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 September 28, 2019

OR

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

For the transition period from ________ to _________

Commission file number 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, including zip code)

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

Securities registered pursuant to Section 12(b) of the Securities Exchange Act of 1934:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $.01 par value	KAI	New York Stock Exchange

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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	Smaller reporting company
	Emerging growth company

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

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

As of October 25, 2019, the registrant had 11,272,476 shares of Common Stock outstanding.

Kadant Inc.
Quarterly Report on Form 10-Q
for the Period Ended September 28, 2019
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PART 1 – FINANCIAL INFORMATION

Item 1 – Financial Statements

KADANT INC.
Condensed Consolidated Balance Sheet
(Unaudited)

(In thousands, except share and per share amounts)	September 28, 2019	December 29, 2018
Assets		
Current Assets:		
Cash and cash equivalents	$ 48,650	$ 45,830
Restricted cash (Note 1)	1,321	287
Accounts receivable, less allowances of $2,826 and $2,897 (Note 1)	102,131	92,624
Inventories (Note 1)	108,377	86,373
Unbilled revenues	13,571	15,741
Other current assets	17,246	11,906
Total Current Assets	291,296	252,761
Property, Plant, and Equipment, at Cost	179,098	170,697
Less: accumulated depreciation and amortization	95,049	90,540
Property, Plant, and Equipment, at Cost, Net	84,049	80,157
Other Assets (Note 8)	46,040	21,310
Intangible Assets, Net (Notes 1 and 2)	179,681	113,347
Goodwill (Notes 1 and 2)	334,491	258,174
Total Assets	$ 935,557	$ 725,749
Liabilities and Stockholders' Equity		
Current Liabilities:		
Current maturities of long-term obligations (Note 5)	$ 2,749	$ 1,668
Accounts payable	40,391	35,720
Customer deposits	30,012	26,987
Accrued payroll and employee benefits	30,739	30,902
Advanced billings	8,124	5,534
Other current liabilities	31,676	28,178
Total Current Liabilities	143,691	128,989
Long-Term Obligations (Note 5)	314,075	174,153
Long-Term Deferred Income Taxes	23,692	22,962
Other Long-Term Liabilities (Note 8)	47,226	25,074
Commitments and Contingencies (Note 14)		
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	105,219	104,731
Retained earnings	429,127	393,578
Treasury stock at cost, 3,352,034 and 3,514,163 shares	(82,138)	(86,111)
Accumulated other comprehensive items (Note 9)	(47,360)	(39,376)
Total Kadant Stockholders' Equity	404,994	372,968
Noncontrolling interest	1,879	1,603
Total Stockholders' Equity	406,873	374,571
Total Liabilities and Stockholders' Equity	$ 935,557	$ 725,749

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

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KADANT INC.
Condensed Consolidated Statement of Income
(Unaudited)

(In thousands, except per share amounts)	Three Months Ended September 28, 2019	Three Months Ended September 29, 2018	Nine Months Ended September 28, 2019	Nine Months Ended September 29, 2018
Revenues (Notes 1 and 12)	$ 173,504	$ 165,745	$ 521,985	$ 469,851
Costs and Operating Expenses:				
Cost of revenues	99,257	92,652	302,852	262,515
Selling, general, and administrative expenses	47,097	42,888	144,883	133,796
Research and development expenses	2,597	2,452	7,980	8,049
Restructuring costs (Note 13)	—	378	—	1,717
	148,951	138,370	455,715	406,077
Operating Income	24,553	27,375	66,270	63,774
Interest Income	43	30	158	335
Interest Expense	(3,066)	(1,738)	(10,143)	(5,320)
Other Expense, Net (Note 7)	(98)	(245)	(296)	(736)
Income Before Provision for Income Taxes	21,432	25,422	55,989	58,053
Provision for Income Taxes (Note 4)	5,219	6,443	12,310	15,575
Net Income	16,213	18,979	43,679	42,478
Net Income Attributable to Noncontrolling Interest	(98)	(195)	(360)	(487)
Net Income Attributable to Kadant	$ 16,115	$ 18,784	$ 43,319	$ 41,991
Earnings per Share Attributable to Kadant (Note 3):				
Basic	$ 1.43	$ 1.69	$ 3.87	$ 3.79
Diluted	$ 1.41	$ 1.64	$ 3.79	$ 3.69
Weighted Average Shares (Note 3):				
Basic	11,267	11,101	11,198	11,078
Diluted	11,469	11,421	11,434	11,388

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

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

	Three Months Ended		Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Net Income	$ 16,213	$ 18,979	$ 43,679	$ 42,478
Other Comprehensive Items:				
Foreign currency translation adjustment	(9,091)	(1,121)	(7,603)	(11,561)
Pension and other post-retirement liability adjustments (net of tax provision of $12, $46, $22 and $155)	31	143	59	472
Deferred (loss) gain on cash flow hedges (net of tax (benefit) provision of ($47), $35, ($190) and ($12))	(123)	100	(524)	20
Other Comprehensive Items	(9,183)	(878)	(8,068)	(11,069)
Comprehensive Income	7,030	18,101	35,611	31,409
Comprehensive Income Attributable to Noncontrolling Interest	(24)	(191)	(276)	(430)
Comprehensive Income Attributable to Kadant	$ 7,006	$ 17,910	$ 35,335	$ 30,979

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

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

(In thousands)	Nine Months Ended September 28, 2019	Nine Months Ended September 29, 2018
Operating Activities		
Net income attributable to Kadant	$ 43,319	$ 41,991
Net income attributable to noncontrolling interest	360	487
Net income	43,679	42,478
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	24,304	17,739
Stock-based compensation expense	5,125	5,346
Right-of-use asset amortization	3,270	—
Provision for losses on accounts receivable	170	344
(Gain) loss on the sale of property, plant, and equipment	(139)	79
Other items, net	(2,316)	(3,543)
Changes in current assets and liabilities, net of effects of acquisitions:		
Accounts receivable	(1,124)	(9,598)
Unbilled revenues	1,957	(3,947)
Inventories	(10,294)	(10,155)
Other current assets	(4,093)	241
Accounts payable	2,798	4,182
Other current liabilities	(5,171)	9,384
Net cash provided by operating activities	58,166	52,550
Investing Activities		
Acquisitions, net of cash acquired (Note 2)	(177,058)	—
Purchases of property, plant, and equipment	(6,236)	(12,817)
Proceeds from sale of property, plant, and equipment	527	173
Net cash used in investing activities	(182,767)	(12,644)
Financing Activities		
Proceeds from issuance of long-term obligations	247,090	37,000
Repayment of long-term obligations	(108,272)	(81,891)
Dividends paid	(7,604)	(7,200)
Tax withholding payments related to stock-based compensation	(2,670)	(3,886)
Proceeds from issuance of Company common stock	2,006	813
Dividend paid to noncontrolling interest	—	(465)
Payment of debt issuance costs	(52)	(158)
Net cash provided by (used in) financing activities	130,498	(55,787)
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash	(2,043)	(2,906)
Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	3,854	(18,787)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	46,117	76,846
Cash, Cash Equivalents, and Restricted Cash at End of Period	$ 49,971	$ 58,059

See Note 1 for supplemental cash flow information.

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

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

	Three Months Ended September 28, 2019								
	Common Stock				Treasury Stock				
(In thousands, except share and per share amounts)	Shares	Amount	Capital in Excess of Par Value	Retained Earnings	Shares	Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at June 29, 2019	14,624,159	$ 146	$ 103,767	$ 415,605	3,369,304	$ (82,562)	$ (38,251)	$ 1,855	$ 400,560
Net income	—	—	—	16,115	—	—	—	98	16,213
Dividend declared – Common Stock, $0.23 per share	—	—	—	(2,593)	—	—	—	—	(2,593)
Activity under stock plans	—	—	1,452	—	(17,270)	424	—	—	1,876
Other comprehensive items	—	—	—	—	—	—	(9,109)	(74)	(9,183)
Balance at September 28, 2019	14,624,159	$ 146	$ 105,219	$ 429,127	3,352,034	$ (82,138)	$ (47,360)	$ 1,879	$ 406,873

	Nine Months Ended September 28, 2019								
	Common Stock				Treasury Stock				
(In thousands, except share and per share amounts)	Shares	Amount	Capital in Excess of Par Value	Retained Earnings	Shares	Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at December 29, 2018	14,624,159	$ 146	$ 104,731	$ 393,578	3,514,163	$ (86,111)	$ (39,376)	$ 1,603	$ 374,571
Net income	—	—	—	43,319	—	—	—	360	43,679
Adoption of ASU No. 2016-02, *Leases*	—	—	—	(17)	—	—	—	—	(17)
Dividends declared – Common Stock, $0.69 per share	—	—	—	(7,753)	—	—	—	—	(7,753)
Activity under stock plans	—	—	488	—	(162,129)	3,973	—	—	4,461
Other comprehensive items	—	—	—	—	—	—	(7,984)	(84)	(8,068)
Balance at September 28, 2019	14,624,159	$ 146	$ 105,219	$ 429,127	3,352,034	$ (82,138)	$ (47,360)	$ 1,879	$ 406,873

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

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

	Three Months Ended September 29, 2018								
	Common Stock				Treasury Stock				
(In thousands, except share and per share amounts)	Shares	Amount	Capital in Excess of Par Value	Retained Earnings	Shares	Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at June 30, 2018	14,624,159	$ 146	$ 101,842	$ 361,262	3,528,550	$ (86,464)	$ (36,853)	$ 1,752	$ 341,685
Net income	—	—	—	18,784	—	—	—	195	18,979
Dividend declared – Common Stock, $0.22 per share	—	—	—	(2,444)	—	—	—	—	(2,444)
Dividend paid to noncontrolling interest	—	—	—	—	—	—	—	(465)	(465)
Activity under stock plans	—	—	1,275	—	(11,687)	287	—	—	1,562
Other comprehensive items	—	—	—	—	—	—	(874)	(4)	(878)
Balance at September 29, 2018	14,624,159	$ 146	$ 103,117	$ 377,602	3,516,863	$ (86,177)	$ (37,727)	$ 1,478	$ 358,439

	Nine Months Ended September 29, 2018								
	Common Stock				Treasury Stock				
(In thousands, except share and per share amounts)	Shares	Amount	Capital in Excess of Par Value	Retained Earnings	Shares	Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
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	—	—	—	41,991	—	—	—	487	42,478
Adoption of ASU No. 2014-09, *Revenue from Contracts with Customers*	—	—	—	119	—	—	—	—	119
Adoption of ASU No. 2016-16, *Income Taxes*	—	—	—	(75)	—	—	—	—	(75)
Dividends declared – Common Stock, $0.66 per share	—	—	—	(7,326)	—	—	—	—	(7,326)
Dividend paid to noncontrolling interest	—	—	—	—	—	—	—	(465)	(465)
Activity under stock plans	—	—	(104)	—	(96,975)	2,377	—	—	2,273
Other comprehensive items	—	—	—	—	—	—	(11,012)	(57)	(11,069)
Balance at September 29, 2018	14,624,159	$ 146	$ 103,117	$ 377,602	3,516,863	$ (86,177)	$ (37,727)	$ 1,478	$ 358,439

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 trades on the New York Stock Exchange under the ticker symbol "KAI." Kadant Inc. (together with its subsidiaries, the Company) is a global supplier of high-value, critical components and engineered systems used in process industries worldwide. The Company has a diverse and large customer base, including most of the world's major paper, lumber and oriented strand board (OSB) manufacturers, and various mining companies across multiple industries. Its products, technologies, and services play an integral role in enhancing process efficiency, optimizing energy utilization, and maximizing productivity in resource-intensive industries.

The Company's operations include three reportable operating segments, Papermaking Systems, Wood Processing Systems, and Material Handling Systems, and a separate product line, Fiber-based Products, which manufactures granules made from papermaking by-products. See Note 2 for information regarding the Company's recent acquisition, which comprises its new Material Handling Systems segment.

