ARROW ELECTRONICS INC

Form 4

August 19, 2008

FORM 4

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF

SECURITIES

OMB Number:

3235-0287

Expires:

January 31, 2005

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Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section

30(h) of the Investment Company Act of 1940

1(b).

(Print or Type Responses)

1. Name and Address of Reporting Person *

MILLS KAREN G

2. Issuer Name and Ticker or Trading

Symbol

ARROW ELECTRONICS INC [ARW]

5. Relationship of Reporting Person(s) to

Issuer

below)

(Check all applicable)

(Last)

Security

(Instr. 3)

(First)

(Middle)

3. Date of Earliest Transaction

(Month/Day/Year)

X_ Director Officer (give title

10% Owner Other (specify

ARROW ELECTRONICS, INC., 50 **MARCUS DRIVE**

(Street)

4. If Amendment, Date Original

Filed(Month/Day/Year)

08/15/2008

6. Individual or Joint/Group Filing(Check

Applicable Line)

X Form filed by One Reporting Person Form filed by More than One Reporting

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

MELVILLE, NY 11747

(City) (State) (Zip) 1.Title of 2. Transaction Date 2A. Deemed

3. 4. Securities (Month/Day/Year) Execution Date, if

TransactionAcquired (A) or Code Disposed of (D) (Instr. 3, 4 and 5) (Instr. 8)

5. Amount of Securities Beneficially Owned Following

6. Ownership 7. Nature of Form: Direct Indirect (D) or Indirect Beneficial (I) Ownership (Instr. 4) (Instr. 4)

Reported

Transaction(s) (Instr. 3 and 4)

Code V Amount (D) Price

(A)

or

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

(Month/Day/Year)

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

3. Transaction Date 3A. Deemed 1. Title of (Month/Day/Year) Execution Date, if TransactionDerivative Conversion

5. Number of

6. Date Exercisable and **Expiration Date**

7. Title and Amount of 8. Pr **Underlying Securities**

(9-02)

Security (Instr. 3)	or Exercise Price of Derivative Security		any (Month/Day/Year)	Code (Instr. 8)	Securities Acquired (A) or Disposed or (D) (Instr. 3, 4, and 5)	acquired (A) r Disposed of D) (instr. 3, 4,		4)	Secu (Inst	
				Code V	(A) (D) Date Exercisable	Expiration Date	Title	Amount or Number of Shares	
Phantom Stock	<u>(1)</u>	08/15/2008		A	457.36	<u>(1)</u>	<u>(1)</u>	Common Stock	457.36	\$ 3

Reporting Owners

Reporting Owner Name / Address	Relationships							
	Director	10% Owner	Officer	Other				
MILLS KAREN G ARROW ELECTRONICS, INC. 50 MARCUS DRIVE MELVILLE, NY 11747	X							

Signatures

Lori McGregor, Attorney-in-fact 08/19/2008

**Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Phantom Stock issued under the Arrow Electronics, Inc. 2004 Omnibus Incentive Plan and settled by issuance of Common Stock on a 1

(1) for 1 basis, following termination of services as a Director, the occurrence of an unforeseeable emergency or a change in control as defined in the Plan.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. for certain senior executives of the Company. In addition, we sponsor multiple fully insured or self-funded medical plans and life insurance plans for certain retirees. The measurement date for all plans is December 31 for each respective plan year.

Components of Net Periodic (Benefit) Cost

The components of net periodic (benefit) cost for the periods indicated were:

	Pensio	on Bene	fits		Retirement Health and Life Insurance Benefits			
(Dollars in thousands)	Quarter Ended September 30,		Nine Months Ended September 30,		Quarter Ended September 30,		Nine Months Ended September 30,	
Change in benefit obligation:	2017	2016	2017	2016	2017	2016	2017	2016
Service cost	\$—	\$—	\$ —	\$ —	\$12	\$37	\$68	\$111
Interest cost	1,837	1,872	5,519	5,658	20	19	51	57

Reporting Owners 2

Expected return on plan assets	(2,30)	2 (2,698)	(6,92)	(8,110)	_	_	_	_
Amortization of prior service cost (credit)	_	_	_	_	(411)	(373)	(1,191) (1,119)
Amortization of net loss (gain)	445	445	1,311	1,339	16	(19)	(15) (57)
Net periodic (benefit) cost	\$(20)	\$(381)	\$(90)	\$(1,113)	\$(363)	\$(336)	\$(1,087	7) \$(1,008)
Employer Contributions								

We made required contributions of \$0.4 million and \$0.3 million to our qualified defined benefit pension plans in the first nine months of 2017 and 2016, respectively. We are not required to make additional contributions to these plans in 2017.

In the three and nine month periods ended September 30, 2017 and 2016, we did not make any voluntary contributions to our defined benefit pension plans.

As there is no funding requirement for the non-qualified unfunded noncontributory defined benefit pension plan or the retiree health and life insurance benefit plans, benefit payments made during the year are funded directly by the Company.

Pension Plan Merger and Proposed Termination

In October 2017, the Company merged the Rogers Plan and the Bear Plan (the Merged Plan). The Company currently intends to terminate the Merged Plan and has requested a determination letter from the Internal Revenue Service (IRS). The termination of the Merged Plan remains subject to final approval by both management and the IRS. The Company plans to provide for lump sum distributions or annuity payments in connection with the termination of the Merged Plan and we expect the settlement process to be completed in late 2018 or early 2019. The Company lacks sufficient information as of September 30, 2017 to determine the financial impact of the proposed plan termination. The actuarial assumptions used to calculate pension cost and true-up the pension liability are reviewed annually and will be updated at December 31, 2017. At this time, there are no plans to terminate the remaining Union Plan.

Note 10 – Segment Information

Our reporting structure is comprised of the following operating segments: ACS, EMS, PES, and Other. We believe this structure aligns our external reporting presentation with how we currently manage and view our business internally.

In November 2016, we acquired DeWAL, a leading manufacturer of polytetrafluoroethylene, ultra-high molecular weight polyethylene films, pressure sensitive tapes and specialty products for the industrial, aerospace, automotive, and electronics markets. In January 2017, we acquired the principal operating assets of DSP, a custom manufacturer of silicone sheet, extrusions, stripping and compounds. We are in the process of integrating both DeWAL and DSP into our EMS segment.

The following table sets forth the information about our segments for the periods indicated; inter-segment sales have been eliminated from the net sales data:

	Quarter Ended		Nine Months Ended		
	September	30,	September	30,	
(Dollars in thousands)	2017	2016	2017	2016	
Net sales					
Advanced Connectivity Solutions	\$72,713	\$65,518	\$225,595	\$206,115	
Elastomeric Material Solutions	82,239	54,391	236,673	146,476	
Power Electronics Solutions	46,409	39,777	132,966	113,391	
Other	5,422	5,573	16,801	17,332	
Total	\$206,783	\$165,259	\$612,035	\$483,314	
Operating income					
Advanced Connectivity Solutions	\$14,465	\$7,605	\$47,362	\$34,334	
Elastomeric Material Solutions	17,846	10,932	44,826	21,584	
Power Electronics Solutions	5,429	2,767	14,024	4,540	
Other	1,847	1,842	5,576	5,544	
Total	39,587	23,146	111,788	66,002	
Equity income in unconsolidated joint ventures	1,384	898	3,359	2,220	
Other income (expense), net	1,596	676	2,126	320	
Interest expense, net				(3,047)	
Income before income tax expense	\$40,928	\$23,909	\$112,439	\$65,495	

Note 11 – Joint Ventures

As of September 30, 2017, we had two joint ventures, each 50% owned, which were accounted for under the equity method of accounting.

Joint VentureLocation Reportable SegmentFiscal Year-EndRogers INOAC Corporation (RIC)JapanElastomeric Material Solutions October 31Rogers INOAC Suzhou Corporation (RIS)ChinaElastomeric Material Solutions December 31

We recognized equity income related to the joint ventures of \$1.4 million and \$3.4 million for the three and nine months ended September 30, 2017, respectively. We recognized equity income related to the joint ventures of \$0.9 million and \$2.2 million for the three and nine months ended September 30, 2016, respectively. These amounts are included in the condensed consolidated statements of operations.

The summarized financial information for the joint ventures for the periods indicated was as follows:

 Quarter Ended
 Nine Months Ended

 September 30,
 September 30,
 September 30,

 (Dollars in thousands) 2017
 2016
 2017
 2016

 Net sales
 \$14,020
 \$12,773
 \$38,653
 \$32,934

 Gross profit
 \$5,463
 \$4,119
 \$14,832
 \$10,877

 Net income
 \$2,768
 \$1,796
 \$6,718
 \$4,440

Receivables from and payables to joint ventures arise during the normal course of business from transactions between us and the joint ventures. We had receivables of \$2.7 million and \$2.4 million due from RIC and RIS as of September 30, 2017 and December 31, 2016, respectively. We owed payables of \$2.7 million and \$1.6 million to RIC and RIS as of September 30, 2017 and December 31, 2016, respectively.

Note 12 – Debt

On June 18, 2015, we entered into a secured five year credit agreement with JPMorgan Chase Bank, N.A., as administrative agent, and the lenders party thereto (the Second Amended Credit Agreement). The Second Amended Credit Agreement provided (1) a \$55.0 million term loan; (2) up to \$295.0 million of revolving loans, with sublimits for multicurrency borrowings, letters of credit and swing-line notes; and (3) a \$50.0 million expansion feature. On February 17, 2017, we entered into a secured five year credit agreement with JPMorgan Chase Bank, N.A., as administrative agent, and the lenders party thereto (the Third Amended Credit Agreement), which amended and restated the Second Amended Credit Agreement. The Third Amended Credit Agreement refinanced the Second Amended Credit Agreement, eliminated the term loan under the Second Amended Credit Agreement, increased the principal amount of the revolving credit facility to up to \$450.0 million borrowing capacity, with sublimits for multicurrency borrowings, letters of credit and swing-line notes, and provided an additional \$175.0 million accordion feature. Borrowings may be used to finance working capital needs, for letters of credit and for general corporate purposes in the ordinary course of business, including the financing of permitted acquisitions (as defined in the Third Amended Credit Agreement).

