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

FORM 10-Q

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

For the quarterly period ended September 30, 2019
OR

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

For the transition period from __________ to __________
Commission File Number 000-23486

NN, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**62-1096725**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification Number)*

6210 Ardrey Kell Road
Charlotte, North Carolina 28277
(Address of principal executive offices, including zip code)
(980) 264-4300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	*Trading symbol*	*Name of each exchange on which registered*
Common Stock, par value $0.01 per share	**NNBR**	**The Nasdaq Stock Market, LLC**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 1, 2019, there were 42,327,206 shares of the registrant's common stock, par value $0.01 per share, outstanding.

NN, Inc.
INDEX

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NN, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Income (Loss)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
(in thousands, except per share data)	**2019**	**2018**	**2019**	**2018**
Net sales	$ 213,897	$ 205,683	$ 648,819	$ 571,180
Cost of sales (exclusive of depreciation and amortization shown separately below)	160,816	156,408	485,598	431,492
Selling, general and administrative expense	24,043	22,480	78,911	71,298
Acquisition related costs excluded from selling, general and administrative expense	—	597	—	5,810
Depreciation and amortization	22,621	21,259	68,970	51,798
Restructuring and integration expense, net	—	(209)	(12)	2,137
Other operating (income) expense, net	(1,255)	(733)	(1,019)	(638)
Income from operations	7,672	5,881	16,371	9,283
Interest expense	14,733	18,608	42,492	46,592
Loss on extinguishment of debt and write-off of debt issuance costs	—	6,624	2,699	19,562
Other (income) expense, net	98	308	884	1,882
Loss before (provision) benefit for income taxes and share of net income from joint venture	(7,159)	(19,659)	(29,704)	(58,753)
Benefit (provision) for income taxes	1,283	5,609	(1,535)	12,213
Share of net income from joint venture	279	266	345	1,744
Net loss	$ (5,597)	$ (13,784)	$ (30,894)	$ (44,796)
Other comprehensive loss:				
Foreign currency translation adjustment	(11,448)	(4,193)	(11,620)	(14,509)
Interest rate swap:				
Change in fair value of interest rate swap, net of tax	(1,181)	—	(11,999)	—
Less: reclassification adjustment for (gains) losses included in net income, net of tax	238	—	238	—
Other comprehensive loss	$ (12,391)	$ (4,193)	$ (23,381)	$ (14,509)
Comprehensive loss	$ (17,988)	$ (17,977)	$ (54,275)	$ (59,305)
Basic net loss per share:				
Net loss per share	$ (0.13)	$ (0.48)	$ (0.74)	$ (1.61)
Weighted average shares outstanding	42,038	28,688	42,013	27,784
Diluted net loss per share:				
Net loss per share	$ (0.13)	$ (0.48)	$ (0.74)	$ (1.61)
Weighted average shares outstanding	42,038	28,688	42,013	27,784

See notes to condensed consolidated financial statements (unaudited).

NN, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)

(in thousands, except per share data)	September 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 24,409	$ 17,988
Accounts receivable, net	141,583	133,421
Inventories	126,832	122,615
Income tax receivable	1,610	2,277
Other current assets	21,884	21,901
Total current assets	316,318	298,202
Property, plant and equipment, net	364,479	361,028
Operating lease right-of-use assets	67,885	—
Goodwill	437,280	439,452
Intangible assets, net	340,513	376,248
Investment in joint venture	19,877	20,364
Other non-current assets	7,393	7,607
Total assets	$ 1,553,745	$ 1,502,901
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 65,534	$ 65,694
Accrued salaries, wages and benefits	31,919	24,636
Income tax payable	1,360	—
Current maturities of long-term debt	25,601	31,280
Current portion of operating lease liabilities	7,047	—
Other current liabilities	24,548	23,420
Total current liabilities	156,009	145,030
Deferred tax liabilities	77,182	91,838
Non-current income tax payable	3,569	3,875
Long-term debt, net of current portion	841,748	811,471
Operating lease liabilities, net of current portion	68,479	—
Other non-current liabilities	46,961	29,417
Total liabilities	1,193,948	1,081,631
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock - $0.01 par value per share, authorized 90,000 shares, 42,297 and 42,104 shares issued and outstanding at September 30, 2019, and December 31, 2018, respectively	423	421
Additional paid-in capital	513,268	511,545
Retained deficit	(98,888)	(59,071)
Accumulated other comprehensive loss	(55,006)	(31,625)
Total stockholders' equity	359,797	421,270
Total liabilities and stockholders' equity	$ 1,553,745	$ 1,502,901

See notes to condensed consolidated financial statements (unaudited).

NN, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
Three Months Ended September 30, 2019 and 2018
(Unaudited)

(in thousands)	Common Stock Number of shares	Common Stock Par value	Additional paid in capital	Retained deficit	Accumulated other comprehensive loss	Total
Balance, June 30, 2019	42,367	$ 424	$ 513,380	$ (90,353)	$ (42,615)	$ 380,836
Net loss	—	—	—	(5,597)	—	(5,597)
Cash dividends declared	—	—	—	(2,973)	—	(2,973)
Shares issued for option exercises	5	—	21	—	—	21
Share-based compensation expense	(50)	(1)	1,152	—	—	1,151
Restricted shares and performance shares forgiven for taxes and forfeited	(25)	—	(10)	—	—	(10)
Change in estimate of performance share vesting	—	—	(1,275)	35	—	(1,240)
Change in fair value of interest rate swap, net of tax of $376	—	—	—	—	(1,181)	(1,181)
Reclassification of interest rate swap settlement to income, net of tax of $68	—	—	—	—	238	238
Foreign currency translation loss	—	—	—	—	(11,448)	(11,448)
Balance, September 30, 2019	42,297	$ 423	$ 513,268	$ (98,888)	$ (55,006)	$ 359,797

(in thousands)	Common Stock Number of shares	Common Stock Par value	Additional paid in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance, June 30, 2018	27,729	$ 277	$ 294,380	$ 176,199	$ (28,061)	$ 442,795
Net loss	—	—	—	(13,784)	—	(13,784)
Cash dividends declared	—	—	—	(1,950)	—	(1,950)
Shares issued	14,375	144	217,168	—	—	217,312
Share-based compensation expense	—	—	1,091	—	—	1,091
Restricted shares and performance shares forgiven for taxes and forfeited	—	—	(3)	—	—	(3)
Change in estimate of performance share vesting	—	—	(802)	49	—	(753)
Foreign currency translation loss	—	—	—	—	(4,193)	(4,193)
Balance, September 30, 2018	42,104	$ 421	$ 511,834	$ 160,514	$ (32,254)	$ 640,515

See notes to condensed consolidated financial statements (unaudited).

NN, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
Nine Months Ended September 30, 2019 and 2018
(Unaudited)

(in thousands)	Common Stock: Number of shares	Common Stock: Par value	Additional paid in capital	Retained deficit	Accumulated other comprehensive loss	Total
Balance, December 31, 2018	42,104	$ 421	$ 511,545	$ (59,071)	$ (31,625)	$ 421,270
Net loss	—	—	—	(30,894)	—	(30,894)
Cash dividends declared	—	—	—	(8,907)	—	(8,907)
Shares issued for option exercises	5	—	21	—	—	21
Share-based compensation expense	231	2	3,128	—	—	3,130
Restricted shares forgiven for taxes and forfeited	(43)	—	(151)	—	—	(151)
Change in estimate of performance share vesting	—	—	(1,275)	35	—	(1,240)
Change in fair value of interest rate swap, net of tax of $3,472	—	—	—	—	(11,999)	(11,999)
Reclassification of interest rate swap settlement to income, net of tax of $68	—	—	—	—	238	238
Foreign currency translation loss	—	—	—	—	(11,620)	(11,620)
Adoption of new accounting standard (Note 1)	—	—	—	(51)	—	(51)
Balance, September 30, 2019	42,297	$ 423	$ 513,268	$ (98,888)	$ (55,006)	$ 359,797

(in thousands)	Common Stock: Number of shares	Common Stock: Par value	Additional paid in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance, December 31, 2017	27,572	$ 275	$ 292,494	$ 211,080	$ (17,745)	$ 486,104
Net loss	—	—	—	(44,796)	—	(44,796)
Cash dividends declared	—	—	—	(5,836)	—	(5,836)
Shares issued	14,375	144	217,168	—	—	217,312
Shares issued for option exercises	27	—	274	—	—	274
Share-based compensation expense	165	2	3,423	—	—	3,425
Restricted shares and performance shares forgiven for taxes and forfeited	(35)	—	(723)	—	—	(723)
Change in estimate of performance share vesting	—	—	(802)	49	—	(753)
Foreign currency translation loss	—	—	—	—	(14,509)	(14,509)
Adoption of new accounting standard	—	—	—	17	—	17
Balance, September 30, 2018	42,104	$ 421	$ 511,834	$ 160,514	$ (32,254)	$ 640,515

See notes to condensed consolidated financial statements (unaudited).

NN, Inc.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Nine Months Ended September 30,	
(in thousands)	**2019**	**2018**
Cash flows from operating activities		
Net loss	$ (30,894)	$ (44,796)
Adjustments to reconcile net loss to net cash provided by (used by) operating activities:		
Depreciation and amortization	68,970	51,798
Amortization of debt issuance costs	3,538	3,631
Loss on extinguishment of debt and write-off of debt issuance costs	2,699	19,562
Share of net income from joint venture, net of cash dividends received	(345)	(1,744)
Compensation expense from issuance of share-based awards	1,855	2,623
Deferred income taxes	(11,024)	(14,737)
Other	2,091	255
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(9,929)	(19,656)
Inventories	(5,794)	(18,207)
Accounts payable	(334)	3,733
Income taxes receivable and payable, net	1,696	(1,681)
Other	11,078	6,004
Net cash provided by (used in) operating activities	33,607	(13,215)
Cash flows from investing activities		
Acquisition of property, plant and equipment	(40,720)	(46,998)
Proceeds from liquidation of short-term investment	8,000	—
Cash paid to acquire businesses, net of cash received	—	(399,011)
Other	1,723	650
Net cash used in investing activities	(30,997)	(445,359)
Cash flows from financing activities		
Cash paid for debt issuance or prepayment costs	(1,016)	(20,703)
Dividends paid	(8,879)	(5,812)
Proceeds from issuance of common shares	—	217,435
Proceeds from long-term debt	52,144	288,594
Repayment of long-term debt	(26,634)	(234,000)
Proceeds from (repayments of) short-term debt, net	(6,086)	10,474
Other	(2,636)	(3,161)
Net cash provided by financing activities	6,893	252,827
Effect of exchange rate changes on cash flows	(3,082)	(910)
Net change in cash and cash equivalents	6,421	(206,657)
Cash and cash equivalents at beginning of period	17,988	224,446
Cash and cash equivalents at end of period	$ 24,409	$ 17,789

See notes to condensed consolidated financial statements (unaudited).

NN, Inc.
Notes to Condensed Consolidated Financial Statements
September 30, 2019
(Unaudited)
Amounts in thousands, except per share data

Note 1. Interim Financial Statements

Nature of Business

NN, Inc. is a global diversified industrial company that combines advanced engineering and production capabilities with in-depth materials science expertise to design and manufacture high-precision components and assemblies for the medical, aerospace and defense, electrical, automotive, and general industrial markets. As used in this Quarterly Report on Form 10-Q (this “Quarterly Report), the terms “NN,” the “Company,” “we,” “our,” or “us” refer to NN, Inc., and its subsidiaries.

Basis of Presentation

In accordance with Accounting Standards Update (“ASU”) 2014-15, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern (Subtopic 205-40)*, the Company has evaluated whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date of the issuance of these unaudited interim financial statements. The Company’s existing revolving line of credit, which has a maximum capacity of $110.0 million, matures on October 19, 2020 (the “Senior Secured Revolver”). The Company leverages such line of credit, along with cash generated from operations, to fund operations and working capital and had $71.5 million of outstanding borrowings as of November 6, 2019. Based on our current and projected use of the facility, as well as cash flows to be generated from operations and investing activities, we do not anticipate that we will be able to repay the outstanding borrowings when they become due in October 2020 without refinancing the line of credit or obtaining new financing. The Company has and continues to make efforts to obtain new financing; however, there is no assurance that we will obtain sufficient financing on commercially reasonable terms, if at all, before the outstanding amounts would be required to be repaid. This condition raises substantial doubt about the Company’s ability to continue as a going concern within one year after the date of issuance of these financial statements. The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern and do not include any adjustments that might result from the outcome of this uncertainty.

