Table of Contents

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

FORM 10-Q

(Mark One)

☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ________ to _________

Commission file number 001-11406

KADANT INC.

(Exact name of registrant as specified in its charter)

Delaware	52-1762325
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

One Technology Park Drive	
Westford, Massachusetts	01886
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (978) 776-2000

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐
	Emerging growth company ☐

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at April 27, 2018
Common Stock, $.01 par value	11,090,209

Kadant Inc.
Quarterly Report on Form 10-Q
for the Period Ended March 31, 2018
Table of Contents

		Page
	PART I: Financial Information	
Item 1.	Financial Statements	
	Condensed Consolidated Balance Sheet as of March 31, 2018 and December 30, 2017 (unaudited)	3
	Condensed Consolidated Statement of Income for the three-month periods ended March 31, 2018 and April 1, 2017 (unaudited)	4
	Condensed Consolidated Statement of Comprehensive Income for the three-month periods ended March 31, 2018 and April 1, 2017 (unaudited)	5
	Condensed Consolidated Statement of Cash Flows for the three-month periods ended March 31, 2018 and April 1, 2017 (unaudited)	6
	Condensed Consolidated Statement of Stockholders' Equity for the three-month periods ended March 31, 2018 and April 1, 2017 (unaudited)	7
	Notes to Condensed Consolidated Financial Statements (unaudited)	8
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	27
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	37
Item 4.	Controls and Procedures	37
	PART II: Other Information	
Item 1A.	Risk Factors	37
Item 6.	Exhibits	38

PART 1 – FINANCIAL INFORMATION

Item 1 – Financial Statements

KADANT INC.
Condensed Consolidated Balance Sheet
(Unaudited)

(In thousands, except share and per share amounts)	March 31, 2018	December 30, 2017
Assets		
Current Assets:		
Cash and cash equivalents	$ 72,210	$ 75,425
Restricted cash (Note 1)	1,532	1,421
Accounts receivable, less allowances of $3,216 and $2,879 (Note 1)	91,529	89,624
Inventories (Note 1)	95,840	84,933
Unbilled revenue	2,375	2,374
Other current assets	14,429	12,246
Total Current Assets	277,915	266,023
Property, Plant, and Equipment, at Cost	169,523	165,231
Less: accumulated depreciation and amortization	88,851	85,508
Property, Plant, and Equipment, at Cost, Net	80,672	79,723
Other Assets	14,541	14,311
Intangible Assets, Net (Note 1)	129,635	133,036
Goodwill (Note 1)	269,514	268,001
Total Assets	$ 772,277	$ 761,094
Liabilities and Stockholders' Equity		
Current Liabilities:		
Current maturities of long-term obligations (Note 5)	$ 710	$ 696
Accounts payable	37,026	35,461
Customer deposits	40,034	30,103
Accrued payroll and employee benefits	23,400	29,616
Advanced billings	5,745	7,316
Other current liabilities	25,274	29,038
Total Current Liabilities	132,189	132,230
Long-Term Obligations (Note 5)	240,226	241,384
Long-Term Deferred Income Taxes	29,125	29,085
Other Long-Term Liabilities	25,510	25,891
Commitments and Contingencies (Note 12)		
Stockholders' Equity:		
Preferred stock, $.01 par value, 5,000,000 shares authorized; none issued	—	—
Common stock, $.01 par value, 150,000,000 shares authorized; 14,624,159 shares issued	146	146
Capital in excess of par value	99,828	103,221
Retained earnings	351,355	342,893
Treasury stock at cost, 3,533,950 and 3,613,838 shares	(86,596)	(88,554)
Accumulated other comprehensive items (Note 8)	(21,212)	(26,715)
Total Kadant Stockholders' Equity	343,521	330,991
Noncontrolling interest	1,706	1,513
Total Stockholders' Equity	345,227	332,504
Total Liabilities and Stockholders' Equity	$ 772,277	$ 761,094

The accompanying notes are an integral part of these condensed consolidated financial statements.

KADANT INC.
Condensed Consolidated Statement of Income
(Unaudited)

(In thousands, except per share amounts)	Three Months Ended March 31, 2018	Three Months Ended April 1, 2017
Revenues (Note 11)	$ 149,193	$ 102,857
Costs and Operating Expenses:		
Cost of revenues	83,114	53,840
Selling, general, and administrative expenses	45,776	34,620
Research and development expenses	2,869	2,147
Restructuring costs (Note 2)	770	—
	132,529	90,607
Operating Income	16,664	12,250
Interest Income	183	104
Interest Expense	(1,732)	(348)
Other Expense, Net (Note 7)	(246)	(204)
Income Before Provision for Income Taxes	14,869	11,802
Provision for Income Taxes (Note 4)	3,861	2,735
Net Income	11,008	9,067
Net Income Attributable to Noncontrolling Interest	(150)	(116)
Net Income Attributable to Kadant	$ 10,858	$ 8,951
Earnings per Share Attributable to Kadant (Note 3):		
Basic	$ 0.98	$ 0.82
Diluted	$ 0.96	$ 0.80
Weighted Average Shares (Note 3):		
Basic	11,042	10,952
Diluted	11,342	11,205
Cash Dividend Declared per Common Share	$ 0.22	$ 0.21

The accompanying notes are an integral part of these condensed consolidated financial statements.

KADANT INC.
Condensed Consolidated Statement of Comprehensive Income
(Unaudited)

(In thousands)	Three Months Ended March 31, 2018	Three Months Ended April 1, 2017
Net Income	$ 11,008	$ 9,067
Other Comprehensive Items:		
Foreign currency translation adjustment	5,336	5,032
Pension and other post-retirement liability adjustments, net (net of tax provision of $34 and $49)	117	82
Deferred gain on cash flow hedges (net of tax provision of $8 and $15)	93	27
Other Comprehensive Items	5,546	5,141
Comprehensive Income	16,554	14,208
Comprehensive Income Attributable to Noncontrolling Interest	(193)	(162)
Comprehensive Income Attributable to Kadant	$ 16,361	$ 14,046

The accompanying notes are an integral part of these condensed consolidated financial statements.

KADANT INC.
Condensed Consolidated Statement of Cash Flows
(Unaudited)

(In thousands)	Three Months Ended March 31, 2018	Three Months Ended April 1, 2017
Operating Activities		
Net income attributable to Kadant	$ 10,858	$ 8,951
Net income attributable to noncontrolling interest	150	116
Net income	11,008	9,067
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	6,099	3,256
Stock-based compensation expense	1,464	1,295
Provision for losses on accounts receivable	316	129
Loss on the sale of property, plant, and equipment	24	41
Other items, net	(386)	180
Contributions to U.S. pension plan	—	(90)
Changes in current assets and liabilities, net of effects of acquisitions:		
Accounts receivable	(799)	(5,043)
Unbilled revenue	2,064	(1,134)
Inventories	(9,674)	(3,964)
Other current assets	(435)	(1,886)
Accounts payable	3,854	805
Other current liabilities	(6,319)	(973)
Net cash provided by operating activities	7,216	1,683
Investing Activities		
Purchases of property, plant, and equipment	(5,151)	(1,722)
Acquisition	—	(165)
Proceeds from sale of property, plant, and equipment	28	—
Other investing activities	—	(2)
Net cash used in investing activities	(5,123)	(1,889)
Financing Activities		
Repayment of debt	(13,382)	(4,610)
Proceeds from issuance of debt	12,000	8,000
Tax withholding payments related to stock-based compensation	(3,641)	(2,182)
Dividends paid	(2,316)	(2,078)
Proceeds from issuance of Company common stock	742	—
Payment of debt issuance costs	—	(654)
Other financing activities	(111)	(118)
Net cash used in financing activities	(6,708)	(1,642)
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash	1,511	1,362
Decrease in Cash, Cash Equivalents, and Restricted Cash	(3,104)	(486)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	76,846	73,569
Cash, Cash Equivalents, and Restricted Cash at End of Period	$ 73,742	$ 73,083

See Note 1 – Supplemental Cash Flow Information and Recently Adopted Accounting Pronouncements, *Statement of Cash Flows (Topic 230), Restricted Cash* for further details.

The accompanying notes are an integral part of these condensed consolidated financial statements.

KADANT INC.
Condensed Consolidated Statement of Stockholders' Equity
(Unaudited)

(In thousands, except share amounts)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at December 31, 2016	14,624,159	$ 146	$ 101,405	$ 321,050	3,686,532	$ (90,335)	$ (49,637)	$ 1,650	$ 284,279
Net income	—	—	—	8,951	—	—	—	116	9,067
Dividend declared	—	—	—	(2,310)	—	—	—	—	(2,310)
Activity under stock plans	—	—	(2,431)	—	(63,020)	1,544	—	—	(887)
Other comprehensive items	—	—	—	—	—	—	5,095	46	5,141
Balance at April 1, 2017	14,624,159	$ 146	$ 98,974	$ 327,691	3,623,512	$ (88,791)	$ (44,542)	$ 1,812	$ 295,290
Balance at December 30, 2017	14,624,159	$ 146	$ 103,221	$ 342,893	3,613,838	$ (88,554)	$ (26,715)	$ 1,513	$ 332,504
Net income	—	—	—	10,858	—	—	—	150	11,008
Adoption of ASU No. 2014-09 (Note 1)	—	—	—	119	—	—	—	—	119
Adoption of ASU No. 2016-16 (Note 1)	—	—	—	(75)	—	—	—	—	(75)
Dividend declared	—	—	—	(2,440)	—	—	—	—	(2,440)
Activity under stock plans	—	—	(3,393)	—	(79,888)	1,958	—	—	(1,435)
Other comprehensive items	—	—	—	—	—	—	5,503	43	5,546
Balance at March 31, 2018	14,624,159	$ 146	$ 99,828	$ 351,355	3,533,950	$ (86,596)	$ (21,212)	$ 1,706	$ 345,227

The accompanying notes are an integral part of these condensed consolidated financial statements.

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

Kadant Inc. was incorporated in Delaware in November 1991 and currently trades on the New York Stock Exchange under the ticker symbol "KAI."

Kadant Inc. and its subsidiaries' (collectively, the Company) operations include two reportable operating segments, Papermaking Systems and Wood Processing Systems, and a separate product line, Fiber-based Products.

Through its Papermaking Systems segment, the Company develops, manufactures, and markets a range of equipment and products for the global papermaking, paper recycling, recycling and waste management, and other process industries. The Company's principal products include custom-engineered stock-preparation systems and equipment for the preparation of wastepaper for conversion into recycled paper and balers and related equipment used in the processing of recyclable and waste materials; fluid-handling systems and equipment used in industrial piping systems to compensate for movement and to efficiently transfer fluid, power, and data; doctoring systems and equipment and related consumables important to the efficient operation of paper machines and other industrial processes; and filtration and cleaning systems essential for draining, purifying, and recycling process water and cleaning fabrics, belts, and rolls in various process industries.

Through its Wood Processing Systems segment, the Company develops, manufactures, and markets stranders, debarkers, chippers, and logging machinery used in the harvesting and production of lumber and oriented strand board. Through this segment, the Company also provides refurbishment and repair of pulping equipment for the pulp and paper industry.

Through its Fiber-based Products business, the Company manufactures and sells biodegradable, absorbent granules derived from papermaking by-products for use primarily as carriers for agricultural, home lawn and garden, and professional lawn, turf and ornamental applications, as well as for oil and grease absorption.

Interim Financial Statements

The interim condensed consolidated financial statements and related notes presented have been prepared by the Company, are unaudited, and, in the opinion of management, reflect all adjustments of a normal recurring nature necessary for a fair statement of the Company's financial position at March 31, 2018 and its results of operations and comprehensive income for the three-month periods ended March 31, 2018 and April 1, 2017, and its cash flows and stockholders' equity for the three-month periods ended March 31, 2018 and April 1, 2017. Interim results are not necessarily indicative of results for a full year or for any other interim period.

The condensed consolidated balance sheet presented as of December 30, 2017 has been derived from the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 30, 2017. The condensed consolidated financial statements and related notes are presented as permitted by the Securities and Exchange Commission (SEC) rules and regulations for Form 10-Q and do not contain certain information included in the annual consolidated financial statements and related notes of the Company. The condensed consolidated financial statements and notes included herein should be read in conjunction with the consolidated financial statements and related notes included in the Company's Annual Report on Form 10-K for the fiscal year ended December 30, 2017, filed with the SEC.

Financial Statement Presentation

Certain reclassifications have been made to prior periods to conform with current reporting. As a result of the adoption of the Financial Accounting Standards Board's (FASB) Accounting Standards Update (ASU) No. 2017-07, *Compensation - Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-retirement Benefit Cost*, certain components of net benefit cost have been reclassified from operating income to non-operating expenses and included in other expense, net in the condensed consolidated statement of income in the 2017 period. In addition, as a result of the adoption of the FASB's ASU No. 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash*, the change in restricted cash has been reclassified from financing activities and exchange rate effect on cash and included in cash, cash equivalents, and restricted cash in the condensed consolidated statement of cash flows in the 2017 period.

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

Effective at the beginning of fiscal 2018, the Company adopted ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (Topic 606), using a modified retrospective method. See *Recently Adopted Accounting Pronouncements* in this footnote for further discussion. Results for fiscal 2018 are presented under Topic 606, while prior period amounts are not adjusted and are reported under the Company's prior method of reporting revenue recognition in accordance with *Revenue Recognition (Topic 605)* (Topic 605). The impact on any financial statement line item created by applying Topic 606 versus Topic 605 to the Company's results for the first quarter of 2018 is not material.

Use of Estimates and Critical Accounting Policies

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period.

Critical accounting policies are defined as those that entail significant judgments and estimates, and could potentially result in materially different results under different assumptions and conditions. The Company believes that the most critical accounting policies upon which its financial position depends, and which involve the most complex or subjective decisions or assessments, concern revenue recognition, income taxes, the valuation of goodwill and intangible assets, inventories, and pension obligations. A discussion of the application of these and other accounting policies is included in Notes 1 and 3 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended December 30, 2017, and in *Revenue Recognition* and *Recently Adopted Accounting Pronouncements, Revenue from Contracts with Customers (Topic 606),* in this footnote.

Although the Company makes every effort to ensure the accuracy of the estimates and assumptions used in the preparation of its condensed consolidated financial statements or in the application of accounting policies, if business conditions were different, or if the Company were to use different estimates and assumptions, it is possible that materially different amounts could be reported in the Company's condensed consolidated financial statements.

Supplemental Cash Flow Information

	Three Months Ended	
(In thousands)	March 31, 2018	April 1, 2017
Cash Paid for Interest	$ 2,459	$ 388
Cash Paid for Income Taxes, Net of Refunds	$ 8,455	$ 3,774
Non-Cash Investing Activities:		
Estimated post-closing adjustment (a)	$ 400	$ —
Non-cash additions to property, plant and equipment	$ 1,816	$ 125
Non-Cash Financing Activities:		
Issuance of Company common stock upon vesting of restricted stock units	$ 2,755	$ 2,640
Dividends declared but unpaid	$ 2,440	$ 2,310

(a) Represents an estimated post-closing purchase price adjustment related to the 2017 acquisition of certain assets of Unaflex, LLC, which is expected to be settled in 2018.

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

Restricted Cash

The Company's restricted cash serves as collateral for bank guarantees primarily associated with providing assurance to customers that the Company will fulfill certain customer obligations entered into in the normal course of business. The majority of the bank guarantees will expire by the end of 2018.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the Company's condensed consolidated balance sheet that are shown in aggregate in the accompanying condensed consolidated statement of cash flows:

(In thousands)	March 31, 2018	April 1, 2017	December 30, 2017	December 31, 2016
Cash and cash equivalents	$ 72,210	$ 71,540	$ 75,425	$ 71,487
Restricted cash	1,532	1,543	1,421	2,082
Total Cash, Cash Equivalents, and Restricted Cash	$ 73,742	$ 73,083	$ 76,846	$ 73,569

Banker's Acceptance Drafts included in Accounts Receivable

The Company's Chinese subsidiaries may receive banker's acceptance drafts from customers as payment for their trade accounts receivable. The banker's acceptance drafts are noninterest bearing obligations of the issuing bank and mature within six months of the origination date. The Company's subsidiaries may sell the drafts at a discount to a third-party financial institution or transfer the drafts to vendors in settlement of current accounts payable prior to the scheduled maturity date. These drafts, which totaled $12,021,000 at March 31, 2018 and $15,960,000 at December 30, 2017, are included in accounts receivable in the accompanying condensed consolidated balance sheet until the subsidiary sells the drafts to a bank and receives a discounted amount, transfers the banker's acceptance drafts in settlement of current accounts payable prior to maturity, or obtains cash payment on the scheduled maturity date.

Inventories

The components of inventories are as follows:

(In thousands)	March 31, 2018	December 30, 2017
Raw Materials and Supplies	$ 42,582	$ 38,952
Work in Process	22,395	18,203
Finished Goods	30,863	27,778
	$ 95,840	$ 84,933

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

Intangible Assets, Net

Acquired intangible assets by major asset class are as follows:

(In thousands)	Gross	Currency Translation	Accumulated Amortization	Net
March 31, 2018				
Definite-Lived				
Customer relationships	$ 113,283	$ (419)	$ (31,196)	$ 81,668
Product technology	46,501	(584)	(20,797)	25,120
Tradenames	5,227	(218)	(1,628)	3,381
Other	13,744	(28)	(11,178)	2,538
	178,755	(1,249)	(64,799)	112,707
Indefinite-Lived				
Tradenames	16,600	328	—	16,928
Acquired Intangible Assets	$ 195,355	$ (921)	$ (64,799)	$ 129,635
December 30, 2017				
Definite-Lived				
Customer relationships	$ 113,301	$ (621)	$ (28,789)	$ 83,891
Product technology	46,501	(737)	(19,841)	25,923
Tradenames	5,227	(262)	(1,504)	3,461
Other	13,754	(35)	(10,863)	2,856
	178,783	(1,655)	(60,997)	116,131
Indefinite-Lived				
Tradenames	16,600	305	—	16,905
Acquired Intangible Assets	$ 195,383	$ (1,350)	$ (60,997)	$ 133,036

Intangible assets are initially recorded at fair value at the date of acquisition and are stated net of accumulated amortization and currency translation in the accompanying condensed consolidated balance sheet. The Company amortizes definite-lived intangible assets over lives that have been determined based on the anticipated cash flow benefits of the intangible asset.