Borrowings under the Third Amended Credit Agreement can be made as alternate base rate loans or euro-currency loans. Alternate base rate loans bear interest that includes a base reference rate plus a spread of 37.5 to 75.0 basis points, depending on our leverage ratio. The base reference rate is the greater of the prime rate; federal funds effective rate (or the overnight bank funding rate, if greater) plus 50 basis points; or adjusted 1-month LIBOR plus 100 basis points. Euro-currency loans bear interest based on adjusted LIBOR plus a spread of 137.5 to 175.0 basis points, depending on our leverage ratio.

In addition to interest payable on the principal amount of indebtedness outstanding from time to time under the Third Amended Credit Agreement, we are required to pay a quarterly fee of 20 to 30 basis points (based upon our leverage ratio) of the unused amount of the lenders' commitments under the Third Amended Credit Agreement.

The Third Amended Credit Agreement contains customary representations, warranties, covenants, mandatory prepayments and events of default under which our payment obligations may be accelerated. If an event of default occurs, the lenders may, among other things, terminate their commitments and declare all outstanding borrowings to be immediately due and payable together with accrued interest and fees. The financial covenants include requirements to maintain (1) a leverage ratio of no more than 3.25 to 1.00, subject to an election to increase the maximum leverage ratio to 3.50 to 1.00 for one fiscal year in connection with a permitted acquisition, and (2) an interest coverage ratio of no less than 3.00 to 1.00.

All obligations under the Third Amended Credit Agreement are guaranteed by each of our existing and future material domestic subsidiaries, as defined in the Third Amended Credit Agreement (the Guarantors). The obligations are also secured by a Third Amended and Restated Pledge and Security Agreement, dated as of February 17, 2017, entered into by us and the Guarantors which grants to the administrative agent, for the benefit of the lenders, a security interest, subject to certain exceptions, in substantially all of the non-real estate assets of the Guarantors. These assets include, but are not limited to, receivables, equipment, intellectual property, inventory, and stock in certain

subsidiaries.

All revolving loans are due on the maturity date, February 17, 2022. We are not required to make any quarterly principal payments under the Third Amended Credit Agreement, however, during the second and third quarters of 2017, we made discretionary principal payments of \$50.0 million and \$60.0 million, respectively, to reduce the amount outstanding on our credit facility. As of September 30, 2017 we have \$131.2 million in outstanding borrowings under our credit facility.

At September 30, 2017, we have \$2.4 million of outstanding deferred debt issuance costs consisting of \$1.4 million related to the term loans under the Second Amended Credit Agreement and \$1.0 million related to the Third Amended Credit Agreement. These

costs will be amortized over the life of the Third Amended Credit Agreement, which will terminate in February 2022. We incurred amortization expense of \$0.1 million and \$0.2 million in the three months ended September 30, 2017 and 2016 related to these deferred costs. We incurred amortization expense of \$0.4 million in the nine months ended September 30, 2017 and 2016 related to these deferred costs.

In March 2017, we entered into an interest rate swap to hedge the variable interest rate on \$75.0 million of our \$450.0 million revolving credit facility. See further discussion in Note 3 Hedging Transactions and Derivative Financial Instruments.

Restriction on Payment of Dividends

Our Third Amended Credit Agreement generally permits us to pay cash dividends to our shareholders, provided that (i) no default or event of default has occurred and is continuing or would result from the dividend payment and (ii) our leverage ratio does not exceed 2.75 to 1.00. If our leverage ratio exceeds 2.75 to 1.00, we may nonetheless make up to \$20 million in restricted payments, including cash dividends, during the fiscal year, provided that no default or event of default has occurred and is continuing or would result from the payments. Our leverage ratio did not exceed 2.75 to 1.00 as of September 30, 2017.

Capital Lease

We have a capital lease obligation related to our manufacturing facility in Eschenbach, Germany. Under the terms of the leasing agreement, we have an option to purchase the property upon the expiration of the lease in 2021 at a price which is the greater of (i) the then-current market value or (ii) the residual book value of the land including the buildings and installations thereon. The total obligation recorded for the lease as of September 30, 2017 is \$5.7 million. Depreciation expense related to the capital lease was \$0.1 million for each of the three months ended September 30, 2017 and 2016. For the nine months ended September 30, 2017 and 2016, depreciation expense related to the capital lease was \$0.2 million and \$0.3 million, respectively. Accumulated depreciation at September 30, 2017 and December 31, 2016 was \$4.1 million and \$3.4 million, respectively. These expenses are included as depreciation expense in cost of sales on our condensed consolidated statements of operations.

We also incurred interest expense on the capital lease of \$0.1 million for each of the three month periods ended September 30, 2017 and 2016. For the nine month periods ended September 30, 2017 and 2016, interest expense incurred on the capital lease was \$0.1 million and \$0.3 million, respectively. Interest expense related to the debt recorded on the capital lease is included in interest expense on the condensed consolidated statements of operations.

Note 13 – Goodwill and Other Intangible Assets Goodwill

The changes in the carrying amount of goodwill for the period ending September 30, 2017, by segment, were as follows:

	Advanced	Elastomeric	Power		
(Dollars in thousands)	Connectivity	Material	Electronics	Other	Total
	Solutions	Solutions	Solutions		
December 31, 2016	\$ 51,693	\$ 91,531	\$ 62,983	\$2,224	\$208,431
Foreign currency translation adjustment	_	768	7,479	_	8,247
Purchase accounting adjustment	_	116	_	_	116
DSP acquisition	_	17,793	_	_	17,793
September 30, 2017	\$ 51,693	\$ 110,208	\$ 70,462	\$2,224	\$234,587

Other Intangible Assets

	Septembe	r 30, 2017		December		
	Gross	Accumulated	Net	Gross	Accumulated	Net
(Dollars in thousands)	Carrying	Amortization	Carrying	Carrying	Amortization	Carrying
	Amount	Amortization	Amount	Amount	Amortization	Amount
Trademarks and patents	\$10,161	\$ 1,882	\$8,279	\$6,825	\$ 1,156	\$5,669
Technology	73,779	31,382	42,397	68,880	24,365	44,515
Covenant not to compete	1,729	1,020	709	1,419	932	487
Customer relationships	128,357	20,262	108,095	96,148	14,311	81,837
Total definite-lived other intangible assets	214,026	54,546	159,480	173,272	40,764	132,508
Indefinite-lived other intangible assets	4,662	_	4,662	4,168	_	4,168
Total other intangible assets	\$218,688	\$ 54,546	\$164,142	\$177,440	\$ 40,764	\$136,676

Gross and net carrying amounts and accumulated amortization may differ from prior periods due to foreign exchange rate fluctuations.

Amortization expense for the three and nine months ended September 30, 2017 was approximately \$3.8 million and \$11.0 million, respectively. Amortization expense for the three and nine months ended September 30, 2016 was approximately \$2.7 million and \$8.0 million, respectively. The estimated future amortization expense is \$3.9 million for the remainder of 2017 and \$15.4 million, \$15.2 million, \$11.9 million and \$11.0 million for 2018, 2019, 2020 and 2021, respectively.

On November 23, 2016, we acquired DeWAL, and on January 6, 2017, we acquired the principal operating assets of DSP. For further detail on the goodwill and other intangible assets recorded in connection with the acquisitions, see Note 5, "Acquisitions".

The indefinite-lived other intangible assets were acquired as part of the acquisition of Curamik Electronics GmbH. These assets are assessed for impairment annually or if changes in circumstances indicate that the carrying values may not be recoverable.

The definite-lived other intangible assets are amortized using a fair value methodology that is based on the projected economic use of the related underlying asset. The weighted average amortization period as of September 30, 2017, by other intangible asset class, is presented in the table below:

Other Intangible Asset Class	Weighted Average Amortization Period (Years)
Trademarks and patents	7.3
Technology	6.1
Customer relationships	10.4
Covenant not to compete	3.4
Total definite-lived other intangible assets	9.1

Note 14 – Commitments and Contingencies

We are currently engaged in the following environmental and legal proceedings:

Voluntary Corrective Action Program

Our location in Rogers, Connecticut is part of the Connecticut Voluntary Corrective Action Program (VCAP). As part of this program, we partnered with the Connecticut Department of Energy and Environmental Protection (CT DEEP) to determine the corrective actions to be taken at the site related to contamination issues. We evaluated this matter and completed internal due diligence work related to the site in the fourth quarter of 2015. We recorded an accrual of \$3.2 million as of December 31, 2015 for remediation costs expected to be incurred based on the facts and circumstances known to us at that time. During the third quarter of 2016, the CT DEEP approved a change to our remediation plan for the site that will reduce our overall expected costs. Accordingly, we reduced the accrual by \$0.9 million as a result of a change in the level of remediation that needs to take place. This benefit was recorded as an offset to selling, general, and administrative expenses in the condensed consolidated statement of operations. Remediation activities on the site continue, totaling approximately \$0.5 million through September 30, 2017, and the remaining accrual for future remediation efforts was \$1.8 million.

