company's forward-looking contracts currently in place, the Company expects pricing to remain at current levels through the remainder of 2018. The Company believes modest price increases are likely in early 2019 as mill orders activity remains strong. 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 continue to review the trends in steel prices during the final quarter of 2018 and 2019 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 the third quarter of 2018, the strong U.S. dollar has negatively impacted pricing in certain foreign markets the Company serves. 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 strengthen above current values, 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 2017, approximately 65% of the Company's sales were to the end user. The Company expects this ratio to be between 60% and 70% for 2018.

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

Under the Company's current profit sharing plans, corporate officers, subsidiary presidents and other key management 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 target incentive compensation. Each subsidiary also has the opportunity to earn up to 10% of its after-tax profit as a profit-sharing incentive award to be paid to its non-management employees.

Under the Company's current long-term incentive plans, 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 target incentive compensation. Additional RSUs may be granted to other key subsidiary management employees based upon individual subsidiary profits.

Results of Operations

Pellet Plant Agreement

The Company's sales contract with the purchaser of a large wood pellet plant, on which \$143,300 of cumulative revenue (prior to the \$75,315 charge discussed below) was recorded through the first six months of 2018 (2018 revenues were not material) based on the over-time method, contained certain production output and operational provisions, which if not timely met, could have resulted in the Company having to refund the purchase price to the customer. Additional contract provisions required the Company to compensate the customer for production shortfalls caused by the Company and other potential costs (depending on the market price of wood pellets). As the plant did not meet the production output and operational specifications by the deadline set forth in the contract (June 29, 2018), the Company entered into an agreement with the customer on July 20, 2018 whereby the Company agreed to pay its customer \$68,000 over 120 days following execution of the agreement and to forgive \$7,315 in accounts receivables to obtain a full release of all the Company's contractual obligations under the sales contract. The terms of the pellet plant agreement resulted in the Company's Infrastructure Group recording charges against sales of \$75,315 and gross margins of \$71,029 in the second quarter of 2018. The Company paid the scheduled \$51,000 of the aforementioned \$68,000 during the three months ended September 30, 2018, leaving a remaining liability of \$17,000, which is scheduled to be paid in the fourth quarter of 2018. The pellet plant agreement also stipulates that the customer will pay the Company \$7,000 if the wood pellet plant's performance satisfies certain emissions targets prior to May 1, 2019.

Net Sales

Net sales for the third quarter of 2018 were \$256,613 compared to \$252,054 for the third quarter of 2017, an increase of \$4,559 or 1.8%. Sales are generated primarily from new equipment and parts sales to domestic and international customers. Sales for the third quarter of 2018 as compared to the third quarter of 2017 increased in the Aggregate and Mining Group and the Energy Group but decreased in the Infrastructure Group. Sales by RexCon, Inc., which was added to the Energy Group in October 2017, were \$6,722 for the three-month period ended September 30, 2018. 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 these design issues, the Company increased its estimate of the remaining costs to complete each pellet plant order. As revenue on the Arkansas order was being recorded on the over-time method, the identification of the additional costs resulted in negative \$13,405 pellet plant revenue being recorded in the third quarter of 2017. No pellet plant revenue was recorded in the third quarter of 2018. Domestic sales declined by 1.2% in the third quarter of 2018 as compared to the third quarter of 2017, with increased domestic sales by the Energy Group but decreased domestic sales by the Infrastructure Group and the Aggregate and Mining Group. International sales in the third quarter of 2018 increased 12.4% as compared to the third quarter of 2017, with increased international sales in the Infrastructure Group and the Aggregate and Mining Group but decreased international sales by the Energy Group. The Company's international backlog increased by 12.4% from September 30, 2017 to September 30, 2018, reflecting the continuing improvement in the Company's overall international business. This increased international order activity is attributable to improved global market conditions, the stabilization of the U.S. dollar in certain foreign markets in late 2017 and early 2018 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 in international markets where future growth is anticipated. Parts sales for the third quarter of 2018 as compared to the third quarter of 2017 increased by 8.0% with growth in each of our reporting segments. Sales reported by the Company's foreign subsidiaries in U.S. dollars for the third quarter of 2018 would have been \$1,667 higher had foreign exchange rates for the third quarter of 2018 been the same as the third quarter of 2017.

Net sales for the first nine months of 2018 were \$854,595 compared to \$872,364 for the first nine months of 2017, a decrease of \$17,769 or 2.0%. Sales are generated primarily from new equipment and parts sales to domestic and international customers. Sales for the first nine months of 2018 as compared to the first nine months of 2017 increased in the Aggregate and Mining Group and the Energy Group and decreased in the Infrastructure Group due primarily to the \$75,315 charge against sales as a result of the pellet plant agreement discussed above. Pellet plant sales for the nine months ended September 30, 2017 were \$2,370. Sales by RexCon, Inc., which was added to the Energy Group in October 2017, were \$22,774 for the nine-month period ended September 30, 2018. Year to date domestic sales not related to pellet plants grew 6.8% in 2018 as compared to the prior year and continue to be positively impacted by the strong domestic economy, the effects of the long-term federal highway bill enacted in December 2015 and other state and local funding mechanisms. International sales in the first nine months of 2018 grew a modest 0.8% as compared to the first nine months of 2017. The Company's international backlog increased by 12.4% from September 30, 2017 to September 30, 2018, reflecting the continuing improvement in the Company's overall international business. This increased order activity is attributable to improved global market conditions, the stabilization of the U.S. dollar in certain foreign markets in late 2017 and early 2018 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 in international markets where future growth is anticipated. Parts sales for the first nine months of 2018 as compared to the first nine months of 2017 increased 10.3%. Sales reported by the Company's foreign subsidiaries in U.S. dollars for the first nine months of 2018 would have been \$1,639 lower had the foreign exchange rates for the first nine months of 2018 been the same as the first nine months of 2017.