The accompanying condensed consolidated financial statements have not been audited, except that the Condensed Consolidated Balance Sheet as of December 31, 2018, was derived from the audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018 (the “2018 Annual Report”), which we filed with the U.S. Securities and Exchange Commission (the “SEC”) on March 18, 2019. In management’s opinion, the accompanying unaudited condensed consolidated financial statements reflect all adjustments necessary to fairly state our results of operations for the three and nine months ended September 30, 2019 and 2018; financial position as of September 30, 2019, and December 31, 2018; and cash flows for the nine months ended September 30, 2019 and 2018, on a basis consistent with our audited consolidated financial statements other than the adoption of new accounting standards, such as the new lease standard (see Note 10). These adjustments are of a normal recurring nature and are, in the opinion of management, necessary to state fairly the Company’s financial position and operating results for the interim periods.

Certain information and footnote disclosures normally included in the consolidated financial statements prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”) have been condensed or omitted from the interim financial statements presented in this Quarterly Report. These unaudited condensed consolidated financial statements should be read in conjunction with our audited consolidated financial statements and accompanying notes included in the 2018 Annual Report. The results for the three and nine months ended September 30, 2019, are not necessarily indicative of results for the year ending December 31, 2019, or any other future periods.

Except for per share data or as otherwise indicated, all U.S. dollar amounts presented in the tables in these Notes to Condensed Consolidated Financial Statements are in thousands.

Prior Periods’ Financial Statement Revisions

In connection with the preparation of our interim financial statements for the nine months ended September 30, 2019, we identified tax accounting misstatements in our previously issued 2018 Annual Report. Such misstatements relate to the tax accounting associated with the 2018 impairment of our joint venture as well as other immaterial tax misstatements. We assessed the materiality of the misstatements on prior periods’ financial statements in accordance with SEC Staff Accounting Bulletin (“SAB”) Topic 1.M, *Materiality*, codified in Accounting Standards Codification (“ASC”) Topic 250, *Accounting Changes and Error Corrections*, (“ASC 250”) and concluded that the misstatements were not material to the prior annual or interim periods. However, the Company has determined that it will revise its previously issued 2018 and 2017 annual financial statements, and relevant interim periods, to correct for these misstatements. In connection with such revision, the Company will correct for an immaterial tax misstatement that originated in 2017 and had been previously corrected for as an out of period adjustment in 2018.

In connection with the filing of this Quarterly Report, we have revised the accompanying Consolidated Statements of Operations and Comprehensive Income (Loss) and our Consolidated Statements of Cash Flows for the nine months ended September 30, 2018, and have reflected the impact of the revision on our Consolidated Balance Sheet as of December 31, 2018. Refer to Note 17 for the effect of the correction of the misstatements on each of the financial statements noted above.

Accounting Standards Recently Adopted

Leases. On January 1, 2019, we adopted Accounting Standards Codification ("ASC") 842, *Leases*, which superseded ASC 840, *Leases*. We adopted ASC 842 utilizing the modified retrospective transition approach; therefore, historical financial information and disclosures do not reflect the new standard and will continue to be presented under the previous lease accounting guidance. Under the modified retrospective transition method, the cumulative effect of the initial adoption adjustment of less than $0.1 million was recognized to the opening balance of retained deficit as of January 1, 2019. As part of the adoption, we elected the package of practical expedients, the short-term lease exemption, and the practical expedient to not separate lease and non-lease components. We recorded lease-related assets and liabilities to our balance sheet for leases with terms greater than twelve months that were classified as operating leases and not previously recorded on our balance sheet. See Note 10 for the required disclosures related to ASC 842.

Derivatives and Hedging. In August 2017, the Financial Accounting Standards Board ("FASB") issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, ("ASU 2017-12"). ASU 2017-12 provides new rules that expand the hedging strategies that qualify for hedge accounting. The new rules also allow additional time to complete hedge effectiveness testing and allow qualitative assessments subsequent to initial quantitative tests if there is a supportable expectation that the hedge will remain highly effective. We adopted the guidance on January 1, 2019. We have applied the new rules to 2019 hedging activities as disclosed in Note 16 to these condensed consolidated financial statements. The new guidance has no effect on our historical financial statements.

Effects of Tax Reform in Other Comprehensive Income. In February 2018, the FASB issued guidance related to the impacts of the U.S. Tax Cuts and Jobs Act of 2017 ("Tax Act"). Under existing U.S. GAAP, the effects of changes in tax rates and laws on deferred tax balances are recorded as a component of income tax expense in the period in which the law was enacted. When deferred tax balances related to items originally recorded in accumulated other comprehensive income ("AOCI") are adjusted, certain tax effects become stranded in AOCI. The FASB issued ASU 2018-2, *Income Statement – Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income,* that permits reclassification of certain income tax effects of the Tax Act from AOCI to retained earnings. The guidance also requires certain disclosures about stranded tax effects. The new guidance was effective for us on January 1, 2019. We adopted the new guidance at the beginning of the period of adoption. The new guidance had no effect on our financial statements.

Accounting Standards Not Yet Adopted

Fair Value Disclosures. In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"), that modifies fair value disclosure requirements. The new guidance could impact us by streamlining disclosures of Level 3 fair value measurements. The modified disclosures are effective for us beginning in the first quarter of 2020, with early adoption allowed. ASU 2018-13 changes disclosures only and does not impact our financial condition, results of operations, or cash flows. We are in the process of evaluating the effects of this guidance on our fair value disclosures.

Internal-Use Software. In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)* ("ASU 2018-15"), that provides guidance on a customer's accounting for implementation, set-up, and other upfront costs incurred in a cloud computing arrangement that is hosted by the vendor. Under the new guidance, customers will apply the same criteria for capitalizing implementation costs as they would for an arrangement that has a software license. ASU 2018-15 is effective for us on January 1, 2020, using either a prospective or retrospective approach and with early adoption permitted. We are in the process of evaluating the effects of this guidance on our financial statements, but do not expect the adoption to have a material impact.

Financial Instruments - Credit Losses. In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which modifies the measurement of expected credit losses on certain financial instruments and the timing of when such losses are recorded. ASU 2016-13 is effective for us on January 1, 2020, using a modified retrospective approach, with early adoption permitted. We are in the process of evaluating the effects of this guidance on our financial statements, but do not expect the adoption to have a material impact.

Note 2. Acquisitions

Paragon Medical, Inc.

On May 7, 2018, we acquired 100% of the stock of PMG Intermediate Holding Corporation, the parent company of Paragon Medical, Inc. ("Paragon Medical"). For accounting purposes, Paragon Medical meets the definition of a business and has been accounted for as a business combination. Paragon Medical is a medical device manufacturer that focuses on the orthopedic, case and tray, implant, and instrument markets. This acquisition continues our strategic focus to expand our Life Sciences portfolio as well as create a balanced business by diversifying our products and finished device offerings. We have finalized the purchase price allocation and recorded measurement period adjustments to the initial allocation as disclosed in our 2018 Annual Report.

Beginning May 7, 2018, our consolidated results of operations include the results of Paragon Medical.

The unaudited pro forma financial results shown in the table below for the three and nine months ended September 30, 2018, combine the consolidated results of NN and Paragon Medical giving effect to the Paragon Medical acquisition as if it had been completed on January 1, 2017. The unaudited pro forma financial results do not give effect to any of our other acquisitions that occurred after January 1, 2017, and do not include any anticipated synergies or other assumed benefits of the Paragon Medical acquisition. This unaudited pro forma financial information is presented for informational purposes only and is not indicative of future operations or results had the Paragon Medical acquisition been completed as of January 1, 2017.

The unaudited pro forma financial results include certain adjustments for debt service costs and additional depreciation and amortization expense based upon the fair value step-up and estimated useful lives of Paragon Medical depreciable fixed assets and definite-life amortizable assets acquired. The provision for income taxes has also been adjusted for all periods, based upon the foregoing adjustments to historical results.

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018	
Pro forma net sales	$	205,683	$	626,414
Pro forma net loss	$	(12,035)	$	(32,129)
Basic net loss per share	$	(0.42)	$	(1.16)
Diluted net loss per share	$	(0.42)	$	(1.16)

Other Acquisitions

Bridgemedica, LLC. On February 22, 2018, we completed the acquisition of 100% of the assets of Bridgemedica, LLC ("Bridgemedica"). For accounting purposes, Bridgemedica meets the definition of a business and has been accounted for as a business combination. Bridgemedica is a medical device company that provides concept to supply solutions through design, development engineering, and manufacturing. Operating results of Bridgemedica are reported in our Life Sciences group after the acquisition date. We have finalized the purchase price allocation with no material changes to the initial allocation.

Southern California Technical Arts, Inc. On August 9, 2018, we completed the acquisition of 100% of the capital stock of Southern California Technical Arts, Inc. ("Technical Arts"). For accounting purposes, Technical Arts meets the definition of a business and has been accounted for as a business combination. Technical Arts is an industrial machining company that manufactures tight tolerance metal components and assemblies. The acquisition of Technical Arts expands our presence in the aerospace and defense end market. Operating results of Technical Arts are reported in our Power Solutions group after the acquisition date. We have finalized the purchase price allocation with no material changes to the initial allocation.

Note 3. Segment Information

Management has concluded that Life Sciences, which is focused on growth in the medical end market, primarily in the orthopaedics and medical/surgical end markets; Mobile Solutions, which is focused on growth in the general industrial and automotive end markets; and Power Solutions, which is focused on growth in the electrical and aerospace and defense end markets, constitute our operating segments. Life Sciences, Mobile Solutions, and Power Solutions are considered operating segments as each engages in business activities for which it earns revenues and incurs expenses, discrete financial information is available for each, and this is the level at which the Chief Operating Decision Maker ("CODM") reviews discrete financial information for purposes of allocating resources and assessing performance.

Segment Results

The following tables present results of operations by reportable segment.

	Life Sciences	Mobile Solutions	Power Solutions	Corporate and Consolidations		Total
Three Months Ended September 30, 2019						
Net sales	$ 94,011	$ 73,071	$ 47,430	$ (615)	(a)	$ 213,897
Income (loss) from operations	9,402	3,681	3,351	(8,762)		7,672
Interest expense						(14,733)
Other						(98)
Loss before benefit for income taxes and share of net income from joint venture						$ (7,159)
Three Months Ended September 30, 2018						
Net sales	$ 78,363	$ 81,805	$ 46,082	$ (567)	(a)	$ 205,683
Income (loss) from operations	6,717	4,657	2,706	(8,199)		5,881
Interest expense						(18,608)
Other						(6,932)
Loss before benefit for income taxes and share of net income from joint venture						$ (19,659)

	Life Sciences	Mobile Solutions	Power Solutions	Corporate and Consolidations		Total
Nine Months Ended September 30, 2019						
Net sales	$ 271,351	$ 230,590	$ 148,480	$ (1,602)	(a)	$ 648,819
Income (loss) from operations	22,553	11,880	12,857	(30,919)		16,371
Interest expense						(42,492)
Other						(3,583)
Loss before provision for income taxes and share of net income from joint venture						$ (29,704)
Nine Months Ended September 30, 2018						
Net sales	$ 168,716	$ 259,678	$ 144,584	$ (1,798)	(a)	$ 571,180
Income (loss) from operations	12,962	21,822	13,939	(39,440)		9,283
Interest expense						(46,592)
Other						(21,444)
Loss before benefit for income taxes and share of net income from joint venture						$ (58,753)

(a) Includes elimination of intersegment transactions occurring during the ordinary course of business.

Total assets by reportable segment as of September 30, 2019, and December 31, 2018, were as follows:

	Total Assets	
	September 30, 2019	December 31, 2018
Life Sciences	$ 817,153	$ 802,770
Mobile Solutions	377,571	356,387
Power Solutions	314,516	297,947
Corporate and Consolidations	44,505	45,797
Total	$ 1,553,745	$ 1,502,901

Note 4. Inventories

Inventories are comprised of the following amounts:

	September 30, 2019	December 31, 2018
Raw materials	$ 52,776	$ 52,930
Work in process	46,548	42,578
Finished goods	27,508	27,107
Total inventories	$ 126,832	$ 122,615

Note 5. Goodwill

The following table shows changes in the carrying amount of goodwill by reportable segment.

