EASTERN CO
Form 10-Q
November 06, 2017
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE QUARTERLY PERIOD ENDED September 30, 2017

OR

[] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

Commission File Number: 001-35383

THE EASTERN COMPANY

(Exact name of registrant as specified in its charter)

<u>Connecticut</u> <u>06-0330020</u> (State or other jurisdiction of (I.R.S. Employer incorporation or organization) Identification No.)

112 Bridge Street, Naugatuck, Connecticut 06770

(Address of principal executive offices) (Zip Code)

(203) 729-2255

(Registrant's telephone number, including area code)

Not applicable

(Former name, former address and former fiscal year, if changed since last report)

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 [X] No []

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

Yes [X] 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 def "accelerated filer," "smaller reporting company," and "emerging growth capacity." Act.	
Large accelerated filer []	Accelerated filer [X]
Non-accelerated filer [] (Do not check if a smaller reporting company)	Smaller reporting company [] Emerging growth company []
If an emerging growth company, indicate by check mark if the registrant period for complying with any new or revised financial accounting standa Exchange Act. []	
Indicate by check mark whether the registrant is a shell company (as defined). Yes [] No [X]	ned in Rule 12b-2 of the Exchange
Indicate the number of shares outstanding of each of the issuer's classes of date.	of common stock, as of the latest practicable
<u>Class</u> <u>Outstanding as of October 18, 2017</u>	
Common Stock, No par value 6,261,415	

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PART I – FINANCIAL INFORMATION

ITEM 1 – FINANCIAL STATEMENTS

THE EASTERN COMPANY AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)

	September	December 31,
ASSETS	30, 2017	2016
Current Assets		
Cash and cash equivalents	\$21,194,091	\$22,725,376
Marketable securities	366,554	
Accounts receivable, less allowances: \$507,000 - 2017; \$430,000 - 2016	28,448,534	18,135,792
Inventories	45,207,813	34,030,286
Prepaid expenses and other assets	4,398,041	1,858,471
Total Current Assets	99,615,033	76,749,925
Property, Plant and Equipment	70,500,848	64,911,071
Accumulated depreciation	(41,629,685)	(38,745,557)
	28,871,163	26,165,514
Goodwill	32,395,740	14,819,835
Trademarks	3,680,037	166,312
Patents, technology, and other intangibles net of accumulated amortization	9,621,147	1,764,449
Deferred income taxes	1,180,355	4,532,361
	46,877,279	21,282,957
TOTAL ASSETS	\$175,363,475	\$124,198,396

LIABILITIES AND SHAREHOLDERS' EQUITY Current Liabilities	September 30, 2017	December 31, 2016
Accounts payable Accrued compensation Other accrued expenses Current portion of long-term debt Total Current Liabilities	\$15,327,476 3,273,317 6,360,362 6,550,000 31,511,155	\$7,048,174 3,112,404 1,812,647 892,857 12,866,082
Other long-term liabilities Long-term debt, less current portion Accrued postretirement benefits Accrued pension cost	288,805 29,062,500 1,018,815 25,780,522	288,805 892,857 1,051,700 26,631,438
Shareholders' Equity Voting Preferred Stock, no par value: Authorized and unissued: 1,000,000 shares Nonvoting Preferred Stock, no par value: Authorized and unissued: 1,000,000 shares Common Stock, no par value: Authorized: 50,000,000 shares Issued: 8,956,144 shares in 2017 and 8,950,827 shares in 2016 Outstanding: 6,261,415 shares in 2017 and 6,256,098 shares in 2016 Treasury Stock: 2,694,729 shares in 2017 and 2016 Retained earnings	29,277,169 (19,105,723) 98,779,632	29,146,622 (19,105,723) 95,631,216
Accumulated other comprehensive income (loss): Foreign currency translation Unrealized loss on marketable securities and derivative, net of tax Unrecognized net pension and postretirement benefit costs, net of tax Accumulated other comprehensive loss Total Shareholders' Equity TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	(902,749) (9,479) (20,419,472) (21,331,700) 87,619,378 \$175,363,475	(21,039,520)

See accompanying notes.

THE EASTERN COMPANY AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)

	Nine Months Ended		Three Months Ended	
	September 30,	October 1,	September30,	October 1,
	2017	2016	2017	2016
Net sales	\$150,095,975	\$103,463,316	\$56,007,937	\$33,478,347
Cost of products sold	(113,888,301)	(77,980,077)	(44,058,406)	(24,105,604)
Gross margin	36,207,674	25,483,239	11,949,531	9,372,743
Engineering expenses	(4,162,151	(1,991,260)	(1,848,861)	(663,705)
Selling and administrative expenses	(23,749,219)	(16,161,133)	(6,527,029)	(5,444,924)
Operating profit	8,296,304	7,330,846	3,573,641	3,264,114
Interest expense	(659,884	(97,486)	(327,206)	(28,817)
Other income	69,278	54,687	13,513	28,169
Income before income taxes	7,705,698	7,288,047	3,259,948	3,263,466
Income taxes	2,491,674	2,152,073	1,029,467	863,402
Net income	\$5,214,024	\$5,135,974	\$2,230,481	\$2,400,064
Earnings per Share:				
Basic	\$.83	\$.82	\$.36	\$.38
Diluted	\$.83	\$.82	\$.35	\$.38
Cash dividends per share:	\$.33	\$.33	\$.11	\$.11

See accompanying notes.

THE EASTERN COMPANY AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)

Net income	Nine Months September 30, 2017 \$5,214,024	October 1, 2016	Three Month September 30, 2017 \$2,230,481	October 1, 2016
Other comprehensive income/(loss): Change in foreign currency translation Change in fair value marketable securities, net of tax	1,262,332	(311,697)		(231,831)
benefit of: 2017 - \$22,688 and \$17,135, respectively 2016 - \$- Change in fair value of derivative financial instrument, net of tax benefit of:	41,548		31,379	
2017 - \$31,275 and \$(10,406) 2016 - \$- Change in pension and postretirement benefit costs, net of taxes of: 2017 - \$338,592 and \$112,865	(51,027)	_	16,978	_
respectively 2016 – \$559,542 and \$(105,703), respectively Total other comprehensive	620,048 1,872,901	(696,200) (1,007,897)	,	192,456 (39,375)

income

Comprehensive

income \$7,086,925 \$4,128,077 \$2,864,029 \$2,630,689

See accompanying notes

THE EASTERN COMPANY AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)

	Nine Months E September 30, 2017	Ended October 1, 2016
Operating Activities Net income	\$5,214,024	\$5,135,974
Adjustments to reconcile net income to net cash provided by operating activities:	\$3,214,024	\$5,155,974
Depreciation and amortization	3,230,174	2,795,699
Unrecognized pension and postretirement benefits	74,839	952,205
Loss on sale of equipment and other assets	18,585	45,313
Provision for doubtful accounts	52,663	
Issuance of Common Stock for directors' fees	130,547	112,086
Changes in operating assets and liabilities:	130,317	112,000
Accounts receivable	(3,894,569)	(1,626,625)
Inventories	2,267,945	
Prepaid expenses and other	(2,686,763)	
Other assets	494,750	· ·
Accounts payable	1,466,401	
Accrued compensation		(215,313)
Other accrued expenses	3,978,256	
Net cash provided by operating activities	10,174,343	8,982,547
Investing Activities		
Marketable securities	(366,554)	
Business Acquisition, net of cash acquired	(42,148,000)	_
Purchases of property, plant and equipment		(1,819,894)
Net cash used in investing activities	(43,972,195)	(1,819,894)
Financing Activities		
Proceeds from issuance of long-term debt	31,000,000	_
Proceeds from short term borrowings	6,614,611	
Payments on revolving credit note	(1,614,611)	
Principal payments on long-term debt		(1,071,428)
Dividends paid		(2,063,085)
Net cash provided by (used in) financing activities	31,761,179	(3,134,513)
Effect of exchange rate changes on cash	505,388	(203,066)
Net change in cash and cash equivalents	(1,531,285)	3,825,074
Cash and cash equivalents at beginning of period	22,725,376	17,814,986
Cash and cash equivalents at end of period	\$21,194,091	\$21,640,060

See accompanying notes.