We are currently involved as a potentially responsible party (PRP) in one active case involving a waste disposal site, the Chatham Superfund Site. The costs incurred since inception for this claim have been immaterial and have been primarily covered by insurance policies, for both legal and remediation costs. In this matter, we have been assessed a cost sharing percentage of approximately 2% in relation to the range for estimated total cleanup costs of \$18.8 million to \$29.6 million. We believe we have sufficient insurance coverage to fully cover this liability and have recorded a liability and related insurance receivable of approximately \$0.4 million as of September 30, 2017, which approximates our share of the low end of the estimated range. We believe we are a de minimis participant and, as such, have been allocated an insignificant percentage of the total PRP cost sharing responsibility. Based on facts presently known to us, we believe that the potential for the final results of this case having a material adverse effect on our results of operations, financial position or cash flows is remote. This case has been ongoing for many years and we believe that it will continue for the indefinite future. No time frame for completion can be estimated at the present time.

PCB Contamination

We have been working with CT DEEP and the United States Environmental Protection Agency, Region I, in connection with certain polychlorinated biphenyl (PCB) contamination at our facility in Woodstock, Connecticut. The issue was originally discovered in the soil at the facility in the late 1990s, which has been remediated. Further contamination was later found in the groundwater beneath the property, which was addressed with the installation of a pump and treat system in 2011. The future costs related to the maintenance of the groundwater pump and treat system now in place at the site are expected to be minimal. We believe that the remaining remediation activity will continue for several more years and no time frame for completion can be estimated at the present time.

PCB contamination at this facility was also found in the buildings and courtyards original to the site, in addition to surrounding areas, including an on-site pond. We have completed remediation activities for the buildings and courtyards. We currently have a reserve of \$0.2 million for the pond remediation recorded in our condensed consolidated statements of financial position. We believe this reserve will be adequate to cover the remaining remediation work related to the pond contamination based on the information known at this time. However, if additional contamination is found, the cost of the remaining remediation may increase.

Asbestos Litigation

We, like many other industrial companies, have been named as a defendant in a number of lawsuits filed in courts across the country by persons alleging personal injury from exposure to products containing asbestos. We have never mined, milled, manufactured or marketed asbestos; rather, we made and provided to industrial users a limited number of products that contained encapsulated asbestos, but we stopped manufacturing these products in the late 1980s. Most of the claims filed against us involve numerous defendants, sometimes as many as several hundred.

The following table presents information about our recent asbestos claims activity:

Asbestos Claims Activity

Claims outstanding at December 31, 2016 605
New claims filed 284
Pending claims concluded (226)

Claims outstanding at September 30, 2017 663

For the nine months ended September 30, 2017, 211 claims were dismissed and 15 claims were settled. Settlements totaled approximately \$2.4 million for the nine months ended September 30, 2017.

We recognize a liability for asbestos-related contingencies that are probable of occurrence and reasonably estimable. In connection with the recognition of liabilities for asbestos related matters, we record asbestos-related insurance receivables that are deemed probable. Our estimates of asbestos-related contingent liabilities and related insurance receivables are based on an independent actuarial analysis and an independent insurance usage analysis prepared annually by third parties. The actuarial analysis contains numerous assumptions, including general assumptions regarding the asbestos-related product liability litigation environment and company-specific assumptions regarding claims rates (including diseases alleged), dismissal rates, average settlement costs and average defense costs. The insurance usage analysis considers, among other things, applicable deductibles, retentions and policy limits, the

solvency and historical payment experience of various insurance carriers, the likelihood of recovery as estimated by external legal counsel and existing insurance settlements.

We review our asbestos-related forecasts annually in the fourth quarter of each year unless facts and circumstances materially change during the year, at which time we would analyze these forecasts. Currently, these analyses project liabilities and related insurance receivables over a 10-year period. It is probable we will incur additional costs for asbestos-related claims following this 10-year period, but we do not believe that any related contingencies are reasonably estimable beyond such period based on, among other things, the significant proportion of future claims included in the analysis and the lag time between the date a claim is filed

and its resolution. Accordingly, no liability (or related asset) has yet been recorded for claims that may be asserted subsequent to 2026.

As of December 31, 2016, the asbestos-related claims and insurance receivables for the 10-year projection period were \$52.0 million and \$48.4 million, respectively. As of September 30, 2017, there have been no changes to these projections.

To date, the defense and settlement costs of our asbestos-related product liability litigation have been substantially covered by insurance. We have identified continuous coverage for primary, excess and umbrella insurance from the 1950s through the mid-1980s, except for a period in the early 1960s, with respect to which we have entered into an agreement for primary, but not excess or umbrella, coverage. In addition, we have entered into a cost sharing agreement with most of our primary, excess and umbrella insurance carriers to facilitate the ongoing administration and payment of claims by the carriers. The cost sharing agreement may be terminated by any party, but will continue until a party elects to terminate it. As of the filing date for this report, the agreement has not been terminated. As previously disclosed, however, we expect to exhaust individual primary, excess and umbrella coverages over time, and there is no assurance that such exhaustion will not accelerate due to additional claims, damages and settlements or that coverage will be available as expected. Accordingly, while we believe it is reasonably possible that we may incur losses and defense costs in excess of our accruals in the future, we do not have sufficient data to provide a reasonable estimate or range of such losses and defense costs, at this time.

The amounts recorded for the asbestos-related liability and the related insurance receivables described above were based on facts known at the time and a number of assumptions. However, projecting future events, such as the number of new claims to be filed each year, the average cost of disposing of such claims, the length of time it takes to dispose of such claims, coverage issues among insurers and the continuing solvency of various insurance companies, as well as the numerous uncertainties surrounding asbestos litigation in the United States could cause the actual liability and insurance recoveries for us to be higher or lower than those projected or recorded.

There can be no assurance that our accrued asbestos liabilities will approximate our actual asbestos-related settlement and defense costs, or that our accrued insurance recoveries will be realized. We will continue to vigorously defend ourselves and believe we have substantial unutilized insurance coverage to mitigate future costs related to this matter. General Litigation

In addition to the above issues, the nature and scope of our business brings us in regular contact with the general public and a variety of businesses and government agencies. Such activities inherently subject us to the possibility of litigation, including environmental and product liability matters that are defended and handled in the ordinary course of business. We have established accruals for matters for which management considers a loss to be probable and reasonably estimable. It is the opinion of management that facts known at the present time do not indicate that such litigation, after taking into account insurance coverage and the aforementioned accruals, will have a material adverse impact on our results of operations, financial position or cash flows.

Note 15 – Share Repurchase

On August 6, 2015, we initiated a share repurchase program (the Program) of up to \$100.0 million of the Company's capital stock. We initiated the Program to mitigate potentially dilutive effects of stock options and shares of restricted stock granted by the Company, in addition to enhancing shareholder value. The Program has no expiration date, and may be suspended or discontinued at any time without notice. As of September 30, 2017, \$52.0 million remained available to repurchase under the Program.

No shares of capital stock were repurchased during the nine months ended September 30, 2017. All previous repurchases were made using cash from operations and cash on hand.

Note 16 – Income Taxes

Our effective income tax rate was 37.6% and 32.8% for the three months ended September 30, 2017 and 2016, respectively. The increase was primarily due to a change in valuation allowance associated with deferred tax assets that are capital in nature and changes in the pretax income mix across jurisdictions with disparate tax rates, partially offset by excess tax deductions on stock based compensation recognized in 2017.

Our effective income tax rate was 34.6% and 44.5% for the nine months ended September 30, 2017 and 2016, respectively. The decrease was primarily due to withholding taxes on off-shore cash movements and the change in our assertion that certain foreign earnings are permanently reinvested recorded in 2016, excess tax deductions on stock based compensation recognized in 2017 and a decrease in current year accruals of uncertain tax positions. This was partially offset by a decrease in reversal of reserves associated with uncertain tax positions, a change in valuation allowance associated with deferred tax assets that are capital in nature and changes in the pretax income mix across jurisdictions with disparate tax rates.

During the quarter, we established a valuation allowance of \$1.9 million on a deferred tax asset associated with a capital investment because its realizability was determined to no longer meet the more likely than not threshold.

Historically, our intention was to permanently reinvest the majority of our foreign earnings indefinitely or to distribute them only when it was tax efficient to do so. As a result of certain internal restructuring transactions effectuated to more closely align our foreign subsidiaries from an operational, legal and geographic perspective and improve management of financial resources, with respect to offshore distributions, we modified our assertion of certain foreign subsidiary earnings considered permanently reinvested in 2016. In connection with this change, we recorded a deferred tax liability of \$3.4 million associated with distribution-related foreign taxes on prior years' undistributed earnings of certain of our Chinese subsidiaries in the second quarter of 2016. These taxes become due when distributed to other offshore subsidiaries. In addition, we incurred \$5.5 million of withholding taxes related to distributions from China in the second quarter of 2016. With few exceptions, U.S. income taxes have not been provided on undistributed earnings of international subsidiaries. We continue to intend to reinvest these earnings permanently outside the U.S. or to repatriate the earnings only when it is tax efficient to do so.

The total amount of unrecognized tax benefits as of September 30, 2017 was \$6.8 million, of which \$6.6 million would affect our effective tax rate if recognized. It is reasonably possible that approximately \$1.6 million of our unrecognized tax benefits as of September 30, 2017 will reverse within the next twelve months.

We recognize interest and penalties related to unrecognized tax benefits through income tax expense. As of September 30, 2017, we had \$0.7 million accrued for the payment of interest.

We are subject to taxation in the U.S. and various state and foreign jurisdictions. With few exceptions, we are no longer subject to examinations by tax authorities for years prior to 2012.

We adopted ASU 2016-09 on January 1, 2017. Upon adoption, we recognized excess tax benefits of approximately \$12.7 million in deferred tax assets that were previously not recognized in a cumulative-effect adjustment to retained earnings. In addition, the new guidance requires that all of the tax effects related to share-based payments at settlement or expiration be recorded through the statement of operations which resulted in the recognition of \$1.5 million and \$3.2 million of income tax benefits during the three and nine months ended September 30, 2017, respectively. See Note 19 - "Recent Accounting Standards" for further information.