	Life Sciences	Power Solutions	Total
Balance as of December 31, 2018	$ 344,947	$ 94,505	$ 439,452
Currency impacts/Other	(1,970)	(202)	(2,172)
Balance as of September 30, 2019	$ 342,977	$ 94,303	$ 437,280

In 2018, Mobile Solutions recorded an impairment loss on goodwill. As of September 30, 2019, no goodwill was recorded at Mobile Solutions.

Based on the closing price of a share of our common stock as of September 30, 2019, our market capitalization was at a level that is less than the net book value of our stockholders' equity. A prolonged or significant decline in market capitalization could be an indicator of additional goodwill impairment. We concluded that our market capitalization as of September 30, 2019, was not at a level that would require us to perform a goodwill impairment assessment during the period. We will continue to monitor our market capitalization to determine if an indicator of impairment exists in subsequent periods.

During 2018, as a result of our annual goodwill impairment analysis performed during the fourth quarter of 2018, we recorded an impairment of $109.1 million in our Power Solutions group. Subsequent to the impairment, at December 31, 2018, Power Solutions reported a goodwill balance of $94.5 million. Given the carrying value of the Power Solutions group was equal to its fair value at December 31, 2018, as a result of the 2018 goodwill impairment, if actual performance of the Power Solutions group falls short of expected results, additional material impairment charges may be required. During the third quarter of 2019, we assessed for triggering events that would signify the need to perform an impairment test and concluded there were no triggering events during the period. Our annual impairment analysis will be completed as of October 1, 2019.

Note 6. Intangible Assets, Net

The following table shows changes in the carrying amount of intangible assets, net by reportable segment.

	Life Sciences	Mobile Solutions	Power Solutions	Total
Balance as of December 31, 2018	$ 244,365	$ 35,892	$ 95,991	$ 376,248
Amortization	(24,860)	(2,640)	(8,245)	(35,745)
Other	8	2	—	10
Balance as of September 30, 2019	$ 219,513	$ 33,254	$ 87,746	$ 340,513

Note 7. Investment in Joint Venture

We own a 49% investment in Wuxi Weifu Autocam Precision Machinery Company, Ltd. (the "JV"), a joint venture located in Wuxi, China. The JV is jointly controlled and managed, and we account for it under the equity method.

The following table shows changes in our investment in the JV.

Balance as of December 31, 2018	$ 20,364
Share of earnings	345
Foreign currency translation loss	(832)
Balance as of September 30, 2019	$ 19,877

During the fourth quarter of 2018, as a result of changing market conditions, the fair value of the JV was assessed and we recorded an impairment of $16.6 million against our investment in the JV. The fair value assessment was significantly affected by changes in our assessment of future growth rates. It is reasonably possible that material deviation of future performance from the estimates used in the 2018 valuation could result in additional impairment to our investment in the JV in subsequent periods. During the third quarter of 2019, we assessed for triggering events that would signify the need to perform an impairment test and concluded there were no triggering events during the period.

We recognized sales to the JV of less than $0.1 million and $0.1 million during the three and nine months ended September 30, 2019, respectively, and less than $0.1 million and $0.2 million for the three and nine months ended September 30, 2018, respectively.

Note 8. Income Taxes

Our effective tax rate was 17.9% and (5.2)% for the three months and nine months ended September 30, 2019, respectively. Our effective tax rate was 28.4% and 20.8% for the three months and nine months ended September 30, 2018, respectively. Our effective tax rate for the nine months ended September 30, 2019, differs from the U.S. federal statutory tax rate of 21% principally due to a discrete tax charge of $6.0 million related to final tax regulations published by the Department of the Treasury and Internal Revenue Service on February 4, 2019, as well as the minimum tax on global intangible low-tax income (“GILTI”). The effective tax rate for the three months ended September 30, 2019, is impacted by the minimum tax on GILTI.

Our 2018 effective tax rate differed from the U.S. federal statutory tax rate of 21% due to permanent differences including GILTI and earnings outside the United States, which were taxed at different rates than the U.S. federal statutory rate of 21%.

Note 9. Debt

Collectively, our credit facility is comprised of a term loan with a face amount of $545.0 million, maturing on October 19, 2022 (the “Senior Secured Term Loan”); a term loan with a face amount of $300.0 million, maturing on April 3, 2021 (the Incremental Term Loan”); and the Senior Secured Revolver. The credit facility is collateralized by all of our assets.

The following table presents debt balances as of September 30, 2019, and December 31, 2018.

	September 30, 2019	December 31, 2018
Senior Secured Term Loan	$ 527,750	$ 532,063
Incremental Term Loan	270,000	279,000
Senior Secured Revolver	71,323	38,720
International lines of credit and other loans	9,897	9,810
Total principal	878,970	859,593
Less—current maturities of long-term debt	25,601	31,280
Principal, net of current portion	853,369	828,313
Less—unamortized debt issuance costs	11,621	16,842
Long-term debt, net of current portion	$ 841,748	$ 811,471

We capitalized interest costs of $0.4 million and $0.3 million in the three months ended September 30, 2019 and 2018, respectively, and $1.5 million and $0.8 million in the nine months ended September 30, 2019 and 2018, respectively, related to construction in progress.

Senior Secured Term Loan

Outstanding borrowings under the Senior Secured Term Loan bear interest at the greater of 0.75% or one-month London Interbank Offered Rate (“LIBOR”) plus an applicable margin of 3.75%. At September 30, 2019, the Senior Secured Term Loan bore interest at 5.80%.

Incremental Term Loan

Outstanding borrowings under the Incremental Term Loan bear interest at one-month LIBOR plus an applicable margin of 3.25%. At September 30, 2019, the Incremental Term Loan bore interest of 5.30%.

Senior Secured Revolver

Outstanding borrowings under the Senior Secured Revolver bear interest on a variable rate structure with borrowings bearing interest at either one-month LIBOR plus an applicable margin of 3.50% or the prime lending rate plus an applicable margin of 2.50%. At September 30, 2019, the weighted average interest rate on outstanding borrowings under the Senior Secured Revolver was 5.73%. We pay a commitment fee of 0.50% for unused capacity under the Senior Secured Revolver.

In March 2019, we amended our existing credit facility (the "March 2019 amendment") to amend the defined terms within the credit facility. In June 2019, we amended our existing credit facility (the "June 2019 amendment") to reduce the maximum capacity under the Senior Secured Revolver to $110.0 million, reduce the total available capacity to $100.0 million, and modify the consolidated net leverage ratio, as defined in the credit facility agreement, which is utilized for certain financial covenants. We paid $0.8 million and $0.2 million of debt issuance costs related to the March 2019 amendment and June 2019 amendment, respectively, which were recorded as a direct reduction to the carrying amount of the associated long-term debt. Additionally, $2.7 million of unamortized debt issuance costs associated with the March 2019 amendment to the existing credit facility were written off.

We had $71.3 million outstanding under the Senior Secured Revolver at September 30, 2019. Total available capacity under the Senior Secured Revolver was $100.0 million as of September 30, 2019, with $16.7 million available for future borrowings after reductions for outstanding letters of credit and outstanding borrowings as of September 30, 2019. Our credit facility is subject to certain financial covenants based on a consolidated net leverage ratio. The financial covenants are effective when we have outstanding borrowings under our Senior Secured Revolver on the last day of any fiscal quarter, become more restrictive over time, and are dependent upon our operational and financial performance. If our operational or financial performance does not improve in line with our expectations, we may be required to take actions to reduce expenditures and decrease our net indebtedness to maintain compliance in future periods. We were in compliance with all covenants under our credit facility at September 30, 2019.

As discussed in Note 1, the outstanding amounts under our Senior Secured Revolver are recognized as a current liability as of October 20, 2019.

Derivative Instruments and Hedging Activities

In February 2019, we entered into a $700.0 million amortizing notional amount fixed-rate interest rate swap agreement to manage the interest rate risk associated with our long-term variable-rate debt until 2022. The fixed-rate interest rate swap agreement calls for us to receive interest monthly at a variable rate equal to one-month LIBOR and to pay interest monthly at a fixed rate of 2.4575%. Refer to Note 16 for further discussion of the interest rate swap agreement.

Note 10. Leases

We adopted ASC 842 on January 1, 2019, and elected the modified retrospective approach in which the new standard is applied to all leases existing at the date of adoption through a cumulative-effect adjustment of less than $0.1 million to retained deficit. Consequently, financial information is not updated, and the disclosures required under the new standard are not provided for periods prior to January 1, 2019. As part of the adoption, we elected the package of practical expedients, the short-term lease exemption, and the practical expedient to not separate lease and non-lease components. Accordingly, we accounted for our existing operating leases as operating leases under the new standard, without reassessing (a) whether the contracts contain a lease under ASC 842, (b) whether classification of the operating leases would be different in accordance with ASC 842, or (c) whether any unamortized initial direct costs would have met the definition of initial direct costs in ASC 842 at lease commencement.

We determine whether an arrangement is a lease at inception. Right-of-use ("ROU") lease assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. ROU lease assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. When the implicit rate is not readily determinable, we use the estimated incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. The lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Amortization of ROU lease assets is recognized in expense on a straight-line basis over the lease term.

Short-term leases are leases having a term of twelve months or less. We recognize short-term leases on a straight-line basis and do not record a related lease asset or liability for such leases. Finance lease ROU assets consist of equipment used in the manufacturing process with terms greater than twelve months to seven years. Operating lease ROU assets consist of the following:

- Equipment used in the manufacturing process as well as office equipment with terms greater than twelve months to seven years; and
- Manufacturing plants and office facilities with terms greater than twelve months to 25 years.

Table of Contents

The following table presents components of lease expense for the three and nine months ended September 30, 2019:

	Financial Statement Line Item	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Lease cost:			
Finance lease cost			
Amortization of right-of-use assets	Depreciation and amortization	$ 360	$ 1,043
Interest expense	Interest expense	75	184
Operating lease cost	Cost of sales and selling, general and administrative expense	3,461	10,294
Short-term lease cost (1)	Cost of sales and selling, general and administrative expense	131	342
Total lease cost		$ 4,027	$ 11,863

(1) Excludes expenses related to leases with a lease term of one month or less.

The following table presents the lease-related assets and liabilities recorded on the balance sheet as of September 30, 2019:

	Financial Statement Line Item	September 30, 2019
Lease assets and liabilities:		
Assets		
Operating lease assets	Operating lease right-of-use assets	$ 67,885
Finance lease assets	Property, plant and equipment, net	14,268
Total lease assets		$ 82,153
Liabilities		
Current liabilities		
Operating lease liabilities	Current portion of operating lease liabilities	$ 7,047
Finance lease liabilities	Other current liabilities	2,839
Non-current liabilities		
Operating lease liabilities	Operating lease liabilities, net of current portion	68,479
Finance lease liabilities	Other non-current liabilities	9,268
Total lease liabilities		$ 87,633

The following table contains supplemental information related to leases for the nine months ended September 30, 2019:

Supplemental Cash Flows Information	Nine Months Ended September 30, 2019
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from finance leases	$ 184
Operating cash flows from operating leases	16,506
Financing cash flows from finance leases	2,520
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 8,677

As of September 30, 2019, the weighted average remaining lease term and weighted-average discount rate for finance and operating leases was as follows:

	Operating Leases	Finance Leases
Weighted-average remaining lease term (years)	10.7	4.9
Weighted-average discount rate	7.8%	2.3%

The maturities of lease liabilities greater than twelve months as of September 30, 2019, is as follows:

	Operating Leases	Finance Leases
2019 (1)	$ 3,506	$ 881
2020	12,106	3,106
2021	11,218	3,095
2022	10,927	2,880
2023	9,384	1,991
Thereafter	65,383	896
Total future minimum lease payments	112,524	12,849
Less: imputed interest	36,998	742
Total lease liabilities	$ 75,526	$ 12,107

(1) For the period from October 1, 2019, to December 31, 2019.