Domestic sales for the third quarter of 2018 were \$194,166 or 75.7% of consolidated net sales compared to \$196,478 or 78.0% of consolidated net sales for the third quarter of 2017, a decrease of \$2,312 or 1.2%. Domestic sales for the third quarter of 2018 as compared to the third quarter of 2017 increased by \$16,202 in the Energy Group but decreased \$15,878 in the Infrastructure Group and \$2,636 in the Aggregate and Mining Group. Domestic sales by the Energy Group include \$6,713 of sales by RexCon, which was acquired in October 2017.

Domestic sales for the first nine months of 2018 were \$667,630 or 78.1% of consolidated net sales compared to \$686,883 or 78.7% of consolidated net sales for the first nine months of 2017, a decrease of \$19,253 or 2.8%. Domestic sales for the first nine months of 2018 as compared to the first nine months of 2017 increased by \$16,202 in the Aggregate and Mining Group and \$39,408 in the Energy Group but decreased \$74,861 in the Infrastructure Group (after giving effect to the \$75,315 charge against sales due to the pellet plant agreement discussed above). Domestic sales by the Energy Group include \$22,467 of sales by RexCon, which was acquired in October 2017.

International sales for the third quarter of 2018 were \$62,447 or 24.3% of consolidated net sales compared to \$55,576 or 22.0% of consolidated net sales for the third quarter of 2017, an increase of \$6,871 or 12.4%. International sales for the third quarter of 2018 as compared to the third quarter of 2017 increased by \$4,897 in the Aggregate and Mining Group and \$4,265 in the Infrastructure Group, but decreased \$2,291 in the Energy Group. Increases in international sales in South America, Canada, Australia, the Middle East and Mexico were partially offset by decreases in sales in Brazil, Post-Soviet States, Asia and China.

International sales for the first nine months of 2018 were \$186,965 or 21.9% of consolidated net sales compared to \$185,481 or 21.3% of consolidated net sales for the first nine months of 2017, an increase of \$1,484 or 0.8%. International sales for the first nine months of 2018 as compared to the first nine months of 2017 decreased \$14,805 in the Infrastructure Group but increased \$13,693 in the Aggregate and Mining Group and \$2,594 in the Energy Group. Increases in international sales in South America, the Middle East, Canada and Africa were partially offset by decreases in sales in Russia, Asia, China, Post-Soviet States and Brazil.

Parts sales for the third quarter of 2018 were \$69,420 compared to \$64,299 for the third quarter of 2017, an increase of \$5,121 or 8.0%. Parts sales as a percentage of net sales increased 160 basis points to 27.1% in the third quarter of 2018 compared to 25.5% in the third quarter of 2017. Parts sales increased \$874 in the Infrastructure Group, \$2,512 in the Aggregate and Mining Group and \$1,735 in the Energy Group.

Parts sales for the first nine months of 2018 were \$236,224 compared to \$214,083 for the first nine months of 2017, an increase of \$22,141 or 10.3%. Parts sales as a percentage of net sales increased 310 basis points to 27.6% in the first nine months of 2018 compared to 24.5% in the first nine months of 2017. Parts sales increased \$8,934 in the Aggregate and Mining Group, \$7,392 in the Energy Group and \$5,815 in the Infrastructure Group.

Gross Profit

Consolidated gross profit increased \$19,200 or 49.1% to \$58,284 for the third quarter of 2018 compared to \$39,084 for the third quarter of 2017. Gross margin as a percentage of sales increased 720 basis points to 22.7% for the third quarter of 2018 compared to 15.5% for the third quarter of 2017. 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, the Company increased its estimate of the remaining costs to complete both plants which resulted in negative \$22,738 gross margin being recorded on the two orders in the third quarter of 2017. RexCon, Inc. contributed \$1,183 of gross profit in the third quarter of 2018.

Consolidated gross profit decreased \$42,981 or 23.8% to \$137,398 for the first nine months of 2018 compared to \$180,379 for the first nine months of 2017. Gross margin as a percentage of sales decreased 460 basis points to 16.1% for the first nine months of 2018 compared to 20.7% for the first nine months of 2017. Gross profit for the first nine months of 2018 was impacted by the \$75,315 charge to sales due to the pellet plant agreement discussed above, which resulted in a decrease in gross profit of \$71,029. 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. RexCon, Inc. contributed \$4,865 of gross profit in the first nine months of 2018.