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 September 28, 2019 and its results of operations, comprehensive income, and stockholders' equity for the three- andnine-month periods ended September 28, 2019 and September 29, 2018, and its cash flows for the nine-month periods ended September 28, 2019 and September 29, 2018. 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 29, 2018 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 29, 2018. 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 29, 2018, filed with the SEC.

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. 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.

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 29, 2018 describe the significant accounting estimates and policies used in preparation of the consolidated financial statements. There have been no material changes in the Company's significant accounting policies during the nine months ended September 28, 2019, except for the adoption of Accounting Standards Codification (ASC), *Leases (Topic 842)* (ASC 842). See *Recently Adopted Accounting Pronouncements* within this note and Note 8 for further details.

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

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

Supplemental Cash Flow Information

	Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018
Cash Paid for Interest	$ 9,711	$ 5,914
Cash Paid for Income Taxes, Net of Refunds	$ 18,037	$ 20,823
Non-Cash Investing Activities:		
Post-closing adjustment	$ —	$ 397
Liabilities assumed of acquired business	$ 28,865	$ —
Non-cash additions to property, plant, and equipment	$ 304	$ 783
Non-Cash Financing Activities:		
Issuance of Company common stock upon vesting of restricted stock units	$ 3,908	$ 3,976
Dividends declared but unpaid	$ 2,593	$ 2,444

See Note 8 for supplemental cash flow information related to the Company's lease obligations.

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 over the next twelve months.

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)	September 28, 2019	September 29, 2018	December 29, 2018	December 30, 2017
Cash and cash equivalents	$ 48,650	$ 57,384	$ 45,830	$ 75,425
Restricted cash	1,321	675	287	1,421
Total Cash, Cash Equivalents, and Restricted Cash	$ 49,971	$ 58,059	$ 46,117	$ 76,846

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 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 $5,824,000 at September 28, 2019 and $7,976,000 at December 29, 2018, 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 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)	September 28, 2019	December 29, 2018
Raw Materials	$ 48,468	$ 44,522
Work in Process	21,382	15,876
Finished Goods	38,527	25,975
	$ 108,377	$ 86,373

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	Accumulated Amortization	Currency Translation	Net
September 28, 2019				
Definite-Lived				
Customer relationships	$ 171,583	$ (48,403)	$ (5,037)	$ 118,143
Product technology	57,647	(26,754)	(1,932)	28,961
Tradenames	5,227	(2,311)	(458)	2,458
Other	17,964	(13,146)	(610)	4,208
	252,421	(90,614)	(8,037)	153,770
Indefinite-Lived				
Tradenames	26,100	—	(189)	25,911
Acquired Intangible Assets	$ 278,521	$ (90,614)	$ (8,226)	$ 179,681
December 29, 2018				
Definite-Lived				
Customer relationships	$ 113,283	$ (38,160)	$ (4,520)	$ 70,603
Product technology	46,501	(23,563)	(1,677)	21,261
Tradenames	5,227	(1,980)	(390)	2,857
Other	13,744	(11,476)	(127)	2,141
	178,755	(75,179)	(6,714)	96,862
Indefinite-Lived				
Tradenames	16,600	—	(115)	16,485
Acquired Intangible Assets	$ 195,355	$ (75,179)	$ (6,829)	$ 113,347

Intangible assets are initially recorded at fair value at the date of acquisition. Definite-lived intangible assets 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	Wood Processing Systems	Material Handling Systems	Total
Balance at December 29, 2018				
Gross balance	$ 241,912	$ 101,771	$ —	$ 343,683
Accumulated impairment losses	(85,509)	—	—	(85,509)
Net balance	156,403	101,771	—	258,174
2019 Adjustments				
Acquisition (Note 2)	—	—	80,296	80,296
Currency translation	(3,791)	(188)	—	(3,979)
Total 2019 adjustments	(3,791)	(188)	80,296	76,317
Balance at September 28, 2019				
Gross balance	238,121	101,583	80,296	420,000
Accumulated impairment losses	(85,509)	—	—	(85,509)
Net balance	$ 152,612	$ 101,583	$ 80,296	$ 334,491

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

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

Warranty Obligations

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.

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:

	Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018
Balance at Beginning of Year	$ 5,726	$ 5,498
Provision charged to expense	3,332	2,584
Usage	(2,778)	(1,828)
Acquisition	303	—
Currency translation	(175)	(215)
Balance at End of Period	$ 6,408	$ 6,039

Revenue Recognition

The Company recognizes revenue under ASC 606, *Revenue from Contracts with Customers.* Most of the Company's revenue is 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 its capital products with minimal customization are accounted for at a point in time. The Company has made a policy election not to 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 portion of the Company's revenue is 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. Contracts recognized on an over time basis are typically for large capital projects which are highly customized for the customer and, as a result, would include a significant cost to rework in the event of cancellation.

The following table presents revenue by revenue recognition method:

	Three Months Ended		Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Point in time	$ 151,101	$ 148,524	$ 457,093	$ 436,527
Over time	22,403	17,221	64,892	33,324
	$ 173,504	$ 165,745	$ 521,985	$ 469,851

The transaction price is typically based on the amount billed to the customer and includes estimated variable consideration where applicable. Such variable consideration relates to certain performance guarantees and rights to return the product. The Company estimates variable consideration as the most likely amount to which it expects to be entitled based on the terms of the contracts with customers and historical experience, where relevant. For contracts with multiple performance obligations, the transaction price is allocated to each performance obligation based on the relative stand-alone selling price.

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

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

The following table presents the disaggregation of revenues by product type and geography:

(In thousands)	Three Months Ended September 28, 2019	Three Months Ended September 29, 2018	Nine Months Ended September 28, 2019	Nine Months Ended September 29, 2018
Revenues by Product Type:				
Parts and Consumables	$ 105,513	$ 92,749	$ 330,280	$ 283,591
Capital	67,991	72,996	191,705	186,260
	$ 173,504	$ 165,745	$ 521,985	$ 469,851
Revenues by Geography:				
North America	$ 92,041	$ 74,089	291,584	227,080
Europe	49,146	44,912	131,944	131,437
Asia	20,971	32,887	61,745	78,537
Rest of World	11,346	13,857	36,712	32,797
	$ 173,504	$ 165,745	$ 521,985	$ 469,851

See Note 12, Business Segment Information, for further details on the disaggregation of revenues by segment and product line.

The following table presents balances from contracts with customers:

(In thousands)	September 28, 2019	December 29, 2018
Accounts receivable	$ 102,131	$ 92,624
Contract assets	$ 13,571	$ 15,741
Contract liabilities	$ 39,336	$ 34,774

Contract assets represent unbilled revenues associated with revenue recognized on contracts accounted for on an over time basis, which will be billed in future periods based on the contract terms. Contract liabilities consist of customer deposits, advanced billings, and deferred revenue. Deferred revenue is 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 advance 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 shipped and control of the asset has transferred to the customer. The Company recognized revenue of $4,780,000 in the third quarter of 2019, $5,787,000 in the third quarter of 2018, $28,302,000 in the first nine months of 2019 and $35,900,000 in the first nine months of 2018 that was included in the contract liabilities balance at the beginning of 2019 and 2018 for the respective periods.

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 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

Leases (Topic 842). In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-02, which requires a lessee to recognize a right-of-use (ROU) asset and a corresponding lease liability for operating leases, initially measured at the present value of the future lease payments, on 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. The Company adopted this ASU as of the beginning of fiscal 2019 using the cumulative-effect adjustment method. As a result, prior period amounts were not restated and continue to be accounted for under Topic 840, *Leases*, which did not require the recognition of operating leases on the balance sheet and is not comparative. As permitted under ASC 842, the Company elected the package of practical expedients for expired or existing contracts, which does not

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

require the reassessment of prior conclusions about lease identification, lease classification and initial direct costs. The Company also elected practical expedients relating to its ongoing accounting, including a short-term lease recognition exemption allowing lessees not to recognize ROU assets and liabilities with terms of 12 months or less and an election not to separate lease and non-lease components for all leases except vehicle leases.

The adoption of this standard as of the beginning of fiscal 2019 resulted in increases of2.3% to total assets and4.8% to total liabilities and an immaterial decrease to retained earnings. In addition, the adoption of this ASU did not have a material impact on the Company's condensed consolidated statements of income or cash flows. See Note 8, *Leases*, for required lease accounting disclosures.

Derivatives and Hedging (Topic 815), Targeted Improvements in Accounting for Hedging Activity. In August 2017, the FASB issued ASU No. 2017-12, which revises hedge accounting to better portray the economic results of an entity's risk management activities, simplifies hedge accounting guidance, and improves disclosures of hedge accounting arrangements. The Company adopted this ASU on a prospective basis at the beginning of fiscal 2019. The adoption of this ASU did not have an impact on the Company's condensed consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

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.

Compensation-Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20), Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans. In August 2018, the FASB issued ASU 2018-14, which removes, adds and clarifies several disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans. This new guidance is effective on a retrospective basis for the Company in fiscal 2020. Early adoption is permitted. The Company does not believe that the adoption of this ASU will have a material effect on its condensed consolidated financial statements.

2. Acquisitions

The Company's acquisitions have been accounted for using the purchase method of accounting and the results of the acquired businesses are included in its condensed consolidated financial statements from the date of acquisition. Historically, the Company's acquisitions have been made at prices above the fair value of identifiable net assets, resulting in goodwill. Acquisition transaction costs are included in selling, general, and administrative expenses (SG&A) in the accompanying condensed consolidated statement of income as incurred.

In the third quarter of 2019, the Company signed an agreement to acquire certain assets of a business in Brazil for its Papermaking Systems segment for approximately $407,000, of which $203,000 was paid in the third quarter of 2019. The Company expects the remaining amount to be paid by year end.

On January 2, 2019, the Company acquired, directly and indirectly, all the outstanding equity interests of Syntron Material Handling Group, LLC and certain of its affiliates (SMH) pursuant to an equity purchase agreement, dated December 9, 2018, for approximately $176,855,000, net of cash acquired. The Company funded the acquisition through borrowings under its revolving credit facility.

SMH, which comprises the Company's Material Handling Systems segment, has manufacturing operations in Mississippi, United States, and China. SMH is a leading provider of material handling equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper. The Company expects several synergies in connection with this acquisition, including expansion of product sales into new markets by leveraging SMH's existing presence, strengthening of SMH's relationships in the pulp and paper industry, and sourcing efficiencies. Goodwill from the SMH acquisition was $80,296,000, of which $58,450,000 is expected to be deductible for tax purposes over15 years. In addition, intangible assets acquired were $83,020,000, of which $70,925,000 is expected to be deductible for tax

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

2. Acquisitions (continued)

purposes over 15 years. For the nine months ended September 28, 2019, the Company recorded revenues of $61,063,000 and operating income of $877,000 for SMH from the date of acquisition, including amortization expense of $4,852,000 associated with acquired profit in inventory and backlog, and $843,000 of acquisition transaction costs.

The following table summarizes the estimated fair values of assets acquired and liabilities assumed and the purchase price for SMH. The final purchase accounting and purchase price allocation is substantially complete but remains subject to change as the Company continues to refine its valuation of certain acquired assets and liabilities, primarily related to the finalization of income taxes.

(In thousands)		Total
Net Assets Acquired:		
Cash, Cash Equivalents, and Restricted Cash	$	2,431
Accounts Receivable		10,275
Inventory		13,061
Other Current Assets		900
Property, Plant, and Equipment		7,085
Other Assets		11,083
Definite-Lived Intangible Assets		
Customer relationships		58,300
Product technology		11,000
Other		4,220
Indefinite-Lived Intangible Assets		
Tradenames		9,500
Goodwill		80,296
Total assets acquired		208,151
Accounts Payable		3,380
Other Current Liabilities		7,954
Long-Term Lease Liabilities		15,244
Long-Term Deferred Income Taxes		2,287
Total liabilities assumed		28,865
Net assets acquired	$	179,286
Purchase Price:		
Cash Paid to Seller Borrowed Under Revolving Credit Facility	$	179,286

The weighted-average amortization period for the definite-lived intangible assets above is 14 years, including weighted-average amortization periods of 15 years for customer relationships, 14 years for product technology, and 8 years for other intangible assets.