THE EASTERN COMPANY NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED) September 30, 2017

Note A – Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with the instructions to Form 10-Q and do not include all of the information and footnotes required by generally accepted accounting principles in the United States for complete financial statements. Refer to the consolidated financial statements of The Eastern Company (the "Company") and the notes thereto included in the Company's Form 10-K for the fiscal year ended December 31, 2016 for additional information.

The accompanying condensed consolidated financial statements are unaudited. However, in the opinion of management, all adjustments (consisting only of normal recurring accruals) necessary for a fair presentation of the results of operations for interim periods have been reflected therein. All intercompany accounts and transactions are eliminated. Operating results for interim periods are not necessarily indicative of the results that may be expected for the full year.

On April 3, 2017, the Company completed its acquisition of Velvac Holdings, Inc., a Delaware corporation including its subsidiaries ("Velvac"), pursuant to a Securities Purchase Agreement (the "Securities Purchase Agreement"), dated April 3, 2017, by and among Jeffery R. Porter, W. Greg Bland, John Backovitch, Dave Otto, Bob Otto, Timothy Rintelman, Robert Brester, Dan McGrew, Mark Moeller and Prospect Partners II, L.P. (collectively, the "Sellers"). Pursuant to the Securities Purchase Agreement, the Company acquired 100% of the issued and outstanding stock of Velvac from the Sellers (the "Acquisition") for \$39.5 million and earnout consideration contingent upon Velvac achieving minimum earnings performance levels with the amount of any such earnout consideration based on a specific percentage (either 7.5% or 15%) of sales of Velvac's new proprietary Road-iQ product line measured over annual calculation periods through April 2022, as set forth in the Securities Purchase Agreement (the "Earnout Consideration"), subject to certain customary post-closing adjustments. The Acquisition was financed with a \$31 million term loan from People's United Bank, National Association ("People's"), a \$5 million draw down on the Company's \$10 million revolving credit facility with People's and \$3.5 million in cash. Please refer to the Form 8-K filed on April 7, 2017 and the amendment thereto files on June 19, 2017 for further details.

The condensed consolidated balance sheet as of December 31, 2016 has been derived from the audited consolidated balance sheet as of that date.

Commencing with this Quarterly Report on Form 10-Q, engineering expenses have been separately identified for all periods presented. These expenses have been reclassified from cost of products sold to selling and administrative expenses. Engineering expense is not necessarily a cost of product sold. Rather, these expenses are related to product development.

Note B - Earnings Per Share

The denominators used in the earnings per share computations are as follows:

Nine Months Ended Three Months Ended
September October 1, September October 1,
30, 2017 2016 30, 2017 2016

Basic:

Weighted average shares outstanding 6,258,278 6,250,185 6,25	9,872 6,254,287
Diluted:	
Weighted average shares outstanding 6,258,278 6,250,185 6,25	9,872 6,254,287
Dilutive stock options 36,679 36,6	79
Denominator for diluted earnings per share 6,294,957 6,250,185 6,29	6,551 6,254,287
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Note C – Inventories, Net

The components of inventories are as follows:

	September 30, 2017	December 31, 2016
Raw material and component parts	\$11,729,271	\$8,829,236
Work in process	9,456,164	7,118,149
Finished goods	24,022,378	18,082,901
-	\$45,207,813	\$34,030,286

Note D – Segment Information

Segment financial information is as follows:

	Nine Months E	Ended	Three Months Ended	
	September October 1,		September	October 1,
	30, 2017	2016	30, 2017	2016
Revenues:				
Sales to unaffiliated customers:				
Industrial Hardware	\$83,500,656	\$45,689,104	\$32,959,599	\$15,210,943
Security Products	46,232,410	43,722,828	16,115,356	13,648,701
Metal Products	20,362,909	14,051,384	6,932,982	4,618,703
	\$150,095,975	\$103,463,316	\$56,007,937	\$33,478,347
Income before income taxes:				
Industrial Hardware	\$2,877,052	\$3,769,045	\$1,813,133	\$1,574,573
Security Products	4,290,745	4,533,995	1,604,950	1,613,148
Metal Products	1,128,507	(972,194)	155,558	76,393
Operating Profit	8,296,304	7,330,846	3,573,641	3,264,114
Interest expense	(659,884)	(97,486)	(327,206)	(28,817)
Other income	69,278	54,687	13,513	28,169
	\$7,705,698	\$7,288,047	\$3,259,948	\$3,263,466

Note E – Recent Accounting Pronouncements

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations – Clarifying the Definition of a Business. ASU 2017-01 provides guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions or dispositions of assets or businesses. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The amendment should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The Company is evaluating the impact of the new guidance.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles – Goodwill and Other: Simplifying the Test for Goodwill Impairment. ASU 2017-04 provides guidance to simplify the subsequent measure of goodwill by

eliminating Step 2 from the goodwill impairment test. The amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The amendment should be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period after January 1, 2017. The Company is evaluating the impact of the new guidance.

In February 2017, the FASB issued ASU No. 2017-06, Plan Accounting: Defined Benefit Pension Plans (Topic 960); Defined Contribution Pension Plans (Topic 962); Health and Welfare Benefit Plans (Topic 965): Employee Benefit Plan Master Trust Reporting. ASU 2017-06 provides guidance for reporting by an employee benefit plan for its interest in a master trust. The amendment is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The amendment should be applied retrospectively with earlier application permitted as of the beginning of an interim or annual reporting period after December 15, 2018. The Company is evaluating the impact of the new guidance.

In March 2017, the FASB issued ASU No. 2017-07, Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. ASU 2017-07 provides guidance to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The amendment should be applied retrospectively with earlier application permitted as of the beginning of an interim or annual reporting period after December 15, 2017. The Company is evaluating the impact of the new guidance.

In September 2017, the FASB issued ASU No. 2017-13, Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840) and Leases (Topic 842). ASU 2017-13 provides guidance regarding amendments to the aforementioned topics following SEC Staff announcement. The amendment is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company is evaluating the impact of the new guidance.

The Company has implemented all new accounting pronouncements that are in effect and that could impact its consolidated financial statements and does not believe that there are any other new accounting pronouncements that have been issued, but are not yet effective, that might have a material impact on the consolidated financial statements of the Company.

Note F – Debt

On January 29, 2010, the Company signed a secured loan agreement (the "Loan Agreement") with People's United Bank, National Association ("People's"), which included a \$5,000,000 term portion (the "Original Term Loan") and a \$10,000,000 revolving credit portion. On January 25, 2012, the Company amended the Loan Agreement by taking an additional \$5,000,000 term loan (the "2012 Term Loan"). Interest on the Original Term Loan portion of the Loan Agreement was fixed at 4.98%. Interest on the 2012 Term Loan was fixed at 3.90%. The interest rate on the revolving credit portion of the Loan Agreement varied based on the LIBOR rate or People's Prime rate plus a margin spread of 2.25%, with a floor rate of 3.25% and a maturity date of January 31, 2014. On January 23, 2014, the Company signed an amendment to the Loan Agreement which extended the maturity date of the \$10,000,000 revolving credit portion of the Loan Agreement to July 1, 2016 and changed the interest rate to LIBOR plus 2.25%, eliminating the floor previously in place. On June 9, 2016, the Company signed a third amendment to its secured Loan Agreement which extended the maturity date of the \$10,000,000 revolver portion of the Loan Agreement to July 1, 2018. On April 3, 2017, the Company signed an amended and restated loan agreement (the "Restated Loan Agreement") with People's that included a \$31 million term portion and a \$10 million revolving credit portion. Proceeds of the Restated Loan Agreement were used to repay the remaining outstanding term loans of the Company (approximately \$1,429,000) and to acquire 100% of the common stock of Velvac Holdings, Inc. (see Note M). The term portion of the Restated Loan Agreement requires quarterly principal payments of \$387,500 for a two-year period beginning July 3, 2017. The repayment amount then increases to \$775,000 per quarter beginning July 1, 2019. The term portion of the Restated Loan Agreement is a five-year loan with any remaining outstanding balance due on March 1, 2022. The revolving credit portion of the Restated Loan Agreement has a quarterly commitment fee ranging from 0.2% to 0.375% based on operating results. Under the terms of the Restated Loan Agreement, this quarterly

commitment fee will be 0.25% for the first six months. The revolving credit portion of the Restated Loan Agreement has a maturity date of April 1, 2022. On April 3, 2017, the Company borrowed approximately \$6.6 million on the revolving credit portion of the Restated Loan Agreement. The Company subsequently paid off \$1.6 million on the revolving credit portion leaving a balance on such revolving credit portion of \$5 million.