Note 17 – Restructuring and Impairment Charges

In the second quarter of 2017, we completed the physical relocation of our global headquarters from Rogers, Connecticut to Chandler, Arizona. We recorded \$0.6 million and \$2.4 million of expense related to this project in the three and nine months ended September 30, 2017. Severance activity related to the headquarters relocation is presented in the table below for the nine months ended September 30, 2017:

Severance

(Dollars in thousands) Related to

Headquarters

Relocation

Balance at December 31, 2016 \$ 470 Provisions 361 Payments (649)

Balance at September 30, 2017 \$ 182

The fair value of the total severance benefits to be paid (including payments already made) in connection with the relocation is \$1.1 million. This total is being expensed ratably over the required service period for the affected employees.

In the third quarter of 2017, we recognized a \$0.3 million charge related to the impairment of our remaining investment in BrightVolt, Inc. (formerly known as Solicore, Inc.). As this investment does not relate to a specific operating segment, we allocated it ratably among the three main operating segments.

Note 18 – Assets Held for Sale

In the first quarter of 2017, we completed the planned sale of a parcel of land in Belgium that had been classified as held for sale as of December 31, 2016 and recognized a gain on sale of approximately \$0.9 million in operating income. In the third quarter of 2017, we completed the sale of a facility located in Belgium that had been classified as

held for sale as of June 30, 2017 and recognized a gain on sale of approximately \$4.4 million in operating income. In the second quarter of 2017, we began actively marketing for sale unutilized property in the U.S. consisting of a building and an adjacent parcel of land with a net book value of \$0.9 million. The asset is no longer being depreciated and is classified as held for sale as of September 30, 2017 as we expect it to be sold within the next twelve months.

Note 19 – Recent Accounting Standards

In August 2017, the FASB issued ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. These improvements expand and refine hedge accounting for both non-financial and financial risk components. Also, this amendment aligns the recognition and presentation of the effects of a hedging instrument and the hedged item in the financial statements. Additionally, this update includes certain targeted improvements to simplify the application of current guidance related to the assessment of hedge effectiveness. This update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. The Company is in the process of evaluating the disclosure requirements and quantifying the financial impact of the adoption of this standard on our financial statements.

In May 2017, the FASB issued ASU No. 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting. This ASU clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. ASU No. 2017-09 is effective for interim and annual reporting periods beginning after December 15, 2017. Adoption of this standard will be applied prospectively to awards modified on or after the adoption date. The impact of this new standard will depend on the extent and nature of future changes to the terms and conditions of the Company's share-based payment awards. Historically, the Company has not had significant changes to its share-based payment awards and therefore does not expect adoption of this guidance to have a material effect on the financial statements upon its adoption in 2018.

In March 2017, the FASB issued ASU No. 2017-05 and ASU No. 2017-07, Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-Retirement Benefit Cost. The changes to the standard require employers to report the service cost component in the same line item as other compensation costs arising from services rendered by employees during the reporting period. The other components of net periodic pension benefit costs will be presented in the statement of operations separately from the service cost and outside of a subtotal of operating income from operations. In addition, only the service cost component may be eligible for capitalization where applicable. ASU No. 2017-05 and ASU 2017-07 are effective for annual periods beginning after December 15, 2017. The Company expects to adopt this guidance when effective and the adoption is not expected to have a material effect on the financial statements.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, in an effort to simplify the subsequent measurement of goodwill and the associated procedures to determine fair value. The amendments of this ASU are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted, however, the Company has not yet determined if it will adopt prior to 2020. The adoption of this guidance is not expected to have a material impact on our financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, with the intention to reduce diversity in practice, as well as simplify elements of classification within the statement of cash flows for certain transactions. The update was effective for interim and annual reporting periods beginning after December 15, 2016. The accounting update was to be adopted using a retrospective approach. The Company adopted ASU 2016-15 effective January 1, 2017, and it did not have a material impact on our financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which contains amendments intended to simplify various aspects of share-based payment accounting and presentation in the financial statements, including the income tax consequences, classification of awards as either equity or liabilities, treatment of forfeitures and statutory tax withholding requirements, and classification in the statement of cash flows. The update was effective for interim and annual reporting periods beginning after December 15, 2016. The new standard required a modified retrospective transition through a cumulative-effect adjustment as of the beginning of the period of adoption, with certain provisions requiring either a prospective or retrospective transition. The Company adopted ASU 2016-09 on January 1, 2017. Upon adoption, the Company recognized excess tax benefits of approximately \$12.7 million in deferred tax assets that were previously not recognized in a cumulative-effect adjustment to retained earnings. In addition, the new guidance requires that all of the tax effects related to share-based payments at settlement or expiration be recorded through the statement of operations. The Company also adopted the

standard with respect to treatment of forfeitures, which did not have a material impact on our financial statements. In February 2016, the FASB issued ASU No. 2016-02, Leases, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The new standard requires lessees to classify leases as either finance or operating leases and record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. An accounting policy election may be made to account for leases with a term of 12 months or less similar to existing guidance for operating leases today. ASU No. 2016-02 supersedes the existing guidance on accounting for leases. The standard is effective for interim and annual reporting periods for fiscal years beginning after December 15, 2018. Early adoption of this standard is permitted and it is to be adopted using a modified retrospective approach. The Company has initiated its implementation plan, which includes evaluating the classification of our lease agreements and quantifying the accounting impact in accordance with the new accounting standard. The Company expects to adopt this accounting standard beginning in fiscal year 2019.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, to achieve a consistent application of revenue recognition within the U.S., resulting in a single revenue model to be applied by reporting companies under U.S. generally accepted accounting principles. Under the new model, recognition of revenue occurs when a customer obtains control of promised goods or services in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, the new standard requires that reporting companies disclose the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. On July 9, 2015, the FASB agreed to delay the effective date by one year. In accordance with the agreed upon delay, the updated standard is effective for us beginning in the first quarter of 2018. Early adoption is permitted, but not before the original effective date of the standard. During 2016, the FASB issued new accounting standards updates regarding principal versus agent considerations in determining revenue recognition identifying performance obligations and licensing, collectability, sales tax, non-cash considerations, completed contracts, contract modifications and effect of accounting change. During 2017, the FASB issued new accounting standards updates regarding clarification of determining the customer in a service concession arrangement. The new standard is required to be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial implementation, without restatement of comparative periods. The Company plans to adopt this standard retrospectively with the cumulative effect recognized at January 1, 2018. The Company has established a cross-functional coordinated implementation team and engaged a third party service provider to assist with the project. The Company has completed its evaluation of contracts. The Company expects that a substantial portion of the business will continue to recognize revenue on a "point in time" basis. The financial impact of adoption primarily relates to recognizing revenue on an "over time" basis due to performance obligations to deliver products that do not have an alternative use to the company whereby the company has an enforceable right to payment evidenced by contractual termination clauses. The cost incurred method will be used to measure the progress to completion as it is the best depiction of the transferring of goods to the customer. The Company is in the process of quantifying the financial impact of the adoption as well as implementing changes to its systems, processes and internal controls, as necessary, to meet the reporting and disclosure requirements.

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

As used herein, the "Company," "Rogers," "we," "us," "our" and similar terms include Rogers Corporation and its subsidiaries unless the context indicates otherwise.

Forward-Looking Statements

This Quarterly Report on Form 10-Q includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements are generally accompanied by words such as "anticipate," "assume," "believe," "could," "estimate," "expect," "fore "goal," "intend," "may," "might," "plan," "potential," "predict," "project," "should," "seek," "target" or similar expressions the uncertainty as to future events or outcomes. Forward-looking statements are based on assumptions and beliefs that we believe to be reasonable; however, assumed facts almost always vary from actual results, and the differences between assumed facts and actual results could be material depending upon the circumstances. Where we express an expectation or belief as to future results, that expectation or belief is expressed in good faith and based on assumptions believed to have a reasonable basis. We cannot assure you, however, that the stated expectation or belief will occur or be achieved or accomplished. Among the factors that could cause our results to differ materially from those indicated by forward-looking statements are risks and uncertainties inherent in our business including, without limitation: failure to capitalize on, or volatility within, the Company's growth drivers, including advanced mobility, advanced connectivity, clean energy, and safety and protection;

uncertain business, economic and political conditions in the United States and abroad, particularly in China, South Korea, Germany, Hungary and Belgium, where we maintain significant manufacturing, sales or administrative operations;

fluctuations in foreign currency exchange rates;

our ability to develop innovative products and have them incorporated into end-user products and systems; the extent to which end-user products and systems incorporating our products achieve commercial success; the ability of our sole or limited source suppliers to deliver certain key raw materials to us in a timely manner; intense global competition affecting both our existing products and products currently under development; failure to realize, or delays in the realization of, anticipated benefits of acquisitions and divestitures due to, among other things, the existence of unknown liabilities or difficulty integrating acquired businesses;

our ability to attract and retain management and skilled technical personnel;

our ability to protect our proprietary technology from infringement by third parties and/or allegations that our technology infringes third party rights;

changes in effective tax rates or tax laws and regulations in the jurisdictions in which we operate;

failure to comply with financial and restrictive covenants in our credit agreement or restrictions on our operational and financial flexibility due to such covenants;

the outcome of ongoing and future litigation, including our asbestos-related product liability litigation;

changes in environmental laws and regulations applicable to our business;

disruptions in, or breaches of, our information technology systems;

restructuring and asset impairment charges; and

changes in accounting standards promulgated by the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC).

Our forward-looking statements are expressly qualified by these cautionary statements, which you should consider carefully, along with the risks discussed in this section and elsewhere in this report and in our Annual Report on Form 10-K for the year ended December 31, 2016 (the Annual Report), any of which could cause actual results to differ materially from historical results or anticipated results. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

The following discussion and analysis of our financial condition and results of operations should be read together with our Condensed Consolidated Financial Statements and the related notes that appear elsewhere in this Form 10-Q along with our audited consolidated financial statements and the related notes thereto in our Annual Report.