Goodwill

The changes in the carrying amount of goodwill by segment are as follows:

(In thousands)	Papermaking Systems Segment	Wood Processing Systems Segment	Total
Balance at December 30, 2017			
Gross balance	$ 247,014	$ 106,496	$ 353,510
Accumulated impairment losses	(85,509)	—	(85,509)
Net balance	161,505	106,496	268,001
2018 Adjustments			
Acquisitions (a)	(309)	(75)	(384)
Currency translation	2,131	(234)	1,897
Total 2018 adjustments	1,822	(309)	1,513
Balance at March 31, 2018			
Gross balance	248,836	106,187	355,023
Accumulated impairment losses	(85,509)	—	(85,509)
Net balance	$ 163,327	$ 106,187	$ 269,514

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

(a) Relates to adjustments to the purchase price allocation, principally for inventory, for acquisitions completed in 2017. The purchase price allocation for the Company's 2017 acquisitions will be finalized by the second quarter of 2018 and any resulting adjustments are not expected to be material.

Warranty Obligations

The changes in the carrying amount of accrued warranty costs included in other current liabilities in the accompanying condensed consolidated balance sheet are as follows:

	Three Months Ended	
(In thousands)	March 31, 2018	April 1, 2017
Balance at December 30, 2017	$ 5,498	$ 3,843
Provision charged to expense	715	804
Usage	(364)	(570)
Currency translation	61	62
Balance at March 31, 2018	$ 5,910	$ 4,139

Revenue Recognition

Effective at the beginning of fiscal 2018, the Company adopted Topic 606, using a modified retrospective method. See *Recently Adopted Accounting Pronouncements* in this footnote for further discussion. Results for fiscal 2018 are presented under Topic 606, while prior period amounts are not adjusted and are reported in accordance with Topic 605. The impact on any financial statement line item created by applying Topic 606 versus Topic 605 to the Company's results for the first quarter of 2018 is not material.

Approximately 95% of the Company's revenue in the first quarter of 2018 was recognized at a point in time for each performance obligation under the contract when the customer obtains control of the goods or service. The majority of the Company's parts and consumables products and capital products with minimal customization are accounted for at a point in time. The Company has made a policy election to not treat the obligation to ship as a separate performance obligation under the contract and, as a result, the associated shipping costs are accrued when revenue is recognized.

The remaining 5% of the Company's revenue in the first quarter of 2018 was recognized on an over time basis based on an input method that compares the costs incurred to date to the total expected costs required to satisfy the performance obligation. Contracts are accounted for on an over time basis when they include products which have no alternative use and an enforceable right to payment over time. The majority of the contracts recognized on an over time basis are for large capital projects within the Company's Stock-Preparation product line and, to a lesser extent, its Fluid-Handling and Doctoring, Cleaning, and Filtration product lines. These projects are highly customized for the customer and as a result would include a significant cost to rework in the event of cancellation.

The Company's contracts covering the sale of its products include warranty provisions that provide assurance to its customers that the products will comply with agreed-upon specifications. The Company negotiates the terms regarding warranty coverage and length of warranty depending on the products and applications.

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

The Company disaggregates its revenue from contracts with customers by product line, product type, and geography as this best depicts how its revenue is affected by economic factors as shown below:

	Three Months Ended	
(In thousands)	March 31, 2018	April 1, 2017
Revenues by Product Line:		
Papermaking Systems:		
Stock-Preparation	$ 45,483	$ 41,153
Doctoring, Cleaning, & Filtration	27,222	25,350
Fluid-Handling	32,886	22,047
Papermaking Systems	$ 105,591	$ 88,550
Wood Processing Systems	39,141	9,943
Fiber-based Products	4,461	4,364
	$ 149,193	$ 102,857
Revenue by Product Type:		
Parts and Consumables	$ 95,985	$ 70,444
Capital	53,208	32,413
	$ 149,193	$ 102,857
Revenue by Geography:		
North America	$ 77,616	$ 50,166
Europe	41,493	32,751
Asia	20,148	11,898
Rest of World	9,936	8,042
	$ 149,193	$ 102,857

The following table presents revenue by revenue recognition method:

	Three Months Ended
(In thousands)	March 31, 2018
Timing of Revenue Recognition:	
Point in Time	$ 142,005
Over Time	7,188
	$ 149,193

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

The following tables present the balances from contracts with customers and the significant changes in contract asset and contract liabilities:

(In thousands)	March 31, 2018	December 30, 2017
Balances from Contracts with Customers:		
Accounts receivable, net	$ 91,529	$ 89,624
Contract assets	2,375	2,374
Contract liabilities	(47,759)	(38,702)

(In thousands)	Contract Assets	Contract Liabilities
Balance at December 30, 2017	$ 2,374	$ (38,702)
Impact from the adoption of Topic 606	2,021	(3,932)
Reclassification to accounts receivable, net	(3,476)	—
Contract assets recognized	1,403	—
Revenue recognized	—	27,325
Cash received and not recognized as revenue	—	(31,503)
Currency translation	53	(947)
Balance at March 31, 2018	$ 2,375	$ (47,759)

Contract assets relate to unbilled revenue associated with revenue recognized on contracts accounted for on an over time basis. Unbilled amounts will be billed in future periods based on the contract terms. Contract liabilities consist of customer deposits, advanced billings and deferred revenue included in other current liabilities in the accompanying condensed consolidated balance sheet. Contract liabilities will be recognized as revenue in future periods once the revenue recognition criteria are met. The majority of the contract liabilities relate to advanced payments on contracts accounted for at a point in time. These advance payments will be recognized as revenue when the Company's performance obligations have been satisfied, which typically occurs when the product has been delivered and control of the asset has transferred to the customer.

Customers in China will often settle their accounts receivable with a banker's acceptance draft, in which case cash settlement will be delayed until the banker's acceptance draft matures or is settled prior to maturity. For customers outside of China, final payment for the majority of the Company's products is received in the quarter following the product shipment. Certain of the Company's contracts include a longer period before final payment is due, which is typically within one year of final shipment or transfer of control to the customer.

Recently Adopted Accounting Pronouncements

Revenue from Contracts with Customers (Topic 606), Section A-Summary and Amendments That Create Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs-Contracts with Customers (Subtopic 340-40). In May 2014, the FASB issued ASU No. 2014-09, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The Company adopted this ASU using the modified retrospective transition approach effective at the beginning of fiscal 2018. The guidance applies to all new contracts initiated in fiscal 2018. For existing contracts that have remaining obligations as of the beginning of fiscal 2018, any difference between the recognition criteria in this ASU and the Company's previous revenue recognition practices under Topic 605 was recognized using a cumulative-effect adjustment that increased retained earnings by $119,000. The increase in retained earnings primarily related to contracts, which meet the over time criteria under the new revenue standard and, as a result, the portion of the contract completed as of the beginning of fiscal 2018 was recognized immediately in retained earnings. Partially offsetting this increase was a reduction of retained earnings associated with certain contracts which were previously accounted for under the percentage-of-completion method of accounting, but do not meet the requirements for over time recognition under Topic 606. Amounts previously recognized in fiscal 2017 based on the percentage-of-completion method of accounting were deferred at the beginning of fiscal 2018 and will be recognized along with the remaining revenue and costs in fiscal 2018 when control of the asset has been transferred to the customer.

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

The Company has implemented certain modifications to its existing internal controls to support the recognition criteria and disclosure requirement of this ASU. See *Revenue Recognition* in this footnote for further disclosures required by this ASU.

Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Cash Payments. In August 2016, the FASB issued ASU No. 2016-15, which simplifies the diversity in practice related to the presentation and classification of certain cash receipts and cash payments in the statement of cash flows under Topic 230. The Company adopted this ASU at the beginning of fiscal 2018 with no impact on the Company's condensed consolidated statement of cash flows.

Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory. In October 2016, the FASB issued ASU No. 2016-16, which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs and eliminates the exception for an intra-entity transfer of an asset other than inventory. The Company adopted this ASU at the beginning of fiscal 2018 on a modified retrospective basis, which resulted in an immaterial adjustment to retained earnings. The impact of the adoption of this standard to future periods will be dependent on future asset transfers, which generally occur in connection with acquisitions and other business structuring activities.

Statement of Cash Flows (Topic 230), Restricted Cash. In November 2016, the FASB issued ASU No. 2016-18, which requires inclusion of restricted cash and restricted cash equivalents within cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The Company adopted this ASU at the beginning of fiscal 2018. Prior period amounts related to the Company's cash flows from financing activities, exchange rate effect on cash, and cash, cash equivalents, and restricted cash were restated as required by this ASU, which did not have a material effect on the Company's statement of cash flows. See *Restricted Cash* in this footnote for further disclosures required by this ASU.

Business Combinations (Topic 805), Clarifying the Definition of a Business. In January 2017, the FASB issued ASU No. 2017-01, which clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. The Company adopted this ASU on a prospective basis at the beginning of fiscal 2018. The adoption of this ASU will impact how the Company assesses acquisitions and disposals of businesses in the future.

Compensation - Retirement Benefits (Topic 715), Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post-retirement Benefit Cost. In March 2017, the FASB issued ASU No. 2017-07, which requires employers to include only the service cost component of net periodic pension cost and net periodic post-retirement benefit cost in costs and operating expenses in the same income statement line item as the related employees' compensation costs. The other components of net benefit cost are to be included in non-operating expenses. The Company adopted this ASU at the beginning of fiscal 2018 and prior period amounts were reclassified with no impact on the Company’s condensed consolidated net income. As a result of the adoption, the Company reclassified $204,000 from operating income to other expense, net in the accompanying condensed consolidated statement of income for the three months ended April 1, 2017.

Compensation - Stock Compensation (Topic 718), Scope of Modification Accounting. In May 2017, the FASB issued ASU No. 2017-09, which provides clarity on which changes to the terms or conditions of share-based payment awards require entities to apply the modification accounting provisions required in Topic 718. The Company adopted this ASU on a prospective basis at the beginning of fiscal 2018. The adoption of this ASU did not have a material impact on the Company's condensed consolidated financial statements.

Income Taxes (Topic 740), Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118. In March 2018, the FASB issued ASU No. 2018-05, an amendment to the December 2017 SEC Staff Accounting Bulletin No. 118 (SAB 118), which allowed SEC registrants to record provisional amounts in earnings due to the complexities involved in accounting for the December 22, 2017 enactment of the Tax Cuts and Jobs Act of 2017. While the Company’s accounting for certain tax effects is incomplete, it has determined reasonable estimates for those effects and has recorded provisional amounts in the condensed consolidated financial statements as of March 31, 2018 and December 30, 2017.

Recent Accounting Pronouncements Not Yet Adopted

Leases (Topic 842). In February 2016, the FASB issued ASU No. 2016-02, which requires a lessee to recognize a right-of-use asset and a lease liability for operating leases, initially measured at the present value of the future lease payments,

1. Nature of Operations and Summary of Significant Accounting Policies (continued)

in its balance sheet. This ASU also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This new guidance is effective for the Company in fiscal 2019 using the modified retrospective transition method and early adoption is permitted. The Company is assessing the practical expedients allowed under this new guidance as well as reviewing the impact on its systems, processes and controls to account for its leases. The Company has not completed its evaluation but believes this standard will have a significant impact on its balance sheet but is not expected to have a material impact on the Company's results of operations or cash flows. As of the end of fiscal 2017, the Company had approximately $8.1 million of future lease payments due after fiscal 2018. The actual impact of this new standard will depend on the total amount of the Company's lease commitments as of the adoption date.

Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments. In June 2016, the FASB issued ASU No. 2016-13, which significantly changes the way entities recognize impairment of many financial assets by requiring immediate recognition of estimated credit losses expected to occur over their remaining lives. This new guidance is effective for the Company in fiscal 2020 with early adoption permitted beginning in fiscal 2019. The Company is currently evaluating the effects that the adoption of this ASU will have on its condensed consolidated financial statements.

Derivatives and Hedging (Topic 815), Targeted Improvements in Accounting for Hedging Activity. In August 2017, the FASB issued ASU No. 2017-12, which provides improvements to current hedge accounting to better portray the economic results of an entity's risk management activities and to simplify the application of current hedge accounting guidance. This new guidance is effective on a prospective basis for the Company in fiscal 2019. Early adoption is permitted. The Company does not believe that adoption of this ASU will have a material effect on its condensed consolidated financial statements.

Income Statement - Reporting Comprehensive Income (Topic 220), Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. In February 2018, the FASB issued ASU No. 2018-02, which allows a reclassification from accumulated other comprehensive items (AOCI) to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act of 2017. The reclassification is elective and would allow the income tax effects on items that were originally recorded in AOCI be reclassified from AOCI to retained earnings. This ASU is effective for the Company in fiscal year 2019 and interim periods therein and should be applied either at the beginning of the period of adoption or retrospectively to each period in which the income tax effects of the Tax Cuts and Jobs Act of 2017 are recognized. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of this ASU will have on its condensed consolidated financial statements.

2. Restructuring Costs

In 2017, the Company constructed a 160,000 square foot manufacturing facility in the United States that will integrate its U.S. and Swedish Papermaking stock-preparation product lines into a single manufacturing facility to achieve economies of scale and greater efficiencies. As a result of the consolidation and integration of these facilities, the Company developed a restructuring plan totaling approximately $1,900,000, primarily related to costs for the relocation of machinery and equipment and administrative offices, severance, and abandonment of leased facilities in the Papermaking Systems segment. As a result of this plan, the Company recorded restructuring charges of $203,000 in 2017 associated with severance costs for the reduction of four employees in the United States and six employees in Sweden. In the first three months of 2018, the Company recorded additional restructuring costs of $770,000 related to this plan, including $563,000 for the relocation of machinery and equipment and administrative offices, and $210,000 associated with employee retention costs and abandonment of excess facility and other closure costs. The Company expects to record additional restructuring charges of approximately $900,000, including $750,000 for the relocation of machinery and equipment and $150,000 of other costs, in 2018 when certain specified criteria are met.

2. Restructuring Costs (continued)

A summary of the changes in accrued restructuring costs included in other accrued expenses in the accompanying condensed consolidated balance sheet are as follows:

(In thousands)	Severance	Relocation	Other (a)	Total
Balance at December 30, 2017	$ 203	$ —	$ —	$ 203
Provision (reversal)	(3)	563	210	770
Usage	—	(358)	(120)	(478)
Currency translation	(1)	—	—	(1)
Balance at March 31, 2018	$ 199	$ 205	$ 90	$ 494

(a) Includes employee retention costs that are accrued ratably over the period through which employees must work to qualify for a payment and facility closure and clean-up costs associated with the U.S. stock-preparation operations.

The Company expects to complete this restructuring plan and pay all accrued restructuring costs in 2018.

3. Earnings per Share

Basic and diluted earnings per share (EPS) are calculated as follows:

	Three Months Ended	
(In thousands, except per share amounts)	March 31, 2018	April 1, 2017
Amounts Attributable to Kadant:		
Net Income	$ 10,858	$ 8,951
Basic Weighted Average Shares	11,042	10,952
Effect of Stock Options, Restricted Stock Units and Employee Stock Purchase Plan Shares	300	253
Diluted Weighted Average Shares	11,342	11,205
Basic Earnings per Share	$ 0.98	$ 0.82
Diluted Earnings per Share	$ 0.96	$ 0.80

Restricted stock units (RSUs) totaling 30,000 shares in the first three months of 2018 and 39,000 shares in the first three months of 2017 of common stock were not included in the computation of diluted EPS, as the effect would have been antidilutive or, for unvested performance-based RSUs, the performance conditions had not been met as of the end of the reporting periods.

4. Provision for Income Taxes

The Tax Cuts and Jobs Act of 2017 (2017 Tax Act) was signed into law on December 22, 2017 and its provisions are generally effective for tax years beginning January 1, 2018. The most significant impacts of the 2017 Tax Act to the Company include a decrease in the federal corporate income tax rate from 35% to 21% and a one-time mandatory transition tax on deemed repatriation of previously tax-deferred and unremitted foreign earnings. On December 22, 2017, the SEC staff issued SAB 118 to provide guidance on accounting for the 2017 Tax Act's impact. In accordance with SAB 118, the Company recognized the provisional tax impacts related to the re-measurement of its deferred income tax assets and liabilities and the one-time mandatory transition tax on deemed repatriation of unremitted foreign earnings in the three months ended December 30, 2017. In the first quarter of 2018, the Company recorded an additional provisional net income tax expense of $787,000, including the impact of state taxes, for the one-time mandatory transition tax, primarily due to a 2018 tax law change associated with the 2017 Tax Act that impacted the provisional amount initially recorded.

Additional work is still necessary to finalize the provisional tax impacts of the 2017 Tax Act, including the completion of a more detailed analysis of the Company's historical foreign earnings and the understanding and application of anticipated additional regulatory guidance regarding the provisions of the 2017 Tax Act that may be issued by the Internal Revenue Service

4. Provision for Income Taxes (continued)

and state and local jurisdictions. Any subsequent adjustment to the provisional amounts will be recorded to current tax expense in the quarter of 2018 in which the analysis is complete.

The provision for income taxes was $3,861,000 in the first three months of 2018 and $2,735,000 in the first three months of 2017. The effective tax rate of 26% in the first three months of 2018 was higher than the Company's 2018 statutory tax rate of 21% primarily due to a true-up to the federal provisional net income tax expense initially recorded in 2017 for the 2017 Tax Act, the U.S. tax cost of foreign operations, including the global intangible low-taxed income provisions of the 2017 Tax Act, and the distribution of the Company's worldwide earnings. This incremental tax expense was offset in part by a decrease in tax related to the net excess income tax benefits from stock-based compensation arrangements, the release of tax reserves, and a favorable impact to state taxes primarily related to the true-up to the provisional net income tax expense initially recorded in 2017 for the 2017 Tax Act. The effective tax rate of 23% in the first three months of 2017 was lower than the Company's 2017 statutory tax rate of 35% primarily due to the distribution of the Company's worldwide earnings and the net excess income tax benefits from stock-based compensation arrangements, offset in part by an increase in tax related to non-deductible expenses.