As of September 30, 2019, we have an additional operating lease commitment that would require us to pay a total of approximately $27.5 million base rent payments over the lease term of 15 years. We are expected to commence base rent payments during the third quarter of 2020.

The following table presents the future minimum lease payments under operating leases with initial or non-cancelable lease terms in excess of one year prior to adoption of ASC 842 as reported in the 2018 Annual Report.

Year Ending December 31,	
2019	$ 13,337
2020	11,515
2021	10,557
2022	10,293
2023	8,752
Thereafter	53,945
Total minimum payments	$ 108,399

During the three and nine months ended September 30, 2018, we recognized rent expense of $4.5 million and $9.0 million, respectively.

Note 11. Restructuring and Integration

The following tables present restructuring and integration charges incurred for the three months ended September 30, 2018, and the nine months ended September 30, 2019 and 2018. There were no restructuring and integration charges incurred for the three months ended September 30, 2019.

	Three Months Ended September 30, 2018				
	Life Sciences	Mobile Solutions	Power Solutions	Corporate and Consolidations	Total
Severance and other employee costs	$ (260)	$ —	$ —	$ —	$ (260)
Site closure and other associated costs	—	51	—	—	51
Total	(260)	$ 51	$ —	$ —	$ (209)

	Nine Months Ended September 30, 2019				
	Life Sciences	Mobile Solutions	Power Solutions	Corporate and Consolidations	Total
Severance and other employee costs	$ —	$ —	$ —	$ —	$ —
Site closure and other associated costs	—	(12)	—	—	(12)
Total	$ —	$ (12)	$ —	$ —	$ (12)

	Nine Months Ended September 30, 2018				
	Life Sciences	Mobile Solutions	Power Solutions	Corporate and Consolidations	Total
Severance and other employee costs	$ 1,336	$ —	$ —	$ 728	$ 2,064
Site closure and other associated costs	—	73	—	—	73
Total	$ 1,336	$ 73	$ —	$ 728	$ 2,137

The following table summarizes restructuring and integration reserve activity for the nine months ended September 30, 2019.

	Reserve Balance as of December 31, 2018	Charges	Non-cash Adjustments	Cash Reductions	Reserve Balance as of September 30, 2019
Severance and other employee costs	$ 1,122	$ —	$ —	$ (524)	$ 598
Site closure and other associated costs	24	(12)	—	(12)	—
Total	$ 1,146	$ (12)	$ —	$ (536)	$ 598

The amount accrued for restructuring and integration costs represents what we expect to pay over the next 1.5 years. We expect to pay $0.4 million within the next twelve months.

Note 12. Commitments and Contingencies

Brazil ICMS Tax Matter

Prior to the acquisition of Autocam Corporation in 2014 (“Autocam”), Autocam’s Brazilian subsidiary (“Autocam Brazil”) received notification from the Brazilian tax authority regarding ICMS (state value added tax or “VAT”) tax credits claimed on intermediary materials (e.g., tooling and perishable items) used in the manufacturing process. The Brazilian tax authority notification disallowed state ICMS tax credits claimed on intermediary materials based on the argument that these items are not intrinsically related to the manufacturing processes. Autocam Brazil filed an administrative defense with the Brazilian tax authority arguing, among other matters, that it should qualify for an ICMS tax credit, contending that the intermediary materials are directly related to the manufacturing process.

We believe that we have substantial legal and factual defenses, and we plan to defend our interests in this matter vigorously. The matter encompasses several lawsuits filed with the Brazilian courts requesting declaratory actions that no tax is due or seeking a stay of execution on the collection of the tax. In 2018, we obtained a favorable decision in one of the declaratory actions for which the period for appeal has expired. We have filed actions in each court requesting dismissal of the matter based on the earlier court action. Although we anticipate a favorable resolution to all matters, we can provide no assurances that we will be successful in achieving dismissal of all pending cases. While we believe a loss is not probable, we estimate the range of possible losses related to this assessment is from $0 to $6.0 million. No amount was accrued at September 30, 2019, for this matter.

We are entitled to indemnification from the former shareholders of Autocam, subject to the limitations and procedures set forth in the agreement and plan of merger relating to the Autocam acquisition. Management believes the indemnification would include amounts owed for the tax, interest, and penalties related to this matter.

Securities Offering Matter

On November 1, 2019, Erie County Employees' Retirement System, on behalf of a purported class of plaintiffs, filed a complaint in the Supreme Court of the State of New York, County of New York, against the Company, certain of the Company's current and former officers and directors, and each of the underwriters involved in the Company's public offering and sale of 14,375,000 shares of its common stock pursuant to a preliminary prospectus supplement, dated September 10, 2018, a final prospectus supplement, dated September 13, 2018, and a base prospectus, dated April 19, 2017, relating to the Company's effective shelf registration statement on Form S-3 (File No. 333-216737) (the "Offering"). The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933 in connection with the Offering. The plaintiffs seek to represent a class of stockholders who purchased shares of the Company's common stock in the Offering. The complaint seeks unspecified monetary damages and other relief. The Company believes the complaint and allegations to be without merit and intends to vigorously defend itself against these actions. The Company is unable at this time to determine whether the outcome of the litigation would have a material impact on the Company's financial position, results of operations, or cash flows.

All Other Legal Matters

All other legal proceedings are of an ordinary and routine nature and are incidental to our operations. Management believes that such proceedings should not, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations, or cash flows. In making that determination, we analyze the facts and circumstances of each case at least quarterly in consultation with our attorneys and determine a range of reasonably possible outcomes.

Note 13. Revenue from Contracts with Customers

Revenue is recognized when control of the good or service is transferred to the customer either at a point in time or, in limited circumstances, as our services are rendered over time. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring goods or services. Sales, value add, and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. Incidental items that are immaterial in the context of the contract are recognized as expense.

The following tables present sales to external customers by reportable segment.

	Three Months Ended September 30, 2019				
	Life Sciences	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States	$ 79,429	$ 40,147	$ 38,750	$ (615)	$ 157,711
China	1,590	9,109	1,870	—	12,569
Brazil	—	9,414	72	—	9,486
Mexico	68	4,700	3,832	—	8,600
Germany	6,504	1,768	17	—	8,289
Switzerland	2,985	1,094	15	—	4,094
Other	3,435	6,839	2,874	—	13,148
Total net sales	$ 94,011	$ 73,071	$ 47,430	$ (615)	$ 213,897

	Three Months Ended September 30, 2018				
	Life Sciences	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States	$ 63,869	$ 46,341	$ 38,137	$ (567)	$ 147,780
China	2,405	11,111	1,696	—	15,212
Mexico	90	6,570	2,254	—	8,914
Germany	7,321	1,415	17	—	8,753
Brazil	—	8,200	107	—	8,307
Poland	2,107	1,215	6	—	3,328
Switzerland	—	1,420	47	—	1,467
Other	2,571	5,533	3,818	—	11,922
Total net sales	$ 78,363	$ 81,805	$ 46,082	$ (567)	$ 205,683

	Nine Months Ended September 30, 2019				
	Life Sciences	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States	$ 222,001	$ 129,116	$ 120,445	$ (1,602)	$ 469,960
China	5,155	27,580	5,306	—	38,041
Germany	23,836	4,490	54	—	28,380
Brazil	—	27,432	221	—	27,653
Mexico	312	15,144	10,776	—	26,232
Switzerland	9,759	3,606	56	—	13,421
Other	10,288	23,222	11,622	—	45,132
Total net sales	$ 271,351	$ 230,590	$ 148,480	$ (1,602)	$ 648,819

	Nine Months Ended September 30, 2018				
	Life Sciences	Mobile Solutions	Power Solutions	Intersegment Sales Eliminations	Total
United States	$ 142,863	$ 144,138	$ 120,189	$ (1,798)	$ 405,392
China	3,843	34,273	4,140	—	42,256
Mexico	429	21,042	8,799	—	30,270
Brazil	29	27,722	157	—	27,908
Germany	11,138	4,500	24	—	15,662
Switzerland	3,827	3,915	35	—	7,777
Poland	1	5,485	23	—	5,509
Other	6,586	18,603	11,217	—	36,406
Total net sales	$ 168,716	$ 259,678	$ 144,584	$ (1,798)	$ 571,180

Deferred Revenue

The following table provides information about contract liabilities from contracts with customers.

	Deferred Revenue
Balance at January 1, 2019	$ 2,974
Balance at September 30, 2019	$ 3,268

Revenue recognized during the three and nine months ended September 30, 2019, from amounts included in deferred revenue at the beginning of the period for performance obligations satisfied or partially satisfied during the period, was $1.4 million and $3.0 million, respectively.

Transaction Price Allocated to Future Performance Obligations

We are required to disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as of September 30, 2019, unless our contracts meet one of the practical expedients. Our contracts met the practical expedient for a performance obligation that is part of a contract that has an original expected duration of one year or less.

Sales Concentration

During the three months ended September 30, 2019, we recognized sales from a single customer of $23.7 million, or 11.1% of consolidated net sales. During the nine months ended September 30, 2019, we recognized sales from a single customer of $68.7 million, or 10.6% of consolidated net sales. Revenues from this customer are in our Life Sciences and Power Solutions groups. No customers represented more than 10% of our net sales during the three and nine months ended September 30, 2018.

Note 14. Share-Based Compensation

The following table lists the components of share-based compensation expense by type of award.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Stock options	$ 371	$ 173	$ 732	$ 531
Restricted stock	446	388	1,407	1,244
Performance share units	334	530	991	1,650
Change in estimate of share-based award vesting	(1,275)	(802)	(1,275)	(802)
Share-based compensation expense	$ (124)	$ 289	$ 1,855	$ 2,623

Stock Options

During the nine months ended September 30, 2019, we granted options to purchase 210,400 shares to certain key employees. The weighted average grant date fair value of the options granted during the nine months ended September 30, 2019, was $2.77 per share. The fair value of our options cannot be determined by market value because they are not traded in an open market. Accordingly, we utilized the Black Scholes financial pricing model to estimate the fair value.

The following table shows the weighted average assumptions relevant to determining the fair value of stock options granted in 2019.

	2019
Expected term	6 years
Risk free interest rate	2.47%
Dividend yield	3.53%
Expected volatility	49.53%
Expected forfeiture rate	4.00%

The expected term is derived from using the simplified method of determining stock option terms as described under the Staff Accounting Bulletin Topic 14, *Share-based payment*. The simplified method was used because sufficient historical stock option exercise experience was not available, primarily due to the transformation of the management structure over the past several years.

The average risk-free interest rate is derived from United States Department of Treasury published interest rates of daily yield curves for the same time period as the expected term.

The expected dividend yield is derived by a mathematical formula which uses the expected annual dividends over the expected term divided by the fair market value of our common stock at the grant date.

The expected volatility rate is derived from our actual common stock historical volatility over the same time period as the expected term. The volatility rate is derived by a mathematical formula utilizing daily closing price data.

The forfeiture rate is determined from examining the historical pre-vesting forfeiture patterns of past option issuances to key employees. While the forfeiture rate is not an input of the Black Scholes model for determining the fair value of the options, it is an important determinant of stock option compensation expense to be recorded.

The following table presents stock option activity for the nine months ended September 30, 2019.

	Number of Options (in thousands)	Weighted-Average Exercise Price (per share)	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value	
Outstanding at January 1, 2019	771	$ 15.17			
Granted	210	7.93			
Exercised	(5)	4.42		$ 7	
Forfeited or expired	(139)	15.61			
Outstanding at September 30, 2019	837	$ 13.34	6.0	$ —	(1)
Exercisable at September 30, 2019	570	$ 14.24	4.6	$ —	(1)

(1) The aggregate intrinsic value is the sum of intrinsic values for each exercisable individual option grant. The intrinsic value is the amount by which the closing market price of our stock at September 30, 2019, was greater than the exercise price of any individual option grant.

Restricted Stock

During the nine months ended September 30, 2019, we granted 309,234 restricted stock awards to non-executive directors, officers and certain other key employees. The shares of restricted stock granted during the nine months ended September 30, 2019, vest pro-rata over three years for officers and certain other key employees and over one year for non-executive directors. We determined the fair value of the shares awarded by using the closing price of our common stock as of the date of grant. The weighted average grant date value of restricted stock granted in the nine months ended September 30, 2019, was $7.85 per share. Total grant-date fair value of restricted stock that vested in the nine months ended September 30, 2019, was $2.6 million.