Selling, General, Administrative and Engineering Expenses

Selling, general, administrative and engineering expenses increased \$5,560 to \$51,054 or 19.9% of net sales compared to \$45,494 or 18.0% of net sales for the third quarter of 2017. The increase is due primarily to a \$1,081 increase in selling expense (primarily increased wages (\$651) and commissions (\$683)), a \$5,110 increase in general and administrative expenses (primarily increased consulting and outside services fees (\$2,003), legal and professional fees (\$1,121), airplane maintenance costs (\$656), wages (\$463) and accounting fees (\$786)) and a reduction in engineering expenses of \$631. RexCon, which was acquired in October 2017, incurred \$974 of selling, general, administrative and engineering expenses in the third quarter of 2018.

Selling, general, administrative and engineering expenses increased \$11,560 to \$154,396 or 18.1% of net sales (or 16.6% of net sales excluding the impact of the \$75,315 pellet plant agreement charge against sales) for the first nine months of 2018, compared to \$142,836 or 16.4% of net sales for the first nine months of 2017. The increase is due primarily to a \$1,189 increase in selling expense (primarily increased wages (\$1,143), exhibit costs (\$1,323), amortization (\$733) and commissions of (\$1,360) partially offset by a reduction in ConExpo related costs (\$4,365)), a \$10,956 increase in general and administrative expenses (primarily increased consulting and outside services fees (\$2,976), legal and professional fees (\$2,351), airplane maintenance costs (\$1,491), wages (\$2,257), accounting fees (\$2,033) and depreciation (\$657) partially offset by a reduction in employee incentive benefits (\$1,147)) and a reduction in engineering expenses of \$585. RexCon, which was acquired in October 2017, incurred \$2,866 of selling, general, administrative and engineering expenses in the first nine months of 2018.

Interest Expense

Interest expense for the third quarter of 2018 decreased \$18 to \$170 from \$188 for the third quarter of 2017, primarily due to a reduction in interest at the Company's Brazilian subsidiary, partially offset by an increase in interest on the Company's line of credit.

Interest expense for the first nine months of 2018 decreased \$150 to \$488 from \$638 for the first nine months of 2017, primarily due to a reduction in interest at the Company's Brazilian and South African subsidiaries, partially offset by an increase in interest on the Company's line of credit.

Other Income, Net of Expenses

Other income, net of expenses was \$23 for the third quarter of 2018 compared to \$1,113 for the third quarter of 2017, a decrease of \$1,090 due primarily to a \$510 reduction in interest income and \$506 related to license fee income which was included in other income in 2017 but included in net sales in 2018 due to the adoption of ASU No. 2014-09 regarding revenue recognition.

Other income, net of expenses was \$1,536 for the first nine months of 2018 compared to \$1,886 for the first nine months of 2017, a decrease of \$350. The decrease was due primarily to a \$389 reduction in interest income and the reclassification of license fee income from this category in 2017 to net sales in 2018, partially offset by a \$635 insurance recovery during the first nine months of 2018.

Income Tax Expense

The Company's combined effective income tax rate was 2.5% for the third quarter of 2018 compared to 50.7% for the third quarter of 2017. The tax rate for the third quarter of 2018 was favorably impacted by the passage of the Tax Cuts and Jobs Act of 2017 (which we refer to as the Tax Act) which lowered the U.S. corporate tax rate from 35% to 21% effective January 1, 2018. The Tax Act also contained provisions partially offsetting the tax rate decline including the elimination of the Domestic Production Activities Deduction and a new territorial tax on foreign earnings. The tax rate for the third quarter of 2018 includes benefits identified during the gathering of information coincident with the filing of the Company's 2017 tax return and tax planning efforts related to research and development tax credits. 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. See Note 10, Income Taxes, of the Notes to Unaudited Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for additional information.

The Company's combined effective income tax rate was 14.4% for the first nine months of 2018 compared to 31.1% for the first nine months of 2017. The decline in tax rates is due to the passage of the Tax Act which lowered the U.S. corporate tax rate from 35% to 21% effective January 1, 2018, favorable benefits recognized in the third quarter of 2018 related to benefits identified during the gather of information coincident with the filing of the Company's 2017 tax return and tax planning efforts related to the research and development tax credits discussed above. The Tax Act also contained provisions partially offsetting the tax rate decline including the elimination of the Domestic Production Activities Deduction and a new territorial tax on foreign earnings. See Note 10, Income Taxes of the Notes to Unaudited Condensed Consolidated Financial Statements in this Quarterly Report on Form 10-Q for additional information.

Net Income

The Company had net income attributable to controlling interest of \$6,995 for the third quarter of 2018 compared to a net loss attributable to controlling interest of \$2,667 for the third quarter of 2017, an improvement of \$9,662. Net income (loss) attributable to controlling interest per diluted share was \$0.30 for the third quarter of 2018 compared to \$(0.12) for the third quarter of 2017, an improvement in earnings per share of \$0.42. Diluted shares outstanding for the quarters ended September 30, 2018 and 2017 were 23,084 and 23,029, respectively.

