
**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 **June 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

*(State or other jurisdiction of
incorporation or organization)*

62-1096725

*(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 August 2, 2019, there were 42,366,961 shares of the registrant's common stock, par value \$0.01 per share, outstanding.

NN, Inc.
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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

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

Amounts in thousands, except per share data

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net sales	\$ 221,666	\$ 196,349	\$ 434,922	\$ 365,497
Cost of sales (exclusive of depreciation and amortization shown separately below)	163,513	148,640	324,782	275,084
Selling, general and administrative expense	26,743	26,641	54,868	48,818
Acquisition related costs excluded from selling, general and administrative expense	—	3,437	—	5,213
Depreciation and amortization	22,924	16,258	46,349	30,539
Restructuring and integration expense, net	—	1,591	(12)	2,346
Other operating (income) expense, net	388	74	236	96
Income (loss) from operations	8,098	(292)	8,699	3,401
Interest expense	13,958	15,988	27,759	27,984
Loss on extinguishment of debt and write-off of debt issuance costs	—	12,938	2,699	12,938
Other (income) expense, net	57	1,887	786	1,574
Loss before (provision) benefit for income taxes and share of net income from joint venture	(5,917)	(31,105)	(22,545)	(39,095)
Benefit (provision) for income taxes	(577)	5,947	(2,818)	7,123
Share of net income (loss) from joint venture	(203)	647	66	1,478
Net loss	\$ (6,697)	\$ (24,511)	\$ (25,297)	\$ (30,494)
Other comprehensive loss:				
Change in fair value of interest rate swap, net of tax	(6,962)	—	(10,818)	—
Foreign currency translation loss	(1,434)	(15,781)	(172)	(10,316)
Other comprehensive loss	\$ (8,396)	\$ (15,781)	\$ (10,990)	\$ (10,316)
Comprehensive loss	\$ (15,093)	\$ (40,292)	\$ (36,287)	\$ (40,810)
Basic net loss per share				
Net loss per share	\$ (0.16)	\$ (0.89)	\$ (0.60)	\$ (1.10)
Weighted average shares outstanding	42,028	27,696	42,000	27,632
Diluted net loss per share				
Net loss per share	\$ (0.16)	\$ (0.89)	\$ (0.60)	\$ (1.10)
Weighted average shares outstanding	42,028	27,696	42,000	27,632

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

NN, Inc.
Condensed Consolidated Balance Sheets
(Unaudited)
Amounts in thousands

	<u>June 30, 2019</u>	<u>December 31, 2018</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 22,077	\$ 17,988
Accounts receivable, net	151,289	133,421
Inventories	128,526	122,615
Income tax receivable	419	946
Other current assets	16,433	21,901
Total current assets	318,744	296,871
Property, plant and equipment, net	368,445	361,028
Operating lease right-of-use assets	65,300	—
Goodwill	439,632	439,452
Intangible assets, net	351,797	376,248
Investment in joint venture	20,406	20,364
Other non-current assets	7,961	7,607
Total assets	<u>\$ 1,572,285</u>	<u>\$ 1,501,570</u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 63,500	\$ 65,694
Accrued salaries, wages and benefits	29,980	24,636
Current maturities of long-term debt	25,115	31,280
Current portion of operating lease liabilities	7,272	—
Other current liabilities	23,472	23,420
Total current liabilities	149,339	145,030
Deferred tax liabilities	83,623	93,482
Non-current income tax payable	3,671	3,875
Long-term debt, net of current portion	850,376	811,471
Operating lease liabilities, net of current portion	64,152	—
Other non-current liabilities	43,263	29,417
Total liabilities	<u>1,194,424</u>	<u>1,083,275</u>
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock - \$0.01 par value, authorized 90,000 shares, 42,367 and 42,104 shares issued and outstanding at June 30, 2019, and December 31, 2018, respectively	424	421
Additional paid-in capital	513,380	511,545
Retained deficit	(93,328)	(62,046)
Accumulated other comprehensive loss	(42,615)	(31,625)
Total stockholders' equity	377,861	418,295
Total liabilities and stockholders' equity	<u>\$ 1,572,285</u>	<u>\$ 1,501,570</u>

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

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

	Common Stock		Additional paid in capital	Retained deficit	Accumulated other comprehensive loss	Total
	Number of shares	Par value				
Balance, March 31, 2019	42,367	\$ 424	\$ 512,274	\$ (83,639)	\$ (34,219)	\$ 394,840
Net loss	—	—	—	(6,697)	—	(6,697)
Cash dividends declared	—	—	—	(2,992)	—	(2,992)
Share-based compensation expense	—	—	1,106	—	—	1,106
Change in fair value of interest rate swap, net of tax of \$1,993	—	—	—	—	(6,962)	(6,962)
Foreign currency translation loss	—	—	—	—	(1,434)	(1,434)
Adoption of new accounting standard (Note 1)	—	—	—	—	—	—
Balance, June 30, 2019	42,367	\$ 424	\$ 513,380	\$ (93,328)	\$ (42,615)	\$ 377,861

	Common Stock		Additional paid in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Number of shares	Par value				
Balance, March 31, 2018	27,666	\$ 276	\$ 293,704	\$ 203,159	\$ (12,280)	\$ 484,859
Net loss	—	—	—	(24,511)	—	(24,511)
Cash dividends declared	—	—	—	(1,930)	—	(1,930)
Shares issued for option exercises	4	—	32	—	—	32
Share-based compensation expense	78	1	1,077	—	—	1,078
Restricted shares and performance shares forgiven for taxes and forfeited	(19)	—	(433)	—	—	(433)
Foreign currency translation loss	—	—	—	—	(15,781)	(15,781)
Balance, June 30, 2018	27,729	\$ 277	\$ 294,380	\$ 176,718	\$ (28,061)	\$ 443,314

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

NN, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
Six Months Ended June 30, 2019 and 2018
(Unaudited)
Amounts in thousands

	Common Stock			Retained deficit	Accumulated other comprehensive loss	Total
	Number of shares	Par value	Additional paid in capital			
Balance, December 31, 2018	42,104	\$ 421	\$ 511,545	\$ (62,046)	\$ (31,625)	\$ 418,295
Net loss	—	—	—	(25,297)	—	(25,297)
Cash dividends declared	—	—	—	(5,934)	—	(5,934)
Share-based compensation expense	281	3	1,976	—	—	1,979
Restricted shares forgiven for taxes and forfeited	(18)	—	(141)	—	—	(141)
Change in fair value of interest rate swap, net of tax of \$3,097	—	—	—	—	(10,818)	(10,818)
Foreign currency translation loss	—	—	—	—	(172)	(172)
Adoption of new accounting standard (Note 1)	—	—	—	(51)	—	(51)
Balance, June 30, 2019	42,367	\$ 424	\$ 513,380	\$ (93,328)	\$ (42,615)	\$ 377,861

	Common Stock			Retained earnings	Accumulated other comprehensive loss	Total
	Number of shares	Par value	Additional paid in capital			
Balance, December 31, 2017	27,572	\$ 275	\$ 292,494	\$ 211,080	\$ (17,745)	\$ 486,104
Net loss	—	—	—	(30,494)	—	(30,494)
Cash dividends declared	—	—	—	(3,884)	—	(3,884)
Shares issued for option exercises	27	—	274	—	—	274
Share-based compensation expense	165	2	2,332	—	—	2,334
Restricted shares and performance shares forgiven for taxes and forfeited	(35)	—	(720)	—	—	(720)
Foreign currency translation loss	—	—	—	—	(10,316)	(10,316)
Adoption of new accounting standard	—	—	—	16	—	16
Balance, June 30, 2018	27,729	\$ 277	\$ 294,380	\$ 176,718	\$ (28,061)	\$ 443,314

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

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

	Six Months Ended June 30,	
	2019	2018
Cash flows from operating activities		
Net loss	\$ (25,297)	\$ (30,494)
Adjustments to reconcile net loss to net cash provided by (used by) operating activities:		
Depreciation and amortization	46,349	30,539
Amortization of debt issuance costs	2,354	2,313
Loss on extinguishment of debt and write-off of debt issuance costs	2,699	12,938
Share of net income from joint venture, net of cash dividends received	(66)	(1,478)
Compensation expense from issuance of share-based awards	1,979	2,334
Deferred income taxes	(6,762)	(34)
Other	540	214
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(17,723)	(17,256)
Inventories	(5,826)	(10,742)
Accounts payable	(1,405)	(4,653)
Income taxes receivable and payable, net	315	(8,695)
Other	7,210	5,589
Net cash provided by (used by) operating activities	<u>4,367</u>	<u>(19,425)</u>
Cash flows from investing activities		
Acquisition of property, plant and equipment	(28,994)	(28,888)
Proceeds from liquidation of short-term investment	8,000	—
Cash paid to acquire businesses, net of cash received	—	(393,481)
Other	1,223	625
Net cash used by investing activities	<u>(19,771)</u>	<u>(421,744)</u>
Cash flows from financing activities		
Cash paid for debt issuance or prepayment costs	(967)	(16,703)
Dividends paid	(5,913)	(3,854)
Proceeds from long-term debt	46,630	270,000
Repayment of long-term debt	(12,055)	(16,000)
Proceeds from (repayments of) short-term debt, net	(6,218)	9,703
Other	(1,759)	(2,410)
Net cash provided by financing activities	<u>19,718</u>	<u>240,736</u>
Effect of exchange rate changes on cash flows	(225)	(806)
Net change in cash and cash equivalents	4,089	(201,239)
Cash and cash equivalents at beginning of period	17,988	224,446
Cash and cash equivalents at end of period	<u>\$ 22,077</u>	<u>\$ 23,207</u>

The accompanying notes are an integral part of the Condensed Consolidated Financial Statements.

NN, Inc.
Notes to Condensed Consolidated Financial Statements
June 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. As of June 30, 2019, we had 51 facilities in North America, Europe, South America, and China.

Basis of Presentation

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 six months ended June 30, 2019 and 2018; financial position as of June 30, 2019, and December 31, 2018; and cash flows for the six months ended June 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 six months ended June 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.

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, we recognized the cumulative effect of the initial adoption adjustment to the opening balance of retained deficit as of January 1, 2019. The adoption adjustment to retained deficit was \$0.1 million. As part of the adoption of ASC 842, 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 Accounting Standards Update 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*, 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)*, 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.

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*, 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.

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 six months ended June 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 June 30, 2018	Six Months Ended June 30, 2018
Pro forma net sales	\$ 210,902	\$ 420,731
Pro forma net loss	\$ (12,017)	\$ (20,078)
Basic net loss per share	\$ (0.43)	\$ (0.73)
Diluted net loss per share	\$ (0.43)	\$ (0.73)

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 completed a preliminary purchase price allocation and are in the process of finalizing the fair value of assets acquired and liabilities assumed.

Note 3. Segment Information

We determined our reportable segments under the provisions of U.S. GAAP related to disclosures about segments of an enterprise. Management has concluded that Mobile Solutions, which is focused on growth in the general industrial and automotive end markets; Power Solutions, which is focused on growth in the electrical and aerospace and defense end markets; and Life Sciences, which is focused on growth in the medical end market, constitute our operating segments. Mobile Solutions, Power Solutions, and Life Sciences 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 table presents results of operations for each reportable segment.

	Mobile Solutions	Power Solutions	Life Sciences	Corporate and Consolidations	Total
Three Months Ended June 30, 2019					
Net sales	\$ 79,444	\$ 51,393	\$ 91,332	\$ (503) (a)	\$ 221,666
Income (loss) from operations	\$ 4,092	\$ 5,682	\$ 9,305	\$ (10,981)	\$ 8,098
Interest expense					(13,958)
Other					(57)
Loss before provision for income taxes and share of net income from joint venture					\$ (5,917)
Three Months Ended June 30, 2018					
Net sales	\$ 88,079	\$ 49,820	\$ 59,153	\$ (703) (a)	\$ 196,349
Income (loss) from operations	\$ 7,380	\$ 6,000	\$ 2,041	\$ (15,713)	\$ (292)
Interest expense					(15,988)
Other					(14,825)
Loss before benefit for income taxes and share of net income from joint venture					\$ (31,105)

	Mobile Solutions	Power Solutions	Life Sciences	Corporate and Consolidations	Total
Six Months Ended June 30, 2019					
Net sales	\$ 157,519	\$ 101,050	\$ 177,340	\$ (987) (a)	\$ 434,922
Income (loss) from operations	\$ 8,199	\$ 9,506	\$ 13,151	\$ (22,157)	\$ 8,699
Interest expense					(27,759)
Other					(3,485)
Loss before benefit for income taxes and share of net income from joint venture					\$ (22,545)
Six Months Ended June 30, 2018					
Net sales	\$ 177,873	\$ 98,502	\$ 90,353	\$ (1,231) (a)	\$ 365,497
Income (loss) from operations	\$ 17,165	\$ 11,233	\$ 6,245	\$ (31,242)	\$ 3,401
Interest expense					(27,984)
Other					(14,512)
Loss before benefit for income taxes and share of net income from joint venture					\$ (39,095)

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

	Total Assets as of	
	June 30, 2019	December 31, 2018
Mobile Solutions	\$ 396,398	\$ 356,387
Power Solutions	309,516	297,947
Life Sciences	815,626	802,770
Corporate and Consolidations	50,745	44,466
Total	\$ 1,572,285	\$ 1,501,570

Note 4. Inventories

Inventories are comprised of the following amounts:

	June 30, 2019	December 31, 2018
Raw materials	\$ 53,789	\$ 52,930
Work in process	49,051	42,578
Finished goods	25,686	27,107
Total inventories	\$ 128,526	\$ 122,615

Note 5. Goodwill

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

	Mobile Solutions	Power Solutions	Life Sciences	Total
Balance as of December 31, 2018	\$ —	\$ 94,505	\$ 344,947	\$ 439,452
Currency impacts/Other	—	196	(16)	180
Balance as of June 30, 2019	\$ —	\$ 94,701	\$ 344,931	\$ 439,632

Based on the closing price of a share of our common stock as of June 30, 2019, our market capitalization was in excess of the net book value of our stockholders' equity. Subsequent to June 30, 2019, our market capitalization declined to a level 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 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 second 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.