The following table presents the status of unvested restricted stock awards as of September 30, 2019, and changes during the nine months then ended.

	Nonvested Restricted Shares (in thousands)	Weighted Average Grant-Date Fair Value (per share)
Nonvested at January 1, 2019	146	$ 22.07
Granted	309	7.85
Vested	(144)	18.14
Forfeited	(79)	10.09
Nonvested at September 30, 2019	232	$ 9.62

Performance Share Units

Performance Share Units ("PSUs") are a form of long-term incentive compensation awarded to executive officers and certain other key employees designed to directly align the interests of employees to the interests of our stockholders, and to create long-term stockholder value. PSUs granted in 2019 were made pursuant to the NN, Inc. 2016 Omnibus Incentive Plan and a Performance Share Unit Agreement (the "2016 Omnibus Agreement"). Some PSUs are based on total shareholder return ("TSR Awards"), and other PSUs are based on return on invested capital ("ROIC Awards").

The TSR Awards vest, if at all, upon our achieving a specified relative total shareholder return, which will be measured against the total shareholder return of the S&P SmallCap 600 Index during specified performance periods as defined in the 2016 Omnibus Agreement. The ROIC Awards vest, if at all, upon our achieving a specified average return on invested capital during the performance periods. Each performance period generally begins on January 1 of the year of grant and ends 36 months later on December 31.

We recognize compensation expense over the performance period in which the performance and market conditions are measured. If the PSUs do not vest at the end of the performance periods, then the PSUs will expire automatically. Upon vesting, the PSUs will be settled by the issuance of shares of our common stock, subject to the award recipient's continued employment. The actual number of shares of common stock to be issued to each award recipient at the end of the performance periods will be interpolated between a threshold and maximum payout amount based on actual performance results. No dividends will be paid on outstanding PSUs during the performance period; however, dividend equivalents will be paid based on the number of shares of common stock that are ultimately earned at the end of the performance periods.

With respect to the TSR Awards, a participant will earn 50% of the target number of PSUs for "Threshold Performance," 100% of the target number of PSUs for "Target Performance," and 150% of the target number of PSUs for "Maximum Performance." With respect to the ROIC Awards, a participant will earn 35% of the target number of PSUs for "Threshold Performance," 100% of the target number of PSUs for "Target Performance," and 150% of the target number of PSUs for "Maximum Performance. For performance levels falling between the values shown below, the percentages will be determined by interpolation.

The following table presents the goals with respect to TSR Awards and ROIC Awards granted in 2019.

TSR Awards:	Threshold Performance (50% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2019 grants	35th Percentile	50th Percentile	75th Percentile

ROIC Awards:	Threshold Performance (35% of Shares)	Target Performance (100% of Shares)	Maximum Performance (150% of Shares)
2019 grants (1)	4.7%	5.8%	7.0%

(1) For the ROIC Awards granted in 2019, the denominator of the calculation is different than in prior years, and therefore the target percentages are not comparable to historical target percentages.

We estimate the grant date fair value of TSR Awards using the Monte Carlo simulation model, as the total shareholder return metric is considered a market condition under ASC Topic 718, *Compensation – stock compensation*. The grant date fair value of ROIC Awards is based on the closing price of a share of our common stock on the date of grant.

The following table presents the number of PSUs granted and the grant date fair value in the period presented.

	TSR Awards		ROIC Awards	
Award Year	Shares (in thousands)	Grant Date Fair Value (per share)	Shares (in thousands)	Grant Date Fair Value (per share)
2019	136	$ 9.28	174	$ 7.93

We recognize expense for ROIC Awards based on the probable outcome of the associated performance condition. We generally recognize an expense for ROIC Awards based on the Target Performance threshold of 100% because, at the date of grant, the Target Performance is the probable level of performance achievement.

The following table presents the status of unvested PSUs as of September 30, 2019, and changes during the nine months then ended.

	Nonvested TSR Awards		Nonvested ROIC Awards	
	Shares (in thousands)	Weighted Average Grant-Date Fair Value (per share)	Shares (in thousands)	Weighted Average Grant-Date Fair Value (per share)
Nonvested at January 1, 2019	94	$ 26.84	100	$ 24.39
Granted	136	9.28	174	7.93
Forfeited	(139)	16.76	(164)	14.20
Nonvested at September 30, 2019	91	$ 16.03	110	$ 13.53

Note 15. Net Income (Loss) Per Share

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Numerator:				
Net loss	$ (5,597)	$ (13,784)	$ (30,894)	$ (44,796)
Denominator:				
Weighted average shares outstanding	42,038	28,688	42,013	27,784
Per common share net loss:				
Basic net loss per share	$ (0.13)	$ (0.48)	$ (0.74)	$ (1.61)
Diluted net loss per share	$ (0.13)	$ (0.48)	$ (0.74)	$ (1.61)
Cash dividends declared per share	$ 0.07	$ 0.07	$ 0.21	$ 0.21

The calculation of diluted net loss per share for the three and nine months ended September 30, 2019, excludes 0.8 million and 0.6 million, respectively, of potentially dilutive stock options, which had the effect of being anti-dilutive. The calculation of diluted net loss per share for the three and nine months ended September 30, 2018, excludes 0.8 million and 0.8 million, respectively, of potentially dilutive stock options, which had the effect of being anti-dilutive. Given the net loss for the three and nine months ended September 30, 2019 and 2018, all options are considered anti-dilutive and were excluded from the calculation of diluted net loss per share.

Note 16. Fair Value Measurements

Fair value is an exit price representing the expected amount that an entity would receive to sell an asset or pay to transfer a liability in an orderly transaction with market participants at the measurement date. We followed consistent methods and assumptions to estimate fair values as more fully described in the 2018 Annual Report.

Fair value principles prioritize valuation inputs across three broad levels. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities. Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument. Level 3 inputs are unobservable inputs based on the assumptions used to measure assets and liabilities at fair value. An asset or liability's classification within the various levels is determined based on the lowest level input that is significant to the fair value measurement.

Our financial instruments that are subject to fair value disclosure consist of cash and cash equivalents, accounts receivable, accounts payable, derivatives, and long-term debt. As of September 30, 2019, the carrying values of these financial instruments approximated fair value. The fair value of floating-rate debt approximates the carrying amount as interest rates are based on short-term maturities.

Derivative Financial Instruments

We manage our exposure to fluctuations in interest rates using a mix of fixed and variable rate debt. On February 8, 2019, we entered into a $700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575% (the "interest rate swap"). The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022 (the "interest rate swap term"). The interest rate swap effectively mitigates our exposures to the risks and variability of changes in LIBOR.

The notional amount of the interest rate swap will decrease over the interest rate swap term as follows:

	Notional Amount
February 12, 2019 - December 30, 2020	$ 700,000
December 31, 2020 - December 30, 2021	466,667
December 31, 2021 - October 19, 2022	233,333

The objective of the interest rate swap is to eliminate the variability of cash flows in interest payments on the first $700.0 million of variable rate debt attributable to changes in benchmark one-month LIBOR interest rates. The hedged risk is the interest rate risk exposure to changes in interest payments, attributable to changes in benchmark one-month LIBOR interest rates over the interest rate swap term. If one-month LIBOR is greater than the minimum percentage under the

Senior Secured Term Loan, the changes in cash flows of the interest rate swap are expected to exactly offset changes in cash flows of the variable rate debt. The interest rate swap is designated as a cash flow hedge.

As of September 30, 2019, we reported a $12.0 million loss, net of tax, in accumulated other comprehensive income related to the interest rate swap.

The following shows the liabilities measured at fair value on a recurring basis for the interest rate swap as of September 30, 2019.

	Fair Value Measurements as of September 30, 2019		
Description	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Derivative liability - other current liabilities	$ —	$ 5,719	$ —
Derivative liability - other non-current liabilities	—	9,514	—
Total	$ —	$ 15,233	$ —

The inputs for determining fair value of the interest rate swap are classified as Level 2 inputs. Level 2 fair value is based on estimates using standard pricing models. These standard pricing models use inputs which are derived from or corroborated by observable market data such as interest rate yield curves, index forward curves, discount curves, and volatility surfaces. Counterparty to this derivative contract is a highly rated financial institution which we believe carries only a minimal risk of nonperformance.

As of December 31, 2018, we had no interest rate swap agreements or other derivative financial instruments outstanding.

Fixed Rate Debt

The fair value of our outstanding fixed-rate debt included in the “International lines of credit and other loans” line item within Note 9 to these Notes to Condensed Consolidated Financial Statements was $11.3 million and $10.4 million as of September 30, 2019 and December 31, 2018, respectively. These fair values represent Level 2 under the three-tier hierarchy described above. The book value of our outstanding fixed-rate debt included in the “International lines of credit and other loans” line item within Note 9 to these Notes to Condensed Consolidated Financial Statements was $9.9 million and $9.8 million as of September 30, 2019 and December 31, 2018, respectively.

Note 17. Prior Periods' Financial Statement Revisions

As further described in Note 1, the Company is revising previously issued financial statements to correct for immaterial prior period tax misstatements. The following table presents the effect of the correction of the misstatements and the resulting revision on the Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

	Nine Months Ended September 30, 2018		
	As Originally Reported	**Adjustment**	**As Revised**
Income tax benefit (expense)	$ 12,732	$ (519)	$ 12,213
Net income (loss)	(44,277)	(519)	(44,796)
Comprehensive income (loss)	(58,787)	(519)	(59,306)
Basic net income (loss) per share	$ (1.59)	$ (0.02)	$ (1.61)
Diluted net income (loss) per share	$ (1.59)	$ (0.02)	$ (1.61)

The following table presents the effect of the correction of the misstatements on the Consolidated Balance Sheet as of December 31, 2018.

	As of December 31, 2018		
	As Originally Reported	Adjustment	As Revised
Income tax receivable	$ 946	$ 1,331	$ 2,277
Total current assets	296,871	1,331	298,202
Total assets	1,501,570	1,331	1,502,901
Deferred tax liabilities	93,482	(1,644)	91,838
Total liabilities	1,083,275	(1,644)	1,081,631
Retained (deficit) earnings	(62,046)	2,975	(59,071)
Total stockholders' equity	418,295	2,975	421,270
Total liabilities and stockholders' equity	1,501,570	1,331	1,502,901

Although the misstatements had no impact on net cash provided by (used in) operating, investing or financing cash flows in the corresponding unaudited Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2018, they did impact amounts within operating activities which has been corrected for in the accompanying unaudited Condensed Consolidated Statements of Cash Flows. The accompanying footnotes have also been corrected to reflect the impact of the revisions.

The Company will effect the revisions of its previously issued 2018 and 2017 annual financial statements, and relevant unaudited interim quarterly financial information, in connection with the prospective issuance of its Annual Report on Form 10-K for the year ended December 31, 2019.

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

Overview

NN, Inc. is a global diversified industrial company that combines advanced engineering and production capabilities with in-depth materials science expertise to design and manufacture high-precision components and assemblies for the medical, aerospace and defense, electrical, automotive, and general industrial markets. As used in this Quarterly Report, the terms “NN,” the “Company,” “we,” “our,” or “us” refer to NN, Inc. and its subsidiaries.

Forward-Looking Statements

This Quarterly Report contains forward-looking statements that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements may discuss goals, intentions and expectations as to future trends, plans, events, results of operations or financial condition, or state other information relating to NN, Inc., based on current beliefs of management as well as assumptions made by, and information currently available to, management. Forward-looking statements generally will be accompanied by words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “guidance,” “intend,” “may,” “possible,” “potential,” “predict,” “project” or other similar words, phrases or expressions. Forward-looking statements involve a number of risks and uncertainties that are outside of management’s control and that may cause actual results to be materially different from such forward-looking statements. Such factors include, among others, general economic conditions and economic conditions in the industrial sector, competitive influences, risks that current customers will commence or increase captive production, risks of capacity underutilization, quality issues, availability of raw materials, currency and other risks associated with international trade, our dependence on certain major customers, the impact of acquisitions and divestitures, the level of our indebtedness, the restrictions contained in our debt agreements, our ability to obtain financing at favorable rates, if at all, and to refinance existing debt as it matures, unanticipated difficulties integrating acquisitions, new laws and governmental regulations, and other risk factors and cautionary statements listed from time-to-time in our periodic reports filed with the Securities and Exchange Commission. We disclaim any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements included herein or therein to reflect future events or developments.