5. Long-Term Obligations

Long-term obligations are as follows:

(In thousands)	March 31, 2018	December 30, 2017
Revolving Credit Facility, due 2022	$ 235,851	$ 237,011
Obligations Under Capital Lease, due 2018 to 2022	4,689	4,633
Other Borrowings, due 2018 to 2023	396	436
Total	240,936	242,080
Less: Current Maturities of Long-Term Obligations	(710)	(696)
Long-Term Obligations	$ 240,226	$ 241,384

See Note 10 for the fair value information related to the Company's long-term obligations.

Revolving Credit Facility

In 2017, the Company entered into an Amended and Restated Credit Agreement, as amended (the 2017 Credit Agreement), which is a five-year unsecured multi-currency revolving credit facility in the aggregate principal amount of up to $300,000,000. The 2017 Credit Agreement also includes an uncommitted unsecured incremental borrowing facility of up to an additional $100,000,000. The principal on any borrowings is due on March 1, 2022. Borrowing may be denominated in U.S. dollars or certain foreign currencies as defined in the 2017 Credit Agreement. Interest on any loans outstanding accrues and generally is payable quarterly in arrears at one of the following rates selected by the Company: (i) the Base Rate, calculated as the highest of (a) the federal funds rate plus 0.50%, (b) the prime rate as published by Citizens Bank, and (c) the thirty-day London Inter-Bank Offered Rate (LIBOR) rate, as defined, plus 0.50%; or (ii) the LIBOR rate (with a zero percent floor), as defined, plus an applicable margin of 1% to 2%. The applicable margin is determined based upon the ratio of the Company's total debt, net of certain cash, as defined, to earnings before interest, taxes, depreciation, and amortization (EBITDA), as defined in the 2017 Credit Agreement. For this purpose, total debt net of certain cash is defined as total debt less the sum of (i) unrestricted U.S. cash, and (ii) 65% of unrestricted cash outside of the United States, but no more than an aggregate amount of $30,000,000.

The obligations of the Company under the 2017 Credit Agreement may be accelerated upon the occurrence of an event of default under the 2017 Credit Agreement, which includes customary events of default including, without limitation, payment defaults, defaults in the performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy- and insolvency-related defaults, defaults relating to such matters as the Employment Retirement Income Security Act (ERISA), unsatisfied judgments, the failure to pay certain indebtedness, and a change of control default. In addition, the 2017 Credit Agreement contains negative covenants applicable to the Company and its subsidiaries, including financial covenants requiring the Company to comply with a maximum consolidated leverage ratio of 3.5 to 1, a minimum consolidated interest coverage ratio of 3 to 1, and restrictions on liens, indebtedness, fundamental changes, dispositions of property, making certain restricted payments (including dividends and stock repurchases), investments, transactions with affiliates, sale and leaseback transactions, swap agreements, changing its fiscal year, arrangements affecting subsidiary distributions, entering into

5. Long-Term Obligations (continued)

new lines of business, and certain actions related to a discontinued operation. As of March 31, 2018, the Company was in compliance with these covenants.

Loans under the 2017 Credit Agreement are guaranteed by certain domestic subsidiaries of the Company pursuant to an Amended and Restated Guarantee Agreement. In addition, one of the Company's foreign subsidiaries entered into a guarantee agreement limited to certain obligations of two foreign subsidiary borrowers.

As of March 31, 2018, the outstanding balance under the 2017 Credit Agreement was $235,851,000, including $56,796,000 of Canadian dollar-denominated borrowings and $50,055,000 of euro-denominated borrowings. As of March 31, 2018, the Company had $63,737,000 of borrowing capacity available under its 2017 Credit Agreement, which was calculated by translating its foreign-denominated borrowings using borrowing date foreign exchange rates.

The weighted average interest rate for the revolving credit facility was 2.86% as of March 31, 2018.

Obligations Under Capital Lease

The Company's obligations under capital leases include a sale-leaseback financing arrangement for a manufacturing facility in Germany. Under this arrangement, the quarterly lease payment includes principal, interest, and a payment to the landlord toward a loan receivable. The interest rate on the outstanding obligation is 1.79%. The loan receivable, which is included in other assets in the accompanying condensed consolidated balance sheet, was $458,000 at March 31, 2018. The lease arrangement provides for a fixed price purchase option, net of the projected loan receivable, of $1,639,000 at the end of the lease term in 2022. If the Company does not exercise the purchase option for the facility, the Company will receive cash from the landlord to settle the loan receivable. As of March 31, 2018, $4,596,000 was outstanding under this capital lease obligation and $93,000 was outstanding under other capital lease obligations.

6. Stock-Based Compensation

The Company recognized stock-based compensation expense of $1,464,000 in the first three months of 2018 and $1,295,000 in the first three months of 2017 within selling, general, and administrative expenses in the accompanying condensed consolidated statement of income. The Company recognizes compensation expense for all stock-based awards granted to employees and directors based on the grant date estimate of fair value for those awards. The fair value of RSUs is based on the grant date trading price of the Company's common stock, reduced by the present value of estimated dividends foregone during the requisite service period. For time-based RSUs, compensation expense is recognized ratably over the requisite service period for the entire award based on the grant date fair value, and net of actual forfeitures recorded when they occur. For performance-based RSUs, compensation expense is recognized ratably over the requisite service period for each separately-vesting portion of the award based on the grant date fair value, net of actual forfeitures recorded when they occur and remeasured each reporting period until the total number of RSUs to be issued is known. Unrecognized compensation expense related to stock-based compensation totaled approximately $8,987,000 at March 31, 2018, and will be recognized over a weighted average period of 2.0 years.

On March 7, 2018, the Company granted to certain of its officers performance-based RSUs, which represented, in aggregate, the right to receive 28,637 shares (the target RSU amount), subject to adjustment, with an aggregate grant date fair value of $2,794,000. The RSUs are subject to adjustment based on the achievement of the performance measure selected for the 2018 fiscal year, which is a specified target for adjusted EBITDA generated from operations for the 2018 fiscal year. The RSUs are adjusted by comparing the actual adjusted EBITDA for the performance period to the target adjusted EBITDA. Actual adjusted EBITDA between 50% and 100% of the target adjusted EBITDA results in an adjustment of 50% to 100% of the RSU amount. Actual adjusted EBITDA between 100% and 115% of the target adjusted EBITDA results in an adjustment using a straight-line linear scale between 100% and 150% of the RSU amount. Actual adjusted EBITDA in excess of 115% results in an adjustment capped at 150% of the RSU amount. If actual adjusted EBITDA is below 50% of the target adjusted EBITDA for the 2018 fiscal year, these performance-based RSUs will be forfeited. In the first three months of 2018, the Company recognized compensation expense based on the probable number of performance-based RSUs expected to vest, which was 100% of the target RSU amount. Following the adjustment, the performance-based RSUs will be subject to additional time-based vesting, and will vest in three equal annual installments on March 10 of 2019, 2020, and 2021, provided that the officer is employed by the Company on the applicable vesting dates. On March 7, 2018, the Company also granted time-based RSUs representing 28,086 shares to its officers and employees with an aggregate grant date fair value of $2,741,000. These time-

6. Stock-Based Compensation (continued)

based RSUs generally vest in three equal annual installments on March 10 of 2019, 2020, and 2021, provided the employee remains employed by the Company on the applicable vesting dates.

7. Retirement Benefit Plans

Effective at the beginning of fiscal 2018, the Company retrospectively adopted ASU No. 2017-07. See *Recently Adopted Accounting Pronouncements* in Note 1 for further discussion. As a result, only the service cost component of net periodic benefit cost is included in operating income. All other components are included in other expense, net in the accompanying condensed consolidated statement of income. The components of net periodic benefit cost are as follows:

	Three Months Ended March 31, 2018			Three Months Ended April 1, 2017		
(In thousands, except percentages)	U.S. Pension	Non-U.S. Pension	Other Post-Retirement	U.S. Pension	Non-U.S. Pension	Other Post-Retirement
Service Cost	$ 175	$ 36	$ 53	$ 196	$ 32	$ 35
Interest Cost	298	30	43	314	24	39
Expected Return on Plan Assets	(322)	(11)	(1)	(335)	(8)	—
Recognized Net Actuarial Loss	135	16	34	113	9	13
Amortization of Prior Service Cost	—	2	22	13	1	21
	$ 286	$ 73	$ 151	$ 301	$ 58	$ 108
The weighted average assumptions used to determine net periodic benefit cost are as follows:						
Discount Rate	3.51%	3.80%	3.65%	4.03%	3.39%	4.13%
Expected Long-Term Return on Plan Assets	4.50%	7.43%	7.43%	5.00%	7.72%	7.72%
Rate of Compensation Increase	3.00%	3.69%	3.07%	3.00%	3.40%	3.08%

The Company does not plan to make any material cash contributions to its pension and post-retirement benefit plans other than to fund current benefit payments in 2018.

8. Accumulated Other Comprehensive Items

Comprehensive income combines net income and other comprehensive items, which represent certain amounts that are reported as components of stockholders' equity in the accompanying condensed consolidated balance sheet.

Changes in each component of AOCI, net of tax, are as follows:

(In thousands)	Foreign Currency Translation Adjustment	Unrecognized Prior Service Cost on Pension and Other Post-Retirement Benefit Plans	Net Actuarial Loss on Pension and Other Post-Retirement Benefit Plans	Deferred Gain on Cash Flow Hedges	Total
Balance at December 30, 2017	$ (17,501)	$ (319)	$ (8,974)	$ 79	$ (26,715)
Other comprehensive income (loss) before reclassifications	5,293	(1)	(39)	89	5,342
Reclassifications from AOCI	—	18	139	4	161
Net current period other comprehensive income	5,293	17	100	93	5,503
Balance at March 31, 2018	$ (12,208)	$ (302)	$ (8,874)	$ 172	$ (21,212)

8. Accumulated Other Comprehensive Items (continued)

Amounts reclassified from AOCI are as follows:

(In thousands)	Three Months Ended March 31, 2018	Three Months Ended April 1, 2017	Statement of Income Line Item
Pension and Other Post-Retirement Plans: (a)			
Amortization of actuarial loss	$ (185)	$ (135)	Other expense, net
Amortization of prior service cost	(24)	(35)	Other expense, net
Total expense before income taxes	(209)	(170)	
Income tax benefit	52	59	Provision for income taxes
	(157)	(111)	
Cash Flow Hedges: (b)			
Interest rate swap agreement	(5)	(12)	Interest expense
Forward currency-exchange contracts	—	(11)	Cost of revenues
Total expense before income taxes	(5)	(23)	
Income tax benefit	1	8	Provision for income taxes
	(4)	(15)	
Total Reclassifications	$ (161)	$ (126)	

(a) Included in the computation of net periodic benefit cost. See Note 7 for additional information.
(b) See Note 9 for additional information.

9. Derivatives

The Company uses derivative instruments primarily to reduce its exposure to changes in currency exchange rates and interest rates. When the Company enters into a derivative contract, the Company makes a determination as to whether the transaction is deemed to be a hedge for accounting purposes. For a contract deemed to be a hedge, the Company formally documents the relationship between the derivative instrument and the risk being hedged. In this documentation, the Company specifically identifies the asset, liability, forecasted transaction, cash flow, or net investment that has been designated as the hedged item, and evaluates whether the derivative instrument is expected to reduce the risks associated with the hedged item. To the extent these criteria are not met, the Company does not use hedge accounting for the derivative. The changes in the fair value of a derivative not deemed to be a hedge are recorded currently in earnings. The Company does not hold or engage in transactions involving derivative instruments for purposes other than risk management.

Accounting Standards Codification (ASC) 815, *Derivatives and Hedging*, requires that all derivatives be recognized on the balance sheet at fair value. For derivatives designated as cash flow hedges, the related gains or losses on these contracts are deferred as a component of AOCI. These deferred gains and losses are recognized in the statement of income in the period in which the underlying anticipated transaction occurs. For derivatives designated as fair value hedges, the unrealized gains and losses resulting from the impact of currency exchange rate movements are recognized in earnings in the period in which the exchange rates change and offset the currency gains and losses on the underlying exposures being hedged. The Company performs an evaluation of the effectiveness of the hedge both at inception and on an ongoing basis. The ineffective portion of a hedge, if any, and changes in the fair value of a derivative not deemed to be a hedge, are recorded in the accompanying condensed consolidated statement of income.

Interest Rate Swap Agreement

In January 2015, the Company entered into a swap agreement (2015 Swap Agreement) to hedge its exposure to movements in the three-month LIBOR rate on future outstanding debt and has designated the 2015 Swap Agreement as a cash flow hedge. The 2015 Swap Agreement expires on March 27, 2020 and has a $10,000,000 notional value. Under the 2015 Swap Agreement, on a quarterly basis, the Company receives a three-month LIBOR rate and pays a fixed rate of interest of 1.50% plus an applicable margin. The fair value of the 2015 Swap Agreement is included in other assets, with an offset to AOCI, net of tax, in the accompanying condensed consolidated balance sheet.

9. Derivatives (continued)

The Company has structured the 2015 Swap Agreement to be 100% effective and, as a result, there is no current impact to earnings resulting from hedge ineffectiveness. Management believes that any credit risk associated with the 2015 Swap Agreement is remote based on the Company's financial position and the creditworthiness of the financial institution that issued the 2015 Swap Agreement.

The counterparty to the 2015 Swap Agreement could demand an early termination of the 2015 Swap Agreement if the Company were to be in default under the 2017 Credit Agreement, or any agreement that amends or replaces the 2017 Credit Agreement in which the counterparty is a member, and if the Company were to be unable to cure the default. An event of default under the 2017 Credit Agreement includes customary events of default and failure to comply with financial covenants, including a maximum consolidated leverage ratio of 3.5 to 1, a minimum consolidated interest coverage ratio of 3 to 1, and restrictions on liens, indebtedness, fundamental changes, dispositions of property, making certain restricted payments (including dividends and stock repurchases), investments, transactions with affiliates, sale and leaseback transactions, swap agreements, changing its fiscal year, arrangements affecting subsidiary distributions, entering into new lines of business, and certain actions related to a discontinued operation. As of March 31, 2018, the Company was in compliance with these covenants. The unrealized gain associated with the 2015 Swap Agreement was $204,000 as of March 31, 2018, which represents the estimated amount that the Company would receive from the counterparty in the event of an early termination.

Forward Currency-Exchange Contracts

The Company uses forward currency-exchange contracts primarily to hedge exposures resulting from fluctuations in currency exchange rates. Such exposures result primarily from portions of the Company's operations and assets and liabilities that are denominated in currencies other than the functional currencies of the businesses conducting the operations or holding the assets and liabilities. The Company typically manages its level of exposure to the risk of currency-exchange fluctuations by hedging a portion of its anticipated currency exposures over the ensuing 12-month period, using forward currency-exchange contracts that have maturities of twelve months or less.

Forward currency-exchange contracts that hedge forecasted accounts receivable or accounts payable are designated as cash flow hedges. The fair value for these instruments is included in other current assets for unrecognized gains and in other current liabilities for unrecognized losses, with an offset in AOCI, net of tax. For forward currency-exchange contracts that are designated as fair value hedges, the gain or loss on the derivative, as well as the offsetting loss or gain on the hedged item are recognized currently in earnings. The fair value of forward currency-exchange contracts that are not designated as hedges is recorded currently in earnings with gains reported in other current assets and losses reported in other current liabilities. The Company recognized within SG&A expenses in the accompanying condensed consolidated statement of income gains of $13,000 in the first three months of 2018 and $471,000 in the first three months of 2017 associated with forward currency-exchange contracts that were not designated as hedges. Management believes that any credit risk associated with forward currency-exchange contracts is remote based on the Company's financial position and the creditworthiness of the financial institutions issuing the contracts.

9. Derivatives (continued)

The following table summarizes the fair value of the Company's derivative instruments in the accompanying condensed consolidated balance sheet:

(In thousands)	Balance Sheet Location	March 31, 2018 Asset (Liability) (a)	March 31, 2018 Notional Amount (b)	December 30, 2017 Asset (Liability) (a)	December 30, 2017 Notional Amount
Derivatives Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Interest rate swap agreement	Other Long-Term Assets	$ 204	$ 10,000	$ 126	$ 10,000
Forward currency-exchange contract	Other Current Assets	$ 24	$ 1,002	$ —	$ —
Derivatives Not Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	$ —	$ —	$ 17	$ 1,244
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	$ (1)	$ 2,366	$ (16)	$ 2,049

(a) See Note 10 for the fair value measurements relating to these financial instruments.
(b) The total notional amount is indicative of the level of the Company's derivative activity during the first three months of 2018.

The following table summarizes the activity in AOCI associated with the Company's derivative instruments designated as cash flow hedges as of and for the three months ended March 31, 2018:

(In thousands)	Interest Rate Swap Agreement	Forward Currency-Exchange Contract	Total
Unrealized Gain, Net of Tax, at December 30, 2017	$ 79	$ —	$ 79
Loss reclassified to earnings (a)	4	—	4
Gain recognized in AOCI	71	18	89
Unrealized Gain, Net of Tax, at March 31, 2018	$ 154	$ 18	$ 172

(a) See Note 8 for the income statement classification.

As of March 31, 2018, the Company expects to reclassify $85,000 of the net unrealized gain included in AOCI to earnings over the next twelve months as a result of forward contract maturities and the interest rate swap's estimated cash flows.

10. Fair Value Measurements and Fair Value of Financial Instruments

Fair value measurement is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy is established, which prioritizes the inputs used in measuring fair value into three broad levels as follows:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Inputs, other than quoted prices in active markets, that are observable either directly or indirectly.
- Level 3—Unobservable inputs based on the Company's own assumptions.