Note 6. Intangible Assets, Net

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

	Mobile Solutions	Power Solutions	Life Sciences	Total
Balance as of December 31, 2018	\$ 35,892	\$ 95,991	\$ 244,365	\$ 376,248
Amortization	(1,770)	(5,497)	(17,193)	(24,460)
Currency impacts/Other	2	—	7	9
Balance as of June 30, 2019	\$ 34,124	\$ 90,494	\$ 227,179	\$ 351,797

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 summarizes activity related to our investment in the JV.

Balance as of December 31, 2018	\$ 20,364
Share of earnings	66
Foreign currency translation gain	(24)
Balance as of June 30, 2019	\$ 20,406

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 second 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 six months ended June 30, 2019, respectively, and \$0.1 million and \$0.2 million for the three and six months ended June 30, 2018, respectively.

Note 8. Income Taxes

Our effective tax rate was (9.8)% and (12.5)% for the three months and six months ended June 30, 2019, respectively, and 19.1% and 18.2% for the three months and six months ended June 30, 2018, respectively. Our 2019 effective tax rate 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. The 2019 effective tax rate was also impacted by the minimum tax on global intangible low-tax income (“GILTI”) and earnings outside the United States, which are taxed at different rates than the U.S. federal statutory tax rate of 21%. The effective tax rate for the three months ended June 30, 2019, was primarily impacted by changes in the full year forecast book income (loss) within each jurisdiction in which the Company operates.

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 a revolving line of credit with a face amount of \$110.0 million, maturing on October 19, 2020 (the “Senior Secured Revolver”). The credit facility is collateralized by all of our assets.

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

	June 30, 2019	December 31, 2018
Senior Secured Term Loan	\$ 529,188	\$ 532,063
Incremental Term Loan	273,000	279,000
Senior Secured Revolver	76,382	38,720
International lines of credit and other loans	9,683	9,810
Total principal	888,253	859,593
Less—current maturities of long-term debt	25,115	31,280
Principal, net of current portion	863,138	828,313
Less—unamortized debt issuance costs	12,762	16,842
Long-term debt, net of current portion	\$ 850,376	\$ 811,471

We capitalized interest costs amounting to \$0.5 million and \$0.3 million in the three months ended June 30, 2019 and 2018, respectively, and \$1.1 million and \$0.5 million in the six months ended June 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 June 30, 2019, the Senior Secured Term Loan bore interest at 6.15%.

Incremental Term Loan

Outstanding borrowings under the Incremental Term Loan bear interest at one-month LIBOR plus an applicable margin of 3.25%. At June 30, 2019, the Incremental Term Loan bore interest of 5.65%.

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 June 30, 2019, the weighted average interest rate on outstanding borrowings under the Senior Secured Revolver was 6.02%. We pay an annual commitment fee of 0.50% for unused capacity under the Senior Secured Revolver on a quarterly basis.

On March 15, 2019, we amended our existing credit facility (the “March 2019 amendment”) to amend the defined terms within the credit facility. We paid \$0.8 million of debt issuance costs related to the March 2019 amendment, which was recorded as a direct reduction to the carrying amount of the associated long-term debt. Additionally, \$2.7 million of unamortized debt issuance costs related to the modification of the credit facility were written off.

On June 11, 2019, we amended our existing credit facility (the “June 2019 amendment”) to reduce the total available capacity under the Senior Secured Revolver from \$125.0 million to \$100.0 million, reduce the maximum capacity from \$143.0 million to \$110.0 million, and modify the consolidated net leverage ratio, as defined in the credit facility agreement, which is utilized for certain financial covenants. We paid \$0.2 million of debt issuance costs related to the June 2019 amendment, which was recorded as a direct reduction to the carrying amount of the associated long-term debt.

We had \$76.4 million outstanding under the Senior Secured Revolver at June 30, 2019. Total capacity under the Senior Secured Revolver was \$100.0 million as of June 30, 2019 with \$11.5 million available for future borrowings after reductions for outstanding letters of credit and outstanding borrowings as of June 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 June 30, 2019.

Our Senior Secured Revolver matures on October 19, 2020, which will require us to either extend the maturity date of the Senior Secured Revolver, generate sufficient cash flow through improved operational performance or other means to pay off any outstanding balance on the Senior Secured Revolver or seek additional forms of financing prior to the maturity date. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. If we are unable to extend the maturity date or refinance amounts due under our Senior Secured Revolver, or our operational performance fails to generate sufficient cash flows, we may be required to take additional actions to address our liquidity needs.

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 permitted within ASC 842. 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 obligations represent our obligation to make lease payments arising from the lease. ROU lease assets and obligations 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 between thirteen months and five years. Operating lease ROU assets consist of the following:

- Equipment used in the manufacturing process as well as office equipment with terms between thirteen months and five years; and
- Manufacturing plants and office facilities with terms between thirteen months and 25 years.

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

	Financial Statement Line Item	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Lease cost:			
Finance lease cost			
Amortization of right-of-use assets	Depreciation and amortization	\$ 361	\$ 683
Interest expense	Interest expense	56	109
Operating lease cost	Cost of sales and selling, general and administrative expense	3,398	6,833
Short-term lease cost ⁽¹⁾	Cost of sales and selling, general and administrative expense	105	211
Total lease cost		\$ 3,920	\$ 7,836

(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 June 30, 2019:

	Financial Statement Line Item	June 30, 2019
Lease assets and liabilities:		
Assets		
Operating lease assets	Operating lease right-of-use assets	\$ 65,300
Finance lease assets	Property, plant and equipment, net	13,534
Total lease assets		\$ 78,834
Liabilities		
Current liabilities		
Operating lease liabilities	Current portion of operating lease liabilities	\$ 7,272
Finance lease liabilities	Other current liabilities	2,331
Non-current liabilities		
Operating lease liabilities	Operating lease liabilities, net of current portion	64,152
Finance lease liabilities	Other non-current liabilities	6,376
Total lease liabilities		\$ 80,131

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

Supplemental Cash Flows Information	Six Months Ended June 30, 2019
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from finance leases	\$ 109
Operating cash flows from operating leases	10,667
Financing cash flows from finance leases	1,618
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 2,878

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

	Weighted-Average Remaining Lease Term (years)	Weighted-Average Discount Rate
Finance leases	3.9	2.4%
Operating leases	10.1	8.2%

The maturities of lease liabilities in excess of twelve months as of June 30, 2019, is as follows:

	Operating Leases	Finance Leases
2019 ⁽¹⁾	\$ 6,612	\$ 1,542
2020	11,885	2,263
2021	11,025	2,249
2022	10,768	2,030
2023	9,233	1,118
Thereafter	57,127	72
Total future minimum lease payments	106,650	9,274
Less: imputed interest	35,226	567
Total lease liabilities	\$ 71,424	\$ 8,707

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

As of June 30, 2019, we have an additional operating lease commitment that has not yet commenced that would require us to pay a total of approximately \$21.9 million base rent payments over the lease term of 15 years. This lease is expected to commence during the third quarter of 2020.

The following table summarizes 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 six months ended June 30, 2018, we recognized rent expense of \$2.4 million and \$4.5 million, respectively.

Note 11. Restructuring and Integration

The following tables summarize restructuring and integration charges incurred for the three months ended June 30, 2018 and the six months ended June 30, 2019 and 2018. There were no restructuring and integration charges incurred for the three months ended June 30, 2019.

	Three Months Ended June 30, 2018				
	Mobile Solutions	Power Solutions	Life Sciences	Corporate and Consolidations	Total
Severance and other employee costs	\$ —	\$ —	\$ 1,596	\$ —	\$ 1,596
Site closure and other associated costs	(5)	—	—	—	(5)
Total	\$ (5)	\$ —	\$ 1,596	\$ —	\$ 1,591

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

	Six Months Ended June 30, 2018				
	Mobile Solutions	Power Solutions	Life Sciences	Corporate and Consolidations	Total
Severance and other employee costs	\$ —	\$ —	\$ 1,596	\$ 728	\$ 2,324
Site closure and other associated costs	22	—	—	—	22
Total	\$ 22	\$ —	\$ 1,596	\$ 728	\$ 2,346

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

	Reserve Balance as of December 31, 2018	Charges	Non-cash Adjustments	Cash Reductions	Reserve Balance as of June 30, 2019
Severance and other employee costs	\$ 1,122	\$ —	\$ —	\$ (392)	\$ 730
Site closure and other associated costs	24	(12)	—	(12)	—
Total	\$ 1,146	\$ (12)	\$ —	\$ (404)	\$ 730

The amount accrued for restructuring and integration costs represents what we expect to pay over the next 1.7 years. We expect to pay \$0.5 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 June 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.

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 summarize sales to external customers by major source.

	Three Months Ended June 30, 2019				
	Mobile Solutions	Power Solutions	Life Sciences	Intersegment Sales Eliminations	Total
United States	\$ 44,512	\$ 40,580	\$ 74,229	\$ (503)	\$ 158,818
China	9,318	1,598	1,873	—	12,789
Germany	1,316	21	8,447	—	9,784
Brazil	9,636	80	—	—	9,716
Mexico	5,066	4,235	117	—	9,418
Switzerland	1,153	25	3,509	—	4,687
Other	8,443	4,854	3,157	—	16,454
Total net sales	\$ 79,444	\$ 51,393	\$ 91,332	\$ (503)	\$ 221,666

Three Months Ended June 30, 2018

	Mobile Solutions	Power Solutions	Life Sciences	Intersegment Sales Eliminations	Total
United States	\$ 48,142	\$ 41,924	\$ 48,441	\$ (703)	\$ 137,804
China	11,581	959	1,312	—	13,852
Mexico	7,236	3,348	167	—	10,751
Brazil	9,637	—	29	—	9,666
Germany	1,551	—	3,816	—	5,367
Switzerland	1,294	29	1,720	—	3,043
Other	8,638	3,560	3,668	—	15,866
Total net sales	\$ 88,079	\$ 49,820	\$ 59,153	\$ (703)	\$ 196,349

Six Months Ended June 30, 2019

	Mobile Solutions	Power Solutions	Life Sciences	Intersegment Sales Eliminations	Total
United States	\$ 88,969	\$ 81,695	\$ 142,572	\$ (987)	\$ 312,249
China	18,471	3,436	3,565	—	25,472
Germany	2,722	37	17,332	—	20,091
Brazil	18,018	149	—	—	18,167
Mexico	10,444	6,944	244	—	17,632
Switzerland	2,512	41	6,775	—	9,328
Other	16,383	8,748	6,852	—	31,983
Total net sales	\$ 157,519	\$ 101,050	\$ 177,340	\$ (987)	\$ 434,922

Six Months Ended June 30, 2018

	Mobile Solutions	Power Solutions	Life Sciences	Intersegment Sales Eliminations	Total
United States	\$ 97,797	\$ 82,052	\$ 78,994	\$ (1,231)	\$ 257,612
China	23,162	2,444	1,438	—	27,044
Mexico	14,472	6,545	339	—	21,356
Brazil	19,522	50	29	—	19,601
Germany	3,085	7	3,817	—	6,909
Switzerland	2,700	29	1,720	—	4,449
Poland	3,971	18	1	—	3,990
Other	13,164	7,357	4,015	—	24,536
Total net sales	\$ 177,873	\$ 98,502	\$ 90,353	\$ (1,231)	\$ 365,497

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 June 30, 2019	\$ 2,953

Revenue recognized during the three and six months ended June 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 approximately \$0.9 million and \$1.6 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 June 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 June 30, 2019, we recognized sales from a single customer of \$23.0 million, or 10.4% of consolidated net sales. During the six months ended June 30, 2019, we recognized sales from a single customer of \$45.1 million, or 10.4% 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 six months ended June 30, 2018.

Note 14. Shared-Based Compensation

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Stock options	\$ 169	\$ 152	\$ 361	\$ 358
Restricted stock	502	397	961	856
Performance share units	435	529	657	1,120
Share-based compensation expense	\$ 1,106	\$ 1,078	\$ 1,979	\$ 2,334

Stock Options

During the six months ended June 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 six months ended June 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 summarizes stock option activity for the six months ended June 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	—			\$ —
Forfeited or expired	(5)	24.41		
Outstanding at June 30, 2019	976	\$ 13.56	6.1	\$ — ⁽¹⁾
Exercisable at June 30, 2019	701	\$ 14.26	4.8	\$ — ⁽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 June 30, 2019, was greater than the exercise price of any individual option grant.

Restricted Stock

During the six months ended June 30, 2019, we granted 281,065 restricted stock awards to non-executive directors, officers and certain other key employees. The shares of restricted stock granted during the six months ended June 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 six months ended June 30, 2019, was \$7.93 per share. Total grant-date fair value of restricted stock that vested in the six months ended June 30, 2019, was \$1.5 million.

The following table summarizes the status of unvested restricted stock awards as of June 30, 2019, and changes during the six 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	281	7.93
Vested	(70)	20.92
Forfeited	(18)	18.98
Nonvested at June 30, 2019	339	\$ 10.74

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. PSU awards 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 executive officer’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 awards granted and the grant date fair value of each award in the period presented.

Award Year	TSR Awards		ROIC Awards	
	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 summarizes the status of unvested PSUs as of June 30, 2019, and changes during the six 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	—	—	—	—
Nonvested at June 30, 2019	230	\$ 16.47	274	\$ 13.93

Note 15. Net Income (Loss) Per Share

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Numerator:				
Net loss	\$ (6,697)	\$ (24,511)	\$ (25,297)	\$ (30,494)
Denominator:				
Weighted average shares outstanding	42,028	27,696	42,000	27,632
Effect of dilutive stock options	—	—	—	—
Diluted shares outstanding	42,028	27,696	42,000	27,632
Per common share net loss:				
Basic net loss per share	\$ (0.16)	\$ (0.89)	\$ (0.60)	\$ (1.10)
Diluted net loss per share	\$ (0.16)	\$ (0.89)	\$ (0.60)	\$ (1.10)
Cash dividends declared per share	\$ 0.07	\$ 0.07	\$ 0.14	\$ 0.14

The calculation of diluted net loss per share for the three and six months ended June 30, 2019, excludes 0.8 million and 0.8 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 six months ended June 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 six months ended June 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.