The interest rates on the term portion and the revolving credit portion of the Restated Loan Agreement vary. The interest rates may vary based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The margin spread is based on operating results calculated on a rolling-four-quarter basis. The Company may also borrow funds at People's Prime rate. On September 30, 2017, the interest rate for one half (\$15.3 million) of the term portion was 3.24%, using a 1 month LIBOR rate and 3.30% on the remaining balance (\$15.3 million) of the term portion based on a 3 month LIBOR rate. The interest rate on the \$5 million of the revolving credit portion was 3.24%.

The Company's loan covenants under the Restated Loan Agreement require the Company to maintain a consolidated minimum debt service coverage ratio of at least 1.1 to 1 for periods through December 31, 2018 and 1.2 to 1 thereafter, which is to be tested quarterly on a twelve-month trailing basis. In addition, the Company will be required to show a maximum total leverage ratio of 4.0x for periods through December 31, 2018, 3.5x for the periods from January 1, 2019 through December 31, 2019, 3.25x for the periods from January 1, 2020 through December 31, 2020 and 3.0x thereafter. The Company was in compliance with all covenants for the three and nine month periods ended September 30, 2017.

On April 4, 2017, the Company entered into an interest rate swap contract with People's with an original notional amount of \$15,500,000, which is equal to 50% of the outstanding balance of the term portion of the Restated Loan Agreement on that date. The notional amount will decrease on a quarterly basis beginning July 3, 2017, following the principal repayment schedule of the term portion of the Restated Loan Agreement. The Company has a fixed interest rate of 1.92% on the swap contract and will pay the difference between the fixed rate and the LIBOR rate when the LIBOR rate is below 1.92% and will receive interest when the LIBOR rate exceeds 1.92%.

Note G – Goodwill

The following is a roll-forward of goodwill from year-end 2016 to the end of the third quarter of 2017:

	Industrial	Security	Metal	
	Hardware	Products	Products	
	Segment	Segment	Segment	Total
Beginning balance	\$1,760,793	\$13,059,042	\$ -	-\$14,819,835
Investment – Velva	c 17,502,024	_	_	- 17,502,024
Foreign exchange	73,881	_	_	- 73,881
Ending balance	\$19,336,698	\$13,059,042	\$ -	-\$32,395,740

Note H – Intangibles

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The gross carrying amount and accumulated amortization of amortizable intangible assets are as follows:

	Industrial Hardware Segment	Security Products Segment	Pro	etal oducts gment	Total	Weighted-Average Amortization Period (Years)
2017 Gross Amount Patents and developed technology Customer relationships Non-compete agreements Intellectual property Total Gross Intangibles	\$7,111,906 3,650,000 \$10,761,906	\$1,069,594 449,706 407,000 307,370 \$2,233,670		 	\$8,181,500 4,099,706 407,000 307,370 \$12,995,576	12.2 9.5 5.0 5.0 10.8
2017 Accumulated Amortization Patents and developed technology Customer relationships Non-compete agreements Intellectual property Accumulated Amortization Net September 30, 2017 per Balance Sheet	\$1,888,433 182,500 \$2,070,933 \$8,690,973	\$663,254 247,338 223,850 169,054 \$1,303,496 \$930,174	\$ \$ \$	 	\$2,551,687 429,838 223,850 169,054 \$3,374,429 \$9,621,147	
2016 Gross Amount Patents and developed technology Customer relationships Non-compete agreements Intellectual property Total Gross Intangibles	\$2,159,060 \$2,159,060	449,706 407,000 307,370	\$ \$	449, 407, 307,	706 5.0 000 5.0 370 5.0	
2016 Accumulated Amortization Patents and developed technology Customer relationships Non-compete agreements Intellectual property Accumulated Amortization Net December 31, 2016 per Balance Sheet	 \$1,529,675	179,882 162,800 122,948	 \$	\$2,123 179,3 162,5 122,9 \$2,594 \$1,764	882 800 948 4,061	

Note I – Retirement Benefit Plans

The Company has non-contributory defined benefit pension plans covering certain U.S. employees. Plan benefits are generally based upon age at retirement, years of service and, for its salaried plan, the level of compensation. The Company also sponsors unfunded nonqualified supplemental retirement plans that provide certain current and former officers with benefits in excess of limits imposed by federal tax law.

The Company also provides health care and life insurance for retired salaried employees in the United States who meet specific eligibility requirements.

Effective for fiscal year 2017, the Company changed the method used to measure Service Cost and Interest Cost for pension and other postretirement benefits for the Company's plans. Previously, the Company measured interest costs utilizing a single weighted-average discount rate derived from the yield curve used to measure the benefit obligations. For fiscal year 2017, interest costs will be measured by applying the specific spot rates along the yield curve to the plans' corresponding discounted cash flows that comprise the obligation (i.e., the Spot Rate approach). This new method provides a more precise measurement of interest costs by aligning the timing of the plans' discounted cash flows to the corresponding spot rates on the yield curve. The measurement of the Company's pension and other postretirement benefit obligations is not affected. The Company has accounted for this change as a change in accounting estimate, which is applied prospectively. Consequently, combined pension expense for the Company's pension plans and other postretirement plan under the Spot Rate approach for the nine-month period ended September 30, 2017 is approximately \$406,000 lower when compared to the prior approach that the Company used.

Significant disclosures relating to these benefit plans for the third quarter and first nine months of fiscal years 2017 and 2016 are as follows:

	Pension Benefits							
	Nine Months	Ended	Three Months Ended					
	September	October 1,	September	October 1,				
	30, 2017	2016	30, 2017	2016				
Service cost	\$952,078	\$1,612,278	\$317,360	\$270,721				
Interest cost	2,373,167	2,541,968	791,055	767,625				
Expected return on plan assets	(3,587,682)	(3,603,483)	(1,195,895)	(1,121,311)				
Amortization of prior service cost	109,312	150,427	36,438	50,143				
Amortization of the net loss	923,614	1,319617	307,871	277,469				
Net periodic benefit cost	\$770,489	\$2,020,807	\$256,829	\$244,647				

Postretirement Benefits

			Three Mon	iths	
	Nine Mont	hs Ended	Ended		
	September	October	September October		
	30, 2017	1, 2016	30, 2017	1, 2016	
Service cost	\$20,542	\$21,975	\$6,847	\$7,325	
Interest cost	60,620	71,154	20,206	23,718	
Expected return on plan assets	(38,621)	(35,649)	(12,874)	(11,883)	
Amortization of prior service cost	(16,083)	(17,918)	(5,361)	(5,973)	
Amortization of the net loss	(58,201)	(70,441)	(19,400)	(23,480)	
Net periodic benefit cost	\$(31,743)	\$(30,879)	\$(10,582)	\$(10,293)	

The Company's funding policy with respect to its qualified plans is to contribute at least the minimum amount required by applicable laws and regulations. In 2017, the Company expects to contribute \$700,000 into its pension plans and \$140,000 into its postretirement plan. As of September 30, 2017, the Company has contributed \$322,000 into its pension plans and \$109,000 into its postretirement plan and will make the remaining contributions as required during the remainder of the year.

The Company has a contributory savings plan under Section 401(k) of the Internal Revenue Code of 1986, as amended covering substantially all non-union employees. The plan allows participants to make voluntary contributions on a pretax basis of their annual compensation, subject to IRS limitations. At its discretion, the Company provides for matching contributions to the plan. The plan also provides for a transitional credit to certain eligible employees who were active participants of the Company's Salaried Retirement Plan at the time that benefits under such plan were frozen in fiscal year 2016, as well as a non-discretionary contribution to all eligible employees.

The Company made contributions to the plan as follows:

	Nine Mont	hs Ended	Three Months Ended		
	September	October 1,	September	October 1,	
	30, 2017	2016	30, 2017	2016	
Regular matching contribution	\$346,713	\$226,090	\$111,291	\$94,042	
Transitional credit contribution	307,597	136,416	76,526	94,868	
Non-discretionary contribution	339,220	51,470	15,987		
Total contributions for the period	\$993,530	\$413,976	\$203,804	\$188,910	

The non-discretionary contributions made in each of the periods disclosed above were expensed in the prior fiscal year.