For additional information concerning such risk factors and cautionary statements, please see the section titled “Item 1A. Risk Factors” in the 2018 Annual Report.

Results of Operations

Factors That May Influence Results of Operations

The following paragraphs describe factors that have influenced results of operations for the nine months ended September 30, 2019, that management believes are important to provide an understanding of the business and results of operations, or that may influence operations in the future.

Management Structure

Our enterprise and management structure is designed to accelerate growth and balance our portfolio by aligning our strategic assets and businesses. Our businesses are organized into the Life Sciences, Mobile Solutions, and Power Solutions groups and are based principally on the end markets they serve. Life Sciences is focused on growth in the medical end market, primarily in the orthopaedics and medical/surgical end markets. Mobile Solutions is focused on growth in the general industrial and automotive end markets. Power Solutions is focused on growth in the electrical and aerospace and defense end markets.

During the third quarter of 2019, we announced the departures of our former president and chief executive officer and former chief financial officer and appointed a new interim chief executive officer and chief financial officer.

Prior Periods' Financial Statement Revisions

As described in Note 1 and Note 17 to the condensed consolidated financial statements, the Company has revised previously issued financial statements to correct for immaterial tax misstatements. Accordingly, this Management's Discussion and Analysis of Financial Condition and Results of Operations reflects the effects of the revisions.

Acquisitions

In February 2018, we acquired 100% of the assets of Bridgemedica. Bridgemedica is a medical device company that provides concept to supply solutions through design, development engineering, and manufacturing. Operating results of Bridgemedica are reported in our Life Sciences group.

In May 2018, we acquired 100% of the stock of Paragon Medical. Paragon Medical is a medical device manufacturer that focuses on the orthopedic, case and tray, implant, and instrument markets. Operating results of Paragon Medical are reported in our Life Sciences group.

In August 2018, we acquired 100% of the capital stock of Technical Arts. Technical Arts is an industrial machining company that manufactures tight tolerance metal components and assemblies. The acquisition of Technical Arts expands our presence in the aerospace and defense end market. Operating results of Technical Arts are reported in our Power Solutions group.

Three Months Ended September 30, 2019, compared to the Three Months Ended September 30, 2018

	Three Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 213,897	$ 205,683	$ 8,214	
Acquisitions				*$ 628*
Organic growth				*8,970*
Foreign exchange effects				*(1,384)*
Cost of sales (exclusive of depreciation and amortization shown separately below)	160,816	156,408	4,408	
Selling, general and administrative expense	24,043	22,480	1,563	
Acquisition related costs excluded from selling, general and administrative expense	—	597	(597)	
Depreciation and amortization	22,621	21,259	1,362	
Other operating (income) expense, net	(1,255)	(733)	(522)	
Restructuring and integration expense, net	—	(209)	209	
Income from operations	7,672	5,881	1,791	
Interest expense	14,733	18,608	(3,875)	
Loss on extinguishment of debt and write-off of debt issuance costs	—	6,624	(6,624)	
Other (income) expense, net	98	308	(210)	
Loss before (provision) benefit for income taxes and share of net income from joint venture	(7,159)	(19,659)	12,500	
Benefit (provision) for income taxes	1,283	5,609	(4,326)	
Share of net income from joint venture	279	266	13	
Net loss	$ (5,597)	$ (13,784)	$ 8,187	

Net Sales. Net sales increased by $8.2 million, or 4%, during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to an increase in organic growth of $9.0 million, as a result of an increase in core volume in our Life Sciences group as well as $0.6 million of net sales attributable to the Technical Arts acquisition. The increase in net sales was partially offset by lower demand within the automotive end market in our Mobile Solutions group and unfavorable foreign exchange effects of $1.4 million, primarily in Europe and China.

Cost of Sales. Cost of sales increased by $4.4 million, or 3%, during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to an increase due to organic growth of $4.9 million and $0.5 million in cost of sales attributable to the Technical Arts acquisition. The increase in cost of sales was partially offset by favorable foreign exchange effects of $1.0 million.

Selling, General and Administrative Expense. Selling, general and administrative expense increased by $1.6 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to personnel additions and higher salary and benefits expense as well as costs associated with the chief executive officer and chief financial officer transitions. These increases were partially offset by lower costs for travel and professional services as a result of our strategic initiatives, including integration of recent acquisitions.

Acquisition Related Costs Excluded from Selling, General and Administrative Expense. Acquisition related costs decreased by $0.6 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, as there was no business acquisition activity during the three months ended September 30, 2019. The three months ended September 30, 2018, included professional service costs incurred in connection with the Technical Arts acquisition.

Depreciation and Amortization. Depreciation and amortization increased by $1.4 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, consistent with additions to intangible assets and property, plant and equipment. The increase in depreciation and amortization includes the effects of related fair value adjustments to certain property, plant and equipment and the addition of intangible assets, principally for customer relationships and trade names.

Interest Expense. Interest expense decreased by $3.9 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to the $200.0 million secured second lien term loan facility (“Second Lien Facility”), which was entered into in May 2018 and repaid in full in September 2018.

	Three Months Ended September 30,	
	2019	2018
Interest on debt	$ 13,352	$ 17,451
Amortization of debt issuance costs	1,184	1,318
Capitalized interest	(371)	(300)
Other	568	139
Total interest expense	$ 14,733	$ 18,608

Loss on Extinguishment of Debt and Write-off of Unamortized Debt Issuance Costs. Loss on extinguishment of debt and write-off of unamortized debt issuance costs decreased by $6.6 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, due to a prepayment penalty and costs written off associated with the Second Lien Facility.

Provision/Benefit for Income Taxes. Our effective tax rate was 17.9% for the three months ended September 30, 2019, compared to 28.4% for the three months ended September 30, 2018. Note 8 in the Notes to Condensed Consolidated Financial Statements describes the components of income taxes for each period presented.

Results by Segment

LIFE SCIENCES

	Three Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 94,011	$ 78,363	$ 15,648	
Organic growth				*$ 16,125*
Foreign exchange effects				*(477)*
Income from operations	$ 9,402	$ 6,717	$ 2,685	

Net sales increased by $15.6 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, due to an increase in organic growth of $16.1 million as a result of an increase in core volume primarily within the orthopaedic and medical/surgical end markets partially offset by unfavorable foreign exchange effects.

Income from operations increased by $2.7 million compared to prior year primarily due to the above-referenced increase in sales volume. The increase in income from operations was partially offset by higher selling, general and administrative costs, primarily due to an increase in personnel additions and higher incentive compensation expense, and higher depreciation expense, which is consistent with additions to property, plant and equipment.

MOBILE SOLUTIONS

	Three Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 73,071	$ 81,805	$ (8,734)	
Organic growth				*$ (7,974)*
Foreign exchange effects				*(760)*
Income from operations	$ 3,681	$ 4,657	$ (976)	

Net sales decreased by $8.7 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to lower demand within the North American automotive market, unfavorable foreign exchange effects, and the impact of reduced demand for components associated with programs nearing the end of life partially offset by higher demand within the South American automotive market.

Income from operations decreased by $1.0 million compared to prior year due to lost variable margin on the above-referenced sales volume decline and costs associated with the launch of new fuel systems business within our European operations. These unfavorable impacts were partially offset by fixed cost reduction actions taken in response to the decline in sales volume.

POWER SOLUTIONS

	Three Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 47,430	$ 46,082	$ 1,348	
Acquisitions				*$ 628*
Organic growth				*867*
Foreign exchange effects				*(147)*
Income from operations	$ 3,351	$ 2,706	$ 645	

Net sales increased by $1.3 million during the three months ended September 30, 2019, compared to the three months ended September 30, 2018, primarily due to higher demand in the electrical products end market as well as net sales of $0.6 million attributable to the Technical Arts acquisition. The increase in net sales was partially offset by unfavorable foreign exchange effects.

Income from operations increased by $0.6 million compared to prior year primarily due to higher sales volume to customers in the electrical products end market partially offset by higher selling, general and administrative expenses associated with the implementation of an enterprise resource planning ("ERP") system and employee-related costs associated with a facility closure.

Nine Months Ended September 30, 2019, compared to the Nine Months Ended September 30, 2018

	Nine Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 648,819	$ 571,180	$ 77,639	
Acquisitions				*$ 75,334*
Organic growth				*9,070*
Foreign exchange effects				*(6,765)*
Cost of sales (exclusive of depreciation and amortization shown separately below)	485,598	431,492	54,106	
Selling, general and administrative expense	78,911	71,298	7,613	
Acquisition related costs excluded from selling, general and administrative expense	—	5,810	(5,810)	
Depreciation and amortization	68,970	51,798	17,172	
Other operating (income) expense, net	(1,019)	(638)	(381)	
Restructuring and integration expense, net	(12)	2,137	(2,149)	
Income from operations	16,371	9,283	7,088	
Interest expense	42,492	46,592	(4,100)	
Loss on extinguishment of debt and write-off of debt issuance costs	2,699	19,562	(16,863)	
Other (income) expense, net	884	1,882	(998)	
Loss before (provision) benefit for income taxes and share of net income from joint venture	(29,704)	(58,753)	29,049	
Benefit (provision) for income taxes	(1,535)	12,213	(13,748)	
Share of net income from joint venture	345	1,744	(1,399)	
Net loss	$ (30,894)	$ (44,796)	$ 13,902	

Net Sales. Net sales increased by $77.6 million, or 13.6%, during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to $75.3 million of net sales attributable to the 2018 business acquisitions as well as an increase in organic growth of $9.1 million, as a result of an increase in core volume in the Life Sciences group. The increase in net sales was partially offset by lower demand within the automotive end market in Mobile Solutions group as well as unfavorable foreign exchange effects of $6.8 million in Europe, South America, and China.

Cost of Sales. Cost of sales increased by $54.1 million, or 12.5%, during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to $51.5 million in cost of sales attributable to the 2018 business acquisitions as well as an increase due to organic growth of $8.0 million, which relative to net sales was impacted by the relative contribution margin impact of higher sales in the Life Sciences group and lower sales in the Mobile Solutions group. The increase in cost of sales was partially offset by favorable foreign exchange effects of $5.4 million.

Selling, General and Administrative Expense. Selling, general and administrative expense increased by $7.6 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to the 2018 business acquisitions which collectively contributed $7.4 million to selling, general and administrative expense during the nine months ended September 30, 2019, as well as an increase personnel additions and higher salary and benefits expense. The increase was partially offset by lower costs for professional services as a result of our strategic initiatives, including integration of recent acquisitions.

Acquisition Related Costs Excluded from Selling, General and Administrative Expense. Acquisition related costs decreased by $5.8 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, as there was no business acquisition activity during the nine months ended September 30, 2019. The nine months ended September 30, 2018, included professional service costs incurred in connection with the 2018 business acquisitions.

Depreciation and Amortization. Depreciation and amortization increased by $17.2 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, consistent with additions to intangible assets and property, plant and equipment, including $11.8 million from the 2018 business acquisitions. The increase in depreciation and amortization includes the effects of related fair value adjustments to certain property, plant and equipment and the addition of intangible assets, principally for customer relationships and trade names.

Restructuring and Integration Expense. Restructuring and integration expense decreased by $2.1 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to employee severance costs incurred in connection with implementing our new enterprise and management structure as well as the Paragon Medical acquisition in 2018. Note 11 in the Notes to Condensed Consolidated Financial Statements provides more information regarding the effects of restructuring and integration on our operating results.

Interest Expense. Interest expense decreased by $4.1 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to the $200.0 million Second Lien Facility, which was entered into in May 2018 and repaid in full in September 2018, partially offset by a higher borrowing rate on our variable-rate debt and increased borrowings under the Senior Secured Revolver.

	Nine Months Ended September 30,	
	2019	**2018**
Interest on debt	$ 39,537	$ 43,289
Amortization of debt issuance costs	3,538	3,631
Capitalized interest	(1,455)	(758)
Other	872	430
Total interest expense	$ 42,492	$ 46,592

Loss on Extinguishment of Debt and Write-off of Unamortized Debt Issuance Costs. Loss on extinguishment of debt and write-off of unamortized debt issuance costs decreased by $16.9 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, due to a prepayment penalty and costs written off associated with the Second Lien Facility and the amendment to the existing credit facility in May 2018. These amounts were offset by costs written off associated with the March 2019 amendment to the credit facility.