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 June 30, 2019, the carrying values of these financial instruments approximated fair value. The fair value of floating-rate debt approximates the carrying amount because the interest rates paid are based on short-term maturities. 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 \$9.5 million and \$10.4 million as of June 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 \$9.4 million and \$9.8 million as of June 30, 2019 and December 31, 2018, respectively.

Recurring Fair Value Measurements

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.

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 June 30, 2019, we reported a \$10.8 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 June 30, 2019.

Description	Fair Value Measurements as of June 30, 2019		
	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	\$ —	\$ 4,244	\$ —
Derivative liability - other non-current liabilities	—	9,671	—
Total	\$ —	\$ 13,915	\$ —

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.

Note 17. Subsequent Event

On August 8, 2019, we signed a definitive agreement to sell our former headquarters building in Johnson City, Tennessee, for net proceeds of approximately \$4 million. We anticipate the closing of this sale will occur during the third quarter of 2019 and result in no material gain or loss as a result of the disposition.

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. As of June 30, 2019, we had 51 facilities in North America, Europe, South America, and China.

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 six months ended June 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

In 2018, we implemented a new enterprise and management structure designed to accelerate growth and further balance our portfolio by aligning our strategic assets and businesses. Our businesses were reorganized into the Mobile Solutions, Power Solutions, and Life Sciences groups and are based principally on the end markets they serve. 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. Life Sciences is focused on growth in the medical end market.

Acquisitions

In February 2018, we acquired 100% of the assets of Bridgemedica, LLC (“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 PMG Intermediate Holding Corporation, the parent company of Paragon Medical, Inc. (“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 Southern California Technical Arts, Inc. (“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 June 30, 2019, compared to the Three Months Ended June 30, 2018

	Three Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 221,666	\$ 196,349	\$ 25,317
<i>Acquisitions</i>			\$ 19,457
<i>Volume</i>			7,579
<i>Foreign exchange effects</i>			(2,371)
<i>Price/mix/inflation/other</i>			652
Cost of sales (exclusive of depreciation and amortization shown separately below)	163,513	148,640	14,873
<i>Acquisitions</i>			\$ 13,159
<i>Volume</i>			6,757
<i>Foreign exchange effects</i>			(1,882)
<i>Cost reduction projects</i>			(5,637)
<i>Inflation</i>			2,958
<i>Mix/other</i>			(482)
Selling, general and administrative expense	26,743	26,641	102
Acquisition related costs excluded from selling, general and administrative expense	—	3,437	(3,437)
Depreciation and amortization	22,924	16,258	6,666
Other operating (income) expense, net	388	74	314
Restructuring and integration expense, net	—	1,591	(1,591)
Income (loss) from operations	8,098	(292)	8,390
Interest expense	13,958	15,988	(2,030)
Loss on extinguishment of debt and write-off of debt issuance costs	—	12,938	(12,938)
Other (income) expense, net	57	1,887	(1,830)
Loss before (provision) benefit for income taxes and share of net income from joint venture	(5,917)	(31,105)	25,188
Benefit (provision) for income taxes	(577)	5,947	(6,524)
Share of net income (loss) from joint venture	(203)	647	(850)
Net loss	\$ (6,697)	\$ (24,511)	\$ 17,814

Net Sales. Net sales increased by \$25.3 million, or 13%, in the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to \$19.5 million of net sales attributable to the 2018 business acquisitions as well as an increase in volume of \$7.6 million, as a result of an increase in core volume in the medical end market partially offset by lower demand within the automotive end market. The increase in net sales was partially offset by unfavorable foreign exchange effects of \$2.4 million, primarily in Brazil and China.

Cost of Sales. Cost of sales increased by \$14.9 million, or 10%, in the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to \$13.2 million in cost of sales attributable to the 2018 business acquisitions. The increase in cost of sales was partially offset by favorable foreign exchange effects of \$1.9 million and \$5.6 million in cost savings from production process improvement projects. Material and labor inflation contributed \$3.0 million to the increase in cost of sales.

Selling, General and Administrative Expense. Selling, general and administrative expense increased by \$0.1 million during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to the 2018 business acquisitions, which collectively contributed \$2.2 million to selling, general and administrative expense during the three months ended June 30, 2019, as well as severance and employee-related costs associated with the closure of the Johnson City, Tennessee, shared service center in June 2019 and the chief financial officer transition. These increases were 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 during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, as there was no business acquisition activity during the three months ended June 30, 2019. The three months ended June 30, 2018, included professional service costs incurred in connection with the 2018 business acquisitions.

Depreciation and Amortization. Depreciation and amortization increased during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, consistent with additions to intangible assets and property, plant and equipment, including \$2.8 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 during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to employee severance costs incurred in connection with 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 \$2.0 million during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to the \$200.0 million secured second lien term loan facility (“Second Lien Facility”), which was executed in May 2018 and repaid in full in September 2018.

	Three Months Ended June 30,	
	2019	2018
Interest on debt	\$ 13,067	\$ 14,875
Amortization of debt issuance costs	1,162	1,225
Capitalized interest	(532)	(253)
Other	261	141
Total interest expense	\$ 13,958	\$ 15,988

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 during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, due to costs written off associated with the Second Lien Facility and amendment to the existing credit facility in May 2018.

Other (income) expense, net. Other (income) expense, net decreased during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to unfavorable foreign exchange effects associated with intercompany borrowings during the three months ended June 30, 2018.

Provision/Benefit for Income Taxes. Our effective tax rate was (9.8)% for the three months ended June 30, 2019, compared to 19.1% for the three months ended June 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 a Chinese joint venture in our Mobile Solutions group decreased by \$0.9 million primarily due to price and volume decreases resulting from reduced demand in the Chinese automotive market.

Results by Segment

MOBILE SOLUTIONS

	Three Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 79,444	\$ 88,079	\$ (8,635)
<i>Volume</i>			\$ (7,264)
<i>Foreign exchange effects</i>			(1,823)
<i>Price/mix/inflation/other</i>			452
Income from operations	\$ 4,092	\$ 7,380	\$ (3,288)

Net sales decreased during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to lower demand within the North American and Chinese automotive markets, unfavorable foreign exchange effects, and the impact of reduced demand for components associated with programs nearing the end of life.

Income from operations decreased by \$3.3 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 June 30,		
	2019	2018	\$ Change
Net sales	\$ 51,393	\$ 49,820	\$ 1,573
<i>Acquisitions</i>			\$ 1,719
<i>Volume</i>			219
<i>Foreign exchange effects</i>			(365)
Income from operations	\$ 5,682	\$ 6,000	\$ (318)

Net sales increased during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to \$1.7 million of net sales attributable to the Technical Arts acquisition. The increase in net sales was partially offset by unfavorable foreign exchange effects.

Income from operations decreased by \$0.3 million compared to prior year primarily due to higher selling, general and administrative expenses associated with the 2018 business group resegmentation.

LIFE SCIENCES

	Three Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 91,332	\$ 59,153	\$ 32,179
<i>Acquisitions</i>			\$ 17,738
<i>Volume</i>			14,624
<i>Foreign exchange effects</i>			(183)
Income from operations	\$ 9,305	\$ 2,041	\$ 7,264

Net sales increased during the three months ended June 30, 2019, compared to the three months ended June 30, 2018, primarily due to \$17.7 million of net sales attributable to the Paragon Medical acquisition as well as a \$14.6 million increase in core volume.

Income from operations increased by \$7.3 million compared to prior year primarily due to an increase in sales volume as well as the Paragon Medical acquisition.

Six Months Ended June 30, 2019, compared to the Six Months Ended June 30, 2018

	Six Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 434,922	\$ 365,497	\$ 69,425
<i>Acquisitions</i>			\$ 74,705
<i>Volume</i>			(1,184)
<i>Foreign exchange effects</i>			(5,244)
<i>Price/mix/inflation/other</i>			1,148
Cost of sales (exclusive of depreciation and amortization shown separately below)	324,782	275,084	49,698
<i>Acquisitions</i>			\$ 51,024
<i>Volume</i>			1,689
<i>Foreign exchange effects</i>			(4,286)
<i>Cost reduction projects</i>			(11,676)
<i>Inflation</i>			5,154
<i>Mix/other</i>			7,793
Selling, general and administrative expense	54,868	48,818	6,050
Acquisition related costs excluded from selling, general and administrative expense	—	5,213	(5,213)
Depreciation and amortization	46,349	30,539	15,810
Other operating (income) expense, net	236	96	140
Restructuring and integration expense, net	(12)	2,346	(2,358)
Income (loss) from operations	8,699	3,401	5,298
Interest expense	27,759	27,984	(225)
Loss on extinguishment of debt and write-off of debt issuance costs	2,699	12,938	(10,239)
Other (income) expense, net	786	1,574	(788)
Loss before (provision) benefit for income taxes and share of net income from joint venture	(22,545)	(39,095)	16,550
Benefit (provision) for income taxes	(2,818)	7,123	(9,941)
Share of net income (loss) from joint venture	66	1,478	(1,412)
Net loss	\$ (25,297)	\$ (30,494)	\$ 5,197

Net Sales. Net sales increased by \$69.4 million, or 19.0%, in the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to \$74.7 million of net sales attributable to the 2018 business acquisitions. The increase in net sales was partially offset by a decrease in volume of \$1.2 million, primarily as a result of lower demand within the automotive end market as well as unfavorable foreign exchange effects of \$5.2 million, primarily in Brazil and China.

Cost of Sales. Cost of sales increased by \$49.7 million, or 18.1%, in the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to \$51.0 million in cost of sales attributable to the 2018 business acquisitions as well as an increase in volume of \$1.7 million. The increase in cost of sales was partially offset by favorable foreign exchange effects of \$4.3 million and \$11.7 million in cost savings from production process improvement projects. Material and labor inflation as well as mix, primarily in our Mobile Solutions business, contributed \$5.2 million and \$7.5 million, respectively, to the increase in cost of sales.

Selling, General and Administrative Expense. Selling, general and administrative expense increased by \$6.1 million during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to the 2018 business acquisitions which collectively contributed \$7.3 million to selling, general and administrative expense during the six months ended June 30, 2019. 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 during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, as there was no business acquisition activity during the six months ended June 30, 2019. The six months ended June 30, 2018, included professional service costs incurred in connection with the 2018 business acquisitions.

Depreciation and Amortization. Depreciation and amortization increased during the six months ended June 30, 2019, compared to the six months ended June 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 during the six months ended June 30, 2019, compared to the six months ended June 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 \$0.2 million during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to the \$200.0 million secured second lien term loan facility (“Second Lien Facility”), which was executed in May 2018 and repaid in full in September 2018.

	Six Months Ended June 30,	
	2019	2018
Interest on debt	\$ 26,185	\$ 25,839
Amortization of debt issuance costs	2,354	2,313
Capitalized interest	(1,084)	(458)
Other	304	290
Total interest expense	\$ 27,759	\$ 27,984

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 during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, due to costs written off associated with the Second Lien Facility and amendment to the existing credit facility in May 2018 offset by costs written off associated with the March 2019 amendment to the credit facility.

Other (income) expense, net. Other (income) expense, net decreased during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to unfavorable foreign exchange effects associated with intercompany borrowings during the six months ended June 30, 2018.

Provision/Benefit for Income Taxes. Our effective tax rate was (12.5)% for the six months ended June 30, 2019, compared to 18.2% for the six months ended June 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 a Chinese joint venture in our Mobile Solutions group decreased by \$1.4 million primarily due to price and volume decreases resulting from reduced demand in the Chinese automotive market.

Results by Segment

MOBILE SOLUTIONS

	Six Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 157,519	\$ 177,873	\$ (20,354)
<i>Volume</i>			\$ (16,561)
<i>Foreign exchange effects</i>			(4,697)
<i>Price/mix/inflation/other</i>			904
Income from operations	\$ 8,199	\$ 17,165	\$ (8,966)

Net sales decreased during the during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to lower demand within the North American and Chinese automotive markets, unfavorable foreign exchange effects, and the impact of reduced demand for components associated with programs nearing the end of life.

Income from operations decreased by \$9.0 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

	Six Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 101,050	\$ 98,502	\$ 2,548
<i>Acquisitions</i>			\$ 3,331
<i>Volume</i>			(418)
<i>Foreign exchange effects</i>			(365)
Income from operations	\$ 9,506	\$ 11,233	\$ (1,727)

Net sales increased during the during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to \$3.3 million of net sales attributable to the Technical Arts acquisition. The increase in net sales was partially offset by lower demand in the electrical products end market.

Income from operations decreased by \$1.7 million compared to prior year primarily due to higher selling, general and administrative expenses associated with the 2018 business group resegmentation and lower demand in the electrical products end market.

LIFE SCIENCES

	Six Months Ended June 30,		
	2019	2018	\$ Change
Net sales	\$ 177,340	\$ 90,353	\$ 86,987
<i>Acquisitions</i>			\$ 71,374
<i>Volume</i>			15,795
<i>Foreign exchange effects</i>			(182)
Income from operations	\$ 13,151	\$ 6,245	\$ 6,906

Net sales increased during the six months ended June 30, 2019, compared to the six months ended June 30, 2018, primarily due to \$71.4 million of net sales attributable to the Paragon Medical and Bridgemedica acquisitions as well as a \$15.8 million increase in core volume.

Income from operations increased by \$6.9 million compared to prior year primarily due to an increase in sales volume as well as the Paragon Medical and Bridgemedica acquisitions.

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

From December 31, 2018, to June 30, 2019, total assets increased by \$70.7 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 prepare for third and fourth quarter sales. Days inventory outstanding decreased by approximately one day as our businesses met expected customer demand on a timely basis and due to managing procurement based on market price projections.

From December 31, 2018, to June 30, 2019, total liabilities increased by \$111.1 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 \$169.4 million as of June 30, 2019, compared to \$151.8 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 and a decrease in accounts payable due a decrease in days payable outstanding offset by the initial recognition of operating lease liabilities.

Cash provided by operations was \$4.4 million for the six months ended June 30, 2019, compared with cash used by operations of \$19.4 million for the six months ended June 30, 2018. The difference was primarily due to higher receipts from operating revenues as a result of the increase in net sales as well as changes in net working capital during the six months ended June 30, 2019 compared to the six months ended June 30, 2018.