Note J – Stock Based Compensation

The Company accounts for its stock based awards in accordance with Accounting Standards Codification subtopic 718-10, Compensation ("ASC 718-10"), which requires a fair value measurement and recognition of compensation expense for all share-based payment awards made to its employees and directors, including employee stock options and restricted stock awards. The Company estimates the fair value of granted stock options using the Black-Scholes valuation model. This model requires the Company to make estimates and assumptions including, without limitation, estimates regarding the length of time an employee will retain vested stock options before exercising them, the estimated volatility of the Company's common stock price and the number of options that will be forfeited prior to vesting. The fair value is then amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period. Changes in these estimates and assumptions can materially affect the determination of the fair value of stock-based compensation and consequently, the related amount recognized in the Company's consolidated statements of operations.

As of September 30, 2017, the Company had one stock option plan, The Eastern Company 2010 Executive Stock Incentive Plan (the "2010 Plan"), for officers, other key employees, and non-employee directors. Incentive stock options granted under the 2010 Plan must have exercise prices that are not less than 100% of the fair market value of the Company's common stock on the dates the stock options are granted. Restricted stock awards may also be granted to participants under the 2010 Plan with restrictions determined by the Compensation Committee of the Company's Board of Directors. Under the 2010 Plan, non-qualified stock options granted to participants will have exercise prices determined by the Compensation Committee of the Company's Board of Directors. In the third quarter of 2017, no stock options were granted and in the third quarter of 2016, no stock options or restricted stock were granted that were subject to the meeting of performance measurements.

The 2010 Plan also permits the issuance of Stock Appreciation Rights ("SARs"). The SARs are in the form of an option with a cashless exercise price equal to the difference between the fair value of the Company's common stock at the date of grant and the fair value as of the exercise date resulting in the issuance of Company's common stock. During the third quarter of 2017, the Company did not issue any SARs.

Stock-based compensation expense in connection with SARs granted to employees in the nine months of fiscal year 2017 was approximately \$117,222.

As of September 30, 2017, there were 325,500 shares of common stock reserved and available for future grant under the above noted 2010 Plan.

The following tables set forth the outstanding stock options and SARs for the period specified:

	Three Mo	onths			
	Ended		Year	Ended	
	Septembe	er 30,	December 31,		
	2017		2016		
		Weighted		Weighted	
		-		-	
		Average		Average	
		Exercise		Exercise	
	Shares	Price	Shar	Price	
Outstanding at beginning of period	174,500	\$ 20.39		\$	
Issued					
Outstanding at end of period	174,500	20.39			

SARs and Options Outstanding and Exercisable

Range of Exercise Prices	as of	Weighted- Average Remaining Contractual Life	Average	as of September	Weighted- Average Remaining Contractual Life	Weighted- Average Exercise Price
\$19.10-21.10	174,500	4.4	\$20.39			

As of September 30, 2017, outstanding SARs and options had an intrinsic value of \$1,968,950.

Note K – Income Taxes

The Company files federal income tax returns as well as tax returns in various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2013 and foreign income tax examinations by tax authorities prior to 2011.

The total amount of unrecognized tax benefits could increase or decrease within the next twelve months for a number of reasons, including the closure of federal, state and foreign tax years as a result of the expiration of applicable statutes of limitation and the recognition and measurement considerations under FASB Accounting Standards Codification ("ASC") 740. There have been no significant changes to the amount of unrecognized tax benefits during the nine months ended September 30, 2017. The Company believes that it is reasonably possible that the total amount of unrecognized tax benefits will not increase or decrease significantly over the next twelve months.

Note L - Financial Instruments and Fair Value Measurements

Financial Risk Management Objectives and Policies

The Company is exposed primarily to credit, interest rate and currency exchange rate risks which arise in the ordinary course of business.

Credit Risk

Credit risk is the potential financial loss resulting from the failure of a customer or counterparty to settle its financial and contractual obligations to the Company, as and when they become due. The primary credit risk for the Company is its accounts receivable due from customers. The Company has established credit limits for customers and monitors their balances to mitigate the risk of loss. As September 30, 2017 and December 31, 2016, there were no significant concentrations of credit risk. No single customer represented more than 10% of the Company's net accounts receivable as of September 30, 2017 or at December 31, 2016. The maximum exposure to credit risk is primarily represented by the carrying amount of the Company's accounts receivable.

Interest Rate Risk

The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's debt, which bears interest at variable rates based on the LIBOR rate plus a margin spread of 1.75% to 2.50%. The Company has an interest rate swap with a notional amount of \$15,306,250 on September 30, 2017 to convert a portion of its 2017 Term Loan from variable to fixed rates. The valuation of this swap is determined using the three month LIBOR rate index and mitigates the Company's exposure to interest rate risk.

Fair Value Measurements

Assets and liabilities that require fair value measurement are recorded at fair value using market and income valuation approaches and considering the Company's and counterparty's credit risk. The Company uses the market approach and the income approach to value assets and liabilities as appropriate. The assets or liabilities requiring fair value measurements on September 30, 2017 are as follows:

	Fair	Value	Level 1	Le	evel 2	Level	3
Financial Liabilities							
Interest rate swap	\$	82,302	\$	 \$	82,302	\$	
Total liabilities	\$	82,302	\$	 \$	82,302	\$	

The Company's interest rate swap is not an exchange-traded instrument. However, it is valued based on observable inputs for similar liabilities and accordingly is classified as Level 2. The amount of the interest rate swap is included in other accrued liabilities.

Note M – Business Combination

On April 3, 2017, the Company completed the Acquisition of Velvac for \$39.5 million and earnout consideration contingent upon Velvac achieving minimum earning performance levels with the amount of any such earnout consideration based on a specified percentage (7.5% or 15%)of sales of Velvac's new proprietary Road-iQ product line (the "Earnout Consideration") measured over annual calculation periods through April 2022, set forth in the Securities Purchase Agreement, subject to certain customary post-closing adjustments. Velvac is a premier designer and manufacturer of proprietary vision technology for original equipment manufacturers serving the heavy-duty and medium-duty truck, motorhome, and bus markets.

The goodwill of \$17,502,000 arising from the acquisition consist of the difference between the consideration paid and the fair value of the assets and liabilities acquired. None of the goodwill recognized is expected to be deductible for income tax purposes. The following table summarizes the consideration paid for Velvac and the amounts of the assets acquired and liabilities assumed recognized at the acquisition date, as well as the fair value at the acquisition date.

At April 3, 2017:

Consideration	
Cash	\$4,078,000
Debt	36,000,000
Contingent consideration arrangement	2,070,000
	\$42,148,000
Recognized amounts of identifiable assets acquired and liabilities assumed	
Accounts receivable	\$6,063,429
Inventory	12,992,377
Prepaid and other assets	494,617

Property plant and equipment	3,911,767
Other noncurrent assets	366,401
Other intangible assets	11,560,000
Current liabilities	(7,720,591)
Deferred tax liabilities	(3,022,000)
Total identifiable net assets	24,646,000
Goodwill	17,502,000
	\$42,148,000
16	

The Company determined the acquisition date fair value of the contingent consideration obligation using the Income Approach method which is a valuation technique that provides an estimate of the fair value of an asset based on the market participant expectations of the cash flows that an asset would generate over a period of time. The contingent consideration obligation was based on weighted projected cash flows discounted back to present value equivalents at a risk adjusted discount rate. The Velvac earnout is contingent upon the ability of Velvac to reach certain EBITDA targets over the course of the next five years. At each annual period, the Company will revalue the contingent consideration obligation to estimated fair value and record changes in fair value as income or expense in the Company's consolidated statement of operations.

Accounts Receivable

Acquired receivables are amounts due from customers.

Inventories

The estimated fair value of inventories acquired included a purchase price adjustment of \$11,804,709 above the seller's original cost basis of \$1,187,668. The entire amount was charged to cost of sales in the second quarter of 2017.

Intangible Assets

The estimated fair value of identifiable intangible assets is determined primarily using the Income Approach method which is a valuation technique that provides an estimate of the fair value of an asset based on the market participant's expectations of the cash flows that an asset would generate over its remaining useful life. Some of the more significant assumption inherent in the development of the identifiable intangible assets valuation, from the perspective of a market participant, include the estimate net cash flows for each year for each project or product, the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, competitive trends impacting the asset and each cash flow stream as well as other factors.