Unaudited Supplemental Pro Forma Information

Had the acquisition of SMH been completed as of the beginning of 2018, the Company's pro forma results of operations for the three- and nine-month periods ended September 28, 2019 and September 29, 2018 would have been as follows:

	Three Months Ended		Nine Months Ended	
(In thousands, except per share amounts)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Revenues	$ 173,504	$ 187,084	$ 521,985	$ 533,868
Net Income Attributable to Kadant	$ 16,167	$ 18,564	$ 47,515	$ 38,158
Earnings per Share Attributable to Kadant:				
Basic	$ 1.43	$ 1.67	$ 4.24	$ 3.44
Diluted	$ 1.41	$ 1.63	$ 4.16	$ 3.35

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

2. Acquisitions (continued)

The historical consolidated financial information of the Company and SMH has been adjusted in the pro forma information to give effect to pro forma events that are directly attributable to the acquisition and related financing arrangements, are expected to have a continuing impact on the Company, and are factually supportable.

Pro forma results include the following non-recurring pro forma adjustments that were directly attributable to the acquisition:

- Pre-tax charge to SG&A expenses of $843,000 in the nine months ended September 29, 2018 and reversal of $843,000 in the nine months ended September 28, 2019, for acquisition transaction costs.
- Estimated pre-tax charge to cost of revenues of $3,549,000 in the nine months ended September 29, 2018 and reversal of $3,549,000 in the nine months ended September 28, 2019, for the sale of inventory revalued at the date of acquisition.
- Estimated pre-tax charge to SG&A expenses of $21,000 in the three months ended September 29, 2018 and $1,303,000 in the nine months ended September 29, 2018 and reversal of $21,000 in the three months ended September 28, 2019 and $1,303,000 in the nine months ended September 28, 2019, for intangible asset amortization related to acquired backlog.
- Estimated tax effects related to pro forma adjustments.

These pro forma results of operations have been prepared for comparative purposes only, and they do not purport to be indicative of the results of operations that would have resulted had the acquisition of SMH occurred as of the beginning of 2018, or that may result in the future.

3. Earnings per Share

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

	Three Months Ended		Nine Months Ended	
(In thousands, except per share amounts)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Amounts Attributable to Kadant:				
Net Income	$ 16,115	$ 18,784	$ 43,319	$ 41,991
Basic Weighted Average Shares	11,267	11,101	11,198	11,078
Effect of Stock Options, Restricted Stock Units and Employee Stock Purchase Plan Shares	202	320	236	310
Diluted Weighted Average Shares	11,469	11,421	11,434	11,388
Basic Earnings per Share	$ 1.43	$ 1.69	$ 3.87	$ 3.79
Diluted Earnings per Share	$ 1.41	$ 1.64	$ 3.79	$ 3.69

The dilutive effect of the outstanding and unvested restricted stock units (RSUs) of the Company's common stock totaling 8,000 shares in the third quarter of 2019, 11,000 in the third quarter of 2018, 32,000 in the first nine months of 2019 and 25,000 in the first nine months of 2018 was not included in the computation of diluted EPS for the respective periods 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 provision for income taxes was $12,310,000 in the first nine months of 2019 and $15,575,000 in the first nine months of 2018. The effective tax rate of 22% in the first nine months of 2019 was higher than the Company's statutory rate of21% primarily due to the distribution of the Company's worldwide earnings, nondeductible expenses, tax expense associated with the Global Intangible Low-Taxed Income (GILTI) provisions of the Tax Cuts and Jobs Act of 2017 (2017 Tax Act), state taxes, and the cost of repatriating the earnings of certain foreign subsidiaries. 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, a net tax benefit associated with foreign exchange losses and tax costs recognized upon the Company's repatriation of certain previously taxed foreign earnings, and the reversal of tax reserves associated with uncertain tax positions. The effective tax rate of 27% in the first nine months of 2018 was higher than the Company's statutory tax rate of21% primarily due to the GILTI provisions of the 2017 Tax Act, the distribution of the Company's worldwide earnings, the cost of repatriating the earnings of certain foreign subsidiaries, and a change in estimate to the federal and state provisional net income tax expense initially recorded in 2017 for the 2017 Tax Act. This incremental tax expense was offset in part by a decrease in tax related to the reversal of tax reserves associated with uncertain tax positions and the net excess income tax benefits from stock-based compensation arrangements.

5. Long-Term Obligations

Long-term obligations are as follows:

(In thousands)	September 28, 2019	December 29, 2018
Revolving Credit Facility, due 2023	$ 280,960	$ 141,106
Commercial Real Estate Loan, due 2019 to 2028	19,688	20,475
Senior Promissory Notes, due 2023 to 2028	10,000	10,000
Finance Leases, due 2019 to 2023	2,408	—
Other Borrowings, due 2019 to 2023	3,901	4,388
Unamortized Debt Issuance Costs	(133)	(148)
Total	316,824	175,821
Less: Current Maturities of Long-Term Obligations	(2,749)	(1,668)
Long-Term Obligations	$ 314,075	$ 174,153

See Note 11 for the fair value information related to the Company's long-term obligations.

Revolving Credit Facility

In 2018, the Company entered into a second amendment (Second Amendment) to its existing amended and restatedfive-year, unsecured multi-currency revolving credit facility, dated as of March 1, 2017 (as amended, the Credit Agreement). Pursuant to the Second Amendment, the Company has a borrowing capacity of $400,000,000, with an uncommitted unsecured incremental borrowing facility of$150,000,000 under its Credit Agreement, with a maturity date of December 14, 2023. Interest on borrowings outstanding accrues and generally is payable quarterly in arrears at one of the following rates selected by the Company: (i) the Base Rate, plus an applicable margin of 0% to 1.25%, or (ii) the LIBOR rate (with azero percent floor), as defined, plus an applicable margin of 1% to 2.25%. The Base Rate is calculated as the highest of (a) the federal funds rate plus0.50%, (b) the prime rate as published by Citizens Bank, N.A. (Citizens), and (c) the thirty-day USD London Inter-Bank Offered Rate (LIBOR) rate, as defined, plus 0.50%. The applicable margin is determined based upon the ratio of the Company's total debt, net of unrestricted cash up to $30,000,000 and certain debt obligations, to earnings before interest, taxes, depreciation, and amortization (EBITDA) as defined in the Credit Agreement.

The obligations of the Company under the Credit Agreement may be accelerated upon the occurrence of an event of default, which includes customary events of default under such financing arrangements. In addition, the Credit Agreement contains negative covenants applicable to the Company and its subsidiaries, including financial covenants requiring the Company to maintain a maximum consolidated leverage ratio of 3.75 to 1.00, or for the quarter during which a material acquisition occurs and for the three fiscal quarters thereafter, 4.00 to 1.00, and limitations on making certain restricted payments (including dividends and stock repurchases).

5. Long-Term Obligations (continued)

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

As of September 28, 2019, the outstanding balance under the Credit Agreement was $280,960,000, and included $34,094,000 of Canadian dollar-denominated borrowings and $68,865,000 of euro-denominated borrowings. As of September 28, 2019, the Company had $118,798,000 of borrowing capacity available under its Credit Agreement, which was calculated by translating its foreign-denominated borrowings using borrowing date foreign exchange rates.

See Note 10, Derivatives, under the heading *Interest Rate Swap Agreements*, for information relating to the swap agreements used to hedge the Company's exposure to movements in the three-month LIBOR rate on its U.S. dollar-denominated debt borrowed under the Credit Agreement.

The weighted average interest rate for the outstanding balance under the Credit Agreement was 3.08% as of September 28, 2019.

Commercial Real Estate Loan

In 2018, the Company and certain domestic subsidiaries borrowed $21,000,000 under a promissory note (Real Estate Loan) which is repayable in quarterly principal installments of $262,500 over a ten-year period with the remaining principal balance of $10,500,000 due upon maturity. Interest accrues and is payable quarterly in arrears at a fixed rate of 4.45% per annum. Any voluntary prepayments are subject to a 2% prepayment fee if paid in the twelve months following July 6, 2019 and are subject to a 1% prepayment fee if paid in the twelve months following July 6, 2020. Thereafter, no prepayment fee will be applied to voluntary prepayment by the Company.

The Real Estate Loan is secured by real estate and related personal property of the Company and certain of its domestic subsidiaries, pursuant to the mortgage and security agreements dated July 6, 2018 (Mortgage and Security Agreements). The obligations of the Company under the Real Estate Loan may be accelerated upon the occurrence of an event of default under the Real Estate Loan and the Mortgage and Security Agreements, which includes customary events of default for financings of this type. In addition, a default under the Credit Agreement or any successor credit facility would be an event of default under the Real Estate Loan. The effective interest rate for the Real Estate Loan, including amortization of debt issuance costs, was 4.60% as of September 28, 2019.

Senior Promissory Notes

In 2018, the Company entered into an uncommitted, unsecured Multi-Currency Note Purchase and Private Shelf Agreement (Note Purchase Agreement). Simultaneous with the execution of the Note Purchase Agreement, the Company issued senior promissory notes (Initial Notes) in an aggregate principal amount of $10,000,000, with a per annum interest rate of 4.90% payable semiannually, and a maturity date of December 14, 2028. The Company is required to prepay a portion of the principal of the Initial Notes beginning on December 14, 2023 and each year thereafter, and may optionally prepay the principal on the Initial Notes, together with any prepayment premium, at any time (in a minimum amount of $1,000,000, or the foreign currency equivalent thereof, if applicable) in accordance with the Note Purchase Agreement. The obligations of the Initial Notes may be accelerated upon an event of default as defined in the Note Purchase Agreement, which includes customary events of default under such financing arrangements.

In accordance with the Note Purchase Agreement, the Company may also issue additional senior promissory notes (together with the Initial Notes, the Senior Promissory Notes) up to an additional $115,000,000 until the earlier of December 14, 2021 or the thirtieth day after written notice to terminate the issuance and sale of additional notes pursuant to the Note Purchase Agreement. The Senior Promissory Notes are *pari passu* with the Company's indebtedness under the Credit Agreement, and any other senior debt of the Company, subject to certain specified exceptions, and participate in a sharing agreement with respect to the obligations of the Company and its subsidiaries under the Credit Agreement. The Senior Promissory Notes are guaranteed by certain of the Company's domestic subsidiaries.

Debt Compliance

As of September 28, 2019, the Company was in compliance with the covenants related to its debt obligations.

5. Long-Term Obligations (continued)

Finance Leases

The Company's finance leases primarily relate to contracts for its vehicles. See Note 8 for further information relating to the Company's finance leases.

Other Borrowings

Other borrowings 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 secured loan receivable, which is included in other assets in the accompanying condensed consolidated balance sheet, was $828,000 at September 28, 2019. The lease arrangement provides for a fixed price purchase option, net of the projected loan receivable, of $1,454,000 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 September 28, 2019, $3,717,000 was outstanding under this obligation.

6. Stock-Based Compensation

The Company recognized stock-based compensation expense of $1,658,000 in the third quarter of 2019, $1,736,000 in the third quarter of 2018, $5,125,000 in the first nine months of 2019, and $5,346,000 in the first nine months of 2018 within SG&A 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 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 $6,542,000 at September 28, 2019, and will be recognized over a weighted average period of 1.6 years.