Cash used by investing activities was \$19.8 million for the six months ended June 30, 2019, compared with cash used by investing activities of \$421.7 million for the six months ended June 30, 2018. The decrease was primarily due to cash paid for

the Paragon Medical and Bridgemedica acquisitions in 2018 partially offset by cash received from the liquidation of the short-term investment during 2019.

Cash provided by financing activities was \$19.7 million for the six months ended June 30, 2019, compared with cash provided by financing activities of \$240.7 million for the six months ended June 30, 2018. The difference was primarily due to proceeds from the Second Lien Facility used to partially finance the Paragon Medical acquisition in 2018.

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 second 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 June 30, 2019, our market capitalization was in excess of the net book value of our stockholders' equity. Subsequent to June 30, 2019, our market capitalization declined to a level 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 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 June 30, 2019, we had \$22.1 million of cash and \$11.5 million of unused borrowing capacity under our Senior Secured Revolver. We believe that these sources of cash and funds generated from our consolidated operations will provide sufficient cash flow to service the required debt and interest payments under our existing credit facility and to fund our operating activities, capital expenditure requirements, and dividend payments.

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 euros as well as 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 June 30, 2019, no currency derivatives were in place. In addition, a strengthening of the U.S. dollar and/or euro against foreign currencies could impair our ability to compete with international competitors for foreign as well as domestic sales.

For the next twelve months, we do not expect the sum of capital expenditures and assets procured under finance leases to materially change from 2018 spending levels, the majority of which relate to new or expanded business or continuous improvement programs. We believe that funds generated from continuing operations and borrowings from the Senior Secured Revolver will be sufficient to finance capital expenditures, working capital, and operational needs through this period.

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 October 31, 2019), 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.

On February 8, 2019, we entered into a \$700.0 million fixed-rate interest rate swap agreement (the "interest rate swap") 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.

Credit Facility

Aggregate principal amounts outstanding under our Senior Secured Term Loan, Incremental Term Loan, and Senior Secured Revolver as of June 30, 2019, were \$878.6 million (without regard to unamortized debt issuance costs). As of June 30, 2019, we had unused borrowing capacity of \$11.5 million under the Senior Secured Revolver, subject to certain limitations. This amount of borrowing capacity is net of \$12.1 million of outstanding letters of credit at June 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. On June 11, 2019, we amended our existing credit facility to reduce the total available capacity under the Senior Secured Revolver from \$125.0 million to \$100.0 million, reduce the maximum capacity from \$143.0 million to \$110.0 million, and modify the consolidated net leverage ratio, as defined in the credit facility agreement. Total available capacity under the Senior Secured Revolver was \$100.0 million as of June 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 June 30, 2019, annual interest payments would have been \$32.6 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 June 30, 2019, annual interest payments would have been \$15.4 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 June 30, 2019, annual interest payments would have been \$4.6 million. We pay a quarterly commitment fee at an annual rate of 0.50% on the Senior Secured Revolver for unused borrowing capacity.

Covenants

We had \$76.4 million outstanding under the Senior Secured Revolver at June 30, 2019. Total capacity under the Senior Secured Revolver was \$100.0 million as of June 30, 2019 with \$11.5 million available for future borrowings after reductions for outstanding letters of credit and outstanding borrowings as of June 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 June 30, 2019.

Our Senior Secured Revolver matures on October 19, 2020, which will require us to either extend the maturity date of the Senior Secured Revolver, generate sufficient cash flow through improved operational performance or other means to pay off any outstanding balance on the Senior Secured Revolver or seek additional forms of financing prior to the maturity date. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. If we are unable to extend the maturity date or refinance amounts due under our Senior Secured Revolver, or our operational performance fails to generate sufficient cash flows, we may be required to take additional actions to address our liquidity needs.

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 six months ended June 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 June 30, 2019, we had \$529.2 million of principal outstanding under the variable rate Senior Secured Term Loan, without regard to debt issuance costs. At June 30, 2019, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Senior Secured Term Loan would result in interest expense increasing annually by approximately \$5.3 million.

At June 30, 2019, we had \$273.0 million of principal outstanding under the Incremental Term Loan, without regard to debt issuance costs. At June 30, 2019, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Incremental Term Loan would result in interest expense increasing annually by approximately \$2.7 million.

At June 30, 2019, we had \$76.4 million of principal outstanding under the Senior Secured Revolver, without regard to debt issuance costs. At June 30, 2019, a one-percent increase in the interest rate charged on outstanding variable rate borrowings under the Senior Secured Revolver would result in interest expense increasing annually by approximately \$0.8 million.

Interest Rate Swaps and Hedging Activities

Our policy is to manage interest expense using a mix of fixed and variable rate debt. 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. The nature and amount of borrowings may vary as a result of future business requirements, market conditions, and other factors.

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 June 30, 2019.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Under the supervision and with the participation of management, including our principal executive officer and principal 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 principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective as of June 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 principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure.

Our Chief Financial Officer resigned effective July 12, 2019, and as a result, our Chief Executive Officer is currently the acting principal financial officer.

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 principal executive officer and principal financial officer 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

To ensure we have a sufficient complement of resources within our finance department, we continue to hire qualified personnel for critical finance roles. After we integrate these professionals into our control environment, 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 June 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 June 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.

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

There have been no material changes to the risk factors disclosed in the 2018 Annual Report under Item 1A. “Risk Factors.”

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

None.

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
3.1	Certificate of Amendment to Restated Certificate of Incorporation of NN, Inc. (Declassification) (incorporated by reference to Exhibit 3.1 to NN, Inc.'s Current Report on Form 8-K filed on May 20, 2019)
3.2	Certificate of Amendment to Restated Certificate of Incorporation of NN, Inc. (Share Increase) (incorporated by reference to Exhibit 3.2 to NN, Inc.'s Current Report on Form 8-K filed on May 20, 2019)
3.3	Amendment to Amended and Restated Bylaws of NN, Inc. (incorporated by reference to Exhibit 3.3 to NN, Inc.'s Current Report on Form 8-K filed on May 20, 2019)
10.1	NN, Inc. 2019 Omnibus Incentive Plan (incorporated by reference to Appendix C to NN, Inc.'s Definitive Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on April 8, 2019)
10.2	Amendment No. 7 to Amended and Restated Credit Agreement, dated as of June 11, 2019, by and among NN, Inc., certain NN, Inc. subsidiaries named therein, SunTrust Bank, as administrative agent, and certain lenders named therein (incorporated by reference to Exhibit 10.1 to NN, Inc.'s Current Report on Form 8-K filed on June 12, 2019)
10.3*	Separation Agreement and Release, dated as of July 12, 2019, by and between NN, Inc. and Thomas C. Burwell, Jr. (incorporated by reference to Exhibit 10.1 to NN, Inc.'s Current Report on Form 8-K filed on July 15, 2019)
10.4	Form of Incentive Stock Option Agreement under the 2019 Omnibus Incentive Plan
10.5	Form of Nonqualified Stock Option Agreement under the 2019 Omnibus Incentive Plan
10.6	Form of Restricted Share Award Agreement under the 2019 Omnibus Incentive Plan
10.7	Form of Performance Share Unit Award Agreement under the 2019 Omnibus Incentive Plan
31.1	Certification of Principal Executive Officer and 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 and 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: August 9, 2019 /s/ Richard D. Holder

Richard D. Holder

President, Chief Executive Officer and Director

(Principal Executive and Financial Officer)

(Duly Authorized Officer)

Date: August 9, 2019 /s/ Michael C. Felcher

Michael C. Felcher

Vice President—Chief Accounting Officer

(Principal Accounting Officer)

NN, INC.
2019 OMNIBUS INCENTIVE PLAN
INCENTIVE STOCK OPTION GRANT NOTICE

NN, Inc., a Delaware corporation, (the "Company"), pursuant to its 2019 Omnibus Incentive Plan, as amended from time to time (the "Plan"), hereby grants to the holder listed below ("Grantee"), an option (the "Option") to purchase the number of shares of common stock of the Company ("Shares") set forth below. The Option is subject to the terms and conditions set forth in this Stock Option Grant Notice (the "Grant Notice") and the Incentive Stock Option Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, which are incorporated herein by reference. Unless otherwise defined, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

Grantee: _____

Grant Date: _____

Exercise Price per Share: \$ _____

Total Number of Shares Subject to the Option: _____ shares

Expiration Date: _____

Vesting Schedule:	<u>Initial Exercisability Date</u>	Percentage of Option Which Becomes First <u>Exercisable</u>
	_____	_____
	_____	_____
	_____	_____
	_____	_____

Type of Option: Incentive Stock Option

By his or her signature and the Company's signature below, Grantee agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Grantee has reviewed the Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Grant Notice and fully understands all provisions of the Grant Notice, the Agreement and the Plan. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions arising under the Plan, the Grant Notice or the Agreement.

NN, INC.

GRANTEE

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____
Address: _____

EXHIBIT A

INCENTIVE STOCK OPTION AGREEMENT

Pursuant to the Grant Notice to which this Agreement is attached, the Company has granted to Grantee an Option under the Plan to purchase the number of Shares set forth in the Grant Notice.

**ARTICLE I
GENERAL**

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1.2 Incorporation of Terms of Plan. The Option is subject to the terms and conditions set forth in this Agreement, the Grant Notice and the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

1.3 Incentive Stock Option. This Option is intended to qualify as an incentive stock option (“ISO”) within the meaning of Section 422 of the Code. If any portion of this Option should fail to qualify as an ISO, such portion shall be treated as a non-qualified stock option and the remainder of this Option that continues to qualify as an ISO shall be unaffected by such treatment.

**ARTICLE II
GRANT OF OPTION**

2.1 Grant of Option. In consideration of Grantee’s past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the “Grant Date”), the Company has granted to Grantee the Option to purchase any part or all of an aggregate of the number of Shares set forth in the Grant Notice, upon the terms and conditions set forth in the Grant Notice, the Plan and this Agreement, subject to adjustments as provided in Section 4.2 of the Plan.

2.2 Exercise Price. The exercise price per Share subject to the Option (the “Exercise Price”) shall be as set forth in the Grant Notice.

ARTICLE III

PERIOD OF EXERCISABILITY

3.1 Commencement of Exercisability. Subject to Sections 3.2, and 3.3 hereof, the Option shall become vested and exercisable in such amounts and at such times as are set forth in the Grant Notice. In the event Grantee Separates from Service, other than in connection with Grantee's death, Disability or Retirement as defined in Section 3.3(d) hereof, prior to the "Initial Exercisability Date" set forth in the Grant Notice with respect to all or any portion of this Option, all or such portion of this Option that shall not have become exercisable immediately shall be forfeited and not exercisable by the Grantee. In the event Grantee Separates from Service on account of death, Disability or Retirement, this Option shall become 100% vested for the period of time set forth in Section 3.2 hereof.

3.2 Duration of Exercisability. Once a portion of this Option shall have become exercisable in accordance with Section 3.1 hereof, such portion shall remain exercisable until it becomes unexercisable under Section 3.3 hereof.

3.3 Expiration of Option. The Option may not be exercised to any extent by anyone after the first to occur of the following events:

(a) The expiration date set forth in the Grant Notice;

(b) Except as the Committee may otherwise approve, in the event of Grantee's Separation from Service other than for Cause or by reason of Grantee's death, Disability or Retirement, the expiration of three (3) months from the date of Grantee's Separation from Service;

(c) Except as the Committee may otherwise approve, the expiration of two (2) years from the date of Grantee's Separation from Service by reason of Grantee's death or Disability; or

(d) Except as the Committee may otherwise approve, the expiration of two (2) years from the date of Grantee's Separation from Service by reason of Grantee's Retirement; for purposes of this Agreement, "Retirement" means termination of service after the Grantee has completed 10 years of service with the Company and has reached the age of 55.

(e) Except as the Committee may otherwise approve, upon Grantee's Separation from Service for Cause.

3.4 Change in Control. Upon the occurrence of a Change in Control, the Committee shall determine the treatment of the Option consistent with the provisions of Section 13 of the Plan.

3.5 Tax Withholding. Notwithstanding any other provision of this Agreement:

(a) The Company and its Subsidiaries have the authority to deduct or withhold, or require Grantee to remit to the Company or the applicable Subsidiary, an amount sufficient to satisfy applicable federal, state, local and foreign taxes (including the employee portion of any FICA obligation) required by law to be withheld, if any, with respect to any taxable event arising pursuant to this Agreement. The Company and its Subsidiaries may withhold or Grantee may make such payment in one or more of the forms specified below:

(i) by cash or check made payable to the Company or the Subsidiary with respect to which the withholding obligation arises;

(ii) by the deduction of such amount from other cash compensation payable to Grantee;

(iii) with the consent of the Committee, by requesting that the Company withhold a net number of Shares issuable upon the exercise of the Option having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(iv) with the consent of the Committee, by tendering to the Company Shares having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries due upon the exercise of the Option based on the applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(v) with the consent of the Committee, through the delivery of a notice that Grantee has placed a market sell order with a broker designated by the Company with respect to Shares then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company or the Subsidiary with respect to which the withholding obligation arises in satisfaction of such withholding taxes; provided that payment of such proceeds is then made to the Company or the applicable Subsidiary at such time as may be required by the Committee, but in any event not later than the settlement of such sale; or

(vi) in any combination of the foregoing.

(b) With respect to any withholding taxes arising in connection with the Option, in the event Grantee fails to provide timely payment of all sums required pursuant to Section 3.5(a) hereof, the Company shall have the right and option, but not the obligation, to treat such failure as an election by Grantee to satisfy all or any portion of Grantee's required payment obligation pursuant to Section 3.5(a)(ii) or Section 3.5(a)(iii) above, or any combination of the foregoing as the Company may determine to be appropriate. The Company shall not be obligated to deliver any certificate representing Shares issuable with respect to the exercise of the Option to Grantee or his or her legal representative unless and until Grantee or his or her legal representative shall have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes applicable with respect to the taxable income of Grantee resulting from the exercise of the Option or any other taxable event related to the Option.