10. Fair Value Measurements and Fair Value of Financial Instruments (continued)

The following table presents the fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis:

(In thousands)	Level 1	Level 2	Level 3	Total
March 31, 2018				
Assets:				
Money market funds and time deposits	$ 19,745	$ —	$ —	$ 19,745
Forward currency-exchange contract	$ —	$ 24	$ —	$ 24
Interest rate swap agreement	$ —	$ 204	$ —	$ 204
Banker's acceptance drafts (a)	$ —	$ 12,021	$ —	$ 12,021
Liabilities:				
Forward currency-exchange contracts	$ —	$ 1	$ —	$ 1
December 30, 2017				
Assets:				
Money market funds and time deposits	$ 17,728	$ —	$ —	$ 17,728
Forward currency-exchange contracts	$ —	$ 17	$ —	$ 17
Interest rate swap agreement	$ —	$ 126	$ —	$ 126
Banker's acceptance drafts (a)	$ —	$ 15,960	$ —	$ 15,960
Liabilities:				
Forward currency-exchange contracts	$ —	$ 16	$ —	$ 16

(a) Included in accounts receivable in the accompanying condensed consolidated balance sheet.

The Company uses the market approach technique to value its financial assets and liabilities, and there were no changes in valuation techniques during the first three months of 2018. The Company's financial assets and liabilities carried at fair value are cash equivalents, banker's acceptance drafts, derivative instruments used to hedge the Company's foreign currency and interest rate risks, variable rate debt, and capital lease obligations. The Company's cash equivalents are comprised of money market funds and bank deposits which are highly liquid and readily tradable. These cash equivalents are valued using inputs observable in active markets for identical securities. The carrying value of banker's acceptance drafts approximates their fair value due to the short-term nature of the negotiable instrument. The fair values of the Company's forward currency-exchange contracts are based on quoted forward foreign exchange rates at the reporting date. The fair value of the Company's interest rate swap agreement is based on LIBOR yield curves at the reporting date. The forward currency-exchange contracts and interest rate swap agreement are hedges of either recorded assets or liabilities or anticipated transactions. Changes in values of the underlying hedged assets and liabilities or anticipated transactions are not reflected in the table above.

The carrying value and fair value of the Company's long-term debt obligations are as follows:

	March 31, 2018		December 30, 2017	
(In thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Long-term Debt Obligations:				
Revolving credit facility	$ 235,851	$ 235,851	$ 237,011	$ 237,011
Capital lease obligations	4,141	4,141	4,101	4,101
Other borrowings	234	234	272	272
	$ 240,226	$ 240,226	$ 241,384	$ 241,384

The carrying value of the Company's revolving credit facility approximates the fair value as the obligation bears variable rates of interest, which adjust quarterly based on prevailing market rates. The carrying values of the Company's capital lease obligations and other borrowings approximate fair value as the stipulated interest rates are comparable to prevailing market rates for those obligations.

KADANT INC.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

11. Business Segment Information

The Company has combined its operating entities into two reportable operating segments, Papermaking Systems and Wood Processing Systems, and a separate product line, Fiber-based Products. In classifying operational entities into a particular segment, the Company has aggregated businesses with similar economic characteristics, products and services, production processes, customers, and methods of distribution.

The following table presents financial information for the Company's reportable operating segments:

	Three Months Ended	
(In thousands)	March 31, 2018	April 1, 2017
Revenues:		
Papermaking Systems (a)	$ 105,591	$ 88,550
Wood Processing Systems (b)	39,141	9,943
Fiber-based Products	4,461	4,364
	$ 149,193	$ 102,857
Income Before Provision for Income Taxes:		
Papermaking Systems (c)	$ 14,584	$ 14,299
Wood Processing Systems (d)	7,363	2,504
Corporate and Fiber-based Products (e)	(5,283)	(4,553)
Total operating income	16,664	12,250
Interest expense, net (f)	(1,549)	(244)
Other expense, net	(246)	(204)
	$ 14,869	$ 11,802
Capital Expenditures:		
Papermaking Systems	$ 4,649	$ 1,484
Wood Processing Systems	376	186
Other	126	52
	$ 5,151	$ 1,722

(a) Includes $5,900,000 in the three-month period ended March 31, 2018 from 2017 acquisitions.
(b) Includes $28,870,000 in the three-month period ended March 31, 2018 from a 2017 acquisition.
(c) Includes restructuring costs of $770,000 in the three-month period ended March 31, 2018 (see Note 2).
(d) Includes acquisition-related expenses of $252,000 in the three-month period ended March 31, 2018 for the amortization of acquired backlog and $319,000 in the three-month period ended April 1, 2017 for acquisition transaction costs.
(e) Corporate primarily includes general and administrative expenses.
(f) The Company does not allocate interest expense, net to its segments.

12. Commitments and Contingencies

Right of Recourse

In the ordinary course of business, the Company's subsidiaries in China may receive banker's acceptance drafts from customers as payment for their trade accounts receivable. The banker's acceptance drafts are noninterest-bearing obligations of the issuing bank and mature within six months of the origination date. The Company's subsidiaries in China may use these banker's acceptance drafts prior to the scheduled maturity date to settle outstanding accounts payable with vendors. Banker's acceptance drafts transferred to vendors are subject to customary right of recourse provisions prior to their scheduled maturity dates. The Company had $9,890,000 at March 31, 2018 and $10,035,000 at December 30, 2017 of banker's acceptance drafts subject to recourse, which were transferred to vendors and had not reached their scheduled maturity dates. Historically, the banker's acceptance drafts have settled upon maturity without any claim of recourse against the Company.

Litigation

From time to time, the Company is subject to various claims and legal proceedings covering a range of matters that arise in the ordinary course of business. Such litigation may include, but is not limited to, claims and counterclaims by and against the Company for breach of contract or warranty, canceled contracts, product liability, or bankruptcy-related claims. For legal proceedings in which a loss is probable and estimable, the Company accrues a loss based on the low end of the range of estimated loss when there is no better estimate within the range. If the Company were found to be liable for any of the claims or counterclaims against it, the Company would incur a charge against earnings for amounts in excess of legal accruals.

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

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), and Section 27A of the Securities Act of 1933, as amended. These forward-looking statements are not statements of historical fact, and may include statements regarding possible or assumed future results of operations. Forward-looking statements are subject to risks and uncertainties and are based on the beliefs and assumptions of our management, using information currently available to our management. When we use words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "seeks," "should," "likely," "will," "would," "may," "continue," "could," or similar expressions, we are making forward-looking statements.

Forward-looking statements are not guarantees of performance. They involve risks, uncertainties, and assumptions. Our future results of operations may differ materially from those expressed in the forward-looking statements. Many of the important factors that will determine these results and values are beyond our ability to control or predict. You should not put undue reliance on any forward-looking statements. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise. For a discussion of important factors that may cause our actual results to differ materially from those suggested by the forward-looking statements, you should read carefully the section captioned "Risk Factors" in Part I, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 30, 2017 (fiscal 2017), as filed with the Securities and Exchange Commission (SEC) and subsequent filings with the SEC.

Overview

Company Background

We are a leading global supplier of equipment and critical components used in process industries worldwide. In addition, we manufacture granules made from papermaking by-products. We have a diverse and large customer base, including most of the world's major paper, lumber and oriented strand board (OSB) manufacturers, and our products, technologies, and services play an integral role in enhancing process efficiency, optimizing energy utilization, and maximizing productivity in resource-intensive industries.

Our operations are comprised of two reportable operating segments: Papermaking Systems and Wood Processing Systems, and a separate product line, Fiber-based Products, as detailed below.

Papermaking Systems Segment

Through our Papermaking Systems segment, we develop, manufacture, and market equipment and products for the global papermaking, paper recycling, recycling and waste management, and other process industries. This segment consists of the following product lines:

- Stock-Preparation: custom-engineered systems and equipment, as well as standard individual components, for baling, pulping, de-inking, screening, cleaning, and refining primarily recycled fiber for preparation for entry into the paper machine, and recausticizing and evaporation equipment and systems used in the production of virgin pulp. Our baling equipment is also used to compress a variety of other secondary materials to prepare them for transport or storage;
- Doctoring, Cleaning, & Filtration: doctoring, cleaning, and filtration systems and related consumables that keep paper machines and other industrial processes running efficiently; doctor blades made of a variety of materials to perform functions including cleaning, creping, web removal, flaking, and the application of coatings; and systems and equipment used to continuously clean fabrics and rolls, drain water from pulp mixtures, form the sheet or web, and filter the process water for reuse. Doctoring and cleaning systems are also used in other process industries such as carbon fiber, textiles and food processing; and
- Fluid-Handling: rotary joints, precision unions, steam and condensate systems, components, and controls used to transfer fluids, power, and data in numerous process industries and expansion joints used in industrial piping systems.

Overview (continued)

Wood Processing Systems Segment

Through our Wood Processing Systems segment, we develop, manufacture, and market stranders and related equipment used in the production of OSB. We also supply stranders, debarkers, chippers and logging machinery used in the harvesting and production of lumber and OSB. In addition, we provide refurbishment and repair of pulping equipment for the pulp and paper industry. Our principal wood-processing products include:

- Debarkers: ring and rotary debarkers and related parts and consumables that employ a combination of mechanical abrasion and log-to-log contact to efficiently remove bark from logs of all shapes and species;
- Stranders: disc and ring stranders and related parts and consumables that cut batch-fed logs into strands for OSB production;
- Chippers: disc, drum, and veneer chippers and related parts and consumables are high quality, robust chipper systems for waste-wood and whole-log applications found in pulp woodrooms, chip plants, sawmill, and planer mill sites; and
- Logging machinery: feller bunchers, log loaders, and swing yarders that are used to harvest and gather timber for lumber production.

Fiber-based Products

Through our Fiber-based Products business, we manufacture and sell biodegradable, absorbent granules derived from papermaking by-products for use primarily as carriers for agricultural, home lawn and garden, and professional lawn, turf and ornamental applications, as well as for oil and grease absorption.

Acquisitions

We expect that a significant driver of our growth over the next several years will be the acquisition of technologies and businesses that complement or augment our existing products and services or may involve entry into a new process industry. We continue to actively pursue additional acquisition opportunities. Certain of our recent acquisitions are described below.

On July 5, 2017, we acquired the forest products business of NII FPG Company (NII FPG) pursuant to a Stock and Asset Purchase Agreement dated May 24, 2017, for $170.8 million, net of cash acquired. NII FPG is a global leader in the design and manufacture of equipment used by sawmills, veneer mills, and other manufacturers in the forest products industry. NII FPG also designs and manufactures logging equipment used in harvesting timber from forest plantations. This acquisition extends our presence deeper into the forest products industry and complements our existing Wood Processing Systems segment.

On August 14, 2017, we acquired certain assets of Unaflex, LLC (Unaflex) for $31.7 million, including $31.3 million in cash and an estimated $0.4 million post-closing adjustment to be paid in 2018. Unaflex is a leading manufacturer of expansion joints and related products for process industries. This acquisition complements our existing Fluid-Handling product line within our Papermaking Systems segment.

International Sales

Our sales to customers outside the United States, mainly in Europe, Asia and Canada, were approximately 58% of total revenue in both the first three months of 2018 and 2017. We generally seek to charge our customers in the same currency in which our operating costs are incurred. However, our financial performance and competitive position can be affected by currency exchange rate fluctuations affecting the relationship between the U.S. dollar and foreign currencies. We seek to reduce our exposure to currency fluctuations through the use of forward currency exchange contracts. We may enter into forward contracts to hedge certain firm purchase and sale commitments denominated in currencies other than our subsidiaries' functional currencies.

Overview (continued)

Application of Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of our condensed consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Our actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies are defined as those that entail significant judgments and uncertainties, and could potentially result in materially different results under different assumptions and conditions. We believe that our most critical accounting policies upon which our financial position depends, and which involve the most complex or subjective decisions or assessments, are those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the section captioned "Application of Critical Accounting Policies and Estimates" in Part II, Item 7, of our Annual Report on Form 10-K for the fiscal year ended December 30, 2017, filed with the SEC. There have been no material changes to these critical accounting policies since fiscal year-end 2017 that warrant disclosure, except for the adoption of the Financial Accounting Standards Board's Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, as described in *Recently Adopted Accounting Pronouncements* and *Revenue Recognition* in Note 1 to the accompanying condensed consolidated financial statements.

Industry and Business Outlook

Our products are primarily sold in global process industries and used to produce packaging, tissue, OSB, and lumber, among other products. Major markets for our products are as follows:

Packaging, Tissue and Other Paper

Approximately 44% of our revenue in the first three months of 2018 was from the sale of products that support packaging, tissue, and other paper grades excluding printing and writing and newsprint. Consumption of packaging, which is primarily comprised of containerboard and boxboard, is driven by many factors, including regional economic conditions, consumer spending on non-durable goods, increased use of e-commerce, demand for food and beverage packaging, and greater urbanization in developing regions. The growth of e-commerce in particular has caused and is expected to continue to cause increased demand for packaging grades used to make boxes. Consumption of tissue is fairly stable and in the developed world tends to grow with the population. For both packaging and tissue, growth rates in the developing world are expected to increase as per capita consumption of paper products increases with rising standards of living. For balers and related equipment, demand is generally driven by rising standards of living and population growth, shortage and costs of landfilling, increasing recycling rates, and environmental regulation.

Printing, Writing and Newsprint

Approximately 11% of our revenue in the first three months of 2018 was related to products used to produce printing and writing paper grades as well as newsprint, which have been negatively affected by the development and increased use of digital media. We expect the decline in the use of printing and writing and newsprint paper grades to continue due to the use of digital media.

Wood Processing

Approximately 26% of our revenue in the first three months of 2018 was from sales to manufacturers in the wood processing industries, including lumber mills, engineered wood panel producers, and sawmills, that use standers, debarkers, and related equipment to prepare logs to be converted into OSB or lumber, and use harvesting equipment to cut, gather, and remove timber from forest plantations. Demand for OSB and lumber is tied to new home construction and home remodeling in all markets we serve. The majority of OSB and lumber demand is in North America, as North American houses are more often constructed of wood compared to other parts of the world.

Other

Our remaining revenue was from sales to other process industries, which tend to grow with the overall economy. These industries include metals, food and beverage, chemical, petrochemical, and energy, among others.

Overview (continued)

Bookings by Geographic Region

Our bookings increased 53% to $182 million in the first three months of 2018 compared to $119 million in the first three months of 2017. Bookings in 2018 included a $40 million, or 34%, increase resulting from our acquisitions and an $8 million, or 7%, increase from the favorable effect of foreign currency translation. Excluding the impact of acquisitions and the favorable effect of foreign currency translation, our bookings in the first three months of 2018 increased 12% compared to the first three months of 2017, primarily due to strong performance in our Wood Processing, Fluid-Handling, and Stock-Preparation product lines. Bookings for our capital equipment tend to be variable and are dependent on regional economic conditions and the level of capital spending by our customers, among other factors. By comparison, demand for our parts and consumables products tends to be more predictable. We believe our large installed base provides us with a relatively stable parts and consumables business that yields higher margins than our capital equipment business. Bookings for our parts and consumables products increased to $103 million in the first three months of 2018, or 57% of total bookings, compared to $75 million, or 63% of total bookings, in the first three months of 2017, primarily due to bookings of $22 million from our acquisitions.

North America

The largest and most impactful regional market for our products in the first three months of 2018 was North America, and we expect this to continue to be the case for the remainder of 2018. The primary pulp and paper markets we serve in North America tend to be stable. The strength of the U.S. housing market has led to continued growth in our Wood Processing product line, which we recently expanded with our forest products business acquisition. We expect to see continued strength in this market as home ownership among millennials continues to increase and the tight U.S. labor market and limited inventory support demand for new housing. Projected continued growth in housing starts for the next several years is expected to have a positive impact on demand for structural wood panels, which includes OSB and lumber. In addition, the U.S. tax law passed in 2017 and repatriation of offshore cash may result in additional capital investment activity by our customers in the United States. Our bookings in North America were $93 million in the first three months of 2018, including bookings of $28 million from our acquisitions, up 64% compared to $57 million in the first three months of 2017. According to a PPI Pulp & Paper Week report, U.S. containerboard production increased in 2017 by 3.1% over 2016, and according to a Resource Information Systems Inc. (RISI) report, containerboard mill operating rates were 96% in the first three months of 2018. For the month of March 2018, U.S. housing starts increased 11% over March 2017 to 1.319 million due to a rebound in the construction of multifamily housing units.

Europe

We saw increased business activity in Europe in the first three months of 2018 compared to the first three months of 2017, particularly in the lumber, industrial and packaging markets. We expect the solid growth in the euro zone economies in the first three months of 2018 to be sustained for the remainder of 2018. Our bookings in Europe were $50 million in the first three months of 2018, up 55% compared to $32 million in the first three months of 2017, including an $8 million increase from our acquisitions and a favorable foreign currency translation effect of $5 million. Excluding acquisitions and the favorable effect of foreign currency translation, our bookings in Europe increased 14% in the first three months of 2018 compared to the first three months of 2017.

Asia

Our bookings in Asia were $25 million in the first three months of 2018, up 18% compared to $21 million in the first three months of 2017. The market in Asia continued to be healthy for both our capital equipment and parts and consumables products in the first three months of 2018. We saw continued strength in project activity in containerboard grades during the first three months of 2018, particularly in China. We expect to see a gradual weakening of demand for pulp and paper-related capital projects in China in the second half of 2018. However, while OSB is a fairly new product in China and its consumption is low compared to North America, we foresee increased demand in China for our stranding equipment used in OSB mills in 2018 as producers explore the use of OSB in the production of furniture and in export packaging.

Rest of World

Our bookings in the rest of the world were $14 million in the first three months of 2018, including bookings of $4 million from our acquisitions, up 61% compared to $9 million in the first three months of 2017.

Overview (continued)

Guidance

Based on our performance in the first three months of 2018 and current visibility for the remainder of the year, we expect for the full year 2018 GAAP diluted earnings per share (EPS) of $4.98 to $5.08, revised from our previous guidance of $4.74 to $4.84. For 2018, we expect revenue of $625 to $635 million, revised from our previous guidance of $605 to $615 million. The 2018 guidance includes pre-tax restructuring costs of $1.7 million, or $0.11 per diluted share, discrete tax expense of $0.4 million, or $0.04 per diluted share, and pre-tax amortization expense associated with acquired backlog of $0.2 million, or $0.02 per diluted share. For the second quarter of 2018, we expect to achieve GAAP diluted EPS of $0.89 to $0.94 on revenue of $150 to $154 million. The second quarter of 2018 guidance includes pre-tax restructuring costs of $0.8 million, or $0.06 per diluted share.