7. Retirement Benefit Plans

The Company includes the service cost component of net periodic benefit cost in operating income and 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 September 28, 2019			Three Months Ended September 29, 2018		
(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	$ —	$ 43	$ 1	$ 175	$ 35	$ 53
Interest Cost	283	27	37	298	30	43
Expected Return on Plan Assets	(248)	(16)	(1)	(322)	(11)	(1)
Recognized Net Actuarial Loss	8	5	3	135	15	34
Amortization of Prior Service Cost	—	—	—	—	2	22
	$ 43	$ 59	$ 40	$ 286	$ 71	$ 151
The weighted average assumptions used to determine net periodic benefit cost are as follows:						
Discount Rate	4.10%	2.82%	4.44%	3.51%	3.86%	3.64%
Expected Long-Term Return on Plan Assets	4.10%	9.22%	9.22%	4.50%	7.43%	7.43%
Rate of Compensation Increase	—%	2.99%	5.57%	3.00%	3.72%	3.07%

7. Retirement Benefit Plans (continued)

	Nine Months Ended September 28, 2019			Nine Months Ended September 29, 2018		
(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	$ —	$ 129	$ 3	$ 525	$ 106	$ 159
Interest Cost	850	84	112	894	90	129
Expected Return on Plan Assets	(745)	(50)	(3)	(966)	(33)	(3)
Recognized Net Actuarial Loss	24	15	9	405	46	102
Amortization of Prior Service Cost	—	—	—	—	6	66
	$ 129	$ 178	$ 121	$ 858	$ 215	$ 453
The weighted average assumptions used to determine net periodic benefit cost are as follows:						
Discount Rate	4.10%	2.81%	4.44%	3.51%	3.82%	3.64%
Expected Long-Term Return on Plan Assets	4.10%	9.22%	9.22%	4.50%	7.43%	7.43%
Rate of Compensation Increase	—%	2.99%	5.57%	3.00%	3.70%	3.07%

In 2018, the Company's board of directors and its compensation committee approved amendments to freeze and terminate the Company's U.S. pension plan (Retirement Plan) and its restoration plan (Restoration Plan) as of December 29, 2018. In November 2019, the Company will finalize the settlement amount of its Retirement Plan obligation, which requires remeasurement at the settlement date based on the participants' elections to receive either a lump sum payment or an annuity, current discount rates, asset returns, and economic conditions. The Company expects to recognize a settlement loss of approximately $7,192,000 in the fourth quarter of 2019, which is calculated as the sum of the unrecognized actuarial loss and an estimated $5,144,000 of additional cash to be paid, less the accrued pension liability. The Company expects to settle liabilities under the Restoration Plan by paying a lump sum to plan participants of $2,370,000 in early 2020. The Company does not plan to make any material cash contributions to its other pension and post-retirement plans in 2019.

8. Leases

Under ASC 842, *Leases*, the Company determines if an arrangement is a lease obligation at inception of the contract. The Company enters into operating and finance lease commitments primarily for its manufacturing and office space, vehicles, and equipment leases that expire on various dates over the next 15 years, some of which include one or more options to extend the lease for up to 5 years. In addition, the Company leases land associated with certain of its buildings in Canada and China, under long-term leases expiring on various dates ranging from 2032 to 2062, one of which includes an assumed option to extend the lease for up to 10 years.

The Company's operating lease ROU assets and corresponding lease liabilities with contract terms greater than 12 months are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. In determining the present value of future lease payments, the Company utilizes either the rate implicit in the lease if that rate is readily determinable or the Company’s incremental secured borrowing rate commensurate with the term of the underlying lease. In addition, the calculation may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. The Company recognizes its operating lease expense for lease payments on a straight-line basis over the lease term. Variable lease costs are not included in fixed lease payments and, as a result, are excluded from the measurement of the ROU assets and lease liabilities. The Company expenses all variable lease costs as incurred, which were not material for the nine months ended September 28, 2019.

8. Leases (continued)

The Company's lease agreements often contain lease and non-lease components. For real estate and equipment leases, the Company accounts for the lease and non-lease components as a single lease component. For vehicle leases, the Company does not combine lease and non-lease components.

The components of lease expense are as follows:

(In thousands)	Three Months Ended September 28, 2019	Nine Months Ended September 28, 2019
Operating Lease Cost	$ 1,390	$ 4,141
Short-Term Lease Cost	178	542
Finance Lease Cost:		
ROU asset amortization	309	907
Interest on lease liabilities	25	69
Total Finance Lease Cost	334	976
Total Lease Costs	$ 1,902	$ 5,659

Supplemental cash flow information related to leases is as follows:

(In thousands)	Nine Months Ended September 28, 2019
Cash Paid for Amounts Included in the Measurement of Lease Liabilities:	
Operating cash flows from operating leases	$ 4,223
Operating cash flows from finance leases	$ 69
Financing cash flows from finance leases	$ 854
ROU Assets Obtained in Exchange for Lease Obligations (a):	
Operating leases	$ 27,949
Finance leases	$ 3,575

(a) Includes additions related to the transition adjustment for the adoption of ASC 842. The post-adoption additions of operating leases were $12,632,000, of which $10,994,000 related to ROU assets obtained as part of the acquisition of SMH. The post-adoption additions of finance leases were $2,224,000, of which $528,000 related to ROU assets obtained as part of the acquisition of SMH.

8. Leases (continued)

Supplemental balance sheet information related to leases is as follows:

(In thousands, except lease term and discount rate)	Balance Sheet Line Item		September 28, 2019
Operating Leases:			
ROU assets	Other assets	$	27,714
Short-term liabilities	Other current liabilities	$	4,217
Long-term liabilities	Other long-term liabilities		25,047
Total operating lease liabilities		$	29,264
Finance Leases:			
ROU assets, at cost	Property, plant, and equipment, at cost	$	3,731
ROU assets accumulated amortization	Less: accumulated depreciation and amortization		(1,274)
ROU assets, net	Property, plant, and equipment, net	$	2,457
Short-term obligations	Current maturities of long-term obligations	$	1,128
Long-term obligations	Long-term obligations		1,280
Total finance lease liabilities		$	2,408
Weighted Average Remaining Lease Term:			
Operating leases			10.3
Finance leases			2.4
Weighted Average Discount Rate:			
Operating leases			3.97%
Finance leases			4.16%

As of September 28, 2019, future lease payments for lease liabilities are as follows:

(In thousands)		Operating Leases		Finance Leases
2019	$	1,387	$	320
2020		5,112		1,149
2021		4,306		743
2022		3,531		251
2023		3,078		62
Thereafter		18,637		1
Total Future Lease Payments		36,051		2,526
Less: Imputed Interest		(6,787)		(118)
Present Value of Lease Payments	$	29,264	$	2,408

As of September 28, 2019, the Company had no significant operating and finance leases that had not yet commenced.

As previously disclosed in the Company's 2018 Annual Report on Form 10-K for the fiscal year ended December 29, 2018 and under the previous lease accounting standard, future minimum lease payments for noncancelable operating leases were as follows:

(In thousands)		December 29, 2018
2019	$	4,507
2020		3,275
2021		2,230
2022		1,579
2023		987
Thereafter		1,713
Total Future Minimum Lease Payments	$	14,291

9. 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 accumulated other comprehensive items (AOCI), net of tax, are as follows:

(In thousands)	Foreign Currency Translation Adjustment	Pension and Other Post-Retirement Benefit Liability Adjustments	Deferred Loss on Cash Flow Hedges	Total
Balance at December 29, 2018	$ (34,804)	$ (4,375)	$ (197)	$ (39,376)
Other comprehensive (income) loss before reclassifications	(7,519)	23	(601)	(8,097)
Reclassifications from AOCI	—	36	77	113
Net current period other comprehensive (income) loss	(7,519)	59	(524)	(7,984)
Balance at September 28, 2019	$ (42,323)	$ (4,316)	$ (721)	$ (47,360)

Amounts reclassified from AOCI are as follows:

	Three Months Ended		Nine Months Ended		
(In thousands)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018	Statement of Income Line Item
Retirement Benefit Plans (a)					
Amortization of net actuarial loss	$ (16)	$ (184)	$ (48)	$ (553)	Other expense, net
Amortization of prior service cost	—	(24)	—	(72)	Other expense, net
Total expense before income taxes	(16)	(208)	(48)	(625)	
Income tax benefit	4	51	12	154	Provision for income taxes
	(12)	(157)	(36)	(471)	
Cash Flow Hedges (b)					
Interest rate swap agreements	(10)	17	17	(5)	Interest expense
Forward currency-exchange contracts	—	—	(129)	24	Cost of revenues
Total (expense) income before income taxes	(10)	17	(112)	19	
Income tax benefit (provision)	2	(4)	35	(5)	Provision for income taxes
	(8)	13	(77)	14	
Total Reclassifications	$ (20)	$ (144)	$ (113)	$ (457)	

(a) Included in the computation of net periodic benefit cost. See Note 7 for additional information.
(b) See Note 10 for additional information.

10. Derivatives

The Company uses derivative instruments primarily to reduce its exposure to changes in currency exchange rates and interest rates. The Company believes that any credit risk associated with its derivative instruments is remote based on the creditworthiness of the financial institutions issuing those agreements. The Company does not hold or engage in transactions involving derivative instruments for purposes other than risk management.

Interest Rate Swap Agreements

In 2018, the Company entered into an interest rate swap agreement (2018 Swap Agreement) with Citizens which has a $15,000,000 notional value and expires on June 30, 2023. In 2015, the Company also entered into an interest rate swap agreement (2015 Swap Agreement) with Citizens which has a $10,000,000 notional value and expires on March 27, 2020. The swap agreements hedge the Company's exposure to movements in the three-month LIBOR rate on U.S. dollar-denominated debt. On a quarterly basis, the Company receives a three-month LIBOR rate and pays a fixed rate of interest of 3.15% plus an applicable margin as defined in the Credit Agreement on the 2018 Swap Agreement and 1.50% plus an applicable margin as defined in the Credit Agreement on the 2015 Swap Agreement. The 2018 Swap Agreement is subject to a zero percent floor on the three-month LIBOR rate. The interest rate swap agreements are designated as cash flow hedges and the Company has structured its interest rate swap agreements to be 100% effective. The fair values of the interest rate swap agreements represent the estimated amounts the Company would receive from or pay to the counterparty in the event of early termination. Unrealized gains and losses related to the fair values of the swap agreements are recorded to AOCI, net of tax.

The counterparty to the interest rate swap agreements could demand an early termination of those agreements if the Company were to be in default under the Credit Agreement, or any agreement that amends or replaces the Credit Agreement in which the counterparty is a member, and if the Company were to be unable to cure the default (See Note 5).

Forward Currency-Exchange Contracts

The Company uses forward currency-exchange contracts that typically have maturities of twelve months or less to hedge exposures resulting from fluctuations in currency exchange rates. Such exposures result from assets and liabilities that are denominated in currencies other than functional currencies.

Forward currency-exchange contracts that hedge forecasted accounts receivable or accounts payable are designated as cash flow hedges and unrecognized gains and losses are recorded to AOCI, net of tax. Deferred gains and losses are recognized in the statement of income in the period in which the underlying transaction occurs. The fair values of forward currency-exchange contracts that are designated as fair value hedges and forward currency-exchange contracts that are not designated as hedges are recognized currently in earnings.

The Company recognized within SG&A expenses in the accompanying condensed consolidated statement of income losses of $14,000 in the third quarter of 2019, losses of $67,000 in the third quarter of 2018, losses of $46,000 in the first nine months of 2019, and losses of $40,000 in the first nine months of 2018 associated with forward currency-exchange contracts that were not designated as hedges.

10. Derivatives (continued)

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

		September 28, 2019		December 29, 2018	
(In thousands)	Balance Sheet Location	Asset (Liability) (a)	Notional Amount (b)	Asset (Liability) (a)	Notional Amount
Derivatives Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
2015 Swap Agreement	Other Current Assets	$ 26	$ 10,000	$ —	$ —
2015 Swap Agreement	Other Long-Term Assets	$ —	$ —	$ 148	$ 10,000
Forward currency-exchange contract	Other Long-Term Assets	$ —	$ —	$ 11	$ 842
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	$ (89)	$ 1,976	$ (50)	$ 2,946
2018 Swap Agreement	Other Long-Term Liabilities	$ (894)	$ 15,000	$ (352)	$ 15,000
Derivatives Not Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	$ —	$ —	$ 9	$ 1,192
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	$ (32)	$ 1,277	$ (31)	$ 1,384

(a) See Note 11 for the fair value measurements relating to these financial instruments.
(b) The total 2019 notional amounts are indicative of the level of the Company's recurring derivative activity.