(c) In the event any tax withholding obligation arising in connection with the Option will be satisfied under Section 3.5(a)(iii) above, then the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on Grantee's behalf a whole number of Shares from those Shares that are issuable upon exercise of the Option as the Company determines to be appropriate to generate cash proceeds sufficient to satisfy the tax withholding obligation and to remit the proceeds of such sale to the Company or the Subsidiary with respect to which the withholding obligation arises. Grantee's acceptance of this Award constitutes Grantee's instruction and authorization to the Company and such brokerage firm to complete the transactions described in this Section 3.5(c), including the transactions described in the previous sentence, as applicable. The Company may refuse to issue any Shares to Grantee until the foregoing tax withholding obligations are satisfied.

(d) Grantee is ultimately liable and responsible for all taxes owed in connection with the Option, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding obligations that arise in connection with the Option. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or exercise of the Option or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure the Option to reduce or eliminate Grantee's tax liability.

ARTICLE IV EXERCISE OF OPTION

4.1 Person Eligible to Exercise. During the lifetime of Grantee, only the Grantee may exercise the Option or any portion thereof. After the death of Grantee, the Option may, prior to the time when the Option becomes unexercisable under Section 3.3 hereof, be exercised by Grantee's personal representative or by any person empowered to do so under the deceased Grantee's will or under the then applicable laws of descent and distribution.

4.2 Partial Exercise. Subject to Section 5.2 hereof, the Option may be exercised in whole or in part at any time prior to the time when the Option or applicable portion thereof becomes unexercisable under Section 3.3 hereof.

4.3 Manner of Exercise. The Option may be exercised solely by delivery to the Secretary of the Company (or any third party administrator or other person or entity designated by the Company), during regular business hours, of all of the following prior to the time when the Option or such portion thereof becomes unexercisable under Section 3.3 hereof:

(a) An exercise notice in a form specified by the Committee, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Committee;

(b) The receipt by the Company of full payment for the Shares with respect to which the Option or portion thereof is exercised, in such form of consideration permitted under Section 4.4 hereof that is acceptable to the Committee;

(c) The payment of any applicable withholding tax in accordance with Section 3.5;

(d) Any other written representations or documents as may be required in the Committee's sole discretion to effect compliance with applicable law; and

(e) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 hereof by any person or persons other than Grantee, appropriate proof of the right of such person or persons to exercise the Option. Notwithstanding any of the foregoing, the Committee shall have the right to specify all conditions of the manner of exercise, which conditions may vary by Grantee and which may be subject to change from time to time.

4.4 Method of Payment. Payment of the exercise price shall be by any of the following, or a combination thereof, at the election of Grantee:

(a) Cash or check;

(b) With the consent of the Committee, surrender of Shares (including, without limitation, Shares otherwise issuable upon exercise of the Option) held for such period of time as may be required by the Committee in order to avoid adverse accounting consequences and having a Fair Market Value on the date of delivery equal to the aggregate exercise price of the Option or exercised portion thereof;

(c) With the consent of the Committee and subject to Section 5.18 hereof, through the delivery of a notice that Grantee has placed a market sell order with a broker designated by the Company with respect to Shares then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the Option exercise price; provided that payment of such proceeds is then made to the Company at such time as may be required by the Committee, but in any event not later than the settlement of such sale; or

(d) Any other form of legal consideration acceptable to the Committee.

4.5 Conditions to Issuance of Stock. The Company shall not be required to issue or deliver any Shares purchased upon the exercise of the Option or portion thereof prior to fulfillment of all of the following conditions: (a) the admission of such Shares to listing on all stock exchanges on which such Shares are then listed, (b) the completion of any registration or other qualification of such Shares under any state or federal law or under rulings or regulations of the SEC or other governmental regulatory body, that the Committee shall, in its absolute discretion, deem necessary or advisable, (c) the obtaining of any approval or other clearance from any state or federal governmental agency that the Committee shall, in its absolute discretion, determine to be necessary or advisable, (d) the receipt by the Company of full payment for such Shares, which may be in one or more of the forms of consideration permitted under Section 4.4 hereof, and (e) the receipt of full payment of any applicable withholding tax in accordance with Section 3.5 hereof by the Company or its Subsidiary with respect to which the applicable withholding obligation arises.

4.6 Rights as Stockholder. Neither Grantee nor any person claiming under or through Grantee will have any of the rights or privileges of a stockholder of the Company in respect of any Shares purchasable upon the exercise of any part of the Option unless and until certificates representing such Shares (which may be in book-entry form) will have been issued and recorded on the records of the Company or its transfer agents or registrars and delivered to Grantee (including through electronic delivery to a brokerage account). No adjustment will be made for a dividend or other right for which the record date is prior to the date of such issuance, recordation and delivery, except as provided in Section 4.2 of the Plan. Except as otherwise provided herein, after such issuance, recordation and delivery, Grantee will have all the rights of a stockholder of the Company with respect to such Shares, including, without limitation, the right to receive dividends and distributions on such Shares.

ARTICLE V OTHER PROVISIONS

5.1 Administration. The Committee shall have the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan, the Grant Notice and this Agreement as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Committee will be final and binding upon Grantee, the Company and all other interested persons. To the extent allowable pursuant to applicable law, no member of the Committee or the Board will be personally liable for any action, determination or interpretation made with respect to the Plan, the Grant Notice or this Agreement.

5.2 Whole Shares. The Option may only be exercised for whole Shares.

5.3 Option Not Transferable. Subject to Section 4.1 hereof, the Option may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the Shares underlying the Option have been issued, and all restrictions applicable to such Shares have lapsed. Neither the Option nor any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Grantee or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

5.4 Adjustments. Upon the occurrence of certain events relating to Shares contemplated by Section 4.2 of the Plan (including, without limitation, an extraordinary cash dividend on such Stock), the Committee shall make such adjustments as the Committee deems appropriate in the number of Shares subject to the Option, the exercise price of the Option and the kind of securities that may be issued upon exercise of the Option. Grantee acknowledges that the Option is subject to adjustment, modification and termination in certain events as provided in this Agreement and Section 4.2 of the Plan. If any such adjustment shall result in a fractional Share, such fractional Share shall be disregarded.

5.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Grantee shall be addressed to Grantee at Grantee's last address reflected on the Company's records. By a notice given pursuant to this Section 5.5, either party may hereafter designate a different address for notices to be given to that party. Any notice that is required to be given to Grantee shall, if Grantee is then deceased, be given to the person entitled to exercise the Option pursuant to Section 4.1 hereof by written notice under this Section 5.5. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

5.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

5.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

5.8 Conformity to Securities Laws. Grantee acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all applicable laws, including, without limitation, the provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated thereunder by the SEC and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Option is granted and may be exercised, only in such a manner as to conform to applicable law. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to applicable law.

5.9 Amendment, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Committee or the Board, provided that, except as may otherwise be provided by

the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Option in any material way without the prior written consent of Grantee.

5.10 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 5.3 hereof and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

5.11 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Grantee is subject to Section 16 of the Exchange Act, the Plan, the Option, the Grant Notice and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

5.12 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Grantee any right to continue to serve as an employee or other service provider of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Grantee at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Grantee.

5.13 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Grantee with respect to the subject matter hereof.

5.14 Section 409A. This Award is not intended to constitute “nonqualified deferred compensation” within the meaning of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, “Section 409A”). However, notwithstanding any other provision of the Plan, the Grant Notice or this Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Grantee or any other person for failure to do so) to adopt such amendments to the Plan, the Grant Notice or this Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate for this Award either to be exempt from the application of Section 409A or to comply with the requirements of Section 409A. Nothing in the Plan or this Agreement shall be construed to make the Company liable to Grantee for any tax, interest, or penalties that Grantee might owe as a result of the grant, holding, vesting, exercise, or payment of this Option or any Shares related thereto.

5.15 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

5.16 Limitation on Grantee’s Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company

as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Grantee shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Option, and rights no greater than the right to receive the Shares as a general unsecured creditor with respect to options, as and when exercised pursuant to the terms hereof.

5.17 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to applicable law, each of which shall be deemed an original and all of which together shall constitute one instrument.

5.18 Broker-Assisted Sales. In the event of any broker-assisted sale of Shares in connection with the payment of withholding taxes as provided in Section 3.4(a)(v) or Section 3.4(c) hereof or the payment of the exercise price as provided in Section 4.4(c) hereof: (a) any Shares to be sold through a broker-assisted sale will be sold on the day the tax withholding obligation or exercise of the Option, as applicable, occurs or arises, or as soon thereafter as practicable; (b) such Shares may be sold as part of a block trade with other Grantees in the Plan in which all Grantees receive an average price; (c) Grantee will be responsible for all broker's fees and other costs of sale, and Grantee agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (d) to the extent the proceeds of such sale exceed the applicable tax withholding obligation or exercise price, the Company agrees to pay such excess in cash to Grantee as soon as reasonably practicable; (e) Grantee acknowledges that the Company or its designee is under no obligation to arrange for such sale at any particular price, and that the proceeds of any such sale may not be sufficient to satisfy the applicable tax withholding obligation or exercise price; and (f) in the event the proceeds of such sale are insufficient to satisfy the applicable tax withholding obligation, Grantee agrees to pay immediately upon demand to the Company or its Subsidiary with respect to which the withholding obligation arises, an amount sufficient to satisfy any remaining portion of the Company's or the applicable Subsidiary's withholding obligation.

5.19 Clawback. Any Shares issued pursuant to this Award shall be subject to mandatory repayment by the Grantee to the Company to the extent that such Grantee is, or in the future becomes, subject to (a) any "clawback" or recoupment policy adopted by the Company or any Subsidiary thereof to comply with the requirements of any applicable laws, rules or regulations, including pursuant to final rules adopted by the SEC pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, or otherwise, or (b) any applicable laws which impose mandatory recoupment, under circumstances set forth in such applicable laws, including the Sarbanes-Oxley Act of 2002.

NN, INC.
2019 OMNIBUS INCENTIVE PLAN
NONQUALIFIED STOCK OPTION GRANT NOTICE

NN, Inc., a Delaware corporation, (the "Company"), pursuant to its 2019 Omnibus Incentive Plan, as amended from time to time (the "Plan"), hereby grants to the holder listed below ("Grantee"), an option (the "Option") to purchase the number of shares of common stock of the Company ("Shares") set forth below. The Option is subject to the terms and conditions set forth in this Stock Option Grant Notice (the "Grant Notice") and the Nonqualified Stock Option Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, which are incorporated herein by reference. Unless otherwise defined, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

Grantee: _____

Grant Date: _____

Exercise Price per Share: \$ _____

Total Number of Shares Subject to the Option: _____ shares

Expiration Date: _____

Vesting Schedule:		Percentage of Option Which Becomes First <u>Exercisable</u>
	<u>Initial Exercisability Date</u>	
	_____	_____
	_____	_____
	_____	_____

Type of Option: Nonqualified Stock Option

By his or her signature and the Company's signature below, Grantee agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Grantee has reviewed the Agreement, the Plan and the Grant Notice in their entirety, has had an opportunity to obtain the advice of counsel prior to executing the Grant Notice and fully understands all provisions of the Grant Notice, the Agreement and the Plan. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions arising under the Plan, the Grant Notice or the Agreement.

NN, INC.

GRANTEE

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____
Address: _____

EXHIBIT A

NONQUALIFIED STOCK OPTION AGREEMENT

Pursuant to the Grant Notice to which this Agreement is attached, the Company has granted to Grantee an Option under the Plan to purchase the number of Shares set forth in the Grant Notice.

**ARTICLE I
GENERAL**

- 1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.
- 1.2 Incorporation of Terms of Plan. The Option is subject to the terms and conditions set forth in this Agreement, the Grant Notice and the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.
- 1.3 Nonqualified Stock Option. This Option is intended not to qualify as an incentive stock option within the meaning of Section 422 of the Code.

**ARTICLE II
GRANT OF OPTION**

- 2.1 Grant of Option. In consideration of Grantee’s past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the “Grant Date”), the Company has granted to Grantee the Option to purchase any part or all of an aggregate of the number of Shares set forth in the Grant Notice, upon the terms and conditions set forth in the Grant Notice, the Plan and this Agreement, subject to adjustments as provided in Section 4.2 of the Plan.
- 2.2 Exercise Price. The exercise price per Share subject to the Option (the “Exercise Price”) shall be as set forth in the Grant Notice.

**ARTICLE III
PERIOD OF EXERCISABILITY**

3.1 Commencement of Exercisability. Subject to Sections 3.2, and 3.3 hereof, the Option shall become vested and exercisable in such amounts and at such times as are set forth in the Grant Notice. In the event Grantee Separates from Service, other than in connection with Grantee's death, Disability or Retirement as defined in Section 3.3(d) hereof, prior to the "Initial Exercisability Date" set forth in the Grant Notice with respect to all or any portion of this Option, all or such portion of this Option that shall not have become exercisable immediately shall be forfeited and not exercisable by the Grantee. In the event Grantee Separates from Service on account of death, Disability or Retirement, this Option shall become 100% vested for the period of time set forth in Section 3.2 hereof.

3.2 Duration of Exercisability. Once a portion of this Option shall have become exercisable in accordance with Section 3.1 hereof, such portion shall remain exercisable until it becomes unexercisable under Section 3.3 hereof.

3.3 Expiration of Option. The Option may not be exercised to any extent by anyone after the first to occur of the following events:

(a) The expiration date set forth in the Grant Notice;

(b) Except as the Committee may otherwise approve, in the event of Grantee's Separation from Service other than for Cause or by reason of Grantee's death, Disability or Retirement, the expiration of three (3) months from the date of Grantee's Separation from Service;

(c) Except as the Committee may otherwise approve, the expiration of two (2) years from the date of Grantee's Separation from Service by reason of Grantee's death or Disability; or

(d) Except as the Committee may otherwise approve, the expiration of two (2) years from the date of Grantee's Separation from Service by reason of Grantee's Retirement; for purposes of this Agreement, "Retirement" means termination of service after the Grantee has completed 10 years of service with the Company and has reached the age of 55.

(e) Except as the Committee may otherwise approve, upon Grantee's Separation from Service for Cause.

3.4 Change in Control. Upon the occurrence of a Change in Control, the Committee shall determine the treatment of the Option consistent with the provisions of Section 13 of the Plan.