In the following discussion and analysis, we sometimes provide financial information that was not prepared in accordance with U.S. generally accepted accounting principles (GAAP). Management believes that such non-GAAP information can provide meaningful supplemental information regarding the Company's performance by excluding certain expenses that are generally non-recurring or otherwise may not be indicative of the core business operating results. In general, the Company believes that any such additional non-GAAP financial information provided is useful to management and investors in assessing the Company's historical performance and for planning, forecasting and analyzing future periods. However, non-GAAP information has limitations as an analytical tool and should not be considered in isolation from, or solely as an alternative to, financial information prepared in accordance with GAAP. Any time we provide non-GAAP information in the following narrative we identify it as such and in close proximity provide the most directly comparable GAAP financial measure, as well as the information necessary to reconcile the two measures.

Executive Summary

Company Background and Strategy

Rogers Corporation designs, develops, manufactures and sells high-quality and high-reliability engineered materials and components for mission critical applications. We operate principally three strategic business segments: Advanced Connectivity Solutions (ACS), Elastomeric Material Solutions (EMS) and Power Electronics Solutions (PES). We have a history of innovation and have established two Rogers Innovation Centers for our leading research and development activities, in Massachusetts and Suzhou, China. We are now headquartered in Chandler, Arizona. Our growth strategy is based upon the following principles: (1) market-driven organization, (2) innovation leadership, (3) synergistic mergers and acquisitions, and (4) operational excellence. Our ability to manage the risks inherent in the markets into which we sell our products, and thereby maintain our financial performance in the future, will depend, in part, on our ability to continue to maintain our focus on these principles. As a market-driven organization, we are focused on growth drivers, including advanced mobility, advanced connectivity, clean energy, and safety and protection. More specifically, the key trends and markets that affect our business include the growth in automotive, automotive radar, electric vehicles, hybrid electric vehicles, rail, aviation, telecom, wireless, internet connectivity, renewable energy, aerospace and defense, and general industrial markets.

Our sales and marketing approach is based on addressing these trends, while our strategy focuses on imperatives for success as a manufacturer of engineered materials and components: quality, service, cost, efficiency, innovation and technology. We have expanded our capabilities through organic investment and acquisitions and strive to ensure a full complement of high quality solutions for our customers. We continue to review and re-align our manufacturing and engineering footprint in an effort to attain a leading competitive position globally. We have established or expanded our capabilities in locations such as Eastern Europe and Asia in support of our customers' growth initiatives. We seek to enhance our operational and financial performance by investing in research and development, manufacturing and materials efficiencies, and new product initiatives that respond to the needs of our customers. We strive to evaluate operational and strategic alternatives to improve our business structure and align our business with the changing needs of our customers and major industry trends affecting our business.

In executing on our growth strategy, we have completed three strategic acquisitions: (1) in January 2017, we acquired the principal operating assets of Diversified Silicone Products, Inc. (DSP), a custom silicone product development and manufacturing business, serving a wide range of high reliability applications, (2) in November 2016, we acquired DeWAL Industries LLC (DeWAL), a leading manufacturer of polytetrafluoroethylene and ultra-high molecular weight polyethylene films, pressure sensitive tapes and specialty products for the industrial, aerospace, automotive, and electronics markets, and (3) in January 2015, we acquired Arlon LLC and its subsidiaries, other than Arlon India (Pvt) Limited (the acquired entities, collectively, Arlon), a leading manufacturer of high performance materials for the printed circuit board industry and silicone rubber-based materials.

2017 Third Quarter Executive Summary

In the third quarter of 2017 as compared to the third quarter of 2016, our net sales increased 25.1% to \$206.8 million, gross margin increased 220 basis points to 39.7%, and operating margin increased 510 basis points. The following key factors should be considered when reviewing our results of operations, financial condition and liquidity for the periods discussed:

Our net sales increase in the third quarter of 2017 was attributable to increases in net sales across all of our strategic business segments, reflecting both organic growth within each business unit, and growth attributable to our recent acquisitions. Each of ACS, EMS and PES recorded net sales growth. ACS experienced continued growth in automotive, aerospace and defense, wireless infrastructure applications, and portable electronics, offset partially by lower demand in satellite dish applications. EMS net sales increased primarily from the recent acquisitions of DeWAL and DSP, and from higher demand from its core markets, including portable electronics, general industrial, and mass transit applications. PES saw strength across most of their traditional markets, including renewable energy, electric and hybrid electric vehicles, variable frequency motor drives, mass transit, and laser diode cooler applications. See "Segment Sales and Operations."

Our gross margin improved 220 basis points and our operating margin improved 510 basis points in the third quarter of 2017 primarily as a result of increased demand and our operational improvement initiatives. Our gross margin

improved to 39.7% in the third quarter of 2017 as a result of increased net sales, as described above, and continued benefits from operational improvement initiatives. Operating income increased to \$39.6 million in the third quarter of 2017, as compared to \$23.1 million in the third quarter of 2016, reflecting an increase in net sales that more than offset an increase in selling, general & administrative (SG&A) expense. As a result, SG&A expense declined as a percentage of net sales from 19.1% in the third quarter of 2016 to 18.7% in the third quarter of 2017.

We are an innovation company, and in the third quarter of 2017 we continued our investment in research and development, with research and development expenses comprising 3.6% of our quarterly net sales. Research and development (R&D) expenses were \$7.4 million in the third quarter of 2017, which was an increase of \$0.1 million but a decline of 0.8% as a percentage of net sales from the third quarter of 2016. The year-over-year decline as a percentage of net sales is attributable to net sales growth (including the recent acquisitions), and we expect the percentage to rebalance closer to historical levels as we integrate the new businesses. Our spending continues to be focused on developing new platforms and technologies.

Results of Operations

The following table sets forth, for the periods indicated, selected operations data expressed as a percentage of net sales.

		Quar	ter I	Ended		Nine Month Ended		nths					
		Septe	emb	er 30,		Septe	mb	er 30,					
		2017		2016		2017		2016					
Net sales		100.0) %	100.0	%	100.0	%	100.0	%				
Gross margin		39.7	%	37.5	%	39.7	%	37.8	%				
Selling, general and ad	ministrative expenses	18.7	%	19.1	%	18.4	%	19.8	%				
Research and developm	nent expenses	3.6	%	4.4	%	3.5	%	4.3	%				
Restructuring and impa	-	0.5	%	_	%	0.5	%	_	%				
Gain on sale of long-liv		(2.1)%	_	%	(0.9))%	_	%				
Operating income		19.1	%	14.0	%	18.3	%	13.7	%				
Equity income in unco	nsolidated joint venture	es 0.7	%	0.5	%	0.5	%	0.5	%				
Other income (expense	· ·	0.8	%	0.4	%	0.3	%	0.1	%				
Interest expense, net	,	(0.8)%	(0.5		(0.8)%	(0.6)%				
Income before income	tax expense	19.8		-				13.6	%				
Income tax expense		7.4	%	4.7	%	6.4	%	6.0	%				
Net income		12.3	%	9.7	%	12.0	%	7.6	%				
Net Sales	Quarter Ended					Nine	Mo	onths E	Ended				
(Dollars in thousands)	September 3 September 2017 2016	er 30, Po	erce	nt Cha	ınge	Septe 2017	emb	er 3 % 20	eptember 016	: 30,	Percen	ıt Chan	ige
Net sales	\$206,783 \$165,259	2:	5.1%	6		\$612		5 \$	483,314		26.6%		
Gross margin	39.7 % 37.5	%				39.7		% 37	7.8	%			

Net sales increased by 25.1% in the third quarter of 2017 compared to the third quarter of 2016. This increase was driven by higher organic net sales in our three strategic business segments (ACS, EMS and PES), as well as from the net sales from our recent acquisitions, DeWAL and DSP. The ACS operating segment had an increase in net sales of 11.0% due to higher end-market demand in automotive, aerospace and defense, wireless infrastructure applications and portable electronics, partially offset by lower demand in satellite dish applications. EMS net sales increased 51.2% due to higher end-market demand in portable electronics, general industrial, and mass transit applications (13.1%), as well as from acquired businesses (38.1%). PES had increased net sales of 16.7% due to higher end-market demand in renewable energy, electric and hybrid electric vehicles, variable frequency motor drives, mass transit, and laser diode cooler applications. Net sales were favorably impacted by 0.5% due to currency fluctuations, primarily as a result of the appreciation in value of the Euro relative to the U.S. dollar offset in part by the depreciation in value of the Renminbi relative to the U.S. dollar.

On a year to date basis, net sales increased by 26.6% from the first nine months of 2016. The ACS operating segment net sales increased 9.5%. The EMS operating segment net sales increased 61.6% and the PES operating segment net sales increased 17.3%. Both ACS and PES had net sales increases from higher end-market demand, and EMS experienced higher net sales resulting from the acquisitions of DeWAL and DSP and organic net sales growth. Net sales were unfavorably impacted by 1.1% due to currency fluctuations, primarily as a result of the depreciation in value of the Renminbi and Euro relative to the U.S. dollar.

See "Segment Sales and Operations" below for further discussion on segment performance. Gross Margin

Gross margin as a percentage of net sales increased 220 basis points to 39.7% in the third quarter of 2017 compared to 37.5% in the third quarter of 2016. Gross margin in the third quarter of 2017 was favorably impacted by an increase in net sales, and operational performance improvements driven by increased capacity utilization, operational process enhancements and automation, conversion of fixed cost structure to variable, benefits from low cost country manufacturing expansion, and synergies from the recent acquisitions.