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 nine months ended September 28, 2019:

(In thousands)	Interest Rate Swap Agreements	Forward Currency-Exchange Contracts	Total
Unrealized Loss, Net of Tax, at December 29, 2018	$ (170)	$ (27)	$ (197)
(Gain) loss reclassified to earnings (a)	(12)	89	77
Loss recognized in AOCI	(478)	(123)	(601)
Unrealized Loss, Net of Tax, at September 28, 2019	$ (660)	$ (61)	$ (721)

(a) See Note 9 for the income statement classification.

As of September 28, 2019, the Company expects to reclassify losses of $195,000 from AOCI to earnings over the next twelve months based on the estimated cash flows of the interest rate swap agreements and the maturity dates of the forward currency-exchange contracts.

11. 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.

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
September 28, 2019				
Assets:				
Money market funds and time deposits	$ 5,657	$ —	$ —	$ 5,657
Banker's acceptance drafts (a)	$ —	$ 5,824	$ —	$ 5,824
2015 Swap Agreement	$ —	$ 26	$ —	$ 26
Liabilities:				
2018 Swap Agreement	$ —	$ 894	$ —	$ 894
Forward currency-exchange contracts	$ —	$ 121	$ —	$ 121
December 29, 2018				
Assets:				
Money market funds and time deposits	$ 6,902	$ —	$ —	$ 6,902
Banker's acceptance drafts (a)	$ —	$ 7,976	$ —	$ 7,976
2015 Swap Agreement	$ —	$ 148	$ —	$ 148
Forward currency-exchange contracts	$ —	$ 20	$ —	$ 20
Liabilities:				
2018 Swap Agreement	$ —	$ 352	$ —	$ 352
Forward currency-exchange contracts	$ —	$ 81	$ —	$ 81

(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 nine months of 2019. The Company's banker's acceptance drafts are carried at face value which 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 values of the Company's interest rate swap agreements are based on LIBOR yield curves at the reporting date. The forward currency-exchange contracts and interest rate swap agreements are hedges of either recorded assets or liabilities or anticipated transactions and represent the estimated amount the Company would receive or pay upon liquidation of the contracts. Changes in values of the underlying hedged assets and liabilities or anticipated transactions are not reflected in the table above.

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

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

The carrying value and fair value of the Company's debt obligations, excluding lease obligations and other borrowings, are as follows:

	September 28, 2019		December 29, 2018	
(In thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Debt Obligations:				
Revolving credit facility	$ 280,960	$ 280,960	$ 141,106	$ 141,106
Commercial real estate loan	19,688	21,055	20,475	20,575
Senior promissory notes	10,000	10,928	10,000	10,120
	$ 310,648	$ 312,943	$ 171,581	$ 171,801

The carrying value of the Company's revolving credit facility approximates the fair value as the obligation bears variable rates of interest, which adjust frequently, based on prevailing market rates. The fair values of the commercial real estate loan and senior promissory notes are primarily calculated based on quoted market rates plus an applicable margin available to the Company at the respective period ends, which represent Level 2 measurements.

12. Business Segment Information

The Company has combined its operating entities intothree reportable operating segments, Papermaking Systems, Wood Processing Systems, and Material Handling Systems, and a separate product line, Fiber-based Products, as described below:

- *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 Papermaking Systems segment consists of the following product lines: Stock-Preparation; Fluid-Handling; and Doctoring, Cleaning, & Filtration.
- *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 OSB. Through this segment, the Company also provides refurbishment and repair of pulping equipment for the pulp and paper industry.
- *Material Handling Systems Segment* – The Company develops, manufactures, and markets material handling equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper.
- *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.

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

	Three Months Ended		Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Revenues:				
Stock-Preparation	$ 56,128	$ 62,983	$ 158,993	$ 164,842
Fluid-Handling	32,734	33,083	100,201	98,500
Doctoring, Cleaning, & Filtration	29,641	30,704	88,591	87,469
Papermaking Systems	118,503	126,770	347,785	350,811
Wood Processing Systems	32,731	37,042	104,649	109,335
Material Handling Systems (a)	20,282	—	61,063	—
Fiber-based Products	1,988	1,933	8,488	9,705
	$ 173,504	$ 165,745	$ 521,985	$ 469,851

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

12. Business Segment Information (continued)

	Three Months Ended		Nine Months Ended	
(In thousands)	September 28, 2019	September 29, 2018	September 28, 2019	September 29, 2018
Income Before Provision for Income Taxes:				
Papermaking Systems (b)	$ 22,798	$ 25,919	$ 61,368	$ 61,402
Wood Processing Systems (c)	6,787	8,704	22,858	21,380
Material Handling Systems (a, d)	1,742	—	877	—
Corporate and Fiber-based Products (e)	(6,774)	(7,248)	(18,833)	(19,008)
Total operating income	24,553	27,375	66,270	63,774
Interest expense, net (f)	(3,023)	(1,708)	(9,985)	(4,985)
Other expense, net (f)	(98)	(245)	(296)	(736)
	$ 21,432	$ 25,422	$ 55,989	$ 58,053
Capital Expenditures:				
Papermaking Systems	$ 1,376	$ 1,348	$ 3,890	$ 9,837
Wood Processing Systems	444	1,026	1,423	2,586
Material Handling Systems (a)	225	—	605	—
Corporate and Fiber-based Products	48	232	318	394
	$ 2,093	$ 2,606	$ 6,236	$ 12,817

(In thousands)	September 28, 2019	December 29, 2018
Total Assets:		
Papermaking Systems	$ 467,034	$ 462,297
Wood Processing Systems	248,843	247,553
Material Handling Systems (a)	198,423	—
Corporate and Fiber-based Products (g)	21,257	15,899
	$ 935,557	$ 725,749

(a) Represents SMH, which was acquired on January 2, 2019 (see Note 2).
(b) Includes restructuring costs of $378,000 in the three-month period ended September 29, 2018 and $1,717,000 in the nine-month period ended September 29, 2018 (see Note 13).
(c) Includes acquisition-related expenses of $252,000 in the nine-month period ended September 29, 2018 for the amortization of acquired backlog.
(d) Includes $21,000 in the three-month period ended September 28, 2019 and $5,695,000 in the nine-month period ended September 28, 2019 of acquisition-related expenses. Acquisition-related expenses include amortization expense associated with acquired profit in inventory and backlog and acquisition transaction costs.
(e) Corporate primarily includes general and administrative expenses.
(f) The Company does not allocate interest and other expense, net to its segments.
(g) Primarily includes Corporate and Fiber-based Products' cash and cash equivalents, tax assets, ROU assets, and property, plant, and equipment.

13. Restructuring Costs

In 2017, the Company constructed a 160,000 square foot manufacturing facility in the United States that integrated 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 $1,920,000, including $148,000 associated with severance costs for the reduction of four employees in the United States and six employees in Sweden, $1,318,000 primarily for relocation costs of machinery, equipment and administrative offices, and $454,000 associated with employee retention costs, abandonment of excess facility and other closure costs. The Company does not expect to incur additional charges related to this restructuring plan.

13. Restructuring (continued)

As a result of this plan, the Company recorded restructuring charges in its Papermaking Systems segment of $1,717,000 in the first nine months of 2018, including $1,318,000 for the relocation of machinery, equipment and administrative offices, $454,000 associated with employee retention and facility closure costs, and a reversal of $55,000 of severance costs no longer required.

14. 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 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 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 $9,065,000 at September 28, 2019 and $12,406,000 at December 29, 2018 of banker's acceptance drafts subject to recourse, which were transferred to vendors but 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 and the documents we incorporate by reference in this report include 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.

When we use the terms “we,” “us,” “our,” and the “Company,” we mean Kadant Inc., a Delaware corporation, and its consolidated subsidiaries, taken as a whole, unless the context otherwise indicates.

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 29, 2018, as filed with the Securities and Exchange Commission (SEC) and as may be further amended and/or restated in subsequent filings with the SEC.

Overview

Company Background

We are a global supplier of high-value, critical components and engineered systems 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 various mining companies serving multiple industries. 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 three reportable operating segments: Papermaking Systems, Wood Processing Systems, and Material Handling Systems, and a separate product line, Fiber-based Products. For additional information regarding our reportable segments, see Note 12, Business Segment Information, in the accompanying condensed consolidated financial statements.

Acquisitions

We expect that a significant driver of our growth over the next several years will be the acquisition of businesses and technologies 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. Our significant acquisition in 2019 is described below.

On January 2, 2019, we acquired, directly and indirectly, all the outstanding equity interests ofSyntron Material Handling Group, LLC and certain of its affiliates (SMH) for approximately $176.9 million, net of cash acquired. SMH, which comprises our Material Handling Systems segment, is a leading provider of material handling equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper. This acquisition has extended our current product portfolio, and we expect it will strengthen SMH's relationships in the pulp and paper markets. See Note 2, Acquisition, in the accompanying condensed consolidated financial statements for further details.

International Sales

Our sales to customers outside the United States, mainly in Europe, Asia, and Canada, were approximately 55% of total revenue in the first nine months of 2019 and 63% of total revenue in the first nine months of 2018. The decrease in the percentage of international sales in 2019 was primarily due to the acquisition of SMH, which predominantly sells to customers in the United States. 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 primarily 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. We currently do not use derivative instruments to hedge our exposure to exchange rate fluctuations created by the translation into the U.S. dollar of our foreign subsidiaries' results that are in functional currencies other than the U.S. dollar.

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 the 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

Overview (continued)

on Form 10-K for the fiscal year endedDecember 29, 2018. There have been no material changes to these critical accounting policies since the end of fiscal2018 that warrant disclosure.

Industry and Business Outlook

Our products are sold worldwide to process industries, and are primarily used to produce packaging, OSB, lumber, tissue, and handle bulk materials. Major markets for our products are as follows:

Packaging

Approximately 30% of our revenue in the first nine months of 2019 was from the sale of products that support packaging production. 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, usage levels of e-commerce, demand for food and beverage packaging, and greater urbanization in developing regions. The growth of e-commerce is expected to continue to increase demand for packaging grades used to make boxes. We also have expertise in fluid handling in the corrugated packaging market in which boxes are produced and have experienced growth in this market. 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.

Wood Processing

Approximately 20% of our revenue in the first nine months of 2019 was from sales to manufacturers in wood processing industries, including lumber mills, engineered wood panel producers, and sawmills, that use stranders, 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 primarily tied to new home construction and home remodeling. In addition, OSB is used in industrial applications such as crates and bed liners for shipping containers, as well as furniture. The majority of OSB and lumber demand is in North America, as houses built in North America are more often constructed of wood compared to those in other parts of the world.

Tissue and Other Paper

Approximately 14% of our revenue in the first nine months of 2019 was from the sale of products that support the manufacturing of tissue and other paper grades. Consumption of tissue is fairly stable and in the developed world tends to grow with the population. Growth rates in the developing world are expected to increase as per capita consumption of paper products increases with rising standards of living.

Material Handling

Approximately 12% of our revenue in the first nine months of 2019 was from sales of material handling equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper. We provide material handling and processing equipment such as idler rolls, conveyors, vibratory screens, and flow aids to allow for the transportation of bulk materials from source to point of processing. Demand for minerals is largely driven by industrial economic growth, while infrastructure expansions and modernization drive demand for aggregates, which include sand, gravel, and crushed stone.

Printing, Writing and Newsprint

Approximately 9% of our revenue in the first nine months of 2019 was related to products used to produce printing and writing paper grades as well as newsprint, the demand for which has 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 increased use of digital media.

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.

Bookings

Our bookings increased 4% to $171 million in the third quarter of2019 compared to the third quarter of 2018, including $18 million from an acquisition and a $3 million unfavorable effect from currency translation. Excluding the acquisition and unfavorable effect from currency translation, our bookings in the third quarter of 2019 decreased 5% compared

Overview (continued)

with the third quarter of 2018 primarily due to declines in project activity in China and lower bookings in our Wood Processing Systems segment.

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 $101 million in the third quarter of 2019, or 59% of total bookings, compared with $91 million, or 55% of total bookings, in the third quarter of 2018, including $14 million in bookings from an acquisition. Excluding the impact of the acquisition and a $2 million unfavorable effect from currency translation, our parts and consumables bookings decreased 3%.