3.5 Tax Withholding. Notwithstanding any other provision of this Agreement:

(a) The Company and its Subsidiaries have the authority to deduct or withhold, or require Grantee to remit to the Company or the applicable Subsidiary, an amount sufficient to satisfy applicable federal, state, local and foreign taxes (including the employee portion of any FICA obligation) required by law to be withheld, if any, with respect to any taxable event arising pursuant to this Agreement. The Company and its Subsidiaries may withhold or Grantee may make such payment in one or more of the forms specified below:

(i) by cash or check made payable to the Company or the Subsidiary with respect to which the withholding obligation arises;

(ii) by the deduction of such amount from other cash compensation payable to Grantee;

(iii) with the consent of the Committee, by requesting that the Company withhold a net number of Shares issuable upon the exercise of the Option having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries based on the applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(iv) with the consent of the Committee, by tendering to the Company Shares having a then current Fair Market Value not exceeding the amount necessary to satisfy the withholding obligation of the Company and its Subsidiaries due upon the exercise of the Option based on the applicable statutory withholding rates for federal, state, local and foreign income tax and payroll tax purposes;

(v) with the consent of the Committee, through the delivery of a notice that Grantee has placed a market sell order with a broker designated by the Company with respect to Shares then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company or the Subsidiary with respect to which the withholding obligation arises in satisfaction of such withholding taxes; provided that payment of such proceeds is then made to the Company or the applicable Subsidiary at such time as may be required by the Committee, but in any event not later than the settlement of such sale; or

(vi) in any combination of the foregoing.

(b) With respect to any withholding taxes arising in connection with the Option, in the event Grantee fails to provide timely payment of all sums required pursuant to Section 3.5(a) hereof, the Company shall have the right and option, but not the obligation, to treat such failure as an election by Grantee to satisfy all or any portion of Grantee's required payment obligation pursuant to Section 3.5(a)(ii) or Section 3.5(a)(iii) above, or any combination of the foregoing as the Company may determine to be appropriate. The Company shall not be obligated to deliver any certificate representing Shares issuable with respect to the exercise of the Option to Grantee or his or her legal representative unless and until Grantee or his or her legal representative shall have paid or otherwise satisfied in full the amount of all federal, state, local and foreign taxes applicable with respect to the taxable income of Grantee resulting from the exercise of the Option or any other taxable event related to the Option.

(c) In the event any tax withholding obligation arising in connection with the Option will be satisfied under Section 3.5(a)(iii) above, then the Company may elect to instruct any brokerage firm determined acceptable to the Company for such purpose to sell on Grantee's behalf a whole number of Shares from those Shares that are issuable upon exercise of the Option as the Company determines to be appropriate to generate cash proceeds sufficient to satisfy the tax withholding obligation and to remit the proceeds of such sale to the Company or the Subsidiary with respect to which the withholding obligation arises. Grantee's acceptance of this Award constitutes Grantee's instruction and authorization to the Company and such brokerage firm to complete the transactions described in this Section 3.5(c), including the transactions described in the previous sentence, as applicable. The Company may refuse to issue any Shares to Grantee until the foregoing tax withholding obligations are satisfied.

(d) Grantee is ultimately liable and responsible for all taxes owed in connection with the Option, regardless of any action the Company or any Subsidiary takes with respect to any tax withholding

obligations that arise in connection with the Option. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding, vesting or exercise of the Option or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure the Option to reduce or eliminate Grantee's tax liability.

ARTICLE IV EXERCISE OF OPTION

4.1 Person Eligible to Exercise. Except as otherwise provided by the Committee at any time, during the lifetime of Grantee, only the Grantee (or Grantee's court-appointed representative) may exercise the Option or any portion thereof. After the death of Grantee, the Option may, prior to the time when the Option becomes unexercisable under Section 3.3 hereof, be exercised by Grantee's personal representative or by any person empowered to do so under the deceased Grantee's will or under the then applicable laws of descent and distribution.

4.2 Partial Exercise. Subject to Section 5.2 hereof, the Option may be exercised in whole or in part at any time prior to the time when the Option or applicable portion thereof becomes unexercisable under Section 3.3 hereof.

4.3 Manner of Exercise. The Option may be exercised solely by delivery to the Secretary of the Company (or any third party administrator or other person or entity designated by the Company), during regular business hours, of all of the following prior to the time when the Option or such portion thereof becomes unexercisable under Section 3.3 hereof:

(a) An exercise notice in a form specified by the Committee, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Committee;

(b) The receipt by the Company of full payment for the Shares with respect to which the Option or portion thereof is exercised, in such form of consideration permitted under Section 4.4 hereof that is acceptable to the Committee;

(c) The payment of any applicable withholding tax in accordance with Section 3.5;

(d) Any other written representations or documents as may be required in the Committee's sole discretion to effect compliance with applicable law; and

(e) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 hereof by any person or persons other than Grantee, appropriate proof of the right of such person or persons to exercise the Option. Notwithstanding any of the foregoing, the Committee shall have the right to specify all conditions of the manner of exercise, which conditions may vary by Grantee and which may be subject to change from time to time.

4.4 Method of Payment. Payment of the exercise price shall be by any of the following, or a combination thereof, at the election of Grantee:

(a) Cash or check;

(b) With the consent of the Committee, surrender of Shares (including, without limitation, Shares otherwise issuable upon exercise of the Option) held for such period of time as may be required by the Committee in order to avoid adverse accounting consequences and having a Fair Market Value on the date of delivery equal to the aggregate exercise price of the Option or exercised portion thereof;

(c) With the consent of the Committee and subject to Section 5.18 hereof, through the delivery of a notice that Grantee has placed a market sell order with a broker designated by the Company with respect to Shares then issuable upon exercise of the Option, and that the broker has been directed to pay a sufficient portion of the net proceeds of the sale to the Company in satisfaction of the Option exercise price; provided that payment of such proceeds is then made to the Company at such time as may be required by the Committee, but in any event not later than the settlement of such sale; or

(d) Any other form of legal consideration acceptable to the Committee.

4.5 Conditions to Issuance of Stock. The Company shall not be required to issue or deliver any Shares purchased upon the exercise of the Option or portion thereof prior to fulfillment of all of the following conditions: (a) the admission of such Shares to listing on all stock exchanges on which such Shares are then listed, (b) the completion of any registration or other qualification of such Shares under any state or federal law or under rulings or regulations of the SEC or other governmental regulatory body, that the Committee shall, in its absolute discretion, deem necessary or advisable, (c) the obtaining of any approval or other clearance from any state or federal governmental agency that the Committee shall, in its absolute discretion, determine to be necessary or advisable, (d) the receipt by the Company of full payment for such Shares, which may be in one or more of the forms of consideration permitted under Section 4.4 hereof, and (e) the receipt of full payment of any applicable withholding tax in accordance with Section 3.5 hereof by the Company or its Subsidiary with respect to which the applicable withholding obligation arises.

4.6 Rights as Stockholder. Neither Grantee nor any person claiming under or through Grantee will have any of the rights or privileges of a stockholder of the Company in respect of any Shares purchasable upon the exercise of any part of the Option unless and until certificates representing such Shares (which may be in book-entry form) will have been issued and recorded on the records of the Company or its transfer agents or registrars and delivered to Grantee (including through electronic delivery to a brokerage account). No adjustment will be made for a dividend or other right for which the record date is prior to the date of such issuance, recordation and delivery, except as provided in Section 4.2 of the Plan. Except as otherwise provided herein, after such issuance, recordation and delivery, Grantee will have all the rights of a stockholder of the Company with respect to such Shares, including, without limitation, the right to receive dividends and distributions on such Shares.

ARTICLE V OTHER PROVISIONS

5.1 Administration. The Committee shall have the power to interpret the Plan, the Grant Notice and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan, the Grant Notice and this Agreement as are consistent therewith and to interpret, amend or revoke any such rules. All actions taken and all interpretations and determinations made by the Committee will be final and binding upon Grantee, the Company and all other interested persons. To the extent allowable pursuant to applicable law, no member of the Committee or the Board will be personally liable for any action, determination or interpretation made with respect to the Plan, the Grant Notice or this Agreement.

5.2 Whole Shares. The Option may only be exercised for whole Shares.

5.3 Option Not Transferable. Subject to Section 4.1 hereof and except as otherwise provided by the Committee at any time, the Option may not be sold, pledged, assigned or transferred in any manner other than by will or the laws of descent and distribution, unless and until the Shares underlying the Option have been issued, and all restrictions applicable to such Shares have lapsed. Neither the Option nor any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of Grantee or his or her successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect, except to the extent that such disposition is permitted by the preceding sentence.

5.4 Adjustments. Upon the occurrence of certain events relating to Shares contemplated by Section 4.2 of the Plan (including, without limitation, an extraordinary cash dividend on such Stock), the Committee shall make such adjustments as the Committee deems appropriate in the number of Shares subject to the Option, the exercise price of the Option and the kind of securities that may be issued upon exercise of the Option. Grantee acknowledges that the Option is subject to adjustment, modification and termination in certain events as provided in this Agreement and Section 4.2 of the Plan. If any such adjustment shall result in a fractional Share, such fractional Share shall be disregarded.

5.5 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Grantee shall be addressed to Grantee at Grantee's last address reflected on the Company's records. By a notice given pursuant to this Section 5.5, either party may hereafter designate a different address for notices to be given to that party. Any notice that is required to be given to Grantee shall, if Grantee is then deceased, be given to the person entitled to exercise the Option pursuant to Section 4.1 hereof by written notice under this Section 5.5. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

5.6 Titles. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement.

5.7 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

5.8 Conformity to Securities Laws. Grantee acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all applicable laws, including, without limitation, the provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated thereunder by the SEC and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Option is granted and may be exercised, only in such a manner as to conform to applicable law. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to applicable law.

5.9 Amendment, Suspension and Termination. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Committee or the Board, provided that, except as may otherwise be provided by

the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect the Option in any material way without the prior written consent of Grantee.

5.10 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 5.3 hereof and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

5.11 Limitations Applicable to Section 16 Persons. Notwithstanding any other provision of the Plan or this Agreement, if Grantee is subject to Section 16 of the Exchange Act, the Plan, the Option, the Grant Notice and this Agreement shall be subject to any additional limitations set forth in any applicable exemptive rule under Section 16 of the Exchange Act (including any amendment to Rule 16b-3 of the Exchange Act) that are requirements for the application of such exemptive rule. To the extent permitted by applicable law, this Agreement shall be deemed amended to the extent necessary to conform to such applicable exemptive rule.

5.12 Not a Contract of Employment. Nothing in this Agreement or in the Plan shall confer upon Grantee any right to continue to serve as an employee or other service provider of the Company or any Subsidiary or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries, which rights are hereby expressly reserved, to discharge or terminate the services of Grantee at any time for any reason whatsoever, with or without cause, except to the extent expressly provided otherwise in a written agreement between the Company or a Subsidiary and Grantee.

5.13 Entire Agreement. The Plan, the Grant Notice and this Agreement (including any exhibit hereto) constitute the entire agreement of the parties and supersede in their entirety all prior undertakings and agreements of the Company and Grantee with respect to the subject matter hereof.

5.14 Section 409A. This Award is not intended to constitute “nonqualified deferred compensation” within the meaning of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, “Section 409A”). However, notwithstanding any other provision of the Plan, the Grant Notice or this Agreement, if at any time the Committee determines that this Award (or any portion thereof) may be subject to Section 409A, the Committee shall have the right in its sole discretion (without any obligation to do so or to indemnify Grantee or any other person for failure to do so) to adopt such amendments to the Plan, the Grant Notice or this Agreement, or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, as the Committee determines are necessary or appropriate for this Award either to be exempt from the application of Section 409A or to comply with the requirements of Section 409A. Nothing in the Plan or this Agreement shall be construed to make the Company liable to Grantee for any tax, interest, or penalties that Grantee might owe as a result of the grant, holding, vesting, exercise, or payment of this Option or any Shares related thereto.

5.15 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

5.16 Limitation on Grantee’s Rights. Participation in the Plan confers no rights or interests other than as herein provided. This Agreement creates only a contractual obligation on the part of the Company

as to amounts payable and shall not be construed as creating a trust. Neither the Plan nor any underlying program, in and of itself, has any assets. Grantee shall have only the rights of a general unsecured creditor of the Company with respect to amounts credited and benefits payable, if any, with respect to the Option, and rights no greater than the right to receive the Shares as a general unsecured creditor with respect to options, as and when exercised pursuant to the terms hereof.

5.17 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to applicable law, each of which shall be deemed an original and all of which together shall constitute one instrument.

5.18 Broker-Assisted Sales. In the event of any broker-assisted sale of Shares in connection with the payment of withholding taxes as provided in Section 3.4(a)(v) or Section 3.4(c) hereof or the payment of the exercise price as provided in Section 4.4(c) hereof: (a) any Shares to be sold through a broker-assisted sale will be sold on the day the tax withholding obligation or exercise of the Option, as applicable, occurs or arises, or as soon thereafter as practicable; (b) such Shares may be sold as part of a block trade with other Grantees in the Plan in which all Grantees receive an average price; (c) Grantee will be responsible for all broker's fees and other costs of sale, and Grantee agrees to indemnify and hold the Company harmless from any losses, costs, damages, or expenses relating to any such sale; (d) to the extent the proceeds of such sale exceed the applicable tax withholding obligation or exercise price, the Company agrees to pay such excess in cash to Grantee as soon as reasonably practicable; (e) Grantee acknowledges that the Company or its designee is under no obligation to arrange for such sale at any particular price, and that the proceeds of any such sale may not be sufficient to satisfy the applicable tax withholding obligation or exercise price; and (f) in the event the proceeds of such sale are insufficient to satisfy the applicable tax withholding obligation, Grantee agrees to pay immediately upon demand to the Company or its Subsidiary with respect to which the withholding obligation arises, an amount sufficient to satisfy any remaining portion of the Company's or the applicable Subsidiary's withholding obligation.