Goodwill Allocation

Among the primary reasons why the Company entered into the Velvac acquisition and the factors that contributed to a purchase price resulting in the recognition of goodwill were Velvac's history of operating margins and profitability, Velvac's strong research and development center, including its Road-iQTM 360-degree view camera, recording and communication system and TrailerLinkTM, a new patent-pending solution that supports trailer-to-trailer video and data communications, the expansion of the Company's commercial footprint on a nationwide basis as a result of the Velvac acquisition, and key pipeline additions of Velvac products which will enable the Company to expand its product offerings and offer its customers a greater breadth of products.

Acquisition Related Expenses

Included in general and administrative expenses in the consolidated statements of operations for the three and nine month periods ended September 30, 2017 were \$102,000 and \$863,000, respectively, for acquisition expenses.

ITEM 2 – MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion is intended to highlight significant changes in the Company's financial position and results of operations for the thirteen weeks ended September 30, 2017. The interim financial statements and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the Consolidated Financial Statements and Notes thereto for the fiscal year ended December 31, 2016 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016 ("2016 Annual Report on Form 10-K").

Certain statements set forth in this discussion and analysis of financial condition and results of operations are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. They use such words as "may," "will," "expect," "believe," "plan" and other similar terminology. These statements reflect management's current expectations regarding future events and operating performance and speak only as of the date of this report. These forward-looking statements involve a number of risks and uncertainties, and actual future results and trends may differ materially depending on a variety of factors, including, without limitation, changing customer preferences, lack of success of new products, loss of customers, competition, increased raw material prices, problems associated with foreign sourcing of parts and products, changes within the Company's industry segments and in the overall economy, litigation and legislation, and other factors included in and incorporated by reference in Item 1A of our most recently filed Annual Report on Form 10-K, as amended or supplemented in our reports subsequently filed with the Securities and Exchange Commission ("SEC"), Item 1A of this Part II of this report. In addition, terrorist threats and the possible responses by the United States and foreign governments, the effects on consumer demand, the financial markets, the travel industry, the trucking industry and other conditions increase the uncertainty inherent in forward-looking statements. Forward-looking statements reflect the expectations of the Company at the time they are made, and investors should rely on them only as expressions of opinion about what may happen in the future and only at the time they are made. The Company undertakes no obligation to update any forward-looking statement. Although the Company believes it has an appropriate business strategy and the resources necessary for its operations, future revenue and margin trends cannot be reliably predicted and the Company may alter its business strategies to address changing conditions.

In addition, the Company makes estimates and assumptions that may materially affect reported amounts and disclosures. These relate to valuation allowances for accounts receivable and for excess and obsolete inventories, accruals for pensions and other postretirement benefits (including forecasted future cost increases and returns on plan assets), provisions for depreciation (estimating useful lives), uncertain tax positions, and, on occasion, accruals for contingent losses.

On April 3, 2017, the Company completed its acquisition of Velvac Holdings, Inc., a Delaware corporation including its subsidiaries ("Velvac"), pursuant to a Securities Purchase Agreement (the "Securities Purchase Agreement"), dated April 3, 2017, by and among Jeffery R. Porter, W. Greg Bland, John Backovitch, Dave Otto, Bob Otto, Timothy Rintelman, Robert Brester, Dan McGrew, Mark Moeller and Prospect Partners II, L.P. (collectively, the "Sellers"). Pursuant to the Securities Purchase Agreement, the Company acquired 100% of the issued and outstanding stock of Velvac from the Sellers (the "Acquisition") for \$39.5 million and earnout consideration contingent upon Velvac achieving minimum earnings performance levels with the amount of any such earnout consideration based on a specific percentage (either 7.5% or 15%) of sales of Velvac's new proprietary Road-iQ product line measured over annual calculation periods through April 2022, as set forth in the Securities Purchase Agreement (the "Earnout Consideration"), subject to certain customary post-closing adjustments. The Acquisition was financed with a \$31 million term loan from People's United Bank, National Association ("People's"), a \$5 million draw down on the Company's \$10 million revolving credit facility with People's and \$3.5 million in cash. Please refer to the Form 8-K filed on April 7, 2017 and the amendment thereto files on June 19, 2017 for further details.

Overview

Sales in the third quarter of 2017 increased 67% when compared to the third quarter of 2016. Sales increased in the Industrial Hardware segment by 117% in the third quarter of 2017, primarily as a result of sales generated from the Velvac acquisition. Excluding Velvac's sales in the third quarter of 2017, sales in the Industrial Hardware segment would have increased 12% when compared to the third quarter of 2016.

Sales increased 50% in the Metals segment and sales in the Security Products segment increased 18%, when compared to the third quarter of 2016. Sales volume of existing products which include the sales of Velvac products increased by 61% in the third quarter of 2017 compared to the third quarter of 2016. The third quarter of 2017 was favorably affected by the introduction of new products which increased sales by 6%. Sales of new products in the Metals Segment included numerous types of pipe and gas fittings for the oil, water and gas industries. Sales of new products in the Industrial Hardware Segment included Class 8 truck tumbler paddles, latch brackets, and panels. Sales of new products in the Security Products Segment included locking kits for the motorcycle market and connecting rods for the vehicle market.

Sales for the first nine months of 2017 increased 45% compared to the corresponding prior year period, primarily as a result of the Velvac acquisition. Excluding Velvac's sales for the nine months ended September 30, 2017, sales in the Industrial Hardware segment would have increased by 13% when compared to the first nine months of 2016. Sales volume of existing products, which include the sales of Velvac products, increased by 40% in the first nine months of 2017 compared to the first nine months of 2016. The results for the nine months ended September 30, 2017 were favorably affected by the introduction of new products which increased sales by 5%. The Industrial Hardware segment sales increased 83%, Metal Products segment increased 45%, and Security Products segment increased by 6% as compared to the first nine months of 2016.

For the three months ended September 30, 2017, gross margin was 21% compared to 28% for the comparable period of 2016. This decrease was primarily the result of the Velvac acquisition. Excluding Velvac, the gross margin would have been 24% in the third quarter of 2017. Gross margin for the first nine months of 2017 was 24% compared to 25% for the prior year period.

For the three and nine months ended September 30, 2017, engineering expense increased \$1.2 million or 179% and \$2.2 million or 109% from the comparable periods in 2016. This increase is primarily related to the accelerated development of new technology vision products at Road-iQ, a division of Velvac and gPay, a mobile app to transact credit card payments to laundry equipment, at Greenwald Industries. Road-iQ is a connected vehicle technology that provides both active and passive safety to drivers of RV's, trucks and other specialty vehicles. The Company expects these new products to be ready for market latter in the fourth quarter of 2017.

Selling and administrative costs increased \$1.1 million or 20% in the third quarter of 2017 compared to the third quarter of 2016 primarily as a result of the inclusion of the Velvac acquisition. Excluding Velvac's selling and administrative costs in the third quarter of 2017, selling and administrative costs would have increased \$0.3 million or 5% compared to the third quarter of 2016. Selling and administrative costs increased \$7.7 million or 47% in the first nine months of 2017 compared to the first nine months of 2016. Excluding Velvac's selling and administrative costs in the first nine months of 2017, selling and administrative costs would have increased \$1.9 million or 11% compared to the nine months of 2016. Selling and administrative costs were adversely impacted by several one-time charges, which included personnel charges of \$0.2 million in the Security segment, environmental costs of \$0.4 million in the Metal Products segment, and acquisition costs of \$0.9 million in the Industrial Hardware segment.

In general, raw material prices increased in 2017compared to 2016 and are expected to increase during the fourth quarter of 2017. The Company tries to recover these costs through price increases when possible. Cost reduction in components along with manufacturing efficiency help to minimize the impact of commodity price increases.

Currently, there is no indication that the Company will be unable to obtain supplies of all the raw materials that it requires.

The Company generated approximately \$10,174,000 of cash from its operations during the first nine months of 2017 compared to generating approximately \$8,983,000 during the same period in 2016. This increase was primarily due to the increase in earnings and cash flow generation in the Company's Metal Products segment. Cash on hand and cash flow from operations, along with the controlling of discretionary expenditures, are anticipated to be sufficient to enable the Company to meet its existing obligations.