Results of Operations

First Quarter 2018 Compared With First Quarter 2017

Revenues

The following table presents changes in revenues by segment and product line between the first quarters of 2018 and 2017, and the changes in revenues by segment and product line between the first quarters of 2018 and 2017 excluding the effect of currency translation and acquisitions. Currency translation is calculated by converting first quarter of 2018 revenues in local currency into U.S. dollars at first quarter of 2017 exchange rates and then comparing this result to actual revenues in the first quarter of 2018. The presentation of the changes in revenues excluding the effect of currency translation and acquisitions is a non-GAAP measure. We believe this non-GAAP measure helps investors gain an understanding of our underlying operations consistent with how management measures and forecasts its performance, especially when comparing such results to prior periods. This non-GAAP measure should not be considered superior to or a substitute for the corresponding GAAP measures.

Revenues for the first quarters of 2018 and 2017 are as follows:

	Three Months Ended					(Non-GAAP) Adjusted Total
(In thousands)	March 31, 2018	April 1, 2017	Total Increase	Currency Translation	Acquisitions	Increase (Decrease)
Stock-Preparation	$ 45,483	$ 41,153	$ 4,330	$ 3,456	$ —	$ 874
Doctoring, Cleaning, & Filtration	27,222	25,350	1,872	1,201	—	671
Fluid-Handling	32,886	22,047	10,839	1,599	5,900	3,340
Papermaking Systems	105,591	88,550	17,041	6,256	5,900	4,885
Wood Processing Systems	39,141	9,943	29,198	467	28,870	(139)
Fiber-based Products	4,461	4,364	97	—	—	97
	$ 149,193	$ 102,857	$ 46,336	$ 6,723	$ 34,770	$ 4,843

Papermaking Systems Segment

Revenues from our Papermaking Systems segment increased $17.0 million, or 19%, to $105.6 million in the first quarter of 2018 from $88.6 million in the first quarter of 2017, including $5.9 million from the inclusion of revenue from acquisitions and a $6.3 million increase from the favorable effect of foreign currency translation. Excluding acquisitions and the favorable effect of foreign currency translation, revenues increased $4.9 million as explained in the product line discussions below.

Revenues from our Stock-Preparation product line in the first quarter of 2018 increased $4.3 million, or 11%, compared to the first quarter of 2017, including a $3.5 million increase from the favorable effect of foreign currency translation. Excluding the favorable effect of foreign currency translation, revenues increased $0.9 million, or 2%, primarily due to increased demand for our capital equipment at our Chinese and North American operations that was partially offset by decreased demand for our capital equipment at our European operations.

Results of Operations (continued)

Revenues from our Doctoring, Cleaning, & Filtration product line in the first quarter of 2018 increased $1.9 million, or 7%, including a $1.2 million increase from the favorable effect of foreign currency translation. Excluding the favorable effect of foreign currency translation, revenues increased $0.7 million, or 3%, compared to the first quarter of 2017 due to increased demand for our parts and consumables products.

Revenues from our Fluid-Handling product line in the first quarter of 2018 increased $10.8 million, or 49%, compared to the first quarter of 2017, due to the inclusion of $5.9 million in revenues from acquisitions, principally from Unaflex, and a $1.6 million increase from the favorable effect of foreign currency translation. Excluding acquisitions and the favorable effect of foreign currency translation, revenues increased $3.3 million, or 15%, largely due to increased demand for our capital equipment primarily at our North American and European operations.

Wood Processing Systems Segment

Revenues from our Wood Processing Systems segment increased $29.2 million to $39.1 million in the first quarter of 2018 from $9.9 million in the first quarter of 2017 due to the inclusion of $28.9 million in revenues from our forest products business, which was acquired in July 2017, and $0.5 million from the favorable effect of foreign currency translation. Excluding the acquisition and the favorable effect of foreign currency translation, revenues were essentially flat in the first quarter of 2018 compared with the first quarter of 2017.

Fiber-based Products

Revenues from our Fiber-based Products business were relatively unchanged at $4.5 million in the first quarter of 2018 compared with $4.4 million in the first quarter of 2017.

Gross Profit Margin

Gross profit margins for the first quarters of 2018 and 2017 were as follows:

	Three Months Ended	
	March 31, 2018	April 1, 2017
Papermaking Systems	45.6%	47.9%
Wood Processing Systems	39.5%	42.2%
Fiber-based Products	56.0%	55.0%
	44.3%	47.7%

Papermaking Systems Segment

The gross profit margin in our Papermaking Systems segment decreased to 45.6% in the first quarter of 2018 from 47.9% in the first quarter of 2017, primarily due to lower gross profit margins on our parts and consumables products, as well as a decrease in the proportion of higher-margin parts and consumables revenues.

Wood Processing Systems Segment

The gross profit margin in our Wood Processing Systems segment decreased to 39.5% in the first quarter of 2018 from 42.2% in the first quarter of 2017 primarily due to the inclusion of lower gross profit margins in our timber harvesting product line.

Fiber-based Products

The gross profit margin in our Fiber-based Products business increased to 56.0% in the first quarter of 2018 from 55.0% in the first quarter of 2017 due to increased manufacturing efficiency related to higher production volumes and lower natural gas prices.

Results of Operations (continued)

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses for the first quarters of 2018 and 2017 were as follows:

	Three Months Ended		
(In thousands)	March 31, 2018	April 1, 2017	Increase
Papermaking Systems	$ 30,756	$ 26,185	$ 4,571
Wood Processing Systems	7,299	1,522	5,777
Corporate and Other	7,721	6,913	808
	$ 45,776	$ 34,620	$ 11,156

SG&A expenses as a percentage of revenues decreased to 31% in the first quarter of 2018 from 34% in the first quarter of 2017 due to improved operating leverage as a result of our recent acquisitions. SG&A expenses increased $11.2 million, or 32%, to $45.8 million in the first quarter of 2018 from $34.6 million in the first quarter of 2017 primarily due to the inclusion of $7.2 million of incremental SG&A expenses from our acquisitions and a $2.0 million unfavorable effect from foreign currency translation. We expect further improvements in operating leverage in the second half of 2018 as our revenue increases.

Papermaking Systems Segment

SG&A expenses in our Papermaking Systems segment increased $4.6 million, or 17%, to $30.8 million in the first quarter of 2018 from $26.2 million in the first quarter of 2017, primarily due to a $1.9 million unfavorable effect from foreign currency translation and $1.7 million of incremental SG&A expenses from our acquisitions.

Wood Processing Systems Segment

SG&A expenses in our Wood Processing Systems segment increased $5.8 million to $7.3 million in the first quarter of 2018 from $1.5 million in the first quarter of 2017 primarily due to $5.5 million of incremental SG&A expenses from our acquisitions.

Corporate and Other

SG&A expenses for Corporate and Other increased $0.8 million to $7.7 million in the first quarter of 2018 from $6.9 million in the first quarter of 2017 primarily due to increased incentive compensation expense.

Research and Development Expenses

Research and development expenses, which represented 2% of revenues in both periods, increased $0.7 million, or 34%, to $2.9 million in the first quarter of 2018 from $2.1 million in the first quarter of 2017 largely due to the inclusion of research and development expenses from our acquisitions.

Restructuring Costs

Restructuring costs in the first quarter of 2018 of $0.8 million related to the integration of our U.S. and Swedish Papermaking Stock-Preparation product lines into a single manufacturing facility to achieve economies of scale and greater efficiencies, and included $0.6 million of costs for the relocation of machinery and equipment and administrative offices and $0.2 million associated with employee retention costs and abandonment of excess facility and other closure costs. We expect to record additional restructuring charges of approximately $0.9 million in 2018 primarily for the relocation of machinery and equipment when certain specified criteria are met.

Interest Expense

Interest expense increased $1.4 million to $1.7 million in the first quarter of 2018 from $0.3 million in the first quarter of 2017 primarily due to interest expense on additional borrowings made in the second half of 2017.

Results of Operations (continued)

Provision for Income Taxes

Our provision for income taxes was $3.9 million in the first quarter of 2018 and $2.7 million in the first quarter of 2017. The effective tax rate of 26% in the first quarter of 2018 was higher than our 2018 statutory tax rate of 21% primarily due to a true-up to the federal provisional net income tax expense initially recorded in 2017 for the Tax Cuts and Jobs Act of 2017 (2017 Tax Act), the U.S. tax cost of foreign operations, including the global intangible low-taxed income provisions of the 2017 Tax Act, and the distribution of our worldwide earnings. This incremental tax expense was offset in part by a decrease in tax related to the net excess income tax benefits from stock-based compensation arrangements, the release of tax reserves, and a favorable impact to state taxes primarily related to the true-up to the provisional net income tax expense initially recorded in 2017 for the 2017 Tax Act. The effective tax rate of 23% in the first quarter of 2017 was lower than our 2017 statutory tax rate of 35% primarily due to the distribution of our worldwide earnings and the net excess income tax benefits from stock-based compensation arrangements, offset in part by an increase in tax related to non-deductible expenses.

Additional work is still necessary to finalize the provisional tax impacts of the 2017 Tax Act, including the completion of a more detailed analysis of our historical foreign earnings and the understanding and application of anticipated additional regulatory guidance regarding the provisions of the 2017 Tax Act that may be issued by the Internal Revenue Service and state and local jurisdictions. Any subsequent adjustment to the provisional amounts will be recorded to current tax expense in the quarter of 2018 in which the analysis is complete.

Net Income

Net income increased $1.9 million, or 21%, to $11.0 million in the first quarter of 2018 from $9.1 million in the first quarter of 2017 due to a $4.4 million increase in operating income that was partially offset by increases in our interest expense of $1.4 million and our provision for income taxes of $1.1 million (see *Revenues, Gross Profit Margin, Selling, General and Administrative Expenses, Research and Development Expenses, Restructuring Costs, Interest Expense* and *Provision for Income Taxes* discussed above).

Recent Accounting Pronouncements

See Note 1, under the headings *Recently Adopted Accounting Pronouncements* and *Recent Accounting Pronouncements Not Yet Adopted*, in the accompanying condensed consolidated financial statements for further details.

Liquidity and Capital Resources

Consolidated working capital was $145.7 million at March 31, 2018, compared with $133.8 million at December 30, 2017. Included in working capital were cash and cash equivalents of $72.2 million at March 31, 2018, compared with $75.4 million at December 30, 2017. At March 31, 2018, $71.2 million of cash and cash equivalents was held by our foreign subsidiaries.

Cash Flows

First Three Months of 2018

Our operating activities provided cash of $7.2 million in 2018 primarily due to cash generated by our operating subsidiaries from product sales. This is largely represented within operating cash flows in net income, excluding non-cash charges for depreciation and amortization and stock-based compensation. Aside from cash generated from items which impacted net income, operating cash flows were also impacted by changes in working capital due to the timing of cash receipts and payments. Working capital used cash of $11.3 million in the first quarter of 2018, including $9.7 million of cash used to purchase inventory primarily associated with the expected shipment of stock-preparation capital orders later in 2018 and $6.3 million of cash used to settle other current liabilities that was primarily related to the payment of incentive compensation and taxes.

Our investing activities used cash of $5.1 million in the first quarter of 2018 related to purchases of property, plant, and equipment, including $3.8 million for a manufacturing facility project in Ohio.

Liquidity and Capital Resources (continued)

Our financing activities used cash of $6.7 million in the first quarter of 2018. Cash uses of $13.4 million for principal payments on our outstanding debt obligations, $3.6 million for tax withholding payments related to stock-based compensation, and $2.3 million for cash dividends paid to stockholders were partially offset by U.S. dollar-denominated borrowings of $12.0 million under our revolving credit agreement and $0.7 million received primarily from employee purchases of our common stock.

First Three Months of 2017

Our operating activities provided cash of $1.7 million in 2017 primarily due to cash generated by our operating subsidiaries from product sales. This is largely represented within operating cash flows in net income, excluding non-cash charges for depreciation and amortization and stock-based compensation. Aside from cash generated from items which impacted net income, operating cash flows were also impacted by changes in working capital due to the timing of cash receipts and payments. Working capital used cash of $12.2 million in the first quarter of 2017, including increases of $6.2 million in accounts receivable and unbilled revenue primarily in our Stock-Preparation product line and $4.0 million in inventory primarily from purchases related to the expected shipment of stock-preparation capital orders. To a lesser extent, cash of $1.9 million was used to fund increases in other current assets largely related to prepayments for raw material and equipment and an increase in refundable income taxes. In addition, we used cash of $1.0 million for other current liabilities primarily related to the payment of incentive compensation in the first quarter of 2017.

Our investing activities used cash of $1.9 million in the first quarter of 2017, primarily related to $1.7 million of purchases of property, plant, and equipment.

Our financing activities used cash of $1.6 million in the first quarter of 2017. We received cash proceeds of $8.0 million from borrowings under our revolving credit agreement, which were more than offset by $4.6 million used for principal payments on our outstanding debt obligations, $2.2 million used for tax withholding payments related to stock-based compensation, and $2.1 million used for cash dividends paid to stockholders.

Additional Liquidity and Capital Resources

On May 17, 2017, our board of directors approved the repurchase of up to $20 million of our equity securities during the period from May 17, 2017 to May 17, 2018. We have not purchased any shares of our common stock under this authorization.

We paid cash dividends of $2.3 million in the first quarter of 2018. On March 8, 2018, we declared a quarterly cash dividend of $0.22 per share totaling $2.4 million that will be paid on May 10, 2018. Future declarations of dividends are subject to our board of directors' approval and may be adjusted as business needs or market conditions change. The declaration of cash dividends is subject to our compliance with the consolidated leverage ratio contained in our revolving credit facility.

As of March 31, 2018, we had cash and cash equivalents of $72.2 million, of which $71.2 million was held by our foreign subsidiaries. As of March 31, 2018, we had approximately $272.1 million of total unremitted foreign earnings. It is our intent to indefinitely reinvest $247.0 million of these earnings to support the current and future capital needs of our foreign operations, including debt repayments. In the first quarter of 2018, we recorded withholding taxes on the earnings in certain foreign subsidiaries that we plan to repatriate in the foreseeable future. The foreign withholding taxes that would be required if we were to remit the indefinitely reinvested foreign earnings to the United States would be approximately $4.0 million.

We plan to make expenditures of approximately $13.0 to $14.0 million during the remainder of 2018 for property, plant, and equipment, including approximately $3.0 million for our Ohio manufacturing facility, which will be completed in the first half of 2018.

In the future, our liquidity position will be primarily affected by the level of cash flows from operations, cash paid to satisfy debt repayments, capital projects, dividends, stock repurchases, or acquisitions. We believe that our existing resources, together with the cash available from our credit facilities and the cash we expect to generate from operations, will be sufficient to meet the capital requirements of our current operations for the foreseeable future.

Liquidity and Capital Resources (continued)

Revolving Credit Facility

In 2017, we entered into an Amended and Restated Credit Agreement, as amended (the 2017 Credit Agreement), which is a five-year unsecured multi-currency revolving credit facility in the aggregate principal amount of up to $300 million. The 2017 Credit Agreement also includes an uncommitted unsecured incremental borrowing facility of up to an additional $100 million. The principal on any borrowings is due on March 1, 2022. Borrowing may be denominated in U.S. dollars or certain foreign currencies as defined in the 2017 Credit Agreement. Interest on any loans outstanding under the 2017 Credit Agreement accrues and generally is payable quarterly in arrears at one of the following rates selected by us: (i) the Base Rate, calculated as the highest of (a) the federal funds rate plus 0.50%, (b) the prime rate as published by Citizens Bank, and (c) the thirty-day London Inter-Bank Offered Rate (LIBOR) rate, as defined, plus 0.50%; or (ii) the LIBOR rate (with a zero percent floor), as defined, plus an applicable margin of 1% to 2%. The applicable margin is determined based upon the ratio of our total debt, net of certain cash, as defined, to earnings before interest, taxes, depreciation, and amortization (EBITDA), as defined in the 2017 Credit Agreement. For this purpose, total debt net of certain cash is defined as total debt less the sum of (i) unrestricted U.S. cash, and (ii) 65% of unrestricted cash outside of the United States, but no more than an aggregate amount of $30 million.

Our obligations under the 2017 Credit Agreement may be accelerated upon the occurrence of an event of default under the 2017 Credit Agreement, which includes customary events of default including, without limitation, payment defaults, defaults in the performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy- and insolvency-related defaults, defaults relating to such matters as the Employment Retirement Income Security Act (ERISA), unsatisfied judgments, the failure to pay certain indebtedness, and a change of control default. In addition, the 2017 Credit Agreement contains negative covenants applicable to us, including financial covenants requiring us to comply with a maximum consolidated leverage ratio of 3.5 to 1, a minimum consolidated interest coverage ratio of 3 to 1, and restrictions on liens, indebtedness, fundamental changes, dispositions of property, making certain restricted payments (including dividends and stock repurchases), investments, transactions with affiliates, sale and leaseback transactions, swap agreements, changing our fiscal year, arrangements affecting subsidiary distributions, entering into new lines of business, and certain actions related to a discontinued operation. As of March 31, 2018, we were in compliance with these covenants.

Loans under the 2017 Credit Agreement are guaranteed by certain of our domestic subsidiaries pursuant to an Amended and Restated Guarantee Agreement. In addition, one of our foreign subsidiaries entered into a guarantee agreement limited to certain obligations of two foreign subsidiary borrowers.

As of March 31, 2018, the outstanding balance under the 2017 Credit Agreement was $235.9 million, including $56.8 million of Canadian dollar-denominated and $50.1 million of euro-denominated borrowings. As of March 31, 2018, we had $63.7 million of borrowing capacity available under the 2017 Credit Agreement, which was calculated by translating our foreign-denominated borrowings using borrowing date foreign exchange rates.

The weighted average interest rate for the revolving credit facility was 2.86% as of March 31, 2018.

Sale-Leaseback Financing Arrangement

We have a sale-leaseback financing arrangement for a manufacturing facility in Germany. Under this arrangement, the quarterly lease payment includes principal, interest, and a payment to the landlord toward a loan receivable. The lease arrangement includes a net fixed price purchase option of $1.6 million at the end of the lease term in 2022. At March 31, 2018, $4.6 million was outstanding under this capital lease obligation with an interest rate of 1.79% on the outstanding obligation.