Bookings by geographic region are as follows:

North America

The largest and most impactful regional market for our products is North America. Our bookings in North America increased to $89 million in the third quarter of 2019, including $17 million of bookings from an acquisition, compared with $78 million in the third quarter of2018. Excluding the acquisition and unfavorable effect from foreign currency translation, bookings were down 7%. The packaging market in North America experienced weak demand during the third quarter of 2019, and as a result, major containerboard producers were reported to have taken market-related downtime. According to PPI Pulp & Paper Week, U.S. containerboard producers' operating rates were below 91% for the first nine months of 2019, compared with 97% for the first nine months of 2018.

We are experiencing reduced capital project activity in our Wood Processing segment compared to the high levels that occurred in 2018, as many producers increased their capacity and modernized their facilities last year. In addition, demand for our products decreased in the first nine months of 2019 compared to the 2018 period as this segment primarily serves the housing market in North America, which continues to be challenged by high prices and low inventory.

In our Material Handling Systems segment, which primarily serves the mining and aggregates markets, we experienced a good level of project activity during the first nine months of 2019 and expect that to continue in the last quarter of the year. While some markets in the segment are experiencing a slowdown, others such as the mining, aggregates and food sectors are showing signs of increased demand.

Europe

European packaging producers are being challenged by downward price pressure, due in part to weak demand for corrugated packaging in the Eurozone and reduced export activity that has negatively impacted Europe's overall industrial economy. Despite these negative influences, our bookings in Europe increased to $40 million in the third quarter of 2019 compared with $38 million in the third quarter of 2018, including a $2 million unfavorable effect from currency translation, primarily due to several large capital orders for high-performance balers and increased demand for our Fluid-Handling products.

Asia

Our bookings in Asia decreased to $25 million in the third quarter of 2019 compared with $30 million in the third quarter of 2018, including a $1 million increase from an acquisition and a $1 million unfavorable effect from currency translation. Containerboard project activity in China continued to show signs of weak demand in the third quarter of 2019. Uncertainties in trade relations with the United States and weaker domestic demand for packaging have negatively affected investment in new projects. In addition, containerboard producers have taken market-related downtime to limit excess inventory buildup and balance supply with demand. We expect weaker demand for capital equipment in China in 2019 compared to 2018 as a result of China's recovered paper import restrictions. We expect that lower operating rates at containerboard producers resulting from weaker market conditions in China will also impact our parts and consumables business in 2019 compared to 2018, although we expect the recent capacity build-out in other parts of Asia to have a positive impact on demand for our parts and consumables in those countries after the related installations become operational in the fourth quarter of this year and throughout 2020.

Overview (continued)

Rest of World

Our bookings in the rest of the world decreased to $17 million in the third quarter of2019 compared with a record third quarter in 2018 of $20 million primarily due to a large stock preparation order from a customer in Argentina in 2018. Despite this region having a near record bookings quarter in the third quarter of 2019, South America continues to experience a constrained investment environment as a result of geopolitical conditions, which impacted our results in this region. However, we have recently seen good project activity in our Wood Processing and Fluid Handling product lines in this region.

Global Trade

In 2018, the United States began imposing tariffs on certain imports from China, which has and will continue to increase the cost of some of the equipment that we import. Although we are working to mitigate the impact of tariffs through pricing and sourcing strategies, we cannot be sure how our customers and competitors will react to certain actions we take. For more information on risks associated with our global operations, including tariffs, please see the risk factors included within this filing and Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 29, 2018, and as may be further amended and/or restated in subsequent filings with the SEC.

Results of Operations

Third Quarter 2019 Compared With Third Quarter 2018

Revenues

The following table presents changes in revenues by segment and product line between thethird quarters of 2019 and 2018, and the changes in revenues by segment and product line between the third quarters of 2019 and 2018 excluding the effect of currency translation and an acquisition. Currency translation is calculated by converting third quarter of 2019 revenues in local currency into U.S. dollars atthird quarter of 2018 exchange rates and then comparing this result with actual revenues in the third quarter of 2019. The presentation of the changes in revenues excluding the effect of currency translation and an acquisition 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 third quarters of 2019 and 2018 were as follows:

	Three Months Ended						(Non-GAAP) Adjusted	
(In thousands, except percentages)	September 28, 2019	September 29, 2018	Total Increase (Decrease)	% Change	Currency Translation	Acquisition	Total Increase (Decrease)	% Change
Stock-Preparation	$ 56,128	$ 62,983	$ (6,855)	(11)%	$ (1,534)	$ —	$ (5,321)	(8)%
Fluid-Handling	32,734	33,083	(349)	(1)%	(731)	—	382	1 %
Doctoring, Cleaning, & Filtration	29,641	30,704	(1,063)	(3)%	(686)	—	(377)	(1)%
Papermaking Systems	118,503	126,770	(8,267)	(7)%	(2,951)	—	(5,316)	(4)%
Wood Processing Systems	32,731	37,042	(4,311)	(12)%	(594)	—	(3,717)	(10)%
Material Handling Systems	20,282	—	20,282	— %	—	20,282	—	— %
Fiber-based Products	1,988	1,933	55	3 %	—	—	55	3 %
Consolidated Revenues	$ 173,504	$ 165,745	$ 7,759	5 %	$ (3,545)	$ 20,282	$ (8,978)	(5)%

Consolidated revenues increased 5% in the third quarter of 2019 largely due to our acquisition, offset in part by an unfavorable effect of currency translation. Excluding the acquisition and unfavorable effect of currency translation, revenues decreased 5% in the third quarter of 2019 compared to the third quarter of 2018.

Results of Operations (continued)

Papermaking Systems Segment

Revenues in our Papermaking Systems segment decreased 7% in the third quarter of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, revenues in the Papermaking Systems segment decreased 4% in the third quarter of 2019 compared to the third quarter of 2018, as described in the product line discussions below.

Revenues from our Stock-Preparation product line decreased 11% in the third quarter of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Stock-Preparation revenues decreased 8% in the third quarter of 2019 largely due to decreased demand for our products at our Chinese operations resulting from reduced containerboard project activity and weak market conditions primarily related to China's recovered paper import restrictions. This decrease was offset in part by increased demand for our parts and consumables products at our European operations.

Revenues from our Fluid-Handling product line decreased 1% in the third quarter of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Fluid-Handling revenues increased 1% in the third quarter of 2019.

Revenues from our Doctoring, Cleaning, & Filtration product line decreased 3% in the third quarter of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Doctoring, Cleaning, & Filtration revenues decreased 1% in the third quarter of 2019. Decreased demand for our capital equipment at our Chinese operations was largely offset by increased demand for our capital equipment at our European and North American operations.

Wood Processing Systems Segment

Revenues from our Wood Processing Systems segment decreased 12% in the third quarter of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, revenues from our Wood Processing Systems segment decreased 10% in the third quarter of 2019 due to decreased demand for our products at our North American operations resulting from reduced project activity.

Material Handling Systems Segment

Revenues from our Material Handling Systems segment in the third quarter of 2019 were from our SMH acquisition.

Fiber-based Products

Revenues from our Fiber-based Products business increased slightly in the third quarter of 2019 compared to the third quarter of 2018.

Gross Profit Margin

Gross profit margins for the third quarters of 2019 and 2018 were as follows:

	Three Months Ended	
	September 28, 2019	September 29, 2018
Papermaking Systems	44.8%	44.6%
Wood Processing Systems	41.8%	42.6%
Material Handling Systems	32.0%	—%
Fiber-based Products	46.7%	36.6%
Consolidated Gross Profit Margin	42.8%	44.1%

Consolidated gross profit margin decreased in the third quarter of 2019 due to the inclusion of the lower gross margin profile of the Material Handling Systems segment.

Results of Operations (continued)

Papermaking Systems Segment

The gross profit margin in our Papermaking Systems segment was essentially unchanged in the third quarter of 2019 compared to the third quarter of 2018, as the effect of an increase in the proportion of higher-margin parts and consumables revenues was largely offset by lower margins on our capital equipment.

Wood Processing Systems Segment

The gross profit margin in our Wood Processing Systems segment decreased in the third quarter of 2019 due to lower margins on our parts and consumables products.

Material Handling Systems Segment

The gross profit margin in our Material Handling Systems segment in the third quarter of 2019 is from our SMH acquisition.

Fiber-based Products

The gross profit margin in our Fiber-based Products business increased in the third quarter of 2019 primarily due to the impact of manufacturing efficiencies that resulted from higher production volumes to meet expected demand.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses for the third quarters of 2019 and 2018 were as follows:

(In thousands, except percentages)	Three Months Ended September 28, 2019	Three Months Ended September 29, 2018	Increase (Decrease)	% Change
Papermaking Systems	$ 28,491	$ 28,379	$ 112	— %
Wood Processing Systems	6,314	6,652	(338)	(5)%
Material Handling Systems	4,727	—	4,727	— %
Corporate and Fiber-based Products	7,565	7,857	(292)	(4)%
Consolidated SG&A	$ 47,097	$ 42,888	$ 4,209	10 %
Consolidated SG&A as a Percentage of Revenues	27.1%	25.9%		

Consolidated SG&A expenses increased 10% in the third quarter of 2019 largely due to our acquisition, offset in part by a favorable effect of currency translation of $0.8 million. Excluding the acquisition and favorable effect of currency translation, SG&A expenses increased 1% in the third quarter of 2019 compared to the third quarter of 2018.

Papermaking Systems Segment

SG&A expenses in our Papermaking Systems segment were essentially unchanged in the third quarter of 2019 compared to the third quarter of 2018.

Wood Processing Systems Segment

SG&A expenses in our Wood Processing Systems segment decreased in the third quarter of 2019 primarily due to a decrease in selling expense associated with lower revenues.

Material Handling Systems Segment

SG&A expenses in our Material Handling Systems segment in the third quarter of 2019 are from our SMH acquisition.

Corporate and Fiber-based Products

SG&A expenses for Corporate and Fiber-based Products decreased in the third quarter of 2019 primarily due to lower incentive compensation expense.

Results of Operations (continued)

Restructuring Costs

Restructuring costs in the third quarter of 2018 of $0.4 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.

Interest Expense

Interest expense increased $1.4 million to $3.1 million in the third quarter of 2019 from $1.7 million in the third quarter of 2018 primarily due to interest expense on the additional borrowings related to our SMH acquisition.

Other Expense, Net

We expect other expense, net to increase to approximately $7.3 million in the fourth quarter of 2019 from $0.1 million in the third quarter of 2019, primarily related to settlement costs associated with our U.S. pension plan (Retirement Plan). In 2018, our board of directors and compensation committee approved amendments to freeze and terminate our Retirement Plan and restoration plan (Restoration Plan) as of December 29, 2018. In November 2019, we will finalize the settlement amount of the Retirement Plan obligation, which requires remeasurement based on the participants' elections to receive either a lump sum payment or an annuity, current discount rates, asset returns, and economic conditions. We expect to recognize a pre-tax settlement loss of approximately $7.2 million in the fourth quarter of 2019, which is calculated as the sum of the unrecognized actuarial loss and an estimated $5.1 million of additional cash to be paid, less the accrued pension liability.

Provision for Income Taxes

Our provision for income taxes decreased to $5.2 million in thethird quarter of 2019 from $6.4 million in the third quarter of 2018. The effective tax rate of 24% in the third quarter of 2019 was higher than our statutory tax rate of 21% primarily due to the distribution of our worldwide earnings, tax expense associated with the Global Intangible Low-Taxed Income (GILTI) provisions of the Tax Cuts and Jobs Act of 2017 (2017 Tax Act), nondeductible expenses, state taxes, and the cost of repatriating the earnings of certain foreign subsidiaries. This incremental tax expense was offset in part by a decrease in tax related to the reversal of tax reserves associated with uncertain tax positions and the net excess income tax benefits from stock-based compensation arrangements. The effective tax rate of 25% in the third quarter of 2018 was higher than our statutory tax rate of 21% primarily due to the GILTI provisions of the 2017 Tax Act, the distribution of our worldwide earnings, and the cost of repatriating earnings of certain foreign subsidiaries. This incremental tax expense was offset in part by a decrease in tax related to the reversal of tax reserves associated with uncertain tax positions. We expect our effective tax rate to increase to approximately 45% in the fourth quarter of 2019 due to incremental tax expense associated with the settlement of our Retirement Plan obligation.