A more detailed analysis of the Company's results of operations and financial condition follows: 19

Results of Operations

The following table shows, for the periods indicated, selected line items from the condensed consolidated statements of operations as a percentage of net sales, by segment:

	Three Months Ended September 30, 2017							
	Indust	rial	Security	7	Metal			
	Hardy	vare	Product	s	Product	s	Total	
Net sales	100.0)%	100.0	%	100.0	%	100.0)%
Cost of products sold	80.6	%	70.5	%	88.8	%	78.7	%
Gross margin	19.4	%	29.5	%	11.2	%	21.3	%
Engineering expense	4.1	%	3.0	%			3.3	%
Selling and administrative expense	9.8	%	16.5	%	9.0	%	11.6	%
Operating profit	5.5	%	10.0	%	2.2	%	6.4	%
					October	1, 2	2016	
			Security		Metal			
	HardwareProducts				Products Total			
Net sales	100.0)%	100.0	%	100.0	%	100.0)%
Cost of products sold	72.7	%	65.7	%	88.8	%	72.0	%
Gross margin	27.3	%	34.3	%	11.2	%	28.0	%
Engineering expense	0.9	%	3.8	%			2.0	%
Selling and administrative expense	16.1	%	18.7	%	9.5	%	16.3	%
Operating profit	10.3	%	11.8	%	1.7	%	9.7	%

The following table shows the amount of change for the third quarter of 2017 compared to the third quarter of 2016 in sales, cost of products sold, gross margin, engineering expense, selling and administrative expenses and operating profit, by segment (dollars in thousands):

	Industrial		Security		Metal		TD 4 1	
	Hardware	;	Products	S	Products	S	Total	
Net sales	\$ 17,749		\$ 2,467		\$ 2,314		\$22,530)
Volume	110.2	%	16.0	%	30.3	%	60.8	%
Prices	-0.4	%	-0.1	%	3.0	%	0.2	%
New products	6.9	%	2.2	%	16.8	%	6.3	%
•	116.7	%	18.1	%	50.1	%	67.3	%
Cost of products sold	\$ 15,495		\$ 2,393		\$ 2,051		\$19,939)
-	140.2	%	26.7	%	50.0	%	82.7	%
Gross margin	\$ 2,254		\$ 74		\$ 263		\$2,591	
-	54.2	%	1.6	%	50.9	%	27.5	%
Engineering expense	\$ 1,215		\$ (30)			\$1,185	

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	845	% -5.8	%	178.6 %
Selling and administrative expenses	\$ 800	\$ 99	\$ 184	\$1,083
	32.8	% 3.8	% 41.8	% 19.9 %
Operating profit	\$ 239	\$ 5	\$ 79	\$323
	15.2	% 0.3	% 103.6	% 9.9 %
20				

The following table shows, for the periods indicated, selected line items from the condensed consolidated statements of income as a percentage of net sales, by segment:

	Nine Months Ended September 30, 2017 Industrial Security Metal								
	HardwareProducts				Products Total				
Net sales	100.0% 100.0		, %	100.0	%		0.0%		
Cost of products sold	77.1		69.8	%	84.8	%	75.9	%	
Gross margin	22.9	%	30.2	%	15.2	%		%	
Engineering expense	3.3	%	3.0	%			2.8	%	
Selling and administrative expense	16.2	%	17.9	%	9.7	%	15.8	%	
Operating profit	3.4	%	9.3	%	5.5	%	5.5	%	
	Nine Months Ended October 1, 2016 Industrial Security Metal								
		Hai	Security	•	Metal				
			Security Products		Metal Product	s	Total		
Net sales		vare	•			s %	Total)%	
Net sales Cost of products sold	Hardw	vare	Products	S	Product 100.0	-)% %	
- 1 - 1 - 1 - 1 - 1 - 1	Hardw 100.0	vare)% %	Products	s %	Product 100.0	%	100.0 75.4		
Cost of products sold Gross margin Engineering expense	Hardw 100.0 74.7 25.3	ware. % % %	Products 100.0 69.2 30.8	% % %	Product: 100.0 97.1 2.9	% % %	100.0 75.4 24.6	% % %	
Cost of products sold Gross margin	Hardw 100.0 74.7 25.3	vare:)% % %	Products 100.0 69.2 30.8	% % %	Products 100.0 97.1 2.9	% %	100.0 75.4 24.6	% %	

The following table shows the amount of change for the first nine months of 2017 compared to the first nine months of 2016 in sales, cost of products sold, gross margin, engineering expense, selling and administrative expenses and operating profit, by segment (dollars in thousands):

Net sales	Industrial Hardward \$ 37,812		Security Products \$ 2,510		Metal Products \$ 6,312	8	Total \$46,634	1
Volume	77.4	%		%		%	40.0	%
Prices	-0.3	%	-0.1	%	2.8	%	0.2	%
New products	5.7	%	1.6	%	12.4	%	4.9	%
•	82.8	%	5.7	%	44.9	%	45.1	%
Cost of products sold	\$ 30,265		\$ 2,005		\$ 3,623		\$35,893	3
	88.7	%	6.6	%	26.6	%	46.0	%
Gross margin	\$ 7,547		\$ 505		\$ 2,689		\$10,741	l
	65.2	%	3.7	%	658.3	%	42.2	%
Engineering expense	\$ 2,402		\$ (230)			\$2,172	
	626.9	%	-14.3				109.0	%
Selling and administrative expenses	\$6,038		\$ 963		\$ 588		\$7,589	

81.3 % 13.1 % 42.6 % 47.0 %

Operating profit

\$ (893) \$ (228) \$ 2,101 \$ 980 -23.7 % -5.1 % 216.1 % 13.4 %

Industrial Hardware Segment

Net sales in the Industrial Hardware segment were up 117% in the third quarter of 2017 and 83% in the first nine months of 2017 compared to the respective corresponding prior year periods. The increase in sales in both the third quarter and first nine months of 2017 when compared to the respective corresponding prior year periods primarily reflected sales from the Velvac acquisition. Excluding Velvac's sales in the third quarter of 2017, sales in the Industrial Hardware segment would have increased 12% when compared to the third quarter of 2016 and sales in the first nine months of 2017 would have increased by 13% when compared to the first nine months of 2016. Sales of new products included tumbler paddles, latch brackets and panels for the class 8 trucking industry.

Cost of products sold for the Industrial Hardware segment increased \$15.5 million or 140% in the third quarter of 2017 and \$30.3 million or 89% in the first nine months of 2017 compared to the respective corresponding periods in 2016. The increase in the cost of products sold in both the third quarter and first nine months of 2017 when compared to the respective corresponding prior year periods primarily reflects cost of products sold attributable to the Velvac acquisition.

The most significant factors resulting in changes in cost of products sold in the third quarter of 2017 compared to the third quarter 2016 included:

- •an increase of \$10.5 million or 163% in raw material costs, with Velvac representing \$9.6 million of such increase; an increase of \$2.3 million or 73% in costs for payroll and payroll related charges, with Velvac representing \$1.9 million of such increase;
- •an increase of \$0.8 million or 368% in freight and other shipping costs;
- ·an increase of \$0.6 million in miscellaneous costs;
- ·an increase of \$0.3 million or 100% in depreciation expense;
 - an increase of \$0.3 million in scrap
 - costs:
- ·an increase of \$0.2 million or 85% in supplies and tools expense; and
- ·an increase of \$0.2 million or 189% in rent expense.

The most significant factors resulting in changes in cost of products sold in the first nine months of 2017 compared to the first nine months of 2016 included:

- ·an increase of \$22.3 million or 114% in raw materials costs, with Velvac representing \$18.1 million such increase; an increase of \$2.6 million or 28% in payroll and payroll related charges, with Velvac representing the entire increase:
- •an increase of \$2.1 million in miscellaneous expenses, with Velvac representing the entire increase;
- ·an increase of \$1.7 million in freight and other shipping costs, Velvac represents the entire increase;
- an increase of \$0.3 million or 125% in scrap
 - costs;
- ·an increase of \$0.3 million in foreign currency exchange expense;
- ·an increase of \$0.2 million or 35% in supplies and tools expense;
- ·an increase of \$0.2 million or 39% in utilities costs
- ·an increase of \$0.2 million or 62% in rents expense; and
- •an increase of \$0.2 million or 26% in depreciation expense.