Other (income) expense, net. Other (income) expense, net decreased by $1.0 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to unfavorable foreign exchange effects associated with intercompany borrowings during the nine months ended September 30, 2018.

Provision/Benefit for Income Taxes. Our effective tax rate was (5.2)% for the nine months ended September 30, 2019, compared to 20.8% for the nine months ended September 30, 2018. Note 8 in the Notes to Condensed Consolidated Financial Statements describes the components of income taxes for each period presented.

Share of Net Income from Joint Venture. Our share of net income from the JV, as discussed in Note 7 in the Notes to Condensed Consolidated Financial Statements, decreased by $1.4 million primarily due to price and volume decreases resulting from reduced demand in the Chinese automotive market.

Results by Segment

LIFE SCIENCES

	Nine Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 271,351	$ 168,716	$ 102,635	
Acquisitions				*$ 71,375*
Organic growth				*32,013*
Foreign exchange effects				*(753)*
Income from operations	$ 22,553	$ 12,962	$ 9,591	

Net sales increased by $102.6 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to $71.4 million of net sales attributable to the Paragon Medical and Bridgemedica acquisitions as well as a $32.0 million increase in organic growth as a result of an increase in core volume primarily within the orthopaedic and medical/surgical end markets. These increases were partially offset by unfavorable foreign exchange effects of $0.8 million.

Income from operations increased by $9.6 million compared to prior year primarily due to the Paragon Medical and Bridgemedica acquisitions as well as lower costs as a result of our strategic initiatives, including integration of recent acquisitions partially offset by an increase in costs related to organic growth in the Life Sciences group.

MOBILE SOLUTIONS

	Nine Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 230,590	$ 259,678	$ (29,088)	
Organic growth				*$ (23,515)*
Foreign exchange effects				*(5,573)*
Income from operations	$ 11,880	$ 21,822	$ (9,942)	

Net sales decreased by $29.1 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to lower demand within the North American and European automotive markets, unfavorable foreign exchange effects, and the impact of reduced demand for components associated with programs nearing the end of life partially offset by higher demand within the South American automotive market.

Income from operations decreased by $9.9 million compared to prior year due to lost variable margin on the above-referenced sales volume decline and costs associated with the launch of new fuel systems business within our European operations. These unfavorable impacts were partially offset by fixed cost reduction actions taken in response to the decline in sales volume.

POWER SOLUTIONS

	Nine Months Ended September 30,			
	2019	2018	$ Change	
Net sales	$ 148,480	$ 144,584	$ 3,896	
Acquisitions				*$ 3,959*
Organic growth				*376*
Foreign exchange effects				*(439)*
Income from operations	$ 12,857	$ 13,939	$ (1,082)	

Net sales increased by $3.9 million during the nine months ended September 30, 2019, compared to the nine months ended September 30, 2018, primarily due to $4.0 million of net sales attributable to the Technical Arts acquisition as well as higher demand in the electrical products end market. The increase in net sales was partially offset by unfavorable foreign exchange effects.

Income from operations decreased by $1.1 million compared to prior year primarily due to higher selling, general and administrative expenses associated with the implementation of an ERP system and employee-related costs associated with a facility closure. These decreases were partially offset by higher sales volume to customers in the electrical products end market.

Changes in Financial Condition from December 31, 2018, to September 30, 2019

Overview

From December 31, 2018, to September 30, 2019, total assets increased by $50.8 million primarily due to the initial recognition of operating lease assets as of January 1, 2019, pursuant to ASC 842. Overall, accounts receivable increased consistently with sales growth. Inventories increased as our plants satisfy customer demands and prepare for future sales growth. Days inventory outstanding decreased by approximately one day as our businesses met expected customer demand on a timely basis and managed procurement based on market price projections.

From December 31, 2018, to September 30, 2019, total liabilities increased by $112.3 million, primarily due to the initial recognition of operating lease liabilities as of January 1, 2019, pursuant to ASC 842, an increased balance in our Senior Secured Revolver used to fund operations, and recognition of the fair value of the interest rate swap.

Working capital, which consists principally of cash, accounts receivable, inventories, and other current assets offset by accounts payable, accrued payroll costs, income taxes payable, current maturities of long-term debt, current portion of lease liabilities, and other current liabilities, was $160.3 million as of September 30, 2019, compared to $153.2 million as of December 31, 2018. The increase in working capital was due primarily to the increase in accounts receivable and inventories consistent with our sales growth offset by the initial recognition of operating lease liabilities.

Cash Flows

Cash provided by operations was $33.6 million for the nine months ended September 30, 2019, compared with cash used by operations of $13.2 million for the nine months ended September 30, 2018. The difference was primarily due to a increased profitability and changes in net working capital.

Cash used by investing activities was $31.0 million for the nine months ended September 30, 2019, compared with cash used by investing activities of $445.4 million for the nine months ended September 30, 2018. The decrease was primarily due to cash paid for the 2018 business acquisitions partially offset by cash received from the liquidation of the short-term investment during 2019.

Cash provided by financing activities was $6.9 million for the nine months ended September 30, 2019, compared with cash provided by financing activities of $252.8 million for the nine months ended September 30, 2018. The difference was primarily due to net proceeds from the sale of common shares and higher net borrowings under our credit facility during the nine months ended September 30, 2018.

Impairment Analysis

During 2018, as a result of our annual goodwill impairment analysis performed during the fourth quarter of 2018, we recorded an impairment of $109.1 million in our Power Solutions group. Subsequent to the impairment, at December 31, 2018, Power Solutions reported a goodwill balance of $94.5 million. Given the carrying value of the Power Solutions group was equal to its fair value at December 31, 2018 as a result of the 2018 goodwill impairment, if actual performance of the Power Solutions group falls short of expected results, additional material impairment charges may be required. During the third quarter of 2019, we assessed for triggering events that would signify the need to perform an impairment test and concluded there were no triggering events during the period. We will continue to monitor and assess Power Solutions during 2019.

Based on the closing price of a share of our common stock as of September 30, 2019, our market capitalization was at a level that is less than the net book value of our stockholders' equity. A prolonged or significant decline in market capitalization could be an indicator of additional goodwill impairment. We concluded that our market capitalization as of September 30, 2019, was not at a level that would require us to perform a goodwill impairment assessment during the period. We will continue to monitor our market capitalization to determine if an indicator of impairment exists in subsequent periods.

Liquidity and Capital Resources

Overview

As of September 30, 2019, we had $24.4 million of cash and $16.7 million of unused borrowing capacity under our Senior Secured Revolver. The Company leverages the Senior Secured Revolver, along with cash generated from operations, to fund operations and working capital and had $71.5 million of outstanding borrowings as of November 6, 2019. Based on our current and projected use of the facility, as well as cash flows to be generated from operations and investing activities, we do not anticipate that we will be able to repay the outstanding borrowings when they become due in October 2020 without refinancing the line of credit or obtaining new financing. The Company has and continues to make efforts to obtain new financing; however, there is no assurance that we will obtain sufficient financing on commercially reasonable terms, if at all, before the outstanding amounts would be required to be repaid. This condition raises substantial doubt about the Company's ability to continue as a going concern within one year after the date of issuance of these financial statements.

On October 21, 2019, we announced expense reduction and cash savings initiatives to help the Company continue to pay down its debt and support greater growth by reinvesting in its businesses. The expense reduction and cash saving initiatives will include streamlining facilities and reducing overall selling, general and administrative costs; elimination of quarterly dividend payments; and a reduction in capital expenditures from 2019 spending levels as the Company returns to a more normalized level of capital spending after several years of higher investment. We expect these expense reduction and cash saving initiatives to be fully realized by the second quarter of 2020.

Our arrangements with customers typically provide that payments are due within 30 to 60 days following the date of shipment. We invoice and receive payment from many of our customers in various other currencies. Additionally, we are party to various third party and intercompany loans, payables, and receivables denominated in currencies other than the U.S. dollar. As a result of these sales, loans, payables, and receivables, we are exposed to foreign exchange transaction and translation risk. Various strategies to manage this risk are available to management, including producing and selling in local currencies and hedging programs. As of September 30, 2019, no currency derivatives were in place. In addition, a strengthening of the U.S. dollar against foreign currencies could impair our ability to compete with international competitors for foreign as well as domestic sales.

On February 8, 2019, we entered into a $700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575%. The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022, with a declining notional amount over the term of the interest rate swap. Refer to Note 16 in the Notes to Condensed Consolidated Financial Statements for further discussion about the interest rate swap.

In June 2016, voters in the United Kingdom approved an advisory referendum to withdraw from the European Union, commonly referred to as “Brexit.” The uncertainty surrounding the terms of the United Kingdom’s withdrawal and the timing (deadline to leave was extended to January 31, 2020), could adversely impact consumer and investor confidence, and the level of consumer purchases of discretionary items and retail products, including our products. Any of these effects, among others, could materially adversely affect our business, results of operations, and financial condition. We will continue to monitor and evaluate the potential effect Brexit has on our business, results of operations, and financial condition.

Credit Facility

Aggregate principal amounts outstanding under our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver as of September 30, 2019, were $869.1 million, without regard to unamortized debt issuance costs. As of September 30, 2019, we had unused borrowing capacity of $16.7 million under the Senior Secured Revolver, subject to certain limitations. This amount of borrowing capacity is net of $12.0 million of outstanding letters of credit at September 30, 2019, which are considered as usage of the Senior Secured Revolver.

Collectively, our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver comprise our credit facility. Total available capacity under the Senior Secured Revolver was $100.0 million as of September 30, 2019. The Senior Secured Revolver matures on October 19, 2020.

The Senior Secured Term Loan requires quarterly principal payments of $1.4 million through October 19, 2022, with the remaining principal amount due on the maturity date. If one-month LIBOR is less than 0.75%, then we pay 4.50% per annum in interest. If one-month LIBOR exceeds 0.75%, then we pay the variable one-month LIBOR plus an applicable margin of 3.75%. Based on the outstanding balance and interest rate in effect at September 30, 2019, annual interest payments would be $30.6 million.

The Incremental Term Loan requires quarterly principal payments of $3.0 million through April 3, 2021, with the remaining principal amount due on the maturity date. The Incremental Term Loan bears interest at the variable one-month LIBOR plus an applicable margin of 3.25%. Based on the outstanding balance and interest rate in effect at September 30, 2019, annual interest payments would be $14.3 million.

The Senior Secured Revolver bears interest on a variable rate structure with borrowings bearing interest at either one-month LIBOR plus an applicable margin of 3.50% or the prime lending rate plus an applicable margin of 2.50%. Based on the outstanding balance and weighted average interest rate at September 30, 2019, annual interest payments would be $4.1 million. We pay a commitment fee of 0.50% for unused capacity under the Senior Secured Revolver.

Covenants

We had $71.3 million outstanding under the Senior Secured Revolver at September 30, 2019. Total capacity under the Senior Secured Revolver was $100.0 million as of September 30, 2019 with $16.7 million available for future borrowings after reductions for outstanding letters of credit and outstanding borrowings as of September 30, 2019. Our credit facility is subject to certain financial covenants based on a consolidated net leverage ratio. The financial covenants are effective when we have outstanding borrowings under our Senior Secured Revolver on the last day of any fiscal quarter, become more restrictive over time, and are dependent upon our operational and financial performance. If our operational or financial performance does not improve in line with our expectations, we may be required to take actions to reduce expenditures and decrease our net indebtedness to maintain compliance in future periods. We were in compliance with all covenants under our credit facility at September 30, 2019.

Seasonality and Fluctuation in Quarterly Results

General economic conditions impact our business and financial results, and certain businesses experience seasonal and other trends related to the industries and end markets that they serve. For example, European sales are often weaker in the summer months as customers slow production, medical device sales are often stronger in the fourth calendar quarter, and sales to original equipment manufacturers are often stronger immediately preceding and following the launch of new products. However, as a whole, we are not materially impacted by seasonality.

Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

Critical Accounting Policies

Our critical accounting policies, including the assumptions and judgments underlying them, are disclosed in the 2018 Annual Report, including those policies as discussed in Note 1 to the Notes to Consolidated Financial Statements included in the 2018 Annual Report. There have been no changes to these policies during the nine months ended September 30, 2019, except as discussed in Note 1 to the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report.

Recent Accounting Pronouncements

See Note 1 in the Notes to Condensed Consolidated Financial Statements included in this Quarterly Report.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to changes in financial market conditions in the normal course of business due to use of certain financial instruments as well as transacting business in various foreign currencies. To mitigate the exposure to these market risks, we have established policies, procedures, and internal processes governing the management of financial market risks. We are exposed to changes in interest rates primarily as a result of borrowing activities.

Interest Rate Risk

Variable Rate Debt

At September 30, 2019, we had $527.8 million and $270.0 million of principal outstanding under the Senior Secured Term Loan and Incremental Term Loan, respectively, without regard to capitalized debt issuance costs. At September 30, 2019, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Senior Secured Term Loan and Incremental Term Loan would increase interest expense for an annual period by approximately $5.3 million and $2.7 million, respectively.

At September 30, 2019, we had $71.3 million of principal outstanding under the Senior Secured Revolver, without regard to capitalized debt issuance costs. At September 30, 2019, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Senior Secured Revolver would increase interest expense for an annual period by approximately $0.7 million.

Interest Rate Swaps and Hedging Activities

Our policy is to manage interest expense using a mixture of fixed and variable rate debt. To manage this mixture of fixed and variable rate debt effectively and mitigate interest rate risk, we may use interest rate swap agreements. The nature and amount of borrowings may vary as a result of future business requirements, market conditions, and other factors.

In February 2019, we entered into a $700.0 million fixed-rate interest rate swap agreement that changed the LIBOR-based portion of the interest rate on a portion of our variable rate debt to a fixed rate of 2.4575%. The term of the interest rate swap is from the effective date of February 12, 2019, through the termination date of October 19, 2022, with a declining notional amount over the term of the interest rate swap. Refer to Note 16 in the Notes to Condensed Consolidated Financial Statements for further discussion about the interest rate swap.

Foreign Currency Risk

Translation of our operating cash flows denominated in foreign currencies is impacted by changes in foreign exchange rates. We participate in various third party and intercompany loans, payables, and receivables denominated in currencies other than the U.S. dollar. To help reduce exposure to foreign currency fluctuation, we have incurred debt in euros in the past. From time to time, we may use foreign currency derivatives to hedge currency exposures when these exposures meet certain discretionary levels. We did not hold a position in any foreign currency derivatives as of September 30, 2019.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of management, including our Interim Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)). Based upon that evaluation, as a result of the material weakness in internal control over financial reporting described below, our Interim Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of September 30, 2019, to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to management, including the Interim Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

Previously Identified Material Weakness in Internal Control Over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements would not be prevented or detected on a timely basis.

We did not maintain an effective control environment due to a lack of a sufficient complement of personnel with an appropriate level of knowledge, experience, and training commensurate with our financial reporting requirements. This material weakness resulted in immaterial errors to other current assets; property, plant and equipment, net; goodwill; investment in joint venture; other non-current assets; accounts payable; accrued salaries, wages and benefits; other current liabilities; deferred tax liabilities; accumulated other comprehensive income; selling, general and administrative expense; depreciation and amortization; other operating expense/income; write-off of unamortized debt issuance costs; provision/benefit for income taxes; comprehensive income/loss; and cash flows in our consolidated financial statements for the years ended December 31, 2017, 2016, and 2015. These immaterial errors also resulted in a revision to previously issued financial statements for the periods December 31, 2017 and December 31, 2016. Additionally, this material weakness could result in a misstatement of substantially all account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that would not be prevented or detected.

Notwithstanding the material weakness, our Interim Chief Executive Officer and Chief Financial Officer have concluded that our condensed consolidated financial statements in this Quarterly Report present fairly, and in all material respects, our financial position, results of operations, and cash flows for the periods presented in conformity with U.S. GAAP.

Status of Remediation Efforts for the Unremediated Material Weakness

We have hired qualified professionals for critical roles within our finance department. We are also enhancing and installing new processes and systems to strengthen our internal control over financial reporting. After we integrate these professionals into our control environment and operate any new controls for a sufficient time period, we expect that the remediation of this material weakness will be completed.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting during the fiscal quarter ended September 30, 2019.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

Brazil ICMS Tax Matter

Prior to the acquisition of Autocam Corporation in 2014 ("Autocam"), Autocam's Brazilian subsidiary ("Autocam Brazil") received notification from the Brazilian tax authority regarding ICMS (state value added tax or "VAT") tax credits claimed on intermediary materials (e.g., tooling and perishable items) used in the manufacturing process. The Brazilian tax authority notification disallowed state ICMS tax credits claimed on intermediary materials based on the argument that these items are not intrinsically related to the manufacturing processes. Autocam Brazil filed an administrative defense with the Brazilian tax authority arguing, among other matters, that it should qualify for an ICMS tax credit, contending that the intermediary materials are directly related to the manufacturing process.

We believe that we have substantial legal and factual defenses, and we plan to defend our interests in this matter vigorously. The matter encompasses several lawsuits filed with the Brazilian courts requesting declaratory actions that no tax is due or seeking a stay of execution on the collection of the tax. In 2018, we obtained a favorable decision in one of the declaratory actions for which the period for appeal has expired. We have filed actions in each court requesting dismissal of the matter based on the earlier court action. Although we anticipate a favorable resolution to all matters, we can provide no assurances that we will be successful in achieving dismissal of all pending cases. While we believe a loss is not probable, we estimate the range of possible losses related to this assessment is from $0 to $6.0 million. No amount was accrued at September 30, 2019, for this matter.

We are entitled to indemnification from the former shareholders of Autocam, subject to the limitations and procedures set forth in the agreement and plan of merger relating to the Autocam acquisition. Management believes the indemnification would include amounts owed for the tax, interest, and penalties related to this matter.

Securities Offering Matter

On November 1, 2019, Erie County Employees' Retirement System, on behalf of a purported class of plaintiffs, filed a complaint in the Supreme Court of the State of New York, County of New York, against the Company, certain of the Company's current and former officers and directors, and each of the underwriters involved in the Company's public offering and sale of 14,375,000 shares of its common stock pursuant to a preliminary prospectus supplement, dated September 10, 2018, a final prospectus supplement, dated September 13, 2018, and a base prospectus, dated April 19, 2017, relating to the Company's effective shelf registration statement on Form S-3 (File No. 333-216737) (the "Offering"). The complaint alleges violations of Sections 11, 12(a)(2), and 15 of the Securities Act of 1933 in connection with the Offering. The plaintiffs seek to represent a class of stockholders who purchased shares of the Company's common stock in the Offering. The complaint seeks unspecified monetary damages and other relief. The Company believes the complaint and allegations to be without merit and intends to vigorously defend itself against these actions. The Company is unable at this time to determine whether the outcome of the litigation would have a material impact on the Company's financial position, results of operations, or cash flows.

All Other Legal Matters

All other legal proceedings are of an ordinary and routine nature and are incidental to our operations. Management believes that such proceedings should not, individually or in the aggregate, have a material adverse effect on our business, financial condition, results of operations, or cash flows. In making that determination, we analyze the facts and circumstances of each case at least quarterly in consultation with our attorneys and determine a range of reasonably possible outcomes.

Item 1A. Risk Factors

Except as noted below, there have been no material changes to the risk factors disclosed in the 2018 Annual Report under Item 1A. "Risk Factors."

Doubts regarding our ability to continue as a going concern could have an adverse impact on our relationships with customers, vendors, suppliers, employees and others, which in turn could materially adversely affect our business, results of operations, and financial condition.

As previously described in this Quarterly Report, on October 20, 2019, the outstanding balance under our Senior Secured Revolver became a current liability, and we do not anticipate that we will be able to repay it, in full, without obtaining additional financing, which cannot be assured. This condition raises substantial doubt about the Company's ability to continue as a going concern within one year after the date of issuance of these financial statements. Doubts regarding our ability to continue as a going concern could result in the loss of confidence by customers, vendors, suppliers, employees and others, which in turn could materially adversely affect our business, results of operations, and financial condition. Concerns about our financial condition could adversely impact the payment terms we can obtain from some of our vendors and suppliers. We depend on our ability to retain our key employees at all levels of our business and on our ability to attract new qualified personnel. If we are unable to retain our key employees and we do not succeed in attracting new qualified personnel as a result of the uncertainty regarding our ability to continue as a going concern, our business and results of operations could suffer. Doubts regarding our ability to continue as a going concern may adversely impact our customers' perceptions of our business and our continued viability, which in turn could further negatively impact our revenues. Further declines in our revenues as a result of these perceptions or otherwise would have a material adverse impact on our cash flows, results of operations, and financial condition.

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

Period	Total Number of Shares Purchased (1)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number (or Approximate Dollar Value) of Shares That May Yet Be Purchased Under the Plan or Programs (1)
July 2019	1,148	$ 9.01	—	—
August 2019	—	—	—	—
September 2019	23,469	8.58	—	—
Total	24,617	$ 8.60	—	—

(1) Shares were withheld to pay for tax obligations due upon the vesting of restricted stock held by certain employees granted under the NN, Inc. 2016 Omnibus Incentive Plan (the "Plan"). The Plan provides for the withholding of shares to satisfy tax obligations. It does not specify a maximum number of shares that can be withheld for this purpose. These shares may be deemed to be "issuer purchases" of shares that are required to be disclosed pursuant to this Item.

Item 3. Defaults upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
10.1*	Separation Agreement and General Release, dated as of September 15, 2019, by and between NN, Inc. and Richard D. Holder (incorporated by reference to Exhibit 10.1 to NN, Inc.'s Current Report on Form 8-K filed on September 16, 2019)
10.2*	Amendment No. 1 to Executive Employment Agreement, dated as of September 20, 2019, by and between NN, Inc. and Warren A. Veltman (incorporated by reference to Exhibit 10.1 to NN, Inc.'s Current Report on Form 8-K filed on September 24, 2019)
10.3*	Letter of Understanding and Relocation Agreement, effective as of August 23, 2019, by and between NN, Inc. and Thomas DeByle (incorporated by reference to Exhibit 10.1 to NN, Inc.'s Current Report on Form 8-K filed on August 27, 2019)
10.4	Form of Separation Agreement (incorporated by reference to Exhibit 10.2 to NN, Inc.'s Current Report on Form 8-K filed on August 27, 2019)
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Service
101.CAL	Taxonomy Calculation Linkbase
101.LAB	XBRL Taxonomy Label Linkbase
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Definition Linkbase Document

* Management contract or compensatory plan or arrangement

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.

	NN, Inc.
	(Registrant)
Date: November 8, 2019	/s/ Warren A. Veltman
	Warren A. Veltman President, Chief Executive Officer and Director (Principal Executive Officer) (Duly Authorized Officer)
Date: November 8, 2019	/s/ Thomas D. DeByle
	Thomas D. DeByle Senior Vice President—Chief Financial Officer (Principal Financial Officer) (Duly Authorized Officer)
Date: November 8, 2019	/s/ Michael C. Felcher
	Michael C. Felcher Vice President—Chief Accounting Officer (Principal Accounting Officer)

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Warren A. Veltman, certify that:

1) I have reviewed this quarterly report on Form 10-Q of NN, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

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

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

November 8, 2019

/s/ Warren A. Veltman

Warren A. Veltman
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULES 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Thomas D. DeByle, certify that:

1) I have reviewed this quarterly report on Form 10-Q of NN, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

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

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

November 8, 2019

/s/ Thomas D. DeByle

Thomas D. DeByle
Senior Vice President – Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT
TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of NN, Inc. (the "Company") on Form 10-Q for the interim period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods indicated.

November 8, 2019

/s/ Warren A. Veltman

Warren A. Veltman
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT
TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of NN, Inc. (the “Company”) on Form 10-Q for the interim period ended September 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned, in the capacity and date indicated below, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods indicated.

November 8, 2019	/s/ Thomas D. DeByle
	Thomas D. DeByle
	Senior Vice President – Chief Financial Officer
	(Principal Financial Officer)