Net Income

Net income decreased $2.8 million to $16.2 million in the third quarter of 2019 from $19.0 million in the third quarter of 2018 due to a $2.8 million decrease in operating income and an increase in interest expense of $1.4 million, offset in part by a $1.2 million decrease in the provision for income taxes (see discussions above for further details).

First Nine Months 2019 Compared With First Nine Months 2018

Revenues

The following table presents changes in revenues by segment and product line between the firstnine months of 2019 and 2018, and the changes in revenues by segment and product line between the first nine months of 2019 and 2018 excluding the effect of currency translation and acquisitions. Currency translation is calculated by converting first nine months of 2019 revenues in local currency into U.S. dollars at firstnine months of 2018 exchange rates and then comparing this result with actual revenues in the first nine months of 2019. 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.

Results of Operations (continued)

Revenues for the first nine months of 2019 and 2018 are as follows:

(In thousands, except percentages)	Nine Months Ended September 28, 2019	Nine Months Ended September 29, 2018	Total Increase (Decrease)	% Change	Currency Translation	Acquisition	(Non-GAAP) Adjusted Total Increase (Decrease)	(Non-GAAP) Adjusted % Change
Stock-Preparation	$ 158,993	$ 164,842	$ (5,849)	(4)%	$ (6,181)	$ —	$ 332	— %
Fluid-Handling	100,201	98,500	1,701	2 %	(3,227)	—	4,928	5 %
Doctoring, Cleaning, & Filtration	88,591	87,469	1,122	1 %	(2,779)	—	3,901	4 %
Papermaking Systems	347,785	350,811	(3,026)	(1)%	(12,187)	—	9,161	3 %
Wood Processing Systems	104,649	109,335	(4,686)	(4)%	(4,080)	—	(606)	(1)%
Material Handling Systems	61,063	—	61,063	— %	—	61,063	—	— %
Fiber-based Products	8,488	9,705	(1,217)	(13)%	—	—	(1,217)	(13)%
Consolidated Revenues	$ 521,985	$ 469,851	$ 52,134	11 %	$ (16,267)	$ 61,063	$ 7,338	2 %

Consolidated revenues increased 11% in the first nine months of 2019 largely due to our acquisition, offset in part by an unfavorable effect of currency translation. Excluding the acquisition and unfavorable effect of currency translation, revenues increased 2% in the first nine months of 2019 compared to the first nine months of 2018.

Papermaking Systems Segment

Revenues in our Papermaking Systems segment decreased 1% in the first nine months of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, revenues in the Papermaking Systems segment increased 3% in the first nine months of 2019 compared to the first nine months of 2018, as described in the product line discussions below.

Revenues from our Stock-Preparation product line decreased 4% in the first nine months of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Stock-Preparation revenues were essentially flat in the first nine months of 2019. Increased demand for our capital equipment, and to a lesser extent, our parts and consumables products at our European and North American operations was largely offset by decreased demand for our capital equipment, and to a lesser extent, our parts and consumables products at our Chinese operations. The decreased demand in China resulted from reduced containerboard project activity and weak market conditions due in part to China's recovered paper import restrictions.

Revenues from our Fluid-Handling product line increased 2% in the first nine months of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Fluid-Handling revenues increased 5% in the first nine months of 2019, largely due to increased demand for our capital equipment at our North American operations and an increase in demand for our parts and consumables products across all geographic regions. These increases were partially offset by decreased demand for our capital equipment at our European operations.

Revenues from our Doctoring, Cleaning, & Filtration product line increased 1% in the first nine months of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, Doctoring, Cleaning, & Filtration revenues increased 4% in the first nine months of 2019 due to increased demand for our capital equipment, and to a lesser extent, our parts and consumables products at our North American operations. These increases were partially offset by decreased demand for our capital equipment at our Chinese operations, and to a lesser extent, our parts and consumables products at our European operations.

Results of Operations (continued)

Wood Processing Systems Segment

Revenues from our Wood Processing Systems segment decreased 4% in the first nine months of 2019, including an unfavorable effect of currency translation. Excluding the unfavorable effect of currency translation, revenues from our Wood Processing Systems segment decreased 1% in the first nine months of 2019. Decreased demand for our capital equipment at our North American operations was due to a reduction in our customers' capital spending, as many producers made significant improvements in 2018 to increase capacity and modernize their facilities. This decrease was partially offset by increased demand for our capital equipment at our European operations, and to a lesser extent, our parts and consumables products at our North American and European operations.

Material Handling Systems Segment

Revenues from our Material Handling Systems segment in the first nine months of 2019 were from our SMH acquisition.

Fiber-based Products

Revenues from our Fiber-based Products business decreased 13% in the first nine months of 2019, primarily due to adverse weather conditions in the first half of 2019 that led to widespread weakness in the agricultural industry.

Gross Profit Margin

Gross profit margins for the first nine months of 2019 and 2018 were as follows:

	Nine Months Ended	
	September 28, 2019	September 29, 2018
Papermaking Systems	44.4%	45.1%
Wood Processing Systems	42.0%	40.4%
Material Handling Systems	27.5%	—%
Fiber-based Products	48.5%	50.1%
Consolidated Gross Profit Margin	42.0%	44.1%

Consolidated gross profit margin decreased in the first nine months of 2019 largely due to the inclusion of the lower gross margin profile of the Material Handling Systems Segment, as well as to $3.5 million of amortization of acquired profit in inventory, which lowered the consolidated gross profit margin by 0.7 percentage points.

Papermaking Systems Segment

The gross profit margin in our Papermaking Systems segment decreased in the first nine months of 2019 due to lower margins on our capital equipment.

Wood Processing Systems Segment

The gross profit margin in our Wood Processing Systems segment increased in the first nine months of 2019 primarily due to higher margins on our capital equipment compared to the 2018 period.

Material Handling Systems Segment

The gross profit margin in our Material Handling Systems segment in the first nine months of 2019 was negatively impacted by $3.5 million of amortization of acquired profit in inventory, which lowered its gross profit margin by 5.8 percentage points.

Fiber-based Products

The gross profit margin in our Fiber-based Products business decreased in the first nine months of 2019 primarily due to the combined impact of lower revenues and manufacturing inefficiencies that resulted from lower production volumes.

Results of Operations (continued)

Selling, General, and Administrative Expenses

SG&A expenses for the first nine months of 2019 and 2018 were as follows:

	Nine Months Ended			
(In thousands)	September 28, 2019	September 29, 2018	Increase (Decrease)	% Change
Papermaking Systems	$ 86,956	$ 89,205	$ (2,249)	(3)%
Wood Processing Systems	19,448	20,929	(1,481)	(7)%
Material Handling Systems	15,861	—	15,861	— %
Corporate and Fiber-based Products	22,618	23,662	(1,044)	(4)%
Consolidated SG&A	$ 144,883	$ 133,796	$ 11,087	8 %
Consolidated SG&A as a Percentage of Revenues	27.8%	28.5%		

Consolidated SG&A expenses increased 8% in the first nine months of 2019 due to our acquisition, offset in part by a favorable effect of currency translation of $4.1 million. Excluding the acquisition and favorable effect of currency translation, SG&A expenses were essentially unchanged in the first nine months of 2019 compared to the first nine months of 2018.

Papermaking Systems Segment

SG&A expenses in our Papermaking Systems segment decreased in the firstnine months of 2019, primarily due to a $3.2 million favorable effect from currency translation that was offset in part by increased selling-related expense at our Fluid-Handling product line.

Wood Processing Systems Segment

SG&A expenses in our Wood Processing Systems segment decreased in the firstnine months of 2019 primarily due to a $0.9 million favorable effect from currency translation.

Material Handling Systems Segment

SG&A expenses in our Material Handling Systems segment in the first nine months of 2019 represents those of our SMH acquisition and include $1.3 million of amortization expense from acquired backlog.

Corporate and Fiber-based Products

SG&A expenses for Corporate and Fiber-based Products decreased in the firstnine months of 2019 primarily due to lower incentive compensation expense and professional services fees.

Restructuring Costs

Restructuring costs in the first nine months of 2018 of $1.7 million related to the integration of our U.S. and Swedish papermaking stock-preparation product lines into a newly-constructed manufacturing facility in the United States to achieve economies of scale and greater efficiencies, and included $1.3 million of costs for the relocation of machinery and equipment and administrative offices and $0.4 million primarily associated with employee retention costs and abandonment of excess facility and other closure costs.

Interest Expense

Interest expense increased $4.8 million to $10.1 million in the firstnine months of 2019 from $5.3 million in the first nine months of 2018 primarily due to interest expense on the additional borrowings related to our SMH acquisition.

Provision for Income Taxes

Our provision for income taxes decreased to $12.3 million in the firstnine months of 2019 from $15.6 million in the firstnine months of 2018. The effective tax rate of 22% in the first nine months of 2019 was higher than our statutory rate of 21% primarily due to the distribution of our worldwide earnings, nondeductible expenses, tax expense associated with the GILTI provisions of the 2017 Tax Act, state taxes, and the cost of repatriating the earnings of certain foreign subsidiaries. This incremental tax expense was offset in part by a decrease in tax related to the net excess income tax benefits from stock-based

Results of Operations (continued)

compensation arrangements, a net tax benefit associated with foreign exchange losses and tax costs recognized upon our repatriation of certain previously taxed foreign earnings, and the reversal of tax reserves associated with uncertain tax positions. The effective tax rate of 27% in the first nine months of 2018 was higher than our statutory tax rate of 21% primarily due to the GILTI provisions of the 2017 Tax Act, the distribution of our worldwide earnings, the cost of repatriating the earnings of certain foreign subsidiaries, and a change in estimate to the federal and state provisional net income tax expense initially recorded in 2017 for the 2017 Tax Act. This incremental tax expense was offset in part by a decrease in tax related to the reversal of tax reserves associated with uncertain tax positions and the net excess income tax benefits from stock-based compensation arrangements.

Net Income

Net income increased $1.2 million to $43.7 million in the first nine months of 2019 from $42.5 million in the first nine months of 2018 primarily due to a $2.5 million increase in operating income and a $3.3 million decrease in provision for income taxes, offset in part by increased interest expense of $4.8 million (see discussions above for further details).

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 details.

Liquidity and Capital Resources

Consolidated working capital was $147.6 million at September 28, 2019, compared with $123.8 million at December 29, 2018. Included in working capital were cash and cash equivalents of $48.7 million at September 28, 2019, compared with $45.8 million at December 29, 2018. At September 28, 2019, $48.3 million of cash and cash equivalents was held by our foreign subsidiaries.

In the third quarter of 2019, we repatriated $71.1 million of cash from our European operations, which was financed through an additional $56.1 million of euro-denominated borrowings under our revolving credit facility and $15.0 million of internally-generated cash. These repatriated funds were used to repay U.S.-dollar denominated borrowings outstanding under our revolving credit facility.

Cash Flows

First Nine Months of 2019

Our operating activities provided cash of $58.2 million in the first nine months of 2019 primarily due to cash generated by our operating subsidiaries from product sales, which 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 $15.9 million in the first nine months of 2019, including $10.3 million for inventory primarily in our Wood Processing Systems segment and $5.2 million for other current liabilities primarily related to the payment of income taxes and incentive compensation, which was partially offset by cash received from customer deposits.

Our investing activities used cash of $182.8 million in the first nine months of 2019, including $176.9 million for the SMH acquisition, net of cash acquired, and $6.2 million for purchases of property, plant, and equipment.