On a year to date basis, gross margin as a percentage of net sales increased by 190 basis points to 39.7% in the first nine months of 2017 from 37.8% in the first nine months of 2016. Gross margin in the first nine months of 2017 was favorably impacted by an increase in net sales, and operational performance improvements. The first quarter of 2017 included \$1.6 million of expense for a non-recurring purchase accounting fair value adjustment for inventory related to the DeWAL and DSP acquisitions.

Selling, General and	Quarter En	ded		Nine Months Ended					
Administrative Expenses	Qualitar III			1,1110 1,101101	,5 211000				
(Dollars in thousands)	September	30 e,ptember 3	0, Percent	September 30, Percent					
(Donars in thousands)	2017	2016	Change	2017	2016	Change			
Selling, general and administrative	\$38,615	\$ 31,489	22.6%	\$112,346	\$ 95,718	17.4%			
expenses	\$38,613 \$31,489				. ,				
Percentage of net sales	18.7 %	19.1 %		18.4 %	19.8 %				

SG&A expenses increased 22.6% in the third quarter of 2017 from the third quarter of 2016, due principally to \$2.8 million of additional equity and incentive compensation expense, \$1.4 million of additional other intangible amortization and depreciation related to the acquisitions, and \$1.3 million of additional SG&A expenses from the operations of the acquired businesses. SG&A declined as a percent of net sales to 18.7% in the third quarter of 2017 from 19.1% in the third quarter of 2016, as a result of administrative cost containment activities.

On a year to date basis, SG&A expenses increased 17.4%, due principally to \$4.8 million of additional equity and incentive compensation expense, \$3.9 million of additional other intangible amortization and depreciation related to the acquisitions, \$3.8 million of additional SG&A expenses from the operations of the acquired businesses, and \$2.6 million of acquisition and integration related costs. SG&A declined as a percent of net sales to 18.4% for the nine months ended September 30, 2017, from 19.8% from the corresponding prior year period, as a result of administrative cost containment activities.

Research and Development Expenses	Quarter E	Ended		Nine Months Ended				
(Dollars in thousands)	•	erSeptember 3		September 30, Percent				
(=	2017	2016	Change	2017	2016	Change		
Research and development expenses	\$7,411	\$ 7,294	1.6%	\$21,512	\$ 20,916	2.8%		
Percentage of net sales	36 %	44 %		35 %	4 3 %			

R&D expenses increased 1.6% in the third quarter of 2017 from the third quarter of 2016, and increased 2.8% in the nine months ended September 30, 2017 from the corresponding prior year period. The increases are due to continued investments that are targeted at developing new platforms and technologies focused on long-term growth initiatives at our innovation centers in the U.S. and Asia. Although R&D expenses as a percentage of net sales declined from the corresponding periods of the prior year, we expect the percentage to rebalance closer to historical levels as we integrate the new businesses.

Other Operating Expenses (Income)	Quarte	er Ended		Nine Months Ended					
(Dollars in thousands)	Septen	m SepteO mber 30	O, Dargant Change	Septemb	eseptember 30), Percent Change			
(Dollars in thousands)	2017	2016	reicein Change	2017	2016	refeeld Change			
Restructuring and impairment charges	\$962	\$ -	— 100.0%	\$2,767	\$ -	-100.0%			
Gain on sale of long-lived asset	(4,387)	_	100.0%	(5,329)	_	100.0%			
In the third quarter and first nine months of 2017, we recognized \$0.6 million and \$2.4 million of restructuring									

In the third quarter and first nine months of 2017, we recognized \$0.6 million and \$2.4 million of restructuring charges associated with the relocation of our global headquarters from Rogers, Connecticut to Chandler, Arizona. These charges consist of severance expense and other costs associated with relocating employees to the new location. In the third quarter of 2017, we recognized a \$0.3 million impairment charge related to our remaining investment in BrightVolt, Inc. (formerly known as Solicore, Inc.). As this investment does not relate to a specific operating segment, we allocated it ratably among the three main operating segments.

In the first quarter of 2017, we completed the planned sale of a parcel of land in Belgium that had been classified as held for sale as of December 31, 2016 and recognized a gain on sale of approximately \$0.9 million. During the three

months ended September 30, 2017, we completed the sale of a facility located in Belgium that had been classified as held for sale as of June 30, 2017 and recognized a gain on sale of approximately \$4.4 million.

Equity Income in Unconsolidated Joint Ventures	Quarter Ended		Nine Months Ended		
(Dollars in thousands)	September 30 2017 2016	Percent Change	September 3 2017 2016	OPercent Change	
Equity income in unconsolidated joint ventures	\$1,384 \$ 898	54.1%	\$3,359 \$ 2,220	51.3%	

Equity income in unconsolidated joint ventures increased 54.1% in the third quarter of 2017 from the third quarter of 2016, and year to date increased 51.3%. The increases were due to higher demand, primarily in the portable electronics market.

Other Income (Expense), Net	Quarter	En	ded		Nine M	ontl	ns Ended	
(Dollars in thousands)	Septem	boer	№ mber 30,	Percent Change	Septem	boorp	№ 30,	Percent Change
	2017	20	16	reicent Change	2017	201	6	reicent Change
Other income (expense), net	\$1.596	\$	676	136.1%	\$2,126	\$	320	564.4%

Other income in the third quarter of 2017 was primarily attributable to gains in the value of our copper derivatives of \$0.5 million and favorable foreign currency transaction costs of \$1.0 million, compared to favorable foreign currency transaction costs of \$1.3 million and unfavorable copper derivative transaction costs of \$0.1 million in the third quarter of 2016. These gains were partially offset by \$0.8 million of expense related to the reversal of receivables for uncertain tax positions.

In the nine months ended September 30, 2017, other income was attributable to gains of \$1.7 million compared to gains of \$1.0 million in the nine months ended September 30, 2016, primarily related to the value of the copper derivative contracts and favorable foreign currency transaction costs. In the nine months ended September 30, 2016, we recorded an additional loss related to the sale of the Arlon polyimide and thermoset laminate business of \$0.2 million.

Interest Expense, Net	Quarter Ended			Nine Months Ended				
(Dollars in thousands)	Septembe	embe Sð ptember 30, Percent Change		September 30, 2017 2016			Darcont Changa	
(Donars III thousands)	2017	2016		reicent Change	2017	2016		reicent Change
Interest expense, net	\$(1,639)	\$ (811)	102.1%	\$(4,834)	\$ (3,047)	58.6%
Interest expense, net, in	ncreased b	y 102.1% i	in the	third quarter of	2017 from	the third qua	art	er of 2016, and by 5
the first nine menths of	£ 2017 face	a the first		months of 2016	This in one			ilv dua ta tha additi.

Interest expense, net, increased by 102.1% in the third quarter of 2017 from the third quarter of 2016, and by 58.6% in the first nine months of 2017 from the first nine months of 2016. This increase was primarily due to the additional \$166.0 million of debt incurred for the DeWAL and DSP acquisitions. As explained in "Liquidity, Capital Resources and Financial Position" below, however, we made discretionary payments of \$50.0 million and \$60.0 million, respectively, during the second and third quarters of 2017 to reduce our outstanding borrowings under our credit facility to \$131.2 million, as of September 30, 2017.

Income Taxes	Quarter Ended			Nine Mont	Nine Months Ended		
(Dollars in thousands)	September 3	er Me ptember 30, Paraant Cl		e September 30, Percent Ch 2017 2016 Percent Ch		Domaont Change	
	2017	2016	Percent Change	2017	2016	reicent Change	
Income tax expense	\$15,396	\$ 7,844	96.3%	\$38,979	\$ 29,125	33.8%	
Effective tax rate	37.6 %	32.8 %		34.6 %	44.5 %		

Our effective income tax rate was 37.6% and 32.8% for the three months ended September 30, 2017 and 2016, respectively. The increase was primarily due to a change in valuation allowance associated with deferred tax assets that are capital in nature and changes in the pretax income mix across jurisdictions with disparate tax rates, partially offset by excess tax deductions on stock based compensation recognized in 2017.

Our effective income tax rate was 34.6% and 44.5% for the nine months ended September 30, 2017 and 2016, respectively. The decrease was primarily due to withholding taxes on off-shore cash movements and the change in our assertion that certain foreign earnings are permanently reinvested recorded in 2016, excess tax deductions on stock based compensation recognized in 2017 and a decrease in current year accruals of uncertain tax positions. This was partially offset by a decrease in reversal of reserves associated with uncertain tax positions, a change in valuation allowance associated with deferred tax assets that are capital in nature and changes in the pretax income mix across jurisdictions with disparate tax rates.

During the quarter, we established a valuation allowance of \$1.9 million on a deferred tax asset associated with a capital investment because its realizability was determined to no longer meet the more likely than not threshold. Historically, our intention was to permanently reinvest the majority of our foreign earnings indefinitely or to distribute them only when it was tax efficient to do so. As a result of certain internal restructuring transactions effectuated to more closely align our

foreign subsidiaries from an operational, legal and geographic perspective and improve management of financial resources, with respect to offshore distributions, we modified our assertion of certain foreign subsidiary earnings considered permanently reinvested in 2016. In connection with this change, we recorded a deferred tax liability of \$3.4 million associated with distribution-related foreign taxes on prior years' undistributed earnings of certain of our Chinese subsidiaries in the second quarter of 2016. These taxes become due when distributed to other offshore subsidiaries. In addition, we incurred \$5.5 million of withholding taxes related to distributions from China in the second quarter of 2016. With few exceptions, U.S. income taxes have not been provided on undistributed earnings of international subsidiaries. We continue to intend to reinvest these earnings permanently outside the U.S. or to repatriate the earnings only when it is tax efficient to do so.