Interest Rate Swap Agreement

In January 2015, we entered into a swap agreement (2015 Swap Agreement) to hedge our exposure to movements in the three-month LIBOR rate on future outstanding debt. The 2015 Swap Agreement expires on March 27, 2020, and has a $10 million notional value. Under the 2015 Swap Agreement, on a quarterly basis we receive a three-month LIBOR rate and pay a fixed rate of interest of 1.50% plus an applicable margin.

We believe that any credit risk associated with the swap agreement is remote based on our financial position and the creditworthiness of the financial institution that issued the 2015 Swap Agreement. At March 31, 2018, the 2015 Swap Agreement had an unrealized gain of $0.2 million, which represents the estimated amount that we would receive from the counterparty in the event of an early termination.

Liquidity and Capital Resources (continued)

The counterparty to the 2015 Swap Agreement could demand an early termination of the 2015 Swap Agreement if we were to be in default under the 2017 Credit Agreement, or any agreement that amends or replaces the 2017 Credit Agreement in which the counterparty is a member, and if we were to be unable to cure the default. An event of default under the 2017 Credit Agreement includes customary events of default and failure to comply with financial covenants, including a maximum consolidated leverage ratio of 3.5 to 1 and a minimum consolidated interest coverage ratio of 3 to 1.

Item 3 – Quantitative and Qualitative Disclosures About Market Risk

Our exposure to market risk from changes in interest rates and foreign currency exchange rates has not changed materially from our exposure at fiscal year-end 2017 as disclosed in Item 7A of our Annual Report on Form 10-K for the fiscal year ended December 30, 2017, filed with the SEC.

Item 4 – Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2018. The term "disclosure controls and procedures," as defined in Securities Exchange Act Rules 13a-15(e) and 15d-15(e), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based upon the evaluation of our disclosure controls and procedures as of March 31, 2018, our Chief Executive Officer and Chief Financial Officer concluded that as of March 31, 2018, our disclosure controls and procedures were effective at the reasonable assurance level.

(b) Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the fiscal quarter ended March 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1A – Risk Factors

Except for the addition of the sentences below to the "*Our global operations subject us to various risks that may adversely affect our results of operations"* risk factor, there have been no material changes from the risk factors disclosed in Part I, Item 1A of the Company's Annual Report on Form 10-K for the fiscal year ended December 30, 2017, filed with the SEC.

Among the $50 billion in U.S. trade tariffs proposed by the Trump administration against China, pulp and paper machinery equipment is a potential target facing a 25% duty. If the United States were to impose significant tariffs or taxes on goods imported into the United States, the cost of our products could significantly increase, which in turn could have a material adverse effect on our business and results of operations.

The United States also imposed new trade sanctions against certain persons in Russia in April 2018, in addition to those previously imposed in 2014 and 2017.

Item 6 – Exhibits

Exhibit Number	Description of Exhibit
10.1*	Form of Performance-Based Restricted Stock Unit Award Agreement between the Company and its executive officers used for restricted stock unit awards on or after March 5, 2014.
10.2*	Form of Time-Based Restricted Stock Unit Award Agreement between the Company and its executive officers used for restricted stock unit awards on or after March 5, 2014.
10.3*	Summary of non-employee director compensation of the Registrant.
10.4*	Form of Directors Restricted Stock Unit Award Agreement between the Company and its non-employee directors used for restricted stock unit awards on or after March 5, 2014.
31.1	Certification of the Principal Executive Officer of the Registrant Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of the Principal Financial Officer of the Registrant Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32	Certification of the Chief Executive Officer and the Chief Financial Officer of the Registrant Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.**
101.SCH	XBRL Taxonomy Extension Schema Document.**
101.CAL	XBRL Taxonomy Calculation Linkbase Document.**
101.LAB	XBRL Taxonomy Label Linkbase Document.**
101.PRE	XBRL Taxonomy Presentation Linkbase Document.**
101.DEF	XBRL Taxonomy Definition Linkbase Document.**

* Management contract or compensatory plan or arrangement.

** Submitted electronically herewith.

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Condensed Consolidated Balance Sheet as of March 31, 2018 and December 30, 2017, (ii) Condensed Consolidated Statement of Income for the three-month periods ended March 31, 2018 and April 1, 2017, (iii) Condensed Consolidated Statement of Comprehensive Income for the three-month periods ended March 31, 2018 and April 1, 2017, (iv) Condensed Consolidated Statement of Cash Flows for the three-month periods ended March 31, 2018 and April 1, 2017, (v) Condensed Consolidated Statement of Stockholders' Equity for the three-month periods ended March 31, 2018 and April 1, 2017, and (vi) Notes to Condensed Consolidated Financial Statements.

KADANT INC.

SIGNATURE

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.

	KADANT INC.
Date: May 9, 2018	/s/ Michael J. McKenney
	Michael J. McKenney
	Executive Vice President and Chief Financial Officer
	(Principal Financial Officer)

Exhibit 10.1

PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

KADANT INC.

One Technology Park Drive

Westford, MA 01886

NOTICE OF AWARD AND AWARD AGREEMENT

###GRANT_DATE###

###PARTICIPANT_NAME###

###HOME_ADDRESS###

Dear ###PARTICIPANT_NAME###:

Pursuant to the terms and conditions of the 2006 Equity Incentive Plan, as amended (the "Plan") of Kadant Inc. (the "Company"), you have been granted a Restricted Stock Unit/Stock Settled for ###TOTAL_AWARDS### units of stock as outlined below.

Granted To: ###PARTICIPANT_NAME###

Grant Date: ###GRANT_DATE###

Original Target Granted: ###TOTAL_AWARDS###

Potential Payout Range: 0% to 150%

Grant Price: $0.00

Expiration Date: ###EXPIRY_DATE###

Vesting Schedule: ###VEST_SCHEDULE_TABLE###

By your signature below (as indicated by clicking "accept"), you acknowledge receipt of this Award as of the Grant Date and agree that this Award is granted under and governed by the terms and conditions of the Plan and the Award Agreement, which is attached and made a part of this document. You further acknowledge receipt of the copy of the Plan.

Signature: ###PARTICIPANT_NAME### Date: ###ACCEPTANCE_DATE###

KADANT INC.

AWARD AGREEMENT FOR
PERFORMANCE-BASED RESTRICTED STOCK UNITS
("Award Agreement")

1. **Preamble.** On the date shown on the first page of this Award Agreement ("Grant Date"), the Company granted to the Recipient named on the first page (the "Recipient") restricted stock units ("RSUs") with respect to the number of shares of common stock of the Company identified on the first page of this Award Agreement ("Award Shares"), subject to the terms, conditions and restrictions set forth in this Award Agreement and the provisions of the Company's 2006 Equity Incentive Plan, as amended ("Plan"). The RSUs represent a promise by the Company to deliver the Award Shares upon vesting. Any consideration due to the Company on the issuance of Award Shares pursuant to this Award Agreement will be deemed to have been satisfied by services rendered by the Recipient to the Company during the vesting period.

2. **Restrictions on Transfer**. Unless and until the Award Shares shall have vested as provided in Section 3 below, the Recipient shall not sell, transfer, pledge, hypothecate, assign or otherwise dispose of, by operation of law or otherwise, any RSUs, or any interest therein.

3. **Vesting**.

(a) Vesting Schedule. Subject to the terms, conditions and restrictions of this Award Agreement, including the Forfeiture provisions described in Section 4 below, the Recipient shall vest in the Award Shares on the dates and in the quantities (as such quantities may be adjusted as provided in Section 3(b) below) set forth on the first page of this Notice of Award and Award Agreement (each such date being referred to as a "Vesting Date"), provided that the performance measure set forth in this Section 3(b) has been met. As soon as administratively practicable after the Vesting Date, but in any event within the period ending on the later to occur of the date that is 2 ½ months from the end of the (i) Recipient's tax year that includes the Vesting Date, or (ii) the Company's fiscal year that includes the Vesting Date, the Company shall cause its transfer agent to issue and deliver the Award Shares in the name of the Recipient, subject to payment of all applicable withholding taxes pursuant to Section 6 below.

(b) Performance Measure. The Company has established as the performance measure earnings before interest, taxes, depreciation and amortization (EBITDA) generated by its continuing operations during the fiscal year ending [date] (the "[year] fiscal year") (the "Measurement Period"), equal to the amount set forth in Exhibit A to this Award Agreement and as such amount may be adjusted as set forth in such Exhibit A (the "Target EBITDA"). Upon the conclusion of the Measurement Period, the Company shall calculate and determine the actual EBITDA generated by its continuing operations during the Measurement Period as determined in Exhibit A ("Actual EBITDA"). The number of Award Shares deliverable to the Recipient will be adjusted and determined by a continuous line graph based on the following data points:

Actual EBITDA is:	Number of Award Shares Deliverable
Less than 50% of Target EBITDA	0% of Award Shares
50% of Target EBITDA	50% of Award Shares
100% of Target EBITDA	100% of Award Shares
115% or greater of Target EBITDA	150% of Award Shares

In the event that the Company does not generate Actual EBITDA equal to or more than 50% of Target EBITDA, then all of the RSUs shall be automatically forfeited to the Company. The Compensation Committee of the Company's Board of Directors shall be responsible for certifying the extent to which the performance measure has been met, prior to the release of the Company's earnings for the full [year] fiscal year.

4. **Forfeiture**.

(a) Definitions. For purposes of this Award Agreement, "Forfeiture" shall mean any forfeiture of RSUs pursuant to Section 4(b) below. For purposes of this Award Agreement, "employ" or "employment" with the Company shall include employment with a parent or subsidiary of the Company, which controls, is controlled by, or under common control of the Company.

(b) Termination of Employment; Death and Disability. In the event that the Recipient ceases to be employed by the Company prior to a Vesting Date for any reason or for no reason (other than upon a "Change in Control" as provided in Section 4(c) or upon death or disability meeting the requirements set forth in this Section 4(b)), with or without cause, then any of the Recipient's RSUs that have not previously vested shall be automatically and immediately forfeited and returned to the Company as of the date employment ceases. In the event of the Recipient's death or disability that occurs prior to a Vesting Date and before the last day of the Measurement Period, then 100% of the Recipient's RSUs that have not previously been forfeited or vested shall become immediately vested and no longer subject to the Forfeiture provisions in this Section 4, and the Company shall immediately deliver to the Recipient (or his or her beneficiary in the event of death), as soon as administratively feasible but no later than 30 days after the vesting thereof that number of Award Shares to the Recipient equal to the number shown on the first page of this Award Agreement without adjustment. In the event of the Recipient's death or disability that occurs prior to a Vesting Date and on or after the last day of the Measurement Period, then 100% of the Recipient's RSUs that have not previously been forfeited or vested shall become immediately vested and no longer subject to the Forfeiture provisions in this Section 4, and the Company shall immediately deliver to the Recipient (or his or her beneficiary in the event of death), as soon as administratively feasible but no later than 30 days after the vesting thereof that number of Award Shares to the Recipient equal to the number of Award Shares deliverable based on the achievement of the performance measures, as adjusted and determined in Section 3 (less any Award Shares that have been previously forfeited or vested and issued). For purposes of this Award Agreement, "disability" means that you are receiving disability benefits under the Company's Long Term Disability Coverage, as then in effect, on the date employment ceases.

(c) Change in Control. In the event of a "Change in Control" that occurs (i) prior to the Vesting Date and before the last day of the Measurement Period and (ii) on a date on which the Recipient is employed by the Company, then 100% of the Recipient's RSUs that have not previously been forfeited shall become immediately vested and shall no longer be subject to the Forfeiture provisions in this Section 4, and the Company shall deliver as soon as administratively feasible but no later than 30 days after the Vesting Date that number of Award Shares to the Recipient equal to the number shown on the first page of this Award Agreement, without adjustment. In the event of a "Change in Control" that occurs (i) prior to the Vesting Date and on or after the last day of the Measurement Period and (ii) on a date on which the Recipient is employed by the Company, then 100% of the Recipient's RSUs that have not previously been forfeited shall become immediately vested and shall no longer be subject to the Forfeiture provisions in this Section 4, and the Company shall deliver as soon as administratively feasible but no later than 30 days after the Vesting Date that number of Award Shares to the Recipient equal to the number of Award Shares deliverable based on the achievement of the performance measures, as adjusted and determined in Section 3. A "Change in Control" shall have the same meaning for the purposes of this Award Agreement as set forth in Section 8 of the Plan, as the same may be amended from time to time.

5. **No Stockholder Rights.** Except as set forth in the Plan, neither the Recipient nor any person claiming under or through the Recipient shall be, or have any rights or privileges of, a stockholder of the Company in respect of the Award Shares issuable pursuant to the RSUs until the Award Shares are issued in the name of the Recipient. In particular, a Recipient holding an unvested Award shall have no ownership interest in the shares of Common Stock to which the Award relates until the Award Shares have vested, payment with respect to such Award has actually been made in shares of Common Stock, and the underlying shares of Common Stock have been issued.

6. **Withholding Taxes.** The Company's obligation to deliver Award Shares to the Recipient upon the vesting of the RSUs shall be subject to the satisfaction of all income tax (including federal, state, local and foreign taxes), social insurance, payroll tax, payment on account or other tax-related withholding requirements of any applicable jurisdiction, based on minimum statutory withholding rates for all tax purposes, including payroll and social security taxes ("Withholding Taxes"). In order to satisfy all Withholding Taxes due in connection with the award or vesting of the RSUs or the delivery of the Award Shares, the Recipient hereby irrevocably agrees to the following actions by the Company, at the Company's sole election:

(a) The Company may sell, or arrange for the sale of, such number of the Award Shares that the Recipient is entitled to receive on the Vesting Date, with no further action by the Recipient, as is sufficient to generate net proceeds at least equal to the value of the Withholding Taxes, and the Company shall retain such net proceeds in satisfaction of such Withholding Taxes. The Company shall remit to the Recipient in cash any portion of such net proceeds in excess of the value of such Withholding Taxes.

(b) The Company may retain such number of the Award Shares that the Recipient is otherwise entitled to receive on the Vesting Date, with no further action by the Recipient, by deducting and retaining from the number of Award Shares to which the Recipient is entitled that number of Award Shares as is equal to the value of the Withholding Taxes. The Recipient understands that the fair market value of the surrendered Award Shares will be determined in accordance with the Company's Stock Option and Equity Award Grant and Exercise Procedures as then in effect.

(c) The Recipient hereby appoints each of the Chief Financial Officer, General Counsel and the Secretary of the Company as his or her attorney in fact to sell or transfer the Recipient's Award Shares in accordance with this Section 6. The Recipient agrees to execute and deliver such documents, instruments and certificates as may reasonably be required in connection with the sale, transfer or retention of Award Shares pursuant to this Section 6, including an irrevocable order to sell shares authorizing a brokerage firm selected by the Company to sell the Recipient's Award Shares.

7. **No Compensation Deferral.** Neither the Plan nor this Award Agreement is intended to provide for any deferral of compensation that would be subject to Section 409A ("Section 409A") of the U.S. Internal Revenue Code of 1986, as amended. The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify the Plan and/or this Award Agreement to ensure that all awards (including, without limitation, the RSUs) are either exempt from or complaint with the requirements of Section 409A.

8. **Dilution and Other Adjustments**. In the event a stock dividend, stock split or combination of shares, or other distribution with respect to holders of common stock other than normal cash dividends, occurs while the Award is outstanding (after the Grant Date and before the date the Award is vested), the committee appointed by the Company's Board of Directors to administer the Plan (the "Committee") shall in the manner determined in its sole discretion adjust the number of shares for which the Award may be issued to reflect such event. In the event any recapitalization, merger or consolidation involving the Company, any transaction in which the Company becomes a subsidiary of another entity, any sale or other disposition of all or a substantial portion of the assets of the Company or any similar transaction, as determined by the Committee, (any of the foregoing, a "covered transaction") occurs while the Award is outstanding, the Committee in its discretion may (i) accelerate the vesting of the Award, (ii) adjust the terms of the Award, (iii) if there is a survivor or acquiror entity, provide for the assumption of the Award by such survivor or acquiror or an affiliate thereof or for the grant of one or more replacement awards by such survivor or acquiror or an affiliate thereof, in each case on such terms as the Committee may determine, (iv) terminate the Award (provided, that if the Committee terminates the Award, it shall, in connection therewith, either (A) accelerate the vesting of the Award prior to such termination, or (B) provide for a payment to the holder of the Award of cash or other property or a combination of cash or other property in an amount reasonably determined by the Committee to approximate the value of the Award assuming it vested immediately prior to the transaction, or (C) if there is a survivor or acquiror entity, provide for the grant of one or more replacement awards pursuant to clause (iii) above), or (v) provide for none of, or any combination of, the foregoing. No fraction of a share or fractional shares shall be purchasable or deliverable under this Award Agreement.

9. **Administration.** The Compensation Committee of the Company's Board of Directors or other committee designated in the Plan, shall have the authority to manage and control the operation and administration of this Award Agreement. Any interpretation of the Award Agreement by any of the entities specified in the preceding sentence and any decision made by any of them with respect to the Award Agreement is final and binding.

10. **Plan Definitions.** Notwithstanding anything in this Award Agreement to the contrary, the terms of this Award Agreement shall be subject to the terms of the Plan, a copy of which has already been provided to the Recipient.