The Company had a net loss attributable to controlling interest of \$13,411 for the first nine months of 2018 compared to net income attributable to controlling interest of \$26,873 for the first nine months of 2017, a decline in earnings of \$40,284. The nine month 2018 net loss includes an after-tax charge of \$57,182 due to the pellet plant agreement discussed above. Net income (loss) attributable to controlling interest per share was \$(0.58) for the first nine months of 2018 compared to \$1.16 for the first nine months of 2017, a decline in earnings per share of \$1.74. Diluted shares outstanding for the nine months ended September 30, 2018 and 2017 were 23,009 and 23,180, 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 third quarter of 2013. In July 2018, the Company's Board of Directors approved a revised quarterly dividend of \$0.11 per share, a 10% increase. 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 2017, \$0.10 in each of the first two quarters of 2018 and \$0.11 in the third quarter of 2018.

Stock Buy Back Program

On July 29, 2018, the Company's Board of Directors approved a share repurchase program authorizing the Company to repurchase up to \$150,000 of its common stock. Under the share repurchase plan, the Company may purchase common stock in open market transactions, block or privately negotiated transactions, and may from time to time purchase shares pursuant to a trading plan in accordance with Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934, as amended, or by any combination of such methods. The number of shares to be purchased and the timing of the purchases are based on a variety of factors. Through September 30, 2018, the Company has repurchased 297 shares of its stock at total cost of \$13,914 under this program. No time limit was set for completion of repurchases under the authorization and the program may be suspended or discontinued at any time.

Backlog

The backlog of orders as of September 30, 2018 was \$308,582 compared to \$386,471 (adjusted for the acquisition of Rex-Con) as of September 30, 2017, a decrease of \$77,889 or 20.2%. Domestic backlogs decreased \$87,282 or 28.1% while international backlogs increased \$9,393 or 12.4%. The September 30, 2018 backlog was comprised of 72.3% domestic orders and 27.7% international orders, as compared to 80.3% domestic orders and 19.7% international orders as of September 30, 2017. Included in the September 30, 2017 backlog is approximately \$60,000 for a three-line pellet plant from one customer under a Company-financed arrangement whereby the Company expected to record the related revenues when payment became assured. While the plant is currently operational, the customer has expressed its desire to further modify its obligations under the arrangement. As a result, the Company removed the order from its backlog in the second quarter of 2018 and the parties are jointly marketing the plant to new potential buyers.

The Company is unable to determine whether the changes in backlogs (ignoring the impact of the removal of the \$60,000 pellet plant order discussed above) 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
	2018	2017		
Infrastructure Group	\$ 87,063	\$ 98,676	\$ (11,613)	(11.8)%
Aggregate and Mining Group	101,735	99,474	2,261	2.3%
Energy Group	67,815	53,904	13,911	25.8%

Infrastructure Group: Sales in this group were \$87,063 for the third quarter of 2018 compared to \$98,676 for the same period in 2017, a decrease of \$11,613 or 11.8%. Domestic sales for the Infrastructure Group decreased \$15,878 or 19.0% for the third quarter of 2018 compared to the same period in 2017 due to reduced volumes on both asphalt plants and mobile asphalt equipment. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. No revenues have been recorded on the Georgia plant to date; however, the Company recorded revenue on the Arkansas plant order under the over-time 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. No pellet plant sales were recorded in the third quarter of 2018. International sales for the Infrastructure Group increased \$4,265 or 28.2% for the third quarter of 2018 compared to the same period in 2017 due primarily to an increase in asphalt plant sales. The group's international backlog remained relatively flat from September 30, 2017 to September 30, 2018. The Company's international sales efforts are continuing to benefit from improved highway building activities and global market conditions in certain foreign countries, while still being hampered by the continuing strong U.S. dollar, freight costs on overseas shipments and increased raw material prices in the United States. Sales increases between periods occurred primarily in Mexico, Canada and Australia, offset in part by decreased sales in the Middle East, Asia and Japan. Parts sales for the Infrastructure Group increased 3.3% for the third quarter of 2018 compared to the same period in 2017.

Aggregate and Mining Group: Sales in this group were \$101,735 for the third quarter of 2018 compared to \$99,474 for the same period in 2017, an increase of \$2,261 or 2.3%. Domestic sales for the Aggregate and Mining Group decreased by \$2,636 or 3.9% for the third quarter of 2018 compared to the same period in 2017 due primarily to decreased sales of the Company's larger aggregate processing equipment lines along with a small decrease in mining related sales. International sales for the Aggregate and Mining Group increased \$4,897 or 15.5% in the third quarter of 2018 compared to the same period in 2017 due to improved economies in many international markets and improvements in the mining sector, coupled with the Company's continued international sales efforts and improved sales by the Company's Northern Ireland subsidiary. International sales increases in the Middle East, South America (excluding Brazil) and Europe were partially offset by sales decreases in Post-Soviet states, Asia and Brazil. Parts sales for this group increased 9.2% for the third quarter of 2018 compared to the same period in 2017.

Energy Group: Sales in this group were \$67,815 for the third quarter of 2018 compared to \$53,904 for the same period in 2017, an increase of \$13,911 or 25.8%. Domestic sales for the Energy Group increased \$16,202 or 36.0% for the third quarter of 2018 compared to the same period in 2017. Domestic sales were favorably impacted by the \$6,713 of domestic sales by RexCon, Inc. (which was acquired in October 2017) and improved sales of industrial heaters/boilers and double pumpers for the oil and gas industries and wood chippers and grinders. International sales for the Energy Group decreased \$2,291 or 25.6% for the third quarter of 2018 as compared to the third quarter of 2017 due primarily to decreased sales of industrial burners. Sales decreases occurred primarily in China, the Middle East and Brazil. Parts sales for this group increased 16.8% for the third quarter of 2018 compared to the same period in 2017, with 66.2% of the increase attributable to sales by RexCon, Inc.