Segment Sales and Operations

Advanced Connectivity Solutions

Quarter Ended Nine Months Ended September 30, September 30,

(Dollars in thousands) 2017 2016 2017 2016

Net sales \$72,713 \$ 65,518 \$225,595 \$ 206,115

Operating income \$14,465 \$ 7,605 \$47,362 \$ 34,334

The ACS operating segment is comprised of high frequency circuit material products used for making circuitry that receives, processes and transmits high frequency communications signals, in a wide variety of markets and applications, including wireless communications, automotive, high reliability, wired infrastructure, aerospace and defense, and consumer applications, among others.

Q3 2017 versus Q3 2016

ACS experienced continued growth in automotive, aerospace and defense, wireless infrastructure applications, and portable electronics, offset in part by lower demand in satellite dish applications. Net sales in this segment increased by 11.0% in the third quarter of 2017 compared to the third quarter of 2016. The increase in net sales over the third quarter of 2016 was favorably impacted by demand growth in automotive radar applications for Advanced Driver Assistance Systems (49%), aerospace and defense (14%), wireless telecom market for 4G LTE applications (5%), and portable electronics (76%), partially offset by lower demand in satellite dish applications (-60%). Currency fluctuations had a \$0.1 million unfavorable impact on net sales due to the depreciation in value of the Renminbi relative to the U.S. dollar, largely offset by the appreciation in value of the Euro relative to the U.S. dollar. Operating income increased by 90.2% in the third quarter of 2017 from the third quarter of 2016. As a percentage of net sales, operating income in the third quarter of 2017 was 19.9%, a 830 basis point increase as compared to the 11.6% reported in the third quarter of 2016. This increase is primarily due to the higher net sales previously noted as well as lower costs from continued operational efficiencies and cost reduction initiatives.

YTD 2017 versus YTD 2016

On a year to date basis, ACS experienced growth in automotive, aerospace and defense applications, offset in part by lower wireless infrastructure demand. Net sales in this segment increased by 9.5% in the first nine months of 2017 compared to the first nine months of 2016. The increase in net sales is primarily driven by demand growth in automotive radar applications (53%), and aerospace and defense programs (12%), partially offset by lower demand in the wireless telecom market for 4G LTE applications (-3%). Net sales were unfavorably impacted by 0.9% due to currency fluctuations, primarily as a result of the depreciation in value of the Renminbi and Euro relative to the U.S. dollar.

Operating income improved by 37.9% in the first nine months of 2017 from the first nine months of 2016. As a percentage of net sales, the first nine months of 2017 operating income was 21.0%, a 430 basis point increase as compared to the 16.7% reported in the first nine months of 2016. This increase is primarily due to the higher net sales as well as lower costs from continued operational efficiencies and cost reduction initiatives.

Elastomeric Material Solutions

Ouarter Ended Nine Months Ended

(Dollars in thousands)

September 30, September 30,

2017 2016 2017 2016 \$82,239 \$ 54,391 \$236,673 \$ 146,476

Net sales Operating income \$17,846 \$ 10,932 \$44,826 \$ 21,584

The EMS operating segment is comprised of polyurethane and silicone foam products, which are sold into a wide variety of applications and markets, including general industrial, portable electronics, automotive, mass transit and consumer applications. In November 2016, we completed the acquisition of DeWAL, a leading manufacturer of polytetrafluoroethylene, ultra-high molecular weight polyethylene films, pressure sensitive tapes and specialty products for the industrial, aerospace, automotive, and electronics markets. In January 2017, we acquired the principal operating assets of DSP, a custom silicone product development and manufacturing business, serving a wide range of high reliability applications. We are in the process of integrating DeWAL and DSP into our EMS segment.

O3 2017 versus O3 2016

EMS experienced organic net sales growth in the quarter, as well as growth from net sales stemming from our DeWAL and DSP acquisitions. Net sales in this segment increased by 51.2% in the third quarter of 2017 compared to the third quarter of 2016. The increase in net sales was driven by the acquisitions of DeWAL and DSP (38.1%), as well as an increase in organic net sales (13.1%). Organically, EMS experienced higher demand in portable electronics (14%), general industrial (13%), and mass transit applications (48%). Currency fluctuations had a \$0.1 million unfavorable impact on net sales primarily as a result of the depreciation in value of the Renminbi relative to the U.S. dollar, largely offset by the appreciation in value of the Euro relative to the U.S. dollar.

Operating income increased by 63.2% in the third quarter of 2017 from the third quarter of 2016. As a percentage of net sales, third quarter of 2017 operating income was 21.7%, a 160 basis point increase as compared to the 20.1% reported in the third quarter of 2016. This increase is primarily due to the higher net sales attributable to growth from acquisitions and organic growth, as well as lower costs from continued operational efficiencies, partially offset by increases in other intangible amortization and depreciation expense of \$1.4 million related to the DeWAL and DSP acquisitions.

YTD 2017 versus YTD 2016

On a year to date basis, EMS experienced strong net sales growth from the added net sales of the DeWAL and DSP acquisitions, as well as organically. Net sales in this segment increased by 61.6% in the first nine months of 2017 compared to the first nine months of 2016. The increase in net sales is primarily driven by the acquisitions of DeWAL and DSP (44.6%), as well as an increase in organic net sales (17%). Organically, EMS experienced higher demand in portable electronics (22%), general industrial (17%), automotive (33%), and mass transit (26%) applications. Net sales were unfavorably impacted by 1.1% due to currency fluctuations, primarily as a result of the depreciation in value of the Renminbi and Euro relative to the U.S. dollar.

Operating income improved by 107.7% in the first nine months of 2017 from the first nine months of 2016. As a percentage of net sales, the first nine months of 2017 operating income was 18.9%, a 420 basis point increase as compared to the 14.7% reported in the first nine months of 2016. This increase is primarily due to the higher net sales attributable to both acquisitions and organic growth, as well as lower costs from continued operational efficiencies. Operating income in the first nine months of 2017 included \$1.6 million of expense for a non-recurring purchase accounting fair value adjustment for inventory related to the DeWAL and DSP acquisitions in addition to \$2.6 million of acquisition and integration costs. The first nine months of 2017 also includes increased other intangible amortization and depreciation expense of \$3.9 million related to the DeWAL and DSP acquisitions. Despite these expenses, operating income increased due to higher net sales and ongoing operational excellence initiatives. Power Electronics Solutions

	Quarter Ended			Nine Months Ended		
(Dollars in thousands)	Septemb	eSe	Member 30,	September	rSeptember 30,	
	2017	20)16	2017	2016	
Net sales	\$46,409	\$	39,777	\$132,966	\$ 113,391	
Operating income	\$5,429	\$	2,767	\$14,024	\$ 4,540	

The PES operating segment is comprised of two product lines - curamik® direct-bonded copper (DBC) substrates that are used primarily in the design of intelligent power management devices, such as IGBT (insulated gate bipolar transistor) modules that enable a wide range of products including highly efficient industrial motor drives, wind and solar energy converters and electrical systems in automobiles, and ROLINX® busbars that are used primarily in power distribution systems products in electric and hybrid electric vehicles and clean technology applications.

Q3 2017 versus Q3 2016

PES experienced net sales growth in the third quarter of 2017 across key markets, as compared to the third quarter of 2016. Net sales in this segment increased by 16.7% in the third quarter of 2017 from the third quarter of 2016. Net sales were positively impacted by higher demand for renewable energy (36%), electric and hybrid electric vehicles (12%), variable frequency motor drives (8%), mass transit (26%) and laser diode cooler applications (25%). Net sales were favorably impacted by \$1.1 million or 2.8% due to currency fluctuations, primarily as a result of the appreciation in value of the Euro relative to the U.S. dollar.

Operating income for the quarter increased by 96.2% in the third quarter of 2017 from the third quarter of 2016. As a percentage of net sales, third quarter of 2017 operating income was 11.7%, a 470 basis point increase as compared to the 7.0% reported in the third quarter of 2016. This increase is primarily due to higher net sales and increased equipment utilization, supply chain volume discounts, and improved productivity from operational excellence initiatives.

YTD 2017 versus YTD 2016

Net sales in this segment increased by 17.3% in the first nine months of 2017 from the first nine months of 2016. Net sales increase was driven by higher demand for renewable energy (27%), electric and hybrid electric vehicles (14%), variable frequency motor drives (8%), laser diode cooler applications (44%), and mass transit applications (24%). Net sales were unfavorably impacted by 1.5% due to currency fluctuations, primarily as a result of the depreciation in value of the Euro and Renminbi relative to the U.S. dollar.

Operating income increased 208.9% in the first nine months of 2017 from the first nine months of 2016. As a percentage of net sales, the first nine months of 2017 operating income was 10.5%, a 650 basis point increase as compared to the 4.0% reported in the first nine months of 2016. This increase is primarily due to higher net sales and increased equipment utilization, supply chain volume discounts, and improved productivity from operational excellence initiatives.

Other

	Quarter	Er	nded	Nine Months Ended		
(Dollars in thousands)	Septem	boor	pæmber 30,	Septemb	eseptember 30,	
	2017	20	16	2017	2016	
Net sales	\$5,422	\$	5,573	\$16,801	\$ 17,332	
Operating income	\$1.847	\$	1.842	\$5.576	\$ 5.544	

Our Other segment consists of our elastomer rollers and floats business, as well as our inverter distribution business. Q3 2017 versus Q3 2016

Net sales decreased by 2.7% in the third quarter of 2017 from the third quarter of 2016. Currency fluctuations had a negligible impact on net sales. The decrease in net sales is primarily due to lower demand in global light vehicles. Operating income increased 0.3% in the third quarter of 2017 compared to the third quarter of 2016. As a percentage of net sales, operating income increased to 34.1% in the third quarter of 2017 from 33.1% in the third quarter of 2016. This increase was primarily driven by operational improvements and efficiency initiatives.