Our financing activities provided cash of $130.5 million in the first nine months of 2019. We borrowed $247.1 million under our revolving credit facility, which included $179.3 million for our SMH acquisition and $56.1 million of euro-denominated borrowings to partially fund our cash repatriated from Europe, and $2.0 million received as proceeds from the issuance of common stock in connection with stock option exercises and our employee stock purchase plan. These sources of cash were partially offset by cash used of $108.3 million for principal payments on our outstanding debt obligations, which includes $71.1 million of cash repatriated from Europe, $7.6 million for cash dividends paid to stockholders, and $2.7 million for tax withholding payments related to the vesting of employee stock-based compensation.

Liquidity and Capital Resources (continued)

First Nine Months of 2018

Our operating activities provided cash of $52.6 million in the first nine months of 2018 primarily due to cash generated by our operating subsidiaries from product sales, which 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. We used cash of $10.2 million to purchase inventory primarily associated with the shipment of capital orders in late 2018. We had an increase in accounts receivable of $9.6 million related to a record level of revenue in the third quarter of 2018, which was collected in subsequent periods. We received $9.4 million of cash from other current liabilities primarily related to customer deposits and advanced billings.

Our investing activities used cash of $12.6 million in the first nine months of 2018 primarily related to purchases of property, plant, and equipment, including $6.4 million for a newly-constructed manufacturing facility in the United States.

Our financing activities used cash of $55.8 million in the first nine months of 2018. We used cash of $82.0 million for principal payments on our outstanding debt obligations, $7.2 million for cash dividends paid to stockholders, and $3.9 million for tax withholding payments related to stock-based compensation. These uses of cash were partially offset by proceeds received from borrowings of $21.0 million under our commercial real estate loan and $16.0 million under our revolving credit facility, and $0.8 million received as proceeds from the issuance of common stock under our employee stock purchase plan.

Additional Liquidity and Capital Resources

On May 15, 2019, our board of directors approved the repurchase of up to $20 million of our equity securities during the period from May 15, 2019 to May 15, 2020. We have not repurchased any shares of our common stock under this authorization or under the previous authorization, which expired on May 16, 2019.

We paid cash dividends of $7.6 million in the first nine months of 2019. On September 11, 2019, we declared a quarterly cash dividend of $0.23 per share totaling $2.6 million that will be paid on November 7, 2019. 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 covenant in our revolving credit facility related to our consolidated leverage ratio.

As of September 28, 2019, we had cash and cash equivalents of $48.7 million, of which $48.3 million was held by our foreign subsidiaries. As of September 28, 2019, we had approximately $226.1 million of total unremitted foreign earnings. It is our intent to indefinitely reinvest $217.2 million of these earnings to support the current and future capital needs of our foreign operations, including debt repayments. In the first nine months of 2019, we recorded withholding taxes and the tax effect of foreign exchange losses 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 $5.4 million.

We plan to make expenditures of approximately $5 to $6 million during the remainder of2019 for property, plant, and equipment.

As discussed above in *Other Expense, Net* in the third quarter of 2019 compared with the third quarter of 2018, we will finalize the settlement amount of our Retirement Plan obligation in November 2019, and we estimate paying $5.1 million prior to year end. We also expect to settle the liabilities under the Restoration Plan of $2.4 million in early 2020.

In the future, our liquidity position will be affected by the level of cash flows from operations, cash paid to service our debt obligations, acquisitions, capital projects, dividends, and stock repurchases. We believe that our existing resources, together with the borrowing capacity available under our revolving credit facility and our Multi-Currency Note Purchase and Private Shelf Agreement (Note Purchase Agreement) 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)

Debt Obligations

Under our revolving credit facility, we have a borrowing capacity of $400 million, of which $118.8 million was available to borrow as of September 28, 2019, along with an additional uncommitted unsecured incremental borrowing facility of $150 million. In addition, under our Note Purchase Agreement, of which $10 million of senior promissory notes are currently outstanding, we may issue up to an additional $115 million of senior promissory notes. Under these agreements, our leverage ratio must be less than 4.0 for the next fiscal quarter, and less than 3.75 thereafter. As of September 28, 2019, our consolidated leverage ratio was 2.07 as calculated under the terms defined in our revolving credit facility. See Note 5, Long-Term Obligations, in the accompanying condensed consolidated financial statements for additional information regarding our debt obligations.

Contractual Obligations and Other Commercial Commitments

There have been no significant changes to our contractual obligations and other commercial commitments other than as described below during the nine months ended September 28, 2019, compared with those disclosed in Management's Discussion and Analysis of Financial Condition and Results of Operations, set forth in Part II, Item 7, of our Annual Report on Form 10-K for the fiscal year ended December 29, 2018.

As of September 28, 2019, our borrowings under the revolving credit facility, which matures on December 14, 2023, were $281.0 million, an increase of $139.9 million from December 29, 2018. The interest rate on these borrowings is based on the LIBOR rate (with a zero percent floor), plus an applicable margin. The additional borrowings increased our leverage ratio and resulted in a 25-basis-point increase in the applicable margin beginning in the second quarter of 2019.

In connection with the SMH acquisition, we recorded an additional $15.6 million of operating lease obligations, of which approximately $15.0 million relates to the lease of a building that expires in June 2034. Lease payments on the building are estimated to be approximately $1.3 million annually.

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 as disclosed in Item 7A of our Annual Report on Form 10-K for the fiscal year ended December 29, 2018.

Item 4 – Controls and Procedures

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 September 28, 2019. 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 September 28, 2019, our Chief Executive Officer and Chief Financial Officer concluded that as ofSeptember 28, 2019, our disclosure controls and procedures were effective at the reasonable assurance level.

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 September 28, 2019 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 revised "*Our global operations subject us to various risks that may adversely affect our results of operations"* risk factor below, 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 29, 2018.

Our global operations subject us to various risks that may adversely affect our results of operations.

We are a leading global supplier of equipment and critical components used in process industries worldwide. We sell our products globally, including sales to customers in China, South America, Russia and India, and operate multiple manufacturing operations worldwide, including operations in Canada, China, Europe, Mexico, and Brazil. International revenues and operations are subject to a number of risks which vary by geographic region, including the following:

– agreements may be difficult to enforce and receivables difficult to collect through a foreign country's legal system;
– foreign customers may have longer payment cycles;
– foreign countries may impose additional withholding taxes or otherwise tax our foreign income, impose tariffs, adopt other restrictions on foreign trade, impose currency restrictions or enact other protectionist or anti-trade measures;
– environmental and other regulations can adversely impact our ability to operate our facilities;
– disruption from climate change, natural disaster, including earthquakes and/or tornadoes, fires, war, terrorist activity, and other force majeure events beyond our control;
– worsening economic conditions may result in worker unrest, labor actions, and potential work stoppages;
– political unrest may disrupt commercial activities of ours or our customers;
– it may be difficult to repatriate funds, due to unfavorable domestic and foreign tax consequences or other restrictions or limitations imposed by foreign governments; and
– the protection of intellectual property in foreign countries may be more difficult to enforce.

Operating globally subjects us to changes in government regulations and policies in multiple jurisdictions around the world, including those related to tariffs and trade barriers, taxation, exchange controls and political risks. Changes in government policies, political unrest, economic sanctions, trade embargoes, or other adverse trade regulations can negatively impact our business. For example, we operate businesses in Mexico and Canada, and we benefit from the North American Free Trade Agreement (NAFTA), which is proposed to be revised by the United States-Mexico-Canada Agreement (USMCA). If the United States were to withdraw from or materially modify NAFTA or the successor USMCA or to impose significant tariffs or taxes on goods imported into the United States, the cost of our products could significantly increase or no longer be priced competitively, which in turn could have a material adverse effect on our business and results of operations. The USMCA does not contain an agreement on certain existing tariffs. The United States, Canada, and Mexico must each still ratify the USMCA in their respective legal systems before it becomes effective. In the United States, Congress will be required to pass implementing legislation, the timing of which is uncertain.

In addition, the Office of the United States Trade Representative (USTR) is imposing an additional duty of 25% on a wide variety of Chinese products, including certain pulp and paper machinery equipment, pursuant to an investigation of Chinese intellectual property practices under Section 301 of the Trade Act of 1974. USTR imposed the additional duty on an initial tranche of $34 billion in Chinese products, including certain pulp and paper machinery equipment, effective July 6, 2018 (List 1). USTR then extended the duty to a second tranche of $16 billion in Chinese products effective August 23, 2018 (List 2). USTR then imposed an additional duty of 10% on a third tranche of Chinese products, covering approximately $200 billion in trade effective September 24, 2018 (List 3). USTR subsequently increased the List 3 duty to 25% effective May 10, 2019. Finally, USTR announced an additional 10% duty, which it subsequently increased to 15%, on approximately $300 billion in Chinese trade (List 4). USTR has divided the List 4 products into two parts; the duty on the first part became effective on September 1, 2019, and the duty on the second part is scheduled to become effective on December 15, 2019. In addition, in March 2018, the U.S. Department of Commerce imposed tariffs of 25% on steel imports from most countries under Section 232 of the Trade Expansion Act of 1962. While we are working to assess and mitigate the impact of the existing and other proposed tariffs through pricing and sourcing strategies, we cannot be certain how our customers and competitors will react to the actions we take. The tariffs could negatively affect our ability to compete against competitors who do not manufacture in China and/or are not subject to the tariffs.

Item 1A – Risk Factors (continued)

The United States has tightened export controls targeting countries like China and Russia. For example, in August 2017 and April 2018, the United States imposed new trade sanctions against certain persons in Russia, in addition to those previously imposed in 2014. In 2018, our sales to Russia were $17.7 million, or 3%, of our revenue. In response, Russia may impose trade sanctions that could affect U.S.-owned businesses. The imposition of trade sanctions may make it generally more difficult to do business in Russia and China and cause delays or prevent shipment of products or services performed by our personnel, or to receive payment for products or services. Such restrictions could have a material adverse impact on our business and operating results going forward.

We operate significant manufacturing facilities in and derive significant revenue from China. Changes in the policies of the United States or the Chinese government, devaluation of the Chinese currency, restrictions on investment and/or the expatriation of cash, political unrest, unstable economic conditions, or other developments in China or in U.S.-China relations that are adverse to trade, including enactment of protectionist legislation or trade or currency restrictions, could negatively impact our business and operating results. Policies of the Chinese government to target slower economic growth may negatively affect our business in China if customers are unable to expand capacity or obtain financing for expansion or improvement projects. The president of the United States has indicated that he favors restricting investment by U.S. companies in China; if such restrictions were to become law, or if investment was otherwise restricted, our business would be significantly and adversely affected.

Policies of the Chinese government to advance internal political priorities may potentially negatively affect our business in any number of ways that we may not foresee. For example, China has imposed a ban on mixed waste paper imports and reported that all recovered paper imports have been and are limited to a 0.5% contaminant level after March 1, 2018, which is well below the level that suppliers consider feasible. In addition, the Chinese government has announced that it may ban all recovered paper imports by 2020. According to Fastmarkets RISI, the Chinese government's actions have led to a severe shortage of recovered paper in China, which has forced mills to incur additional downtime. Chinese containerboard producers have been looking to build capacity for fiber in Southeast Asia, with the intent to ship pulp back to China for further processing. These policies could have a significant influence on the price, nature and availability of the type of paper imported into China, could have a negative effect on the operating capacity of our customers in China, and may affect the demand for our products and our operating results in the future, both in China and in the surrounding region.

Item 6 – Exhibits

Exhibit Number	Description of Exhibit
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*	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Filed herewith.
** Furnished herewith.

KADANT INC.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

	KADANT INC.
Date: November 6, 2019	/s/ Michael J. McKenney
	Michael J. McKenney Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 31.1

CERTIFICATION

I, Jeffrey L. Powell, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period endedSeptember 28, 2019 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: November 6, 2019	/s/ Jeffrey L. Powell
	Jeffrey L. Powell
	President and 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 endedSeptember 28, 2019 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: November 6, 2019	/s/ Michael J. McKenney
	Michael J. McKenney
	Executive Vice President and 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, Jeffrey L. Powell, 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 endedSeptember 28, 2019 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: November 6, 2019

/s/ Jeffrey L. Powell

Jeffrey L. Powell
President and Chief Executive Officer

/s/ Michael J. McKenney

Michael J. McKenney
Executive Vice President and 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.