Segment Net Sales-Nine Months:

	Nine Months Ended		\$ Change	% Change
	September 30,			
	2018	2017		
Infrastructure Group	\$ 317,359	\$ 407,025	\$ (89,666)	(22.0)%
Aggregate and Mining Group	337,100	307,205	29,895	9.7%
Energy Group	200,136	158,134	42,002	26.6%

Infrastructure Group: Sales in this group were \$317,359 for the first nine months of 2018 compared to \$407,025 for the same period in 2017, a decrease of \$89,666 or 22.0%. Domestic sales for the Infrastructure Group decreased \$74,861 or 21.9% for the first nine months of 2018 compared to the same period in 2017 due to a one-time \$75,315 charge against sales resulting from the pellet plant agreement discussed above. Pellet plant sales for 2017 were \$2,370 for the first nine months of 2017. International sales for the Infrastructure Group decreased \$14,805 or 22.8% for the first nine months of 2018 compared to the same period in 2017 due to decreases in mobile asphalt equipment and asphalt plant sales partially offset by increased sales by the Company-owned dealership in Australia. Mobile equipment sales for the first nine months of 2017 were favorably impacted by initial purchases from new Company dealers added in certain foreign territories as the Company modified its sales strategy from a direct sales model to selling its mobile equipment through dealers in select territories where historical direct sales efforts had yielded less than desired volumes. While first nine months international sales declined year over year, the group's international backlog remained relatively flat from September 30, 2017 to September 30, 2018. The Company's international sales efforts continue to benefit from improved highway building activities and improved global market conditions in certain foreign countries. Future international sales, which may be adversely impacted by raw material price increases in the United States, are expected to be favorably impacted by equipment modifications currently being designed to better meet the needs of certain foreign markets. Sales decreases between periods occurred primarily in Russia, Canada, Mexico and the West Indies and were partially offset by improved sales in Australia. Parts sales for the Infrastructure Group increased 5.7% for the first nine months of 2018 compared to the same period in 2017.

Aggregate and Mining Group: Sales in this group were \$337,100 for the first nine months of 2018 compared to \$307,205 for the same period in 2017, an increase of \$29,895 or 9.7%. Domestic sales for the Aggregate and Mining Group increased by \$16,202 or 7.6% for the first nine months of 2018 compared to the same period in 2017 due primarily to increased sales into the Company's traditional rock quarry markets as well as improved sales into the mining sector, partially offset by a reduction in the Company's larger aggregate processing equipment. International sales for the Aggregate and Mining Group increased \$13,693 or 14.4% in the first nine months of 2018 compared to the same period in 2017 due to improved sales of the Company's equipment for both the aggregate processing and mining industries as a result of improved economies in many international markets, improvement in the mining sector, the Company's continued international sales efforts and improved sales by the Company's Northern Ireland subsidiary. International sales increases in South America, the Middle East, Mexico, Africa, Europe and Russia were partially offset by sales decreases in Asia and Post-Soviet States. Parts sales for this group increased 11.2% for the first nine months of 2018 compared to the same period in 2017.

Energy Group: Sales in this group were \$200,136 for the first nine months of 2018 compared to \$158,134 for the same period in 2017, an increase of \$42,002 or 26.6%. Domestic sales for the Energy Group increased \$39,408 or 29.6% for the first nine months of 2018 compared to the same period in 2017. Domestic sales were favorably impacted by the \$22,467 of domestic sales by RexCon, Inc. (which was acquired in October 2017) and improved sales of industrial heaters/boilers and double pumpers for the oil and gas industries, partially offset by a reduction in wood chippers and grinder sales in early 2018 related to the required conversion from Tier II to Tier IV engines. International sales for the Energy Group increased \$2,594 or 10.3% due primarily to increases in sales of industrial heaters/boilers and other equipment for the oil and gas industries and wood chipping and grinding equipment, partially offset by a reduction in sales of industrial burners. Sales increases occurring primarily in Canada and South America (excluding Brazil) were partially offset by decreased sales in Australia, China, Brazil and the Middle East. Parts sales for this group increased 22.3% for the first nine months of 2018 compared to the same period in 2017, with 57.2% of the growth being from sales by RexCon, Inc.

Segment Profit (Loss)-Quarter:

	Three Months Ended		\$ Change	% Change
	September 30,			
	2018	2017		
Infrastructure Group	\$ 4,761	\$ (12,529)	\$ 17,290	138.0%
Aggregate and Mining Group	9,011	9,565	(554)	(5.8)%
Energy Group	3,318	4,460	(1,142)	(25.6)%
Corporate	(9,778)	(2,975)	(6,803)	(228.7)%

Infrastructure Group: Segment profit for the Infrastructure Group was \$4,761 for the third quarter of 2018 compared to a segment loss of \$12,529 for the same period in 2017, an improvement in earnings of \$17,290. During the third quarter of 2017, the Company identified significant design issues at its customers' Georgia and Arkansas wood pellet plants. No revenues have been recorded to date related to the Georgia plant order; however, the Company recorded revenue on the Arkansas plant order under the over-time 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 remained relatively constant between years at 21.4% for the third quarter of 2018 as compared to 21.9% for the third quarter of 2017. Total segment profits were negatively impacted by the \$11,613 reduction in sales between periods and an increase in selling, general and administrative expenses of \$788. Engineering expenses declined by \$732 in the third quarter of 2018 as compared to the same period in 2017.