YTD 2017 versus YTD 2016

Net sales decreased by 3.1% in the first nine months of 2017 from the first nine months of 2016, primarily due to a negative currency impact of 1.4% resulting from a decrease in the value of the Renminbi relative to the U.S. dollar. The decrease in net sales was also driven by lower demand in global light vehicles.

Operating income in the first nine months of 2017 was flat as compared to the first nine months of 2016. This was due to lower net sales, offset by the impact of continuing operating efficiencies.

Liquidity, Capital Resources and Financial Position

We believe that our ability to generate cash from operations to reinvest in our business is one of our fundamental strengths. We believe that our existing sources of liquidity and cash flows that are expected to be generated from our operations, together with our available credit facilities, will be sufficient to fund our operations, currently planned capital expenditures, research and development efforts and our debt service commitments. We continually review and evaluate the adequacy of our cash flows, borrowing facilities and banking relationships seeking to ensure that we have the appropriate access to cash to fund both our near-term operating needs and our long-term strategic initiatives.

(Dollars in thousands) September 30, Decem	JCI J1,
(Donars in thousands) 2017 2016	
Key Balance Sheet Accounts:	
Cash and cash equivalents \$ 150,993 \$ 227,7	67
Accounts receivable, less allowance for doubtful accounts of \$1,452 and \$1,952 \$ 138,506 \$ 119,6	04
Inventories \$ 114,118 \$ 91,13	0
Outstanding borrowing on credit facilities (short term and long term) \$ 131,188 \$ 241,1	88
Nine Months Ended	
September 38 eptember 30,	
(Dollars in thousands) $ 2017 2016 $	
Key Cash Flow Measures:	
Cash provided by operating activities \$99,851 \$94,223	
Cash used in investing activities \$(68,699) \$(14,926)	

Cash used in financing activities \$(113,778) \$(108,947)

At the end of the third quarter of 2017, cash and cash equivalents were \$151.0 million as compared to \$227.8 million at the end of 2016, a decrease of \$76.8 million, or 33.7%. This decrease was primarily due to discretionary principal payments on our outstanding credit facility of \$50.0 million and \$60.0 million in the second and third quarters of 2017, respectively, a payment of \$60.2 million for the acquisition of DSP in January 2017, and \$17.7 million in capital expenditures, partially offset by cash generated by operations.

The following table illustrates the location of our cash and cash equivalents by our three major geographic areas as of the periods indicated:

(Dallars in thousands)	September	December
(Dollars in thousands)	30, 2017	31, 2016
U.S.	\$28,087	\$95,481
Europe	35,181	37,791
Asia	87,725	94,495
Total cash and cash equivalents	\$150,993	\$227,767

Cash held in certain foreign locations could be subject to additional taxes if we repatriate such amounts back to the U.S. or offshore subsidiaries. In 2016, as a result of certain internal restructuring transactions effectuated to more closely align our foreign subsidiaries from an operational, legal and geographic perspective and improve management of financial resources, we changed our estimate of the amount of foreign subsidiary earnings considered permanently reinvested. Undistributed earnings of certain of our Chinese subsidiaries are no longer considered indefinitely reinvested and may be distributed to other offshore subsidiaries. We have not changed our assertion with respect to distributions of earnings that would require the accrual of U.S. income tax.

Significant changes in our balance sheet accounts from December 31, 2016 to September 30, 2017 were as follows: Accounts receivable increased 15.8% to \$138.5 million as of September 30, 2017, from \$119.6 million at December 31, 2016. The increase from year end was primarily due to higher net sales in the third quarter of 2017, in comparison with the fourth quarter of 2016. Additionally, accounts receivable increased by \$3.2 million as of September 30, 2017 due to the acquisition of DSP in January 2017.

Inventory increased 25.2% to \$114.1 million as of September 30, 2017, from \$91.1 million at December 31, 2016 in anticipation of increased demand in the fourth quarter of 2017 within our EMS and PES segments. Additionally, inventory increased \$2.7 million as of September 30, 2017 due to the acquisition of DSP in January 2017.

Goodwill increased 12.5% to \$234.6 million as of September 30, 2017, from \$208.4 million at December 31, 2016. The increase is primarily due to the acquisition of DSP in January 2017.

Other intangible assets increased 20.1% to \$164.1 million as of September 30, 2017, from \$136.7 million at December 31, 2016. This overall increase is primarily due to the acquisition of DSP in January 2017. On February 17, 2017, we entered into the Third Amended and Restated Credit Agreement with JPMorgan Chase Bank, N.A., as administrative agent, and the lenders party thereto (the Third Amended Credit Agreement), which amended and restated the Second Amended Credit Agreement. The Third Amended Credit Agreement refinanced the Second Amended Credit Agreement, eliminated the term loan under the Second Amended Credit Agreement, and increased the principal amount of the revolving credit facility to up to \$450.0 million borrowing capacity, with an additional \$175.0 million accordion feature. All revolving loans under the Third Amended Credit Agreement are due on the maturity date, February 17, 2022. We are not required to make any quarterly principal payments under the Third Amended Credit Agreement. During the second and third quarters of 2017, we made discretionary principal payments of \$50.0 million and \$60.0 million, respectively, to reduce the amount outstanding on our credit facility. As of September 30, 2017, we had \$131.2 million in outstanding borrowings under our credit facility.

The Third Amended Credit Agreement generally permits us to pay cash dividends to our shareholders, provided that (i) no default or event of default has occurred and is continuing or would result from the dividend payment and (ii) our leverage ratio does not exceed 2.75 to 1.00. If our leverage ratio exceeds 2.75 to 1.00, we may nonetheless make up to \$20.0 million in restricted payments, including cash dividends, during the fiscal year, provided that no default or event of default has occurred and is continuing or would result from the payments. Our leverage ratio did not exceed 2.75 to 1.00 as of September 30, 2017.

During the third quarter of 2017, there were not any material new developments related to our capital lease. Refer to Note 12 - "Debt" of Notes to the condensed consolidated financial statements in Part I, Item 1 of this Form 10-Q for further discussion on liquidity matters.

Contingencies

During the third quarter of 2017, we did not become aware of any material new developments related to environmental matters or other contingencies or incur any material costs or capital expenditures related to environmental matters. Refer to Note 14, "Commitments and Contingencies" of Notes to the condensed consolidated financial statements in Part I, Item 1 of this Form 10-Q for further discussion on ongoing environmental and other contingencies.

Off-Balance Sheet Arrangements

As of September 30, 2017, we did not have any off-balance sheet arrangements that have or are, in the opinion of management, likely to have a current or future material effect on our financial condition or results of operations.

Critical Accounting Policies

There were no material changes in our critical accounting policies during the third quarter of 2017.

Recent Accounting Pronouncements

See Note 19, "Recent Accounting Standards" of Notes to the condensed consolidated financial statements in Part I, Item 1 of this Form 10-Q for discussion of recent accounting pronouncements including the respective expected dates of adoption.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no significant changes in our exposure to market risk during the third quarter of 2017. For discussion of our exposure to market risk, refer to Item 7A, Quantitative and Qualitative Disclosures About Market Risk, contained in our Annual Report.

Item 4. Controls and Procedures

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

The Company, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), as of September 30, 2017. The Company's disclosure controls and procedures are designed (i) to ensure that information required to be disclosed by it in the reports that 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 (ii) to ensure that information required to be disclosed in the reports the Company files or submits under the Exchange Act is accumulated and communicated to its management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. Based on their evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures were effective as of September 30, 2017.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in the Company's internal control over financial reporting during its most recently completed fiscal quarter that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting, as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. This evaluation included the operations of DeWAL Industries LLC, which we acquired on November 23, 2016. The Company acquired Diversified Silicone Products, Inc., on January 6, 2017 and has elected to defer the related evaluation of internal control over financial reporting until 2018.

Part II - Other Information

Item 1. Legal Proceedings

See a discussion of environmental, asbestos and other litigation matters in Note 14, "Commitments and Contingencies," of Notes to the condensed consolidated financial statements in Part I, Item 1 of this Form 10-O.

Item 6. Exhibits List of Exhibits:

- Restated Articles of Organization of Rogers Corporation, as amended, incorporated by reference to Exhibit 3a to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2006 (the 2006 Form 10-K) (File No. 001-04347).
- 3.2 <u>Amended and Restated Bylaws of Rogers Corporation, effective February 11, 2016, incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on February 26, 2016.</u>
- Certification of President and Chief Executive Officer (Principal Executive Officer) pursuant to Rule 13a-14(a) of 31.1 the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
- Certification of Vice President, Finance and Chief Financial Officer (Principal Financial Officer) pursuant to Rule 31.213a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
- Certification of President and Chief Executive Officer (Principal Executive Officer) and Vice President, Finance and Chief Financial Officer (Principal Financial Officer) pursuant to Rule 13a-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, furnished herewith.
- The following materials from Rogers Corporation's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2017 formatted in XBRL (Extensible Business Reporting Language): (i) Condensed Consolidated Statements of Operations for the nine months ended September 30, 2017 and September 30, 2016, (ii) Condensed Consolidated Statements of Comprehensive Income (Loss) for the nine months ended September 30, 2017 and September 30, 2016, (iii) Condensed Consolidated Statements of Financial Position at September 30, 2017 and December 31, 2016, (iv) Condensed Consolidated Statement of Shareholders' Equity at September 30, 2017 and December 31, 2016, (v) Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2017 and September 30, 2016 and (vi) Notes to Condensed Consolidated Financial Statements.

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.

ROGERS CORPORATION

(Registrant)
/s/ Janice E. Stipp
Janice E. Stipp

Senior Vice President, Finance and Chief Financial Officer, Principal Financial Officer and Principal Accounting Officer

Dated: November 2, 2017