11. **Recipient's Undertakings.** In signing this Award Agreement and accepting the RSU, the Recipient acknowledges that:

(a) The Plan and this Award were established voluntarily by the Company, each is discretionary in nature, and each may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Award Agreement;

(b) The grant of RSUs is voluntary and occasional and does not create any contractual or other right to receive future awards of RSUs, or benefits in lieu of RSUs even if RSUs have been awarded repeatedly in the past or future;

(c) All decisions with respect to future grants of RSUs, if any, will be at the sole discretion of the Company;

(d) The Recipient's participation in the Plan and receipt and acceptance of the Award is voluntary;

(e) RSUs are an extraordinary item that do not constitute compensation of any kind for services of any kind rendered to the Company or to the Recipient's employer, and RSUs are outside the scope of the Recipient's employment contract, if any;

(f) RSUs are not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or the Recipient's employer;

(g) The future value of the underlying Award Shares is unknown and cannot be predicted with certainty;

(h) The value of the Award Shares underlying the RSUs may increase or decrease in value during the period from the Grant Date to the Vesting Date;

(i) In consideration of the grant of RSUs, no claim or entitlement to compensation or damages arises from termination of the RSUs or diminution in value of the RSUs or Award Shares received upon vesting of RSUs resulting from termination of the Recipient's employment by the Company or the Recipient's employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Recipient irrevocably releases the Company and his or her employer from any such claim that may arise; and if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by signing this Award Agreement, the Recipient shall be deemed irrevocably to have waived his or her entitlement to pursue such claim; and

(j) Further, if the Recipient ceases to be an employee (whether or not in breach of local labor laws), the Recipient's right to receive RSUs and vest under the Award Agreement or Plan, if any, will terminate effective as of the date that the Recipient is no longer actively employed by the Company and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of "garden leave" or similar period pursuant to local law); and the Compensation Committee of the Company's Board of Directors shall have the exclusive discretion to determine when the Recipient is no longer actively employed for purposes of this Award Agreement and the Plan.

12. **Data Privacy Notice**. The Company and its subsidiaries or affiliates, including the Recipient's employer ("we" "us" or "our"), will process the Recipient's personal data in connection with the Plan.

We will collect, store, use, transfer or otherwise process the Recipient's personal data in order to operate the Plan. This includes:

- the Recipient's name
- contact details (home address, telephone number, personal and/or work email address)
- date of birth
- social security number
- tax or identification number
- salary, bonus and other compensation
- national, federal, state, provincial and any other tax information
- nationality and tax residency
- information with regard to job status termination and disability benefits
- job title
- information with regard to any shares or directorships held
- details of options or awards or any other interests in shares awarded, cancelled, exercised, vested, unvested or outstanding in your name

all such information referred to as "Data".

We require, and will use, the Data for the purposes of implementing, administering and managing the Recipient's participation in the Plan, including the award and vesting of restricted stock units to the Recipient, and subsequent transactions in the shares issued pursuant to such awards, including the processing and holding of cash received as proceeds from a transaction or as a cash dividend.

We will transfer the Data to:

1) other members of the Kadant group of companies, including Kadant Inc. in the United States or;
2) any third party we engage for the purpose of selling the shares the Recipient receives or to which the Recipient is entitled under the Plan or;
3) any third party engaged by the Company including any third party broker, stock plan service provider or administrator and the Company's transfer agent; or
4) other third parties or tax authorities assisting us with the processing of the Data or required in connection with legal and tax compliance or reporting.

for the purposes mentioned above, for other employment purposes and to carry out transactions in the Kadant shares or cash the Recipient may receive or hold as a result of his or her participation in the Plan.

The third parties may be located in the United States or in another country, and that third party country may have different data privacy laws and protections than in the Recipient's country. The third parties may transfer the Data for the purposes described herein, including to a broker or other stock plan service provider or third party as may be required in respect of the Plan and the subsequent holding of Award Shares or cash on the Recipient's behalf.

By accepting this Award (as indicated by clicking "accept"), the Recipient acknowledges and agrees to us processing the Data as set out herein.

13. **Miscellaneous**.

(a) No Rights to Employment. The Recipient acknowledges and agrees that the vesting of the RSUs pursuant to this Award Agreement is earned only in accordance with the terms hereof. The Recipient further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee for the vesting period, for any period, or at all.

(b) Unfunded Rights. The right of the Recipient to receive Award Shares pursuant to this Award Agreement is an unfunded and unsecured obligation of the Company. The Receipient shall have no rights under this Award Agreement other than those of an unsecured general creditor of the Company.

(c) Severability. The invalidity or unenforceability of any provision of this Award Agreement shall not affect the validity or enforceability of any other provision of this Award Agreement, and each other provision of this Award Agreement shall be severable and enforceable to the extent permitted by law.

(d) Waiver. Any provision for the benefit of the Company contained in this Award Agreement may be waived, either generally or in any particular instance, by the Compensation Committee of the Board of Directors of the Company.

(e) Binding Effect. This Award Agreement shall be binding upon and inure to the benefit of the Company and the Recipient and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in this Award Agreement.

(f) Language. The English version of this Award Agreement, the Plan and any other document delivered pursuant to either the Award Agreement or the Plan, will control over any translated version of any such document in the event such translated version is different from the English version.

(g) Entire Agreement. This Award Agreement and the Plan constitute the entire agreement between the parties, and supercedes all prior agreements and understandings, relating to the subject matter of this Award Agreement.

(h) Governing Law. This Award Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(i) Amendment**.** This Award Agreement may be amended only by written agreement between the Recipient and the Company, without the consent of any other person.

EXHIBIT A

TO PERFORMANCE-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

The Target EBITDA for the Company's continuing operations for the fiscal year ending [date] ([year] fiscal year) (the "Measurement Period") is $[amount].

Target EBITDA shall be adjusted to exclude the following items occurring during the measurement period:

- Results from the date of sale related to any operation that was sold during the Measurement Period

For purposes of this Agreement, Actual EBITDA generated during the Measurement Period by the Company's continuing operations shall be calculated as follows:

(1) Operating Income from continuing operations

(2) Operating Income shall be adjusted to exclude the effects of the following items:

- Depreciation and amortization expense
- Restructuring costs or other expense (income) which is presented on a separate line item in the Company's income statement as included in its earnings release and SEC filings
- Non-cash compensation expense from equity compensation
- Results from any operations acquired during the Measurement Period

(3) The result shall be Actual EBITDA

Exhibit 10.2

TIME-BASED RESTRICTED STOCK UNIT AWARD AGREEMENT

KADANT INC.

One Technology Park Drive

Westford, MA 01886

NOTICE OF AWARD AND AWARD AGREEMENT

###GRANT_DATE###

###PARTICIPANT_NAME###

###HOME_ADDRESS###

Dear ###PARTICIPANT_NAME###:

Pursuant to the terms and conditions of the 2006 Equity Incentive Plan, as amended (the “Plan”) of Kadant Inc. (the “Company”), you have been granted a Restricted Stock Unit/Stock Settled for ###TOTAL_AWARDS### units of stock as outlined below.

Granted to:	###PARTICIPANT_NAME###
Grant Date:	###GRANT_DATE###
Granted:	###TOTAL_AWARDS###
Grant Price:	###GRANT_PRICE###
Expiration Date:	###EXPIRY_DATE###
Vesting Schedule:	###VEST_SCHEDULE_TABLE###

By your signature below (as indicated by clicking “accept”), you hereby acknowledge receipt of this Award on the Grant Date and agree that this Award is granted under and governed by the terms and conditions of the Plan and the Award Agreement, which is attached and made a part of this document. You further acknowledge receipt of the copy of the Plan.

Participant: ###PARTICIPANT_NAME###   Date: ###GRANT_DATE###

KADANT INC.

AWARD AGREEMENT FOR
TIME-BASED RESTRICTED STOCK UNITS
("Award Agreement")

1. **Preamble.** On the effective date shown on the first page of this Award Agreement ("Grant Date"), the Company granted to the Recipient named on the first page (the "Recipient") restricted stock units ("RSUs") with respect to the number of shares of common stock of the Company identified on the first page of this Award Agreement ("Award Shares"), subject to the terms, conditions and restrictions set forth in this Award Agreement and the provisions of the Company's Amended and Restated Equity Incentive Plan, as amended from time to time ("Plan"). The RSUs represent a promise by the Company to deliver the Award Shares upon vesting. Any consideration due to the Company on the issuance of Award Shares pursuant to this Award Agreement will be deemed to have been satisfied by services rendered by the Recipient to the Company during the vesting period.

2. **Restrictions on Transfer**. Unless and until the Award Shares shall have vested as provided in Section 3 below, the Recipient shall not sell, transfer, pledge, hypothecate, assign or otherwise dispose of, by operation of law or otherwise, any RSUs, or any interest therein.

3. **Vesting Date**. Subject to the terms, conditions and restrictions of this Award Agreement, including the Forfeiture provisions described in Section 4 below, the Recipient shall vest in the Award Shares on the dates and in the quantities set forth in the Vesting Schedule on the first page of this Notice of Award and Award Agreement (each such date being referred to as a "Vesting Date"). As soon as administratively practicable after the Vesting Date, but in any event within the period ending on the later to occur of the date that is 2 ½ months from the end of the (i) Recipient's tax year that includes the Vesting Date, or (ii) the Company's fiscal year that includes the Vesting Date, the Company shall cause its transfer agent to issue and deliver the Award Shares in the name of the Recipient, subject to payment of all applicable withholding taxes pursuant to Section 6 below.

4. **Forfeiture**.

   (a) Definitions. For purposes of this Award Agreement, "Forfeiture" shall mean any forfeiture of RSUs pursuant to Section 4(b) below. For purposes of this Award Agreement, "employ" or "employment" with the Company shall include employment with a parent or subsidiary of the Company, which controls, is controlled by, or under common control of the Company.

   (b) Termination of Employment; Death and Disability. In the event that the Recipient ceases to be employed by the Company prior to a Vesting Date for any reason or for no reason (except for death or disability meeting the requirements set forth in this Section 4(b)), with or without cause, then any of the Recipient's RSUs that have not previously vested shall be automatically and immediately forfeited and returned to the Company as of the date employment ceases. In the event of the Recipient's death or disability that occurs prior to a Vesting Date and prior to the Recipient ceasing to be employed by the Company, then 100% of the Recipient's RSUs that have not previously been forfeited or vested shall become immediately vested and no longer subject to the Forfeiture provisions in this Section 4, and the Company shall immediately deliver to the Recipient (or his or her beneficiary in the event of death), the vested Award Shares (less any Award Shares that have been previously forfeited or vested and issued) as soon as administratively feasible but no later than 30 days after the vesting thereof. For purposes of this Award Agreement, "disability" means that you are receiving disability benefits under the Company's Long Term Disability Coverage, as then in effect, on the date employment ceases.

   (c) Change in Control. In the event of a "Change in Control" that occurs prior to a Vesting Date and on a date on which the Recipient is employed by the Company, then 100% of the Recipient's RSUs that have not previously been forfeited or vested shall become immediately vested and no longer be subject to the Forfeiture provisions in this Section 4, and the Company shall immediately deliver as soon as administratively feasible but no later than 30 days after the vesting date the Award Shares to the Recipient, as shown on the first page of this Award Agreement, less any Award Shares that have been previously forfeited or vested and issued. A "Change in Control" shall have the same meaning for the purposes of this Award Agreement as set forth in Section 9 of the Plan, as the same may be amended from time to time.

5. **No Stockholder Rights.** Except as set forth in the Plan, neither the Recipient nor any person claiming under or through the Recipient shall be, or have any rights or privileges of, a stockholder of the Company in respect of the Award Shares issuable pursuant to the RSUs until the Award Shares are issued in the name of the Recipient. In particular, a Recipient

holding an unvested Award shall have no ownership interest in the shares of Common Stock to which the Award relates until the Award Shares have vested, payment with respect to such Award has actually been made in shares of Common Stock, and the underlying shares of Common Stock have been issued.

6. **Withholding Taxes.** The Company's obligation to deliver Award Shares to the Recipient upon the vesting of the RSUs shall be subject to the satisfaction of all income tax (including federal, state, local and foreign taxes), social insurance, payroll tax, payment on account or other tax-related withholding requirements of any applicable jurisdiction, based on minimum statutory withholding rates for all tax purposes, including payroll and social security taxes ("Withholding Taxes"). In order to satisfy all Withholding Taxes due in connection with the award or vesting of the RSUs or the delivery of the Award Shares, the Recipient hereby irrevocably agrees to the following actions by the Company, at the Company's sole election:

   (a) The Company may sell, or arrange for the sale of, such number of the Award Shares that the Recipient is entitled to receive on the Vesting Date, with no further action by the Recipient, as is sufficient to generate net proceeds at least equal to the value of the Withholding Taxes, and the Company shall retain such net proceeds in satisfaction of such Withholding Taxes. The Company shall remit to the Recipient in cash any portion of such net proceeds in excess of the value of such Withholding Taxes.

   (b) The Company may retain such number of the Award Shares that the Recipient is otherwise entitled to receive on the Vesting Date, with no further action by the Recipient, by deducting and retaining from the number of Award Shares to which the Recipient is entitled that number of Award Shares as is equal to the value of the Withholding Taxes. The Recipient understands that the fair market value of the surrendered Award Shares will be determined in accordance with the Company's Stock Option and Equity Award Grant and Exercise Procedures as then in effect.

   (c) The Recipient hereby appoints each of the Chief Financial Officer, General Counsel and the Secretary of the Company as his or her attorney in fact to sell or transfer the Recipient's Award Shares in accordance with this Section 6. The Recipient agrees to execute and deliver such documents, instruments and certificates as may reasonably be required in connection with the sale, transfer or retention of Award Shares pursuant to this Section 6, including an irrevocable order to sell shares authorizing a brokerage firm selected by the Company to sell the Recipient's Award Shares.

7. **No Compensation Deferral.** Neither the Plan nor this Award Agreement is intended to provide for any deferral of compensation that would be subject to Section 409A ("Section 409A") of the U.S. Internal Revenue Code of 1986, as amended. Notwithstanding the provisions of Section 12 (i), the Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify the Plan and/or this Award Agreement to ensure that all awards (including, without limitation, the RSUs) are either exempt from or compliant with the requirements of Section 409A.

8. **Administration.** The Compensation Committee of the Company's Board of Directors or other committee designated in the Plan, shall have the authority to manage and control the operation and administration of this Award Agreement. Any interpretation of the Award Agreement by any of the entities specified in the preceding sentence and any decision made by any of them with respect to the Award Agreement is final and binding.

9. **Plan Definitions.** Notwithstanding anything in this Award Agreement to the contrary, the terms of this Award Agreement shall be subject to the terms of the Plan, a copy of which has already been provided to the Recipient.

10. **Recipient's Undertakings.** In signing this Award Agreement and accepting the RSU, the Recipient acknowledges that:

   (a) The Plan and this Award were established voluntarily by the Company, each is discretionary in nature, and each may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Award Agreement;

   (b) The grant of RSUs is voluntary and occasional and does not create any contractual or other right to receive future awards of RSUs, or benefits in lieu of RSUs even if RSUs have been awarded repeatedly in the past or future;

   (c) All decisions with respect to future grants of RSUs, if any, will be at the sole discretion of the Company;

   (d) The Recipient's participation in the Plan and receipt and acceptance of the Award is voluntary;

   (e) RSUs are an extraordinary item that do not constitute compensation of any kind for services of any kind rendered to the Company or to the Recipient's employer, and RSUs are outside the scope of the Recipient's employment contract, if any;

   (f) RSUs are not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company or the Recipient's employer;

(g) The future value of the underlying Award Shares is unknown and cannot be predicted with certainty;

(h) The value of the Award Shares underlying the RSUs may increase or decrease in value during the period from the Grant Date to the Vesting Date;

(i) In consideration of the grant of RSUs, no claim or entitlement to compensation or damages arises from termination of the RSUs or diminution in value of the RSUs or Award Shares received upon vesting of RSUs resulting from termination of the Recipient's employment by the Company or the Recipient's employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Recipient irrevocably releases the Company and his or her employer from any such claim that may arise; and if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by signing this Award Agreement, the Recipient shall be deemed irrevocably to have waived his or her entitlement to pursue such claim; and

(j) Further, if the Recipient ceases to be an employee (whether or not in breach of local labor laws), the Recipient's right to receive RSUs and vest under the Award Agreement or Plan, if any, will terminate effective as of the date that the Recipient is no longer actively employed by the Company and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of "garden leave" or similar period pursuant to local law); and the Compensation Committee of the Company's Board of Directors shall have the exclusive discretion to determine when the Recipient is no longer actively employed for purposes of this Award Agreement and the Plan.

11. **Data Privacy Notice**. The Company and its subsidiaries or affiliates, including the Recipient's employer ("we" "us" or "our"), will process the Recipient's personal data in connection with the Plan.

We will collect, store, use, transfer or otherwise process the Recipient's personal data in order to operate the Plan. This includes:

- the Recipient's name
- contact details (home address, telephone number, personal and/or work email address)
- date of birth
- social security number
- tax or identification number
- salary, bonus and other compensation
- national, federal, state, provincial and any other tax information
- nationality and tax residency
- information with regard to job status termination and disability benefits
- job title
- information with regard to any shares or directorships held
- details of options or awards or any other interests in shares awarded, cancelled, exercised, vested, unvested or outstanding in your name

all such information referred to as "Data".

We require, and will use, the Data for the purposes of implementing, administering and managing the Recipient's participation in the Plan, including the award and vesting of restricted stock units to the Recipient, and subsequent transactions in the share issued pursuant to such awards, including the processing and holding of cash received as proceeds from a transaction or as a cash dividend.

We will transfer the Data to:

1) other members of the Kadant group of companies, including Kadant Inc. in the United States or;
2) any third party we engage for the purpose of selling the shares the Recipient receives or to which the Recipient is entitled under the Plan or;
3) any third party engaged by the Company including any third party broker, stock plan service provider or administrator and the Company's transfer agent; or
4) other third parties or tax authorities assisting us with the processing of the Data or required in connection with legal and tax compliance or reporting.

for the purposes mentioned above, for other employment purposes and to carry out transactions in the Kadant shares or cash the Recipient may receive or hold as a result of his or her participation in the Plan.

The third parties may be located in the United States or in another country, and that third party country may have different data privacy laws and protections than in the Recipient's country. The third parties may transfer the Data for the purposes described herein, including to a broker or other stock plan service provider or third party as may be required in respect of the Plan and the subsequent holding of Award Shares or cash on the Recipient's behalf.

By accepting this Award (as indicated by clicking "accept"), the Recipient acknowledges and agrees to us processing the Data as set out herein.

12. **Miscellaneous**.

(a) No Rights to Employment. The Recipient acknowledges and agrees that the vesting of the RSUs pursuant to this Award Agreement is earned only in accordance with the terms hereof. The Recipient further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee for the vesting period, for any period, or at all.