Gross margin for the Industrial Hardware segment decreased in the third quarter of 2017 to 19% from 27% in the comparable prior year period and decreased in the first nine months of 2017 to 23% from 25% in the first nine months of 2016. Gross margin as a percentage of sales was adversely effected by a \$1.2 million charge to cost of goods sold related to purchase accounting for the Velvac acquisition.

Engineering expenses as a percentage of sales for the Industrial Hardware segment increased in the third quarter of 2017 to 4% from 1% in the three month period of 2016 and increased to 3% in the nine month period of 2017 from 1% in the nine months of 2016. This increase was primarily the result of the Velvac acquisition.

Selling and administrative expenses in the Industrial Hardware segment increased \$0.8 million or 33% in the third quarter of 2017 and \$6.0 million or 81% in the first nine months of 2017 as compared to the respective corresponding periods of 2016. The increase in the selling and administrative expenses in both the third quarter and nine months of 2017 when compared to the respective corresponding prior year periods primarily reflects costs from the Velvac acquisition.

The most significant factors resulting in changes in selling and administrative costs in the third quarter of 2017 compared to the third quarter of 2016 included:

an increase of \$0.4 million or 24% for payroll and payroll related charges, with Velvac representing the entire increase:

- ·an increase of \$0.2 million or 291% in travel expenses; and
- •an increase of \$0.2 million or 606% in amortization of patent costs.

The most significant factors resulting in changes in selling and administrative costs in the first nine months of 2017 compared to the first nine months of 2016 included:

an increase of \$4.0 million or 71% for payroll and payroll related charges, with Velvac representing \$3.4 million of such increase;

- ·an increase of \$0.8 million for commissions and royalty costs;
- an increase of \$0.7 million or 79% for other administrative expenses, which includes Velvac;
- anc
- •an increase of \$0.5 million in depreciation and amortization charges.

Security Products Segment

Net sales in the Security Products segment increased 18% in the third quarter of 2017 and increased 6% in the first nine months of 2017 compared to the respective corresponding periods of 2016. The increase in sales in the third quarter of 2017 was primarily the result of the introduction of new products in the vehicle lock markets. Sales of new products included locking kits for the motorcycle market and connecting rods for the vehicle market.

Cost of products sold for the Security Products segment increased \$2.4 million or 27% in the third quarter of 2017 and increased \$2.0 million or 7% in the first nine months of 2017 compared to the respective corresponding periods of 2016.

The most significant factors resulting in changes in cost of products sold in the third quarter of 2017 compared to the third quarter of 2016 included:

- ·an increase of \$1.7 million or 30% in raw material costs;
- · an increase of \$0.4 million or 17% in costs for payroll and payroll related charges;
- ·an increase of \$0.1 million in foreign currency costs; and
- •an increase of \$0.1 million or 45% in supplies and tools expenses.

The most significant factors resulting in changes in cost of products sold in the first nine months of 2017 compared to the first nine months of 2016 included:

- ·an increase of \$1.4 million or 7% in raw materials;
- ·an increase of \$0.3 million in foreign exchange charges;

- ·an increase of \$0.1 million or 8% in other shipping costs; and
- •an increase of \$0.1 million or 8% in supplies and tools expense.

Gross margin for the Security Products segment in the third quarter of 2017 decreased to 30% from 34% in the third quarter of 2016 and decreased to 30% in 2017 from 31% in the first nine months of 2017 and the comparable prior year period of 2016.

Engineering expenses as a percentage of sales for the Security Products segment decreased in the third quarter of 2017 to 3% from 4% in the three month period of 2016 and decreased to 3% in the first nine month period of 2017 from 4% in the nine months of 2016.

Selling and administrative expenses in the Security Products segment increased \$0.1 million or 4% in the third quarter of 2017 and \$1.0 million or 13% in the first nine months of 2017 as compared to the respective corresponding periods of 2016. This was due to third quarter costs related to personnel changes and investment in sales and marketing resources in order to support the strategic growth plan for this segment.

The most significant factors resulting in changes in selling and administrative costs in the third quarter of 2017 compared to the third quarter of 2016 included:

·an increase of \$0.1 million or 7% for payroll and payroll related charges.

The most significant factors resulting in changes in selling and administrative costs in the first nine months of 2017 compared to the first nine months of 2016 included:

- ·an increase of \$0.6 million or 12% for payroll and payroll related charges; and
- •an increase of \$0.3 million or 33% in other administrative expenses.

Metal Products Segment

Net sales in the Metal Products segment increased 50% in the third quarter of 2017 and 45% in the first nine months of 2017 as compared to the respective corresponding prior year periods. Mining sales increased 34% and 39%, respectively, for the third quarter and first nine months of 2017 as compared to the comparable periods of 2016. The rebound in the mining industry is the result of the easing of environmental regulations and increases in natural gas prices, which created an increase in demand for our mine related products. The sale of industrial products increased substantially as compared to the prior year and was up 130% and 92%, respectively, for the three and nine months September 30, 2017. Sales of new products included numerous types of pipe and gas fittings for the oil, water and gas industries.

Cost of products sold for the Metal Products segment increased \$2.1 million or 50% in the third quarter of 2017 and \$3.6 million or 27% in the first nine months of 2017 compared to the respective corresponding periods of 2016. Most of the cost increase in the third quarter relates to increased sales volume, however an increase of 33% in raw material cost had a disproportionate effect on the third quarter 2017 as compared to the third quarter of 2016.

The most significant factors resulting in changes in cost of products sold in the third quarter of 2017 compared to the third quarter of 2016 included:

- ·an increase of \$0.8 million or 60% in raw materials;
- •an increase of \$0.5 million or 132% in costs for supplies and tools;
- •an increase of \$0.3 million or 21% in payroll and payroll related charges;
- ·an increase of \$0.2 million or 85% in utilities costs; and
- •an increase of \$0.3 million or 287% in maintenance and repair costs.

The most significant factors resulting in changes in cost of products sold in the first nine months of 2017 compared to the first nine months of 2016 included:

·an increase of \$1.2 million or 24% in payroll and payroll related charges;

- ·an increase of \$1.1 million or 28% in raw materials;
- ·an increase of \$1.1 million or 85% in costs for supplies and tools;
 - an increase of \$0.3 million or 35% in utilities
 - costs
- ·an increase of \$0.3 million or 42% in maintenance and repair costs;
- ·a decrease of \$0.2 million or 100% in outside finishing costs; and
- ·a decrease of \$0.1 million or 12% in depreciation expense.

Gross margin for the Metal Products segment was flat at 11% in the third quarters of 2017 and of 2016 and was 15% in the first nine months of 2017 and 3% in the comparable prior year period. The increases in the gross margin for the first nine months of 2017 was primarily due to the higher sales volume which caused improved utilization of the Company's production capacity in 2017 as compared to the corresponding 2016 periods.

Selling and administrative expenses in the Metal Products segment increased \$0.2 million or 42% in the third quarter of 2017 and \$0.6 million or 43% in the first nine months of 2017 as compared to the respective corresponding periods of 2016.

The most significant factor resulting in changes in selling and administrative costs in the third quarter and first nine months of 2017 compared to the third quarter and first nine months of 2016 was a \$0.4 million charge to remediate and monitor a landfill environmental issue that was expensed in the second and third quarters of 2017.

Other Items

Interest expense increased \$0.3 million in the third quarter of 2017 and \$0.6 million in the first nine months of 2017 compared to the respective corresponding prior year period due to the increased level of debt incurred in the Velvac acquisition.

Other income was not material to the financial statements during the periods covered by this Quarterly Report on Form 10-Q.

Income taxes reflected the change in operating results. The effective tax rates in the third quarter and first nine months of 2017 were 32% and 32%, respectively, compared to 26% and 30%, respectively in the corresponding periods of 2016. The higher than expected effective rate for the first nine months of 2017 was the result of higher earnings estimates from our United States sources compared to earnings estimates from foreign sources that have lower overall tax rates.