Aggregate and Mining Group: Segment profit for the Aggregate and Mining Group was \$9,011 for the third quarter of 2018 compared to \$9,565 for the same period in 2017, a decrease of \$554 or 5.8%. Gross margins remained relatively constant between periods at 23.9% for the third quarter of 2018 as compared to 24.0% for the third quarter of 2017. The slight decline in segment profits between years is primarily due to an \$800 increase in selling, general and administrative expenses offset by a \$292 reduction in engineering expenses and gross profits on the \$2,261 increase in sales between periods.

Energy Group: Segment profit for the Energy Group was \$3,318 for the third quarter of 2018 compared to \$4,460 for the same period in 2017, a decrease of \$1,142 or 25.6%. The Energy Group's gross profit increased \$1,860 between periods due to profits on a \$13,911 increase in sales, offset by a 240 basis point decrease in gross margins. The decline in gross margins between periods was primarily due to a \$1,795 increase in unabsorbed overhead for the third quarter of 2018 as compared to the third quarter of 2017. Segment profits were negatively impacted by increases in selling, general and administrative expenses of \$2,267 (of which \$915 was incurred by RexCon) and engineering expenses of \$393.

Corporate: Corporate operations resulted in a loss of \$9,778 for the third quarter of 2018 compared to a loss of \$2,975 for the third quarter of 2017, an increase in the loss between periods of \$6,803 or 228.7%. The additional losses included in the Corporate category for the third quarter of 2018 as compared to the third quarter of 2017 is due to a \$4,446 increase in income taxes and a \$2,336 increase in general and administrative expenses (primarily accounting fees, airplane maintenance and consulting fees/outside services fees).

Segment Profit (Loss)-Nine Months:

	Nine Months Ended		\$ Change	% Change
	September 30,			
	2018	2017		
Infrastructure Group	\$ (43,121)	\$ 15,545	\$ (58,666)	(377.4)%
Aggregate and Mining Group	34,669	29,360	5,309	18.1%
Energy Group	16,406	10,355	6,051	58.4%
Corporate	(20,428)	(27,666)	7,238	26.2%

Infrastructure Group: Segment loss for the Infrastructure Group was \$43,121 for the first nine months of 2018 compared to \$15,545 for the same period in 2017, a decrease in earnings of \$58,666. Gross profits declined by \$62,289 between periods due primarily to significant pellet plant related charges during both periods. Segment gross profit for the nine months ended September 2018 was negatively impacted by a \$71,029 charge against gross profit due to the pellet plant agreement discussed above. Segment profit for the nine months ended September 30, 2017 was negatively impacted due to identification of significant design issues at its customers' Georgia and Arkansas wood pellet plants in the third quarter of 2017. No revenues have been recorded on the Georgia order; however, the Company recorded revenue on the Arkansas plant order under the over-time 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. Gross margins for the nine months ended September 30, 2018 as compared to the same period in the prior year were also negatively impacted by a \$10,297 change in overabsorbed/unabsorbed overhead between periods and an \$11,981 reduction in net sales, excluding pellet plant revenue. Segment profit for the first nine months of 2018 as compared to the same period in 2017 was also negatively impacted by an \$871 increase in selling, general and administrative expenses (primarily wages/benefits, accounting fees, legal fees and consultant fees/outside services fees, partially offset by a reduction in ConExpo related costs). Segment profit was positively impacted by a \$4,688 reduction in income taxes for the first nine months of 2018 as compared to the same period in 2017.

Aggregate and Mining Group: Segment profit for the Aggregate and Mining Group was \$34,669 for the first nine months of 2018 compared to \$29,360 for the same period in 2017, an increase of \$5,309 or 18.1%. The increase in profits between periods is due to an increase in gross profit of \$7,973 due to increased sales of \$29,895 between periods. Gross margins improved slightly between periods at 24.5% and 24.3% for the first nine months of 2018 and 2017, respectively. Improved gross profits were partially offset by an increase in general and administrative expenses of \$2,968 (primarily wages/benefits, accounting fees, consulting fees/outside services fees and legal fees partially offset by a reduction in ConExpo related costs) and a \$1,211 reduction in engineering expenses for the first nine months of 2018 as compared to the same period in the prior year. Income taxes increased by \$984 for the first nine months of 2018 as compared to the same period in 2017.

Energy Group: Segment profit for the Energy Group was \$16,406 for the first nine months of 2018 compared to \$10,355 for the same period 2017, an increase of \$6,051 or 58.4%. The Energy Group's gross profit increased \$11,203 between periods due primarily to a \$42,002 increase in sales between periods and a 40 basis point increase in gross margins. The improved gross profits were partially offset by an increase in selling expenses of \$2,704 (primarily wages/benefits, advertising, exhibit costs and amortization), and general and administrative expenses of \$1,691 (primarily wages/benefits, consulting fees/outside services fees and accounting fees). Selling, general, administrative and engineering expenses of \$2,866 were incurred at RexCon, Inc. in the first nine months of 2018. Income taxes increased by \$453 for the first nine months of 2018 as compared to the same period in 2017.