(b) Unfunded Rights. The right of the Recipient to receive Award Shares pursuant to this Award Agreement is an unfunded and unsecured obligation of the Company. The Recipient shall have no rights under this Award Agreement other than those of an unsecured general creditor of the Company.

(c) Severability. The invalidity or unenforceability of any provision of this Award Agreement shall not affect the validity or enforceability of any other provision of this Award Agreement, and each other provision of this Award Agreement shall be severable and enforceable to the extent permitted by law.

(d) Waiver. Any provision for the benefit of the Company contained in this Award Agreement may be waived, either generally or in any particular instance, by the Compensation Committee of the Board of Directors of the Company.

(e) Binding Effect. This Award Agreement shall be binding upon and inure to the benefit of the Company and the Recipient and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in this Award Agreement.

(f) Language. The English version of this Award Agreement, the Plan and any other document delivered pursuant to either the Award Agreement or the Plan, will control over any translated version of any such document in the event such translated version is different from the English version.

(g) Entire Agreement. This Award Agreement and the Plan constitute the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Award Agreement.

(h) Governing Law. This Award Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(i) Amendment**.** This Award Agreement may be amended only by written agreement between the Recipient and the Company, without the consent of any other person.

Exhibit 10.3

SUMMARY OF NON-EMPLOYEE DIRECTOR COMPENSATION
(Effective March 2018)

Cash Compensation

Directors of Kadant Inc. (the “company”) who are not employees are paid the following fees for serving on our board of directors:

- An annual retainer of $50,000.
- An additional annual retainer for our non-executive chairman of the board of $60,000.
- An additional annual retainer for chairmen of the following committees:
    - audit committee - $10,000;
    - compensation committee - $7,500;
    - nominating and corporate governance committee - $5,000; and
    - risk oversight committee - $5,000.
- Reimbursement of out-of pocket expenses incurred in attending or participating in meetings of our board of directors or its committees.

We do not provide any meeting fees to our directors for their board service. All annual retainers are paid in equal monthly installments.

Restricted Stock Units

Each of our non-employee directors also receives an annual award, as determined by the Board of Directors, of stock-settled restricted stock units (“RSUs”), distributable in shares of common stock upon vesting. The RSUs vest as determined by the Board of Directors.

All awards are made under our company’s stockholder-approved equity incentive plans. The vesting of all awards accelerates in the event of a change in control of our company. Any awards, to the extent not previously vested, are forfeited if the recipient is no longer a member of our board of directors on the vesting dates for any reason other than a change-in-control of the company. The terms and conditions governing these awards are stated in the form of restricted stock unit award agreement for non-employee directors filed as an exhibit to the company’s periodic reports filed with the Securities and Exchange Commission.

Stock Ownership Guidelines

Under our stock ownership guidelines adopted in March 2011, our directors are required to hold shares of our company’s common stock equivalent in value to three times their annual cash retainer. Compliance with the guidelines is measured annually following the close of the fiscal year, and directors have five years from the later of adoption of our stock ownership guidelines or their appointment as a director to attain compliance.

Exhibit 10.4

DIRECTOR RESTRICTED STOCK UNIT AWARD AGREEMENT

KADANT INC.

One Technology Park Drive

Westford, MA 01886

NOTICE OF AWARD AND AWARD AGREEMENT

###GRANT_DATE###

###PARTICIPANT_NAME###

###HOME_ADDRESS###

Dear ###PARTICIPANT_NAME###:

Pursuant to the terms and conditions of the 2006 Equity Incentive Plan, as amended (the "Plan") of Kadant Inc. (the "Company"), you have been granted a Restricted Stock Unit/Stock Settled for ###TOTAL_AWARDS### units of stock as outlined below.

Granted To: ###PARTICIPANT_NAME###

Grant Date: ###GRANT_DATE###

Granted: ###TOTAL_AWARDS###

Grant Price: ###GRANT_PRICE###

Expiration Date: ###EXPIRY_DATE###

Vesting Schedule: ###VEST_SCHEDULE_TABLE###

By your signature below (as indicated by clicking "accept"), you hereby acknowledge receipt of this Award on the Grant Date and agree that this Award is granted under and governed by the terms and conditions of the Plan and the Award Agreement, which is attached and made a part of this document. You further acknowledge receipt of the copy of the Plan.

Signature: ###PARTICIPANT_NAME### Date: ###GRANT_DATE###

KADANT INC.

AWARD AGREEMENT FOR

DIRECTOR RESTRICTED STOCK UNITS

("Award Agreement")

1. **Preamble.** On the date shown on the first page of this Award Agreement ("Grant Date"), the Company granted to the Recipient named on the first page (the "Recipient") restricted stock units ("RSUs") with respect to the number of shares of common stock of the Company identified on the first page of this Award Agreement ("Award Shares"), subject to the terms, conditions and restrictions set forth in this Award Agreement and the provisions of the Company's Amended and Restated Equity Incentive Plan, as amended from time to time ("Plan"). The RSUs represent a promise by the Company to deliver the Award Shares upon vesting. Any consideration due to the Company on the issuance of Award Shares pursuant to this Award Agreement will be deemed to have been satisfied by services rendered by the Recipient to the Company during the vesting period.

2. **Restrictions on Transfer**. Unless and until the Award Shares shall have vested as provided in Section 3 below, the Recipient shall not sell, transfer, pledge, hypothecate, assign or otherwise dispose of, by operation of law or otherwise, any RSUs, or any interest therein.

3. **Vesting Date**. Subject to the terms, conditions and restrictions of this Award Agreement, including the Forfeiture provisions described in Section 4 below, the Recipient shall vest in the Award Shares on the dates and in the quantities set forth in the Vesting Schedule on the first page of this Notice of Award and Award Agreement (each such date being referred to as a "Vesting Date"). As soon as administratively practicable after the Vesting Date, but in any event within the period ending on the later to occur of the date that is 2 ½ months from the end of the (i) Recipient's tax year that includes the Vesting Date, or (ii) the Company's fiscal year that includes the Vesting Date, the Company shall cause its transfer agent to issue and deliver the Award Shares in the name of the Recipient, subject to payment of all applicable withholding taxes pursuant to Section 6 below.

4. **Forfeiture**.

   (a) Definitions. For purposes of this Award Agreement, "Forfeiture" shall mean any forfeiture of RSUs pursuant to Section 4(b) below.

   (b) Termination of Service as a Director. In the event that the Recipient ceases to be a director of the Company prior to the Vesting Date set forth in Section 3 above for any reason or no reason, with or without cause, other than upon a "Change in Control", then any of the Recipient's RSUs that have not previously vested shall be automatically and immediately forfeited and returned to the Company. A "Change in Control" shall have the same meaning for the purposes of this Award Agreement as defined in Section 8 of the Plan, as the same may be amended from time to time. A date that a Change in Control occurs shall be a Vesting Date and the delivery requirements of Section 3 shall apply.

5. **No Stockholder Rights.** Except as set forth in the Plan, neither the Recipient nor any person claiming under or through the Recipient shall be, or have any rights or privileges of, a stockholder of the Company in respect of the Award Shares issuable pursuant to the RSUs until the Award Shares are issued in the name of the Recipient. In particular, a Recipient holding an unvested Award shall have no ownership interest in the shares of Common Stock to which the Award relates until the Award Shares have vested, payment with respect to such Award has actually been made in shares of Common Stock, and the underlying shares of Common Stock have been issued.

6. **Withholding Taxes.** The Company's obligation to deliver Award Shares to the Recipient upon the vesting of the RSUs shall be subject to the satisfaction of all income tax (including federal, state, local and foreign taxes), social insurance, payroll tax, payment on account or other tax-related withholding requirements of any applicable jurisdiction, based on minimum statutory withholding rates for all tax purposes, including payroll and social security taxes ("Withholding Taxes"). In order to satisfy all Withholding Taxes due in connection with the award or vesting of the RSUs or the delivery of the Award Shares, the Recipient hereby irrevocably agrees to the following actions by the Company, at the Company's sole election:

   (a) The Company may sell, or arrange for the sale of, such number of the Award Shares that the Recipient is entitled to receive on the Vesting Date, with no further action by the Recipient, as is sufficient to generate net proceeds at least equal to the value of the Withholding Taxes, and the Company shall retain such net proceeds in satisfaction of such Withholding Taxes. The Company shall remit to the Recipient in cash any portion of such net proceeds in excess of the value of such Withholding Taxes.

   (b) The Company may retain such number of the Award Shares that the Recipient is otherwise entitled to receive on the Vesting Date, with no further action by the Recipient, by deducting and retaining from the number of Award Shares to which the Recipient is entitled that number of Award Shares as is equal to the value of the Withholding Taxes. The Recipient understands that the fair market value of the surrendered Award Shares will be determined in accordance with the Company's Stock Option and Equity Award Grant and Exercise Procedures as then in effect.

   (c) The Recipient hereby appoints each of the Chief Financial Officer, General Counsel and the Secretary of the Company as his or her attorney in fact to sell or transfer the Recipient's Award Shares in accordance with this Section 6. The Recipient agrees to execute and deliver such documents, instruments and certificates as may reasonably be required in connection with the sale, transfer or retention of Award Shares pursuant to this Section 6, including an irrevocable order to sell shares authorizing a brokerage firm selected by the Company to sell the Recipient's Award Shares.

7. **No Compensation Deferral.** Neither the Plan nor this Award Agreement is intended to provide for any deferral of compensation that would be subject to Section 409A ("Section 409A") of the U.S. Internal Revenue Code of 1986, as amended. The Company reserves the right, to the extent the Company deems necessary or advisable in its sole discretion, to unilaterally amend or modify the Plan and/or this Award Agreement to ensure that all awards (including, without limitation, the RSUs) are either exempt from or compliant with the requirements of Section 409A.

8. **Dilution and Other Adjustments**. In the event a stock dividend, stock split or combination of shares, or other distribution with respect to holders of common stock other than normal cash dividends, occurs while the Award is outstanding (after the Grant Date and before the date the Award is vested), the committee appointed by the Company's Board of Directors to administer the Plan (the "Committee") shall in the manner determined in its sole discretion adjust the number of shares for which the Award may be issued to reflect such event. In the event any recapitalization, merger or consolidation involving the Company, any transaction in which the Company becomes a subsidiary of another entity, any sale or other disposition of all or a substantial portion of the assets of the Company or any similar transaction, as determined by the Committee, (any of the foregoing, a "covered transaction") occurs while the Award is outstanding, the Committee in its discretion may (i) accelerate the vesting of the Award, (ii) adjust the terms of the Award, (iii) if there is a survivor or acquiror entity, provide for the assumption of the Award by such survivor or acquiror or an affiliate thereof or for the grant of one or more replacement awards by such survivor or acquiror or an affiliate thereof, in each case on such terms as the Committee may determine, (iv) terminate the Award (provided, that if the Committee

terminates the Award, it shall, in connection therewith, either (A) accelerate the vesting of the Award prior to such termination, or (B) provide for a payment to the holder of the Award of cash or other property or a combination of cash or other property in an amount reasonably determined by the Committee to approximate the value of the Award assuming it vested immediately prior to the transaction, or (C) if there is a survivor or acquiror entity, provide for the grant of one or more replacement awards pursuant to clause (iii) above), or (v) provide for none of, or any combination of, the foregoing. No fraction of a share or fractional shares shall be purchasable or deliverable under this Award Agreement.

9. **Administration.** The Compensation Committee of the Company's Board of Directors or other committee designated in the Plan, shall have the authority to manage and control the operation and administration of this Award Agreement. Any interpretation of the Award Agreement by any of the entities specified in the preceding sentence and any decision made by any of them with respect to the Award Agreement is final and binding.

10. **Plan Definitions.** Notwithstanding anything in this Award Agreement to the contrary, the terms of this Award Agreement shall be subject to the terms of the Plan, a copy of which has already been provided to the Recipient.

11. **Recipient's Undertakings.** In signing this Award Agreement and accepting the RSU, the Recipient acknowledges that:

(a) The Plan and this Award were established voluntarily by the Company, each is discretionary in nature, and each may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Award Agreement;

(b) The grant of RSUs is voluntary and occasional and does not create any contractual or other right to receive future awards of RSUs, or benefits in lieu of RSUs even if RSUs have been awarded repeatedly in the past or future;

(c) All decisions with respect to future grants of RSUs, if any, will be at the sole discretion of the Company;

(d) The Recipient's participation in the Plan and receipt and acceptance of the Award is voluntary;

(e) RSUs are an extraordinary item that do not constitute compensation of any kind for services of any kind rendered to the Company or to the Recipient's employer, and RSUs are outside the scope of the Recipient's employment contract, if any;

(f) RSUs are not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculation of any severance, resignation, termination, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Company;

(g) The future value of the underlying Award Shares is unknown and cannot be predicted with certainty;

(h) The value of the Award Shares underlying the RSUs may increase or decrease in value during the period from the Grant Date to the Vesting Date;

(i) In consideration of the grant of RSUs, no claim or entitlement to compensation or damages arises from termination of the RSUs or diminution in value of the RSUs or Award Shares received upon vesting of RSUs resulting from termination of the Recipient's service as a director by the Company (for any reason whatsoever and whether or not in breach of local labor laws) and the Recipient irrevocably releases the Company from any such claim that may arise; and if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, then, by signing this Award Agreement, the Recipient shall be deemed irrevocably to have waived his or her entitlement to pursue such claim; and

(j) Further, if the Recipient ceases to be a director of the Company (whether or not in breach of local labor laws), the Recipient's right to receive RSUs and vest under the Award Agreement or Plan, if any, will terminate effective as of the date that the Recipient is no longer a director of the Company and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of "garden leave" or similar period pursuant to local law); and the Compensation Committee of the Company's Board of Directors shall have the exclusive discretion to determine when the Recipient is no a director for purposes of this Award Agreement and the Plan.

12. **Data Privacy Notice**. The Company and its subsidiaries or affiliates, ("we" "us" or "our"), will process the Recipient's personal data in connection with the Plan.

We will collect, store, use, transfer or otherwise process the Recipient's personal data in order to operate the Plan. This includes:

- the Recipient's name
- contact details (home address, telephone number, personal and/or work email address)
- date of birth
- social security number
- tax or identification number
- salary, bonus and other compensation
- national, federal, state, provincial and any other tax information
- nationality and tax residency
- information with regard to job status termination and disability benefits
- job title
- information with regard to any shares or directorships held
- details of options or awards or any other interests in shares awarded, cancelled, exercised, vested, unvested or outstanding in your name

all such information referred to as "Data".

We require, and will use, the Data for the purposes of implementing, administering and managing the Recipient's participation in the Plan, including the award and vesting of restricted stock units to the Recipient, and subsequent transactions in the shares issued pursuant to such awards, including the processing and holding of cash received as proceeds from a transaction or as a cash dividend.

We will transfer the Data to:

1) other members of the Kadant group of companies, including Kadant Inc. in the United States or;
2) any third party we engage for the purpose of selling the shares the Recipient receives or to which the Recipient is entitled under the Plan or;
3) any third party engaged by the Company including any third party broker, stock plan service provider or administrator and the Company's transfer agent; or
4) other third parties or tax authorities assisting us with the processing of the Data or required in connection with legal and tax compliance or reporting;

for the purposes mentioned above, for other service-related purposes and to carry out transactions in the Kadant shares or cash the Recipient may receive or hold as a result of his or her participation in the Plan.

The third parties may be located in the United States or in another country, and that third party country may have different data privacy laws and protections than in the Recipient's country. The third parties may transfer the Data for the purposes described herein, including to a broker or other stock plan service provider or third party as may be required in respect of the Plan and the subsequent holding of Award Shares or cash on the Recipient's behalf.

By accepting this Award (as indicated by clicking "accept"), the Recipient acknowledges and agrees to us processing the Data as set out herein.

13. **Miscellaneous**.

(a) No Rights to Employment. The Recipient acknowledges and agrees that the vesting of the RSUs pursuant to this Award Agreement is earned only in accordance with the terms hereof. The Recipient further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as a director for the vesting period, for any period, or at all.

(b) Unfunded Rights. The right of the Recipient to receive Award Shares pursuant to this Award Agreement is an unfunded and unsecured obligation of the Company. The Recipient shall have no rights under this Award Agreement other than those of an unsecured general creditor of the Company.

(c) Severability. The invalidity or unenforceability of any provision of this Award Agreement shall not affect the validity or enforceability of any other provision of this Award Agreement, and each other provision of this Award Agreement shall be severable and enforceable to the extent permitted by law.

(d) Waiver. Any provision for the benefit of the Company contained in this Award Agreement may be waived, either generally or in any particular instance, by the Compensation Committee of the Board of Directors of the Company.

(e) Binding Effect. This Award Agreement shall be binding upon and inure to the benefit of the Company and the Recipient and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in this Award Agreement.

(f) Language. The English version of this Award Agreement, the Plan and any other document delivered pursuant to either the Award Agreement or the Plan, will control over any translated version of any such document in the event such translated version is different from the English version.

(g) Entire Agreement. This Award Agreement and the Plan constitute the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Award Agreement.

(h) Governing Law. This Award Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(i) Amendment**.** This Award Agreement may be amended only by written agreement between the Recipient and the Company, without the consent of any other person.

Exhibit 31.1

CERTIFICATION

I, Jonathan W. Painter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2018 of Kadant Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2018

/s/ Jonathan W. Painter

Jonathan W. Painter
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Michael J. McKenney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended March 31, 2018 of Kadant Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 9, 2018

/s/ Michael J. McKenney

Michael J. McKenney
Chief Financial Officer

Exhibit 32

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned, Jonathan W. Painter, Chief Executive Officer, and Michael J. McKenney, Chief Financial Officer, of Kadant Inc., a Delaware corporation (the "Company"), do hereby certify, to our best knowledge and belief, that:

The Quarterly Report on Form 10-Q for the period ended March 31, 2018 of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the information contained in this Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 9, 2018

/s/ Jonathan W. Painter

Jonathan W. Painter
Chief Executive Officer

/s/ Michael J. McKenney

Michael J. McKenney
Chief Financial Officer

This certification accompanies this Quarterly Report on Form 10-Q pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by the Company for purposes of Section 18 of the Exchange Act. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.