5.19 Clawback. Any Shares issued pursuant to this Award shall be subject to mandatory repayment by the Grantee to the Company to the extent that such Grantee is, or in the future becomes, subject to (a) any "clawback" or recoupment policy adopted by the Company or any Subsidiary thereof to comply with the requirements of any applicable laws, rules or regulations, including pursuant to final rules adopted by the SEC pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, or otherwise, or (b) any applicable laws which impose mandatory recoupment, under circumstances set forth in such applicable laws, including the Sarbanes-Oxley Act of 2002.

NN, INC.
2019 OMNIBUS INCENTIVE PLAN
RESTRICTED SHARES GRANT NOTICE

NN, Inc., a Delaware corporation, (the "Company"), pursuant to its 2019 Omnibus Incentive Plan, as amended from time to time (the "Plan"), hereby grants to the holder listed below ("Grantee"), the right to receive a number of Restricted Shares as set forth below (the "Restricted Share Award"). The Restricted Shares are subject to the terms and conditions set forth in this Restricted Shares Grant Notice (the "Grant Notice") and the Restricted Share Award Agreement attached hereto as Exhibit A (the "Agreement") and the Plan, which are incorporated herein by reference. Unless otherwise defined, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

Grantee: _____

Grant Date: _____

Total Number of Restricted Shares: _____ shares

Vesting Schedule:	<u>Vesting Date</u>	Percentage of Restricted Shares Which Become <u>Vested</u>
	_____	_____
	_____	_____
	_____	_____

By his or her signature and the Company's signature below, Grantee agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Grantee has reviewed the Agreement, the Plan and the Grant Notice in their entirety. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions arising under the Plan, the Grant Notice or the Agreement.

NN, INC.

GRANTEE

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____
Address: _____

EXHIBIT A

RESTRICTED SHARE AWARD AGREEMENT

Pursuant to this Restricted Share Award Agreement (this "Agreement") and the Grant Notice to which it is attached, the Company has granted to Grantee the right to receive the number of Restricted Shares set forth in the Grant Notice, subject to the terms and conditions of this Agreement and the Company's 2019 Omnibus Incentive Plan, as amended from time to time (the "Plan").

ARTICLE I GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1.2 Incorporation of Terms of Plan. This Restricted Share Award is subject to the terms and conditions set forth in this Agreement, the Grant Notice and the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control.

ARTICLE II GRANT OF RESTRICTED SHARES

2.1 Grant. In consideration of Grantee's past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the "Grant Date"), the Company has granted to Grantee the Restricted Share Award. The Restricted Shares granted pursuant to this Award shall be issued in the form of a book entry of Shares in Grantee's name as soon as reasonably practicable after the Grant Date and shall be subject to Grantee's acknowledgement and acceptance of the Grant Notice and this Agreement.

2.2 Lapse of Restrictions. Subject to Sections 3.2 and 3.3 hereof, the restrictions associated with the Restricted Shares granted pursuant to the Grant Notice shall lapse at such times (each, a "Vesting Date") as set forth on the Vesting Schedule contained in the Grant Notice. Certificates representing the Restricted Shares that have vested under pursuant to this Section 2.2 will be distributed to the Grantee as soon as practicable after each Vesting Date, or an appropriate book entry notation shall be made.

2.3 Voting Rights and Dividends. During the period prior to vesting, except as otherwise provided herein, Grantee will have all of the rights of a shareholder with respect to all of the Restricted Shares, including without limitation the right to vote such Restricted Shares and the right to receive all dividends or other distributions with respect to such Restricted Shares. Prior to the distribution of unrestricted Shares pursuant to Section 2.2 hereof, certificates representing Restricted Shares issued pursuant to this Agreement will be held (or appropriate book entry notation will be made) by the Company (the "Custodian") in the name of the Grantee. The Custodian will take such action as is necessary and appropriate to enable the Grantee to vote the Restricted Shares. All cash dividends received by the Custodian, if any, with respect to the Restricted Shares will be delivered to Grantee as soon as practicable after the Custodian's receipt thereof. Stock dividends issued with respect to the Restricted Shares shall be treated as additional Restricted Shares that are subject to the same restrictions and other terms and conditions that apply to the Restricted

Shares granted in the Grant Notice. Notwithstanding the foregoing, no voting rights or dividend rights shall inure to the Grantee following the forfeiture of the Restricted Shares pursuant to Section 3.1 hereof.

ARTICLE III SEPARATION FROM SERVICE; CHANGE IN CONTROL

3.1 In General. In the event that Grantee Separates from Service for any reason, other than death, Retirement or Disability, all Restricted Shares for which the forfeiture restrictions have not lapsed pursuant to Section 2.2 prior to the Grantee's Separation from Service shall be immediately forfeited and Grantee shall have no further rights with respect to such Restricted Shares, except as may be determined otherwise by the Committee in its sole and absolute discretion.

3.2 Death, Retirement or Disability. In the event that the Grantee's employment terminates by reason of death, Retirement or Disability, all Restricted Shares shall be deemed vested and, the restrictions under the Plan and this Agreement with respect to the Restricted Shares, including the restriction on transfer set forth in Section 4.1 hereof, shall automatically expire and shall be of no further force or effect. For purposes of this Agreement, "Retirement" means termination of service after the Grantee has completed 10 years of service with the Company and has reached the age of 55.

3.3 Change in Control. Upon the occurrence of a Change in Control, the Committee shall determine the treatment of the Restricted Shares consistent with the provisions of Section 13 of the Plan.

ARTICLE IV OTHER PROVISIONS

4.1 No Transfer or Pledge of Restricted Shares. No Restricted Shares may be sold, assigned, transferred, pledged, hypothecated or otherwise encumbered or disposed of prior to the date the forfeiture restrictions with respect to such shares have lapsed, if at all, on the Vesting Date applicable to such shares and the underlying Shares have been delivered to the Grantee, other than by will or the laws of descent and distribution.

4.2 Tax Withholding. If the Grantee makes an election under Section 83(b) of the Code with respect to any Restricted Shares, the grant of such Restricted Shares shall be further conditioned upon the Grantee making prompt payment to the Company of any applicable withholding obligations or withholding taxes ("Withholding Taxes"). Failure by the Grantee to pay such Withholding Taxes will render the Restricted Shares subject to such election null and void *ab initio* and such Restricted Shares will be immediately cancelled. If the Grantee does not make an election under Section 83(b) of the Code with respect to the Restricted Share Award, the Company's obligation to release the vested Restricted Shares shall be subject to the Grantee's satisfaction of any applicable Withholding Taxes, and the Grantee shall pay the amount of any such Withholding Taxes to the Company as set forth in this Section 4.2. The Grantee may satisfy his or her obligation to pay the Withholding Taxes with respect to any Restricted Shares for which an election under Section 83(b) of the Code has not been made by: (i) making a cash payment to the Company in an amount equal to the Withholding Taxes; (ii) having the Company withhold Shares otherwise deliverable to the Grantee pursuant to settlement of vested Restricted Shares; or (iii) delivering, actually or by attestation, to the Company Shares already owned by the Grantee; provided that in the case of (ii) or (iii) the amount of such Shares withheld or Shares delivered (with the value of such Shares being based on the Fair Market Value of a Share as of the payment date as determined by the Committee) shall be determined consistent with the Plan. The Grantee acknowledges and agrees that the Company has the right to deduct from compensation or other amounts owing to the Grantee an amount not to exceed the Withholding Taxes. Neither

the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding or vesting of the Restricted Shares or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure this Restricted Share Award to reduce or eliminate Grantee's tax liability.

4.3 Stock Subject to Award. In the event that the Company Shares should, as a result of a stock split or stock dividend or combination of shares or any other change, redesignation, merger, consolidation, recapitalization or otherwise, be increased or decreased or changed into or exchanged for a different number or kind of shares of stock or other securities of the Company or of another corporation, or in the event of any other event contemplated by Section 4.2 of the Plan, the number of Restricted Shares that have been awarded to Grantee shall be adjusted in an equitable and proportionate manner to reflect such action. If any such adjustment shall result in a fractional share, such fraction shall be disregarded.

4.4 Stock Power. Concurrently with the execution of this Agreement, the Grantee shall deliver to the Company a stock power, endorsed in blank, relating to the Restricted Shares. Such stock power shall be in the form attached hereto as Exhibit A.

4.5 Legend. Each certificate representing Restricted Shares shall bear a legend in substantially the following form:

THIS CERTIFICATE AND THE SHARES OF STOCK REPRESENTED HEREBY ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE AND RESTRICTIONS AGAINST TRANSFER) CONTAINED IN THE NN, INC. 2019 OMNIBUS INCENTIVE PLAN (THE "PLAN") AND THE RESTRICTED SHARE AGREEMENT (THE "AGREEMENT") BETWEEN THE OWNER OF THE RESTRICTED SHARES REPRESENTED HEREBY AND NN, INC. (THE "COMPANY"). THE RELEASE OF SUCH STOCK FROM SUCH TERMS AND CONDITIONS SHALL BE MADE ONLY IN ACCORDANCE WITH THE PROVISIONS OF THE PLAN AND THE AGREEMENT, COPIES OF WHICH ARE ON FILE AT THE COMPANY.

4.6 No Right to Continued Employment. This Agreement shall not be construed as giving the Grantee the right to be retained in the employ of the Company (or any Subsidiary of the Company), and the Company (or any Subsidiary of the Company) may at any time dismiss the Grantee from employment, free from any liability or any claim under the Plan.

4.7 Governing Provisions. This Agreement is made under and subject to the provisions of the Plan, and all of the provisions of the Plan are also provisions of this Agreement. If there is a difference or conflict between the provisions of this Agreement and the provisions of the Plan, the provisions of the Plan will govern. By signing this Agreement, the Grantee confirms that he or she has received a copy of the Plan.

4.8 Entire Agreement. This Agreement and the Plan contain the entire understanding and agreement between the Company and the Grantee concerning the Restricted Shares granted hereby, and supersede any prior or contemporaneous negotiations and understandings. The Company and the Grantee have made no promises, agreements, conditions or understandings relating to the Restricted Shares, either orally or in writing, that are not included in this Agreement or the Plan.

4.9 Captions. The captions and section numbers appearing in this Agreement are inserted only as a matter of convenience. They do not define, limit, construe or describe the scope or intent of the provisions of this Agreement.

4.10 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to applicable law, each of which shall be deemed an original and all of which together shall constitute one instrument.

4.11 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Grantee shall be addressed to Grantee at Grantee's last address reflected on the Company's records. By a notice given pursuant to this Section 4.11, either party may hereafter designate a different address for notices to be given to that party. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

4.12 Amendment. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Committee or the Board, provided that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect this Restricted Share Award in any material way without the prior written consent of Grantee.

4.13 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 4.1 hereof and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

4.14 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

4.15 Conformity to Securities Laws. Grantee acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all applicable laws, including, without limitation, the provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated thereunder by the SEC and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Restricted Shares are granted only in such a manner as to conform to applicable law. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to applicable law.

4.16 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

4.17 Clawback. Any Shares issued pursuant to this Award shall be subject to mandatory repayment by the Grantee to the Company to the extent that such Grantee is, or in the future becomes, subject to (a) any "clawback" or recoupment policy adopted by the Company or any Subsidiary thereof to comply with the requirements of any applicable laws, rules or regulations, including pursuant to final rules adopted by the SEC pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, or otherwise, or (b) any applicable laws which impose mandatory recoupment, under circumstances set forth in such applicable laws, including the Sarbanes-Oxley Act of 2002.

[remainder of this page intentionally left blank]

EXHIBIT A

IRREVOCABLE STOCK POWER

FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer to NN, Inc. (the "Company"), _____ shares of the Company's common stock represented by Certificate No. _____. The undersigned authorizes the Secretary of the Company to transfer the stock on the books of the Company in the event of the forfeiture or repayment of any shares issued under the Restricted Share Award Agreement dated _____, 20__ between the Company and the undersigned.

Dated: _____, ____

Signed:

By: _____
Name:

NN, INC.
2019 OMNIBUS INCENTIVE PLAN
PERFORMANCE SHARE UNIT GRANT NOTICE

NN, Inc., a Delaware corporation, (the “Company”), pursuant to its 2019 Omnibus Incentive Plan, as amended from time to time (the “Plan”), hereby grants to the holder listed below (“Grantee”), the right to receive a number of performance share units (the “Performance Share Units”) as set forth below (the “Performance Share Unit Award”). The Performance Share Units are subject to the terms and conditions set forth in this Performance Share Unit Grant Notice (the “Grant Notice”), the Performance Share Unit Award Agreement attached hereto as Exhibit A (the “Agreement”) and the Plan, which are incorporated herein by reference. Unless otherwise defined, the terms defined in the Plan shall have the same defined meanings in the Grant Notice and the Agreement.

Grantee: _____

Grant Date: _____

Target Number of Performance Share Units: _____ Performance Share Units

Performance Period: _____

Determination Date: The date on which the Committee determines whether the performance goals to which this Performance Share Unit Award relates have been met.

By his or her signature and the Company’s signature below, Grantee agrees to be bound by the terms and conditions of the Plan, the Agreement and the Grant Notice. Grantee has reviewed the Agreement, the Plan and the Grant Notice in their entirety. Grantee hereby agrees to accept as binding, conclusive and final all decisions or interpretations of the Committee upon any questions arising under the Plan, the Grant Notice or the Agreement.

NN, INC.

GRANTEE

By: _____
Print Name: _____
Title: _____

By: _____
Print Name: _____
Address: _____

EXHIBIT A

PERFORMANCE SHARE UNIT AWARD AGREEMENT

Pursuant to this Performance Share Unit Award Agreement (this “Agreement”) and the Grant Notice to which it is attached, the Company has granted to Grantee the right to receive the number of Performance Share Units set forth in the Grant Notice, subject to the terms and conditions of this Agreement and the Company’s 2019 Omnibus Incentive Plan, as amended from time to time (the “Plan”).

ARTICLE I GENERAL

1.1 Defined Terms. Capitalized terms not specifically defined herein shall have the meanings specified in the Plan or the Grant Notice.

1.2 Incorporation of Terms of Plan. The Performance Share Unit Award is subject to the terms and conditions set forth in this Agreement, the Grant Notice and the Plan, which are incorporated herein by reference. In the event of any inconsistency between the Plan and this Agreement, the terms of the Plan shall control. Each Performance Share Unit shall be administered as a Performance Award in the form of a Restricted Share Unit pursuant to Section 8.1 of the Plan.