Corporate: Corporate operations had a loss of \$20,428 for the first nine months of 2018 compared to a loss of \$27,666 for the first nine months of 2017, a favorable change of \$7,238 or 26.2%, due primarily to reductions in income taxes of \$11,106, which were partially offset by an increase in general and administrative expense of \$3,959 for the first nine months of 2018 as compared to the first nine months of 2017 (primarily related to increases in wages/benefits, accounting fees, plane maintenance and consulting fees/outside services fees, partially offset by a reduction in employee annual incentive costs).

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 \$25,674 of cash available for operating purposes as of September 30, 2018, of which \$22,526 was held by the Company's foreign subsidiaries. The transition of U.S. international taxation from a worldwide tax system to a territorial system, as provided under the Tax Act passed in December 2017, will greatly reduce, or eliminate, any additional taxes on these funds should the Company decide to repatriate these funds to the United States. At September 30, 2018, the Company had \$25,553 in borrowings outstanding under its revolving credit facility. The highest borrowing amount outstanding at any time under the credit facility during the nine month period ended September 30, 2018 was \$29,445. Net of letters of credit totaling \$9,546, the Company had borrowing availability of \$64,901 under the revolving credit facility as of September 30, 2018. The revolving credit facility 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 agreement at September 30, 2018.

The Company's South African subsidiary, Osborn Engineered Products SA (Pty) Ltd ("Osborn"), has a credit facility of \$6,709 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, 2018, Osborn had no outstanding borrowings but had \$576 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, 2018, Osborn had available credit under the facility of \$6,133.

The Company's Brazilian subsidiary, Astec Brazil, has outstanding working capital loans totaling \$1,529 as of September 30, 2018 from Brazilian banks. 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 \$3,200 issued by Astec Industries, Inc. Additionally, Astec Brazil has various five-year equipment financing loans outstanding with Brazilian banks in the aggregate of \$217 as of September 30, 2018. These equipment loans have maturity dates ranging from January 2019 to April 2020. Astec Brazil's loans are included in the accompanying unaudited condensed consolidated balance sheets as current maturities of long-term debt (\$793) and long-term debt (\$953) as of September 30, 2018.

Cash Flows from Operating Activities:

	Nine Months Ended September 30,		Increase (Decrease)
	2018	2017	
Net income (loss)	\$ (13,649)	\$ 26,736	\$ (40,385)
Depreciation and amortization	20,755	19,253	1,502
Provision for warranties	10,115	11,842	(1,727)
Changes in working capital:			
Trade and other receivables	(7,512)	766	(8,278)
Inventories	(37,841)	(39,332)	1,491
Prepaid expenses	796	4,601	(3,805)
Accounts payable	14,047	2,820	11,227
Customer deposits	2,895	11,040	(8,145)
Product warranty accruals	(14,480)	(11,072)	(3,408)
Prepaid and income taxes payable, net	(11,055)	(16,246)	5,191
Accrued pellet plant agreement costs	17,000	--	17,000
Other, net	(1,605)	341	(1,946)
Net cash provided (used) by operating activities	\$ (20,534)	\$ 10,749	\$ (31,283)

Net cash from operating activities declined by \$31,283 for the first nine months of 2018 as compared to the first nine months of 2017 due primarily to a reduction in earnings between periods of \$40,385 (including \$68,000 to be paid in cash related to the pellet plant settlement agreement discussed above, of which \$51,000 was paid in the third quarter of 2018), an increase in the growth of accounts receivable of \$8,278, a decline in the growth of customer deposits of \$8,145 partially offset by an increase in the growth of accounts payable of \$11,227. A significant portion of cash used in operations in the nine months ended September 30, 2018 and 2017 relates to the growth of inventory levels between periods.

Cash Flows from Investing Activities:

	Nine Months Ended September 30,		Increase (Decrease)
	2018	2017	
Expenditures for property and equipment	\$ (17,518)	\$ (13,920)	\$ (3,598)
Other	413	(243)	656
Net cash used by investing activities	\$ (17,105)	\$ (14,163)	\$ (2,942)

Net cash used by investing activities increased by \$2,942 for the first nine months of 2018 as compared to the same period in 2017 due primarily to increased capital expenditures in the first nine months of 2018 as compared to the first nine months of 2017.

Total capital expenditures for 2018 are forecasted to be approximately \$23,000. 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 2019.

Cash Flows from Financing Activities:

	Nine Months Ended September 30,		Increase (Decrease)
	2018	2017	
Payment of dividends	\$ (7,149)	\$ (6,920)	\$ (229)
Net change in borrowings from banks	23,782	(6,583)	30,365
Stock buy-back purchases	(13,914)	--	(13,914)
Other, net	(213)	(406)	193
Net cash provided (used) by financing activities	<u>\$ 2,506</u>	<u>\$ (13,909)</u>	<u>\$ 16,415</u>

Net cash from financing activities improved by \$16,415 for the first nine months of 2018 compared to the same period in 2017 due primarily to the net changes in the Company's bank borrowings between periods partially offset by cash expenditures under the Company's stock buy-back program initiated in the third quarter of 2018.