Liquidity and Sources of Capital

The Company generated \$10.2 million of cash from its operations during the first nine months of 2017 compared to \$9.0 million during the same period in 2016. The increase in cash flows in the 2017 period compared to the prior year period was primarily the result of increased sales and profitability during the 2017 period, including as a result of the Velvac acquisition, and the associated timing differences in the collection of accounts receivable, payments of liabilities, and changes in inventories. Cash flow from operations, coupled with the new loan were sufficient to acquire Velvac and fund capital expenditures, debt service and dividend payments.

The Company holds marketable securities totaling approximately \$367,000. The Company did not purchase any marketable securities during the three month period ended September 30, 2017 Marketable securities are acquired for investment purposes. Additions to property, plant and equipment were \$1.5 million for the first nine months of 2017 and \$1.8 million for the same period in 2016. Total capital expenditures for all of 2017 are expected to be approximately \$3.0 million. As of September 30, 2017, there was approximately \$200,000 of outstanding commitments for these capital expenditures.

The following table shows key financial ratios as of the end of each specified period:

Third Third Year Quarter Quarter End

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	2017		2016		2016
Current ratio	3.1		5.7		6.0
Average days' sales in accounts receivable	53		53		49
Inventory turnover	3.5		3.1		3.0
Total debt to shareholders' equity	40.6	%	2.6	%	2.2 %

Total debt to shareholders' equity increased due to the Company leveraging the purchase of Velvac with a \$31 million loan and a drawdown of \$5 million on the revolving portion of its line of credit.

The following table shows important liquidity measures as of the balance sheet date for each period below (in millions):

	Third	Third	Year
	Quarter	Quarter	End
	2017	2016	2016
Cash and cash equivalents			
- Held in the United States	\$7.1	\$ 9.7	\$11.2
- Held by a foreign subsidiary	14.1	11.9	11.5
	21.2	21.6	22.7
Working capital	68.0	64.1	64.8
Net cash provided by operating activities	10.2	9.0	12.4
Change in working capital impact on net cash			
used in operating activities	1.4	(0.1) (0.5)
Net cash used in investing activities	(43.9) (1.8) (2.9)
Net cash used in financing activities	31.8	(3.1) (4.2)

The cash used in investing activities was primarily for the acquisition of Velvac. The cash from financing activities was the result of the execution of the loan with People's and the revolving line of credit facility with People's to provide a significant share of the capital used in the acquisition of Velvac.

Federal income taxes have not been provided for on the undistributed earnings of the Company's foreign subsidiaries except where required under federal tax laws. The Company would be required to accrue and pay United States income taxes to repatriate the funds held by foreign subsidiaries not otherwise provided. The Company intends to reinvest these earnings outside of the United States indefinitely.

All cash held by foreign subsidiaries is readily convertible into other currencies, including the U.S. Dollar.

Total inventories increased approximately 33% to \$45.2 million as of September 30, 2017 compared to \$34.0 million as of year-end 2016 and increased approximately 33% from \$34.1 million at the end of the third quarter of 2016. The increase of inventory was primarily attributable to the acquisition of Velvac as management has made inventory control a priority since 2016. Accounts receivable were \$28.3 million as of September 30, 2017 compared to \$18.1 million at year end 2016 and \$19.0 million as of the end of the third quarter of 2016.

On April 3, 2017, we incurred indebtedness under the Restated Loan Agreement in the aggregate principal amount of \$31 million in the form of a term loan, the proceeds of which were used to repay the remaining outstanding balances of the Original Term Loan and 2012 Term Loan (approximately \$1,429,000) and to acquire 100% of the common stock of Velvac (see Note A and F). On April 3, 2017, the Company also borrowed approximately \$6.6 million on the revolving credit portion of the Restated Loan Agreement. The Company subsequently paid off \$1.6 million on such revolving credit portion at September 30, 2017. See Note F for additional information regarding the terms of the Restated Loan Agreement, including repayment terms, interest rates and applicable loan covenants. Under the terms of the Restated Loan Agreement, the Company is subject to restrictive covenants that limit its ability to, among other things, incur additional indebtedness, pay dividends or make other distributions, and consolidate, merge, sell or otherwise dispose of assets, as well as financial covenants that require the Company to maintain a minimum debt service coverage ratio and a maximum total leverage ratio. These covenants may limit how we conduct our business, and in the event of certain defaults, our repayment obligations may be accelerated. We were in compliance with all of our covenants as of September 30, 2017.

Cash on hand, cash flow from operating activities and funds available under the revolving credit portion of the Company's Restated Loan Agreement are expected to be sufficient to cover future foreseeable working capital requirements subject to the risks and uncertainties outlined in the risk factors disclosed in our 2016 Annual Report on Form 10-K as updated by, and incorporated by reference, in Item 1A of this Quarterly Report on Form 10-Q. 26

ITEM 3 – QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

During the third quarter of 2017, there were no material changes in market risk from what was reported in the Company's 2016 Annual Report on Form 10-K.

ITEM 4 – CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures:

As of the end of the quarter ended September 30, 2017, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Chief Executive Officer (the "CEO") and Chief Financial Officer (the "CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 240.13a-15. As defined in Exchange Act Rules 240.13a-15(e) and 240.15d-15(e), "the term disclosure controls and procedures means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Act (15 U.S.C. 78a et seq.) is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure." Based upon that evaluation, the CEO and CFO concluded that the Company's current disclosure controls and procedures were effective as of the September 30, 2017 evaluation date.

The Company believes that a controls system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected. The Company's disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives, and the CEO and CFO have concluded that these controls and procedures are effective at the "reasonable assurance" level.

Changes in Internal Controls Over Financial Reporting:

During the third quarter of 2017, there were no significant changes in the Company's internal control over financial reporting 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

During 2010, the Company was contacted by the State of Illinois regarding potential ground contamination at its plant in Wheeling, Illinois. The Company entered into a voluntary remediation program in Illinois and has engaged an environmental clean-up company to perform testing and develop a remediation plan. Since 2010, the environmental company has completed a number of tests and the design of a final remediation system is currently being reviewed and is expected to be approved in the fourth quarter of 2017. The total estimated cost for the proposed remediation system is anticipated to be approximately \$55,000.

During 2016 the Company created a plan to remediate a landfill of spent foundry sand maintained at the Company's Metal Casting facility in Syracuse, New York. This plan was presented to the New York Department of Environmental Conservation (the "DEC") for approval in 2017. The Company is in final negotiations with the DEC, and based on estimates provided by the Company's environmental engineers, the cost to remediate and monitor the landfill was \$380,000 which the Company expensed in the second and third quarters of 2017.

There are no other legal proceedings, other than ordinary routine litigation incidental to the Company's business, to which either the Company or any of its subsidiaries is a party or of which any of property of the Company or any subsidiary is the subject.

ITEM 1A - RISK FACTORS

The Company's business is subject to a number of risks, some of which are beyond its control. In addition to the other information set forth in this report, the Company's stockholders should carefully consider the factors discussed in Item 1A. - "Risk Factors" of the Company's 2016 Annual Report on Form 10-K, as filed with the SEC on March 15, 2017, that could have a material adverse effect on the Company's business, results of operations, financial condition and/or liquidity and that could cause its operating results to vary significantly from period to period. As of September 30, 2017, there have been no material changes to the risk factors disclosed in the Company's most recent Annual Report on Form 10-K. The Company may also disclose changes to such factors or disclose additional factors from time to time in its future filings with the SEC. Additional risks and uncertainties not currently known to the Company or that it currently deems to be immaterial also may materially adversely affect its business, financial condition, or operating results.

ITEM 2 – UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

There have been no sales of unregistered securities by the Company or purchases of registered equity securities by the Company during the period covered by this Quarterly Report on Form 10-Q.

ITEM 3 – DEFAULTS UPON SENIOR SECURITIES

None
ITEM 4 – MINE SAFETY DISCLOSURES
Not applicable.
ITEM 5 – OTHER INFORMATION
None
ITEM 6 – EXHIBITS
31) Certifications required by Rule 13a-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) Certifications pursuant to Rule 13a-14(b) and 18 USC 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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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.

THE EASTERN COMPANY

(Registrant)

DATE: November 6, 2017 /s/A ugust M. Vlak

August M. Vlak

President and Chief Executive Officer

DATE: November 6, 2017 /s/John L. Sullivan III

John L. Sullivan III

Vice President and Chief Financial Officer

DATE: November 6, 2017 /s/Angelo M. Labbadia

Angelo M. Labbadia Chief Operating Officer