ARTICLE II GRANT OF PERFORMANCE SHARE UNITS

2.1 Grant. In consideration of Grantee’s past and/or continued employment with or service to the Company or a Subsidiary and for other good and valuable consideration, effective as of the grant date set forth in the Grant Notice (the “Grant Date”), the Company has granted to Grantee the Performance Share Unit Award. Each Performance Share Unit represents the right to receive one Share (or the Fair Market Value thereof) upon the expiration of the performance period set forth in the Grant Notice (the “Performance Period”) and otherwise subject to the terms, conditions and restrictions set forth in the Plan and this Agreement. The Grantee’s interest in the Performance Share Units granted hereby shall be that of a general, unsecured creditor of the Company.

2.2 Lapse of Restrictions. Subject to Sections 3.2 and 3.3 hereof, the restrictions associated with the Performance Share Units granted pursuant to the Grant Notice shall lapse on the Determination Date as set forth in the Grant Notice (the “Vesting Date” as it pertains to Performance Share Units that vest) but only if (a) and to the extent the Company has achieved the performance targets for the Performance Period as set forth on Exhibit A-1 hereto (and the other terms and conditions set forth therein have been met) as determined by the Committee in accordance with the Plan, and (b) the Grantee has remained in service with the Company or any of its Subsidiaries continuously from the Grant Date until the Determination Date. In the event the performance targets shall not have been met as of the Determination Date with respect to some or all of the Performance Share Units, such Performance Share Units shall be cancelled for no further consideration as of the Determination Date.

2.3 Settlement. The Grantee shall be entitled to settlement of the Performance Share Units covered by this Agreement on the Vesting Date to the extent the Performance Share Units have not previously been forfeited and the restrictions associated with the Performance Share Units lapse in accordance with Section 2.2 hereof. Such settlement shall be made as promptly as practicable thereafter (but in no event after

the sixtieth day following the Vesting Date) through, in the sole discretion of the Committee, either (a) the issuance to the Grantee (or to the executors or administrators of Grantee's estate in the event of the Grantee's death) of a stock certificate (or evidence such Shares have been registered in book entry form in the name of the Grantee with the relevant stock agent) for a number of Shares equal to the number of such vested Performance Share Units, or (b) a payment of cash to the Grantee (or to the executors or administrators of Grantee's estate in the event of the Grantee's death) equal to the Fair Market Value of the Shares that would otherwise have been issued pursuant to (a) above.

2.4 Dividends. If the Company pays a cash dividend on its common stock, the Grantee shall accrue in his or her Dividend Account (as defined below) a cash dividend equivalent with respect to the maximum number of Performance Share Units issuable pursuant to this Agreement as of the record date for the dividend. The Company shall cause an account (the "Dividend Account") to be established and maintained as part of the records of the Company to evidence the aggregate cash dividend equivalents accrued by the Grantee from time to time under this Section 2.4. No interest shall accrue on any amounts reflected in the Dividend Account. The Grantee's interest in the amounts reflected in the Dividend Account shall be that of a general, unsecured creditor of the Company. Subject to, and as promptly as practicable following, the settlement of the Performance Share Units pursuant to Section 2.3 hereunder, the Company shall pay an amount in cash (without interest and subject to applicable withholding taxes) to the Grantee (or his or her permitted transferee(s) who are issued Shares or cash pursuant to Section 2.3 hereunder) equal to the aggregate cash dividend equivalents accrued in the Grantee's Dividend Account with respect to the vested Performance Share Units settled with the Grantee and the Grantee's Dividend Account shall be eliminated at that time. In the event that the Grantee forfeits his or her rights to all or any portion of the Performance Share Units (or such Performance Share Units are otherwise cancelled on account of the Company's actual performance), the Grantee also shall forfeit his or her rights to any cash dividend equivalents accrued in the Grantee's Dividend Account with respect to such forfeited or cancelled units and the Grantee's Dividend Account shall be eliminated at that time. For the avoidance of doubt, no dividend equivalent rights shall accrue under this Section 2.4 with respect to a dividend on the Company's Shares in the event that any applicable adjustments pursuant to Section 4.2 of the Plan provide similar benefits.

ARTICLE III SEPARATION FROM SERVICE; CHANGE IN CONTROL

3.1 In General. In the event that Grantee Separates from Service for any reason, other than death, Disability or Retirement, prior to the settlement of this Performance Share Unit Award pursuant to Section 2.3, all Performance Share Units shall be immediately forfeited and Grantee shall have no further rights with respect to such Performance Share Units, except as may be determined otherwise by the Committee in its the sole and absolute discretion.

3.2 Death or Disability. In the event that Grantee Separates from Service by reason of death or Disability, a proportionate number of Performance Share Units shall be deemed vested and the date of the Grantee's death or Disability shall be the Vesting Date with respect to such Performance Share Units which shall thereupon settle in accordance with Section 2.3 hereof. For purposes of this Section 3.2, the "proportionate number" of Performance Share Units shall be the "target" number of Performance Share Units set forth in the Grant Notice, multiplied by a fraction, the numerator of which is the number of days during the Performance Period during which Grantee was employed by the Company (or any Subsidiary) and the denominator of which is the total number of days in the Performance Period.

3.3 Retirement. In the event Grantee Separates from Service on account of Retirement (defined below) prior to settlement of Performance Share Units, Grantee shall be eligible to vest in a proportionate number of Performance Share Units on the Vesting Date otherwise applicable thereto. For purposes of this Section 3.3, the “proportionate number” of Performance Share Units shall be the actual number of Performance Share Units that would have vested in accordance with Section 2.2 hereof had Grantee not Separated from Service during the Performance Period, multiplied by a fraction, the numerator of which is the number of days during the Performance Period during which Grantee was employed by the Company (or any Subsidiary) and the denominator of which is the total number of days in the Performance Period. Following the Vesting Date, any Performance Share Units that did not vest in accordance with this Section 3.3 will be canceled and forfeited. For purposes of this Agreement, “Retirement” means termination of service after the Participant has completed 10 years of service with the Company and has reached the age of 55.

3.4 Change in Control. Upon the occurrence of a Change in Control, the Committee shall determine the treatment of the Performance Share Units consistent with the provisions of Section 13 of the Plan.

ARTICLE IV OTHER PROVISIONS

4.1 No Transfer or Pledge of Performance Share Units. The Performance Share Units may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by the Grantee other than by will or the laws of descent and distribution. Any sale, assignment, transfer, pledge, hypothecation, loan or other disposition other than in accordance with this Section 4.1 shall be null and void.

4.2 Tax Withholding. The Company's obligation to settle vested Performance Share Units shall be subject to the Grantee's satisfaction of any applicable federal, state, local and foreign withholding obligations or withholding taxes, including any employer minimum statutory withholding (“Withholding Taxes”), and the Grantee shall pay the amount of any such Withholding Taxes to the Company as set forth in this Section 4.2. The Grantee may satisfy his or her obligation to pay the Withholding Taxes by: (i) making a cash payment to the Company in an amount equal to the Withholding Taxes; (ii) having the Company withhold Shares otherwise deliverable to the Grantee pursuant to settlement of vested Performance Share Units; or (iii) delivering, actually or by attestation, to the Company Shares already owned by the Grantee; provided that in the case of (ii) or (iii) the amount of such Shares withheld or Shares delivered (with the value of such Shares being based on the Fair Market Value of a Share as of the payment date as determined by the Committee) shall be determined consistent with the Plan. The Grantee acknowledges and agrees that the Company has the right to deduct from compensation or other amounts owing to the Grantee an amount not to exceed the Withholding Taxes. Neither the Company nor any Subsidiary makes any representation or undertaking regarding the treatment of any tax withholding in connection with the awarding or vesting of the Performance Share Units or the subsequent sale of Shares. The Company and the Subsidiaries do not commit and are under no obligation to structure this Performance Share Unit Award to reduce or eliminate Grantee's tax liability.

4.3 Stock Subject to Award. In the event that the Company Shares should, as a result of a stock split or stock dividend or combination of shares or any other change, redesignation, merger, consolidation, recapitalization or otherwise, be increased or decreased or changed into or exchanged for a different number or kind of shares of stock or other securities of the Company or of another corporation, or in the event of any other event contemplated by Section 4.2 of the Plan, the number of Performance Share Units that have

been awarded to Grantee shall be adjusted in an equitable and proportionate manner to reflect such action. If any such adjustment shall result in a fractional share, such fraction shall be disregarded.

4.4 Section 409A. Notwithstanding anything herein to the contrary, to the maximum extent permitted by applicable law, the settlement of the Performance Share Units (including any dividend equivalent rights related thereto) to be made to the Grantee pursuant to this Agreement is intended to qualify as a “short-term deferral” pursuant to Section 1.409A-1(b)(4) of the Treasury Regulations and this Agreement shall be interpreted consistently therewith. However, under certain circumstances, settlement of the Performance Share Units or any dividend equivalent rights may not so qualify, and in that case, the Committee shall administer the grant and settlement of such Performance Share Units and any dividend equivalent rights in strict compliance with Section 409A of the Code. Further, notwithstanding anything herein to the contrary, if at the time of a Grantee’s termination of employment with the Company and its Subsidiaries, the Grantee is a “specified employee” as defined in Section 409A of the Code, and the deferral of the commencement of any payments or benefits otherwise payable hereunder as a result of such termination of service is necessary in order to prevent the imposition of any accelerated or additional tax under Section 409A of the Code, then the Company will defer the commencement of the payment of any such payments or benefits hereunder (without any reduction in such payments or benefits ultimately paid or provided to the Grantee) to the minimum extent necessary to satisfy Section 409A of the Code until the date that is six months and one day following the Grantee’s termination of employment with the Company (or the earliest date as is permitted under Section 409A of the Code), if such payment or benefit is payable upon a termination of employment. Each payment of Performance Units (and related dividend equivalent units) constitutes a “separate payment” for purposes of Section 409A of the Code. In no event whatsoever shall the Company be liable for any additional tax, interest or penalty that may be imposed on the Grantee by Code Section 409A or damages for failing to comply with Code Section 409A.

4.5 No Right to Continued Employment. This Agreement shall not be construed as giving the Grantee the right to be retained in the employ of the Company (or any Subsidiary of the Company), and the Company (or any Subsidiary of the Company) may at any time dismiss the Grantee from employment, free from any liability or any claim under the Plan.

4.6 Governing Provisions. This Agreement is made under and subject to the provisions of the Plan, and all of the provisions of the Plan are also provisions of this Agreement. If there is a difference or conflict between the provisions of this Agreement and the provisions of the Plan, the provisions of the Plan will govern. By signing this Agreement, the Grantee confirms that he or she has received a copy of the Plan.

4.7 Entire Agreement. This Agreement and the Plan contain the entire understanding and agreement between the Company and the Grantee concerning the Performance Share Units granted hereby, and supersede any prior or contemporaneous negotiations and understandings. The Company and the Grantee have made no promises, agreements, conditions or understandings relating to the Performance Share Units, either orally or in writing, that are not included in this Agreement or the Plan.

4.8 Captions. The captions and section numbers appearing in this Agreement are inserted only as a matter of convenience. They do not define, limit, construe or describe the scope or intent of the provisions of this Agreement.

4.9 Counterparts. The Grant Notice may be executed in one or more counterparts, including by way of any electronic signature, subject to applicable law, each of which shall be deemed an original and all of which together shall constitute one instrument.

4.10 Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of the Secretary of the Company at the Company's principal office, and any notice to be given to Grantee shall be addressed to Grantee at Grantee's last address reflected on the Company's records. By a notice given pursuant to this Section 4.10, either party may hereafter designate a different address for notices to be given to that party. Any notice shall be deemed duly given when sent via email or when sent by certified mail (return receipt requested) and deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service.

4.11 Amendment. To the extent permitted by the Plan, this Agreement may be wholly or partially amended or otherwise modified, suspended or terminated at any time or from time to time by the Committee or the Board, provided that, except as may otherwise be provided by the Plan, no amendment, modification, suspension or termination of this Agreement shall adversely affect this Performance Share Unit Award in any material way without the prior written consent of Grantee.

4.12 Successors and Assigns. The Company may assign any of its rights under this Agreement to single or multiple assignees, and this Agreement shall inure to the benefit of the successors and assigns of the Company. Subject to the restrictions on transfer set forth in Section 4.1 hereof and the Plan, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

4.13 Governing Law. The laws of the State of Delaware shall govern the interpretation, validity, administration, enforcement and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

4.14 Conformity to Securities Laws. Grantee acknowledges that the Plan, the Grant Notice and this Agreement are intended to conform to the extent necessary with all applicable laws, including, without limitation, the provisions of the Securities Act and the Exchange Act and any and all regulations and rules promulgated thereunder by the SEC and state securities laws and regulations. Notwithstanding anything herein to the contrary, the Plan shall be administered, and the Performance Share Units are granted only in such a manner as to conform to applicable law. To the extent permitted by applicable law, the Plan and this Agreement shall be deemed amended to the extent necessary to conform to applicable law.

4.15 Agreement Severable. In the event that any provision of the Grant Notice or this Agreement is held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of the Grant Notice or this Agreement.

4.16 Clawback. Any Shares or cash issued pursuant to this Award shall be subject to mandatory repayment by the Grantee to the Company to the extent that such Grantee is, or in the future becomes, subject to (a) any "clawback" or recoupment policy adopted by the Company or any Subsidiary thereof to comply with the requirements of any applicable laws, rules or regulations, including pursuant to final rules adopted by the SEC pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, or otherwise, or (b) any applicable laws which impose mandatory recoupment, under circumstances set forth in such applicable laws, including the Sarbanes-Oxley Act of 2002.

[remainder of this page intentionally left blank]

EXHIBIT A-1

Performance Goals

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

I, Richard D. Holder, 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.

August 9, 2019

/s/ Richard D. Holder

Richard D. Holder

President, Chief Executive Officer and Director
(Principal Executive and Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND 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 June 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.

August 9, 2019

/s/ Richard D. Holder

Richard D. Holder

President, Chief Executive Officer and Director
(Principal Executive and Financial Officer)