Financial Condition

The Company's current assets increased to \$624,362 as of September 30, 2018 from \$602,969 as of December 31, 2017, an increase of \$21,393 or 3.5%, due primarily to increases in receivables of \$7,069, inventories of \$37,841 and prepaid income taxes of \$14,140 during the first nine months of 2018 offset by a decrease in cash and cash equivalents of \$36,606.

The Company's current liabilities increased to \$206,953 as of September 30, 2018 from \$179,146 as of December 31, 2017, an increase of \$27,807 or 15.5% due primarily to a \$68,000 liability incurred during 2018 under the pellet plant settlement agreement discussed above, of which \$17,000 remains outstanding at September 30, 2018, and an increase in accounts payable of \$14,002.

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, 2017.

Contingencies

The Company's sales contract with the purchaser of a large wood pellet plant, on which \$143,300 of cumulative revenue (prior to the \$75,315 charge discussed below) has been recorded through September 30, 2018 based on the over-time method, contained certain production output and operational provisions, which if not timely met, could have resulted in the Company having to refund the purchase price to the customer. Additional contract provisions required the Company to compensate the customer for production shortfalls caused by the Company and other potential costs (depending on the market price of wood pellets). As the plant did not meet the production output and operational specifications by the deadline set forth in the contract (June 29, 2018), the Company entered into an agreement with the customer on July 20, 2018, whereby the Company agreed to pay its customer \$68,000 over 120 days following execution of the agreement (of which \$51,000 was paid by the Company in the third quarter of 2018) and to forgive \$7,315 in accounts receivables to obtain a full release of all the Company's contractual obligations under the sales contract. The terms of the pellet plant agreement resulted in the Company recording charges against sales of \$75,315 and gross margins of \$71,029 in the third quarter of 2018. The Company expects to pay the remaining \$17,000 to the customer in the fourth quarter of 2018, as scheduled. The pellet plant agreement also stipulates that the customer will pay the Company \$7,000 if the wood pellet plant's performance satisfies certain emissions targets prior to May 1, 2019.

The Company manufactured a large wood pellet plant for a customer under a Company-financed arrangement whereby the Company deferred the recognition of revenue as payment under the arrangement was not assured. While the plant, with a September 30, 2018 inventory value on the Company's books of \$59,522, is currently operational, the customer expressed its desire to further modify its obligations under the arrangement. As a result, the parties have agreed to jointly market the plant to a new buyer. The Company is currently in discussions with potential purchasers of the plant; however, the timing and terms of such a sale, if any, including the sales price, are uncertain. Depending on the ultimate sales price, future inventory reserves or losses upon the ultimate sale of the plant may occur. As required by the arrangement with the customer, the Company is currently funding the operation of the plant and may be responsible for operational losses should they occur prior to the ultimate sale of the plant. If the sale of the plant does not occur prior to the maturity date of the note in December 2018, the customer may default on its obligations and the Company may, as a result, retake possession of the plant. If this occurs, the Company anticipates that it would operate the plant for some period and may incur operating losses and may be required to make additional investments in the plant and its operations.

Off-balance Sheet Arrangements

As of September 30, 2018, 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, 2018, 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, 2017.

Item 4. Controls and Procedures

Disclosure 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 three month period ended September 30, 2018 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, 2017, 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, 2017, 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, 2017. The risks described in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 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 2. Unregistered Sales of Equity Securities and Use of Proceeds

ISSUER PURCHASES OF EQUITY SECURITIES (1)
(,000 omitted)

Period	Total Number of Shares Purchased (2)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (2)	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
July 1 to July 31, 2018	--	N/A	--	\$ 150,000
August 1 to August 31, 2018	297	\$ 46.91	297	136,086
September 1 to September 30, 2018	--	N/A	--	136,086
Total	297	\$ 46.91	297	\$ 136,086

1) On July 29, 2018, the Company's Board of Directors approved a share repurchase program authorizing the Company to repurchase up to \$150,000 of its common stock. Through September 30, 2018, the Company has repurchased 297 shares of its stock at total cost of \$13,914 under this program. Under the share repurchase plan, the Company may purchase common stock in open market transactions, block or privately negotiated transactions, and may from time to time purchase shares pursuant to a trading plan in accordance with Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934, as amended, or by any combination of such methods. The number of shares to be purchased and the timing of the purchases are based on a variety of factors. No time limit was set for completion of repurchases under the authorization and the program may be suspended or discontinued at any time.

(2) All shares acquired were purchased in open market transactions.

Item 6. Exhibits

Exhibit No.	Description
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 3, 4 and 5 are not applicable and have been omitted.

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.

ASTECH INDUSTRIES, INC.
(Registrant)

Date: November 2, 2018

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

Date: November 2, 2018

/s/ David C. Silvious
David C. Silvious
Chief Financial Officer, Vice President, and Treasurer
(Principal Financial and Accounting 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, 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 2, 2018

/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
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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 2, 2018

/s/David C. Silvious
David C. Silvious
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, 2018 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 2, 2018

/s/ David C. Silvius

David C. Silvius
Chief Financial Officer, Vice President and Treasurer
(Principal Financial Officer)
November 2, 2018