

**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 October 1, 2016

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 1-11406

**KADANT INC.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or Other Jurisdiction of Incorporation or Organization)

52-1762325  
(I.R.S. Employer Identification No.)

One Technology Park Drive  
Westford, Massachusetts  
(Address of Principal Executive Offices)

01886  
(Zip Code)

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

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

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

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

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

Class	Outstanding at October 28, 2016
Common Stock, \$.01 par value	10,914,753

**Kadant Inc.**  
**Quarterly Report on Form 10-Q**  
**for the Period Ended October 1, 2016**  
**Table of Contents**

	<u>Page</u>	
<b>PART I: Financial Information</b>		
<a href="#">Item 1.</a>	<a href="#">Financial Statements</a>	
	<a href="#">Condensed Consolidated Balance Sheet as of October 1, 2016 and January 2, 2016 (unaudited)</a>	<a href="#">3</a>
	<a href="#">Condensed Consolidated Statement of Income for the three- and nine-month periods ended October 1, 2016 and October 3, 2015 (unaudited)</a>	<a href="#">5</a>
	<a href="#">Condensed Consolidated Statement of Comprehensive Income for the three- and nine-month periods ended October 1, 2016 and October 3, 2015 (unaudited)</a>	<a href="#">7</a>
	<a href="#">Condensed Consolidated Statement of Cash Flows for the nine-month periods ended October 1, 2016 and October 3, 2015 (unaudited)</a>	<a href="#">8</a>
	<a href="#">Condensed Consolidated Statement of Stockholders' Equity for the nine-month periods ended October 1, 2016 and October 3, 2015 (unaudited)</a>	<a href="#">9</a>
	<a href="#">Notes to Condensed Consolidated Financial Statements (unaudited)</a>	<a href="#">10</a>
<a href="#">Item 2.</a>	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	<a href="#">27</a>
<a href="#">Item 3.</a>	<a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	<a href="#">41</a>
<a href="#">Item 4.</a>	<a href="#">Controls and Procedures</a>	<a href="#">41</a>
<b>PART II: Other Information</b>		
<a href="#">Item 1A.</a>	<a href="#">Risk Factors</a>	<a href="#">42</a>
<a href="#">Item 6.</a>	<a href="#">Exhibits</a>	<a href="#">42</a>

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**PART 1 – FINANCIAL INFORMATION**

**Item 1 – Financial Statements**

**KADANT INC.**  
Condensed Consolidated Balance Sheet  
(Unaudited)

Assets

(In thousands)	October 1, 2016	January 2, 2016
<b>Current Assets:</b>		
Cash and cash equivalents	\$ 63,235	\$ 65,530
Restricted cash (Note 1)	2,240	1,406
Accounts receivable, less allowances of \$2,492 and \$2,163 (Note 1)	65,676	64,321
Inventories (Note 1)	58,652	56,758
Unbilled contract costs and fees	4,903	6,580
Other current assets	11,161	10,525
<b>Total Current Assets</b>	<b>205,867</b>	<b>205,120</b>
<b>Property, Plant, and Equipment, at Cost</b>	<b>126,813</b>	<b>118,014</b>
Less: accumulated depreciation and amortization	77,512	75,721
	49,301	42,293
<b>Other Assets</b>	<b>14,521</b>	<b>11,002</b>
<b>Intangible Assets, Net (Note 1)</b>	<b>56,710</b>	<b>38,032</b>
<b>Goodwill (Note 1)</b>	<b>157,719</b>	<b>119,051</b>
<b>Total Assets</b>	<b>\$ 484,118</b>	<b>\$ 415,498</b>

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

**KADANT INC.**  
Condensed Consolidated Balance Sheet (continued)  
(Unaudited)

Liabilities and Stockholders' Equity

(In thousands, except share amounts)	October 1, 2016	January 2, 2016
<b>Current Liabilities:</b>		
Short-term obligations (Note 6)	\$ —	\$ 5,250
Accounts payable	25,177	24,418
Customer deposits	22,062	20,123
Accrued payroll and employee benefits	19,627	19,583
Accrued income taxes	3,293	5,333
Other current liabilities	21,339	21,921
<b>Total Current Liabilities</b>	<b>91,498</b>	<b>96,628</b>
<b>Long-Term Deferred Income Taxes</b>	<b>17,756</b>	<b>8,992</b>
<b>Other Long-Term Liabilities</b>	<b>22,114</b>	<b>15,933</b>
<b>Long-Term Obligations (Note 6)</b>	<b>63,517</b>	<b>26,000</b>
<b>Commitments and Contingencies (Note 13)</b>	<b>—</b>	<b>—</b>
<b>Stockholders' Equity:</b>		
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	100,193	100,536
Retained earnings	315,395	297,258
Treasury stock at cost, 3,709,406 and 3,850,779 shares	(90,895)	(94,359)
Accumulated other comprehensive items (Note 9)	(37,300)	(36,972)
<b>Total Kadant Stockholders' Equity</b>	<b>287,539</b>	<b>266,609</b>
Noncontrolling interest	1,694	1,336
<b>Total Stockholders' Equity</b>	<b>289,233</b>	<b>267,945</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 484,118</b>	<b>\$ 415,498</b>

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

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

(In thousands, except per share amounts)	Three Months Ended	
	October 1, 2016	October 3, 2015
<b>Revenues (Note 12)</b>	\$ 105,519	\$ 91,929
<b>Costs and Operating Expenses:</b>		
Cost of revenues	57,440	48,261
Selling, general, and administrative expenses	33,527	29,200
Research and development expenses	1,991	1,787
	92,958	79,248
<b>Operating Income</b>	12,561	12,681
Interest Income	54	54
Interest Expense	(305)	(239)
<b>Income from Continuing Operations Before Provision for Income Taxes</b>	12,310	12,496
Provision for Income Taxes	3,081	3,782
<b>Income from Continuing Operations</b>	9,229	8,714
Income (Loss) from Discontinued Operation (net of income tax provision (benefit) of \$1 and \$(2))	3	(4)
<b>Net Income</b>	9,232	8,710
Net Income Attributable to Noncontrolling Interest	(75)	(67)
<b>Net Income Attributable to Kadant</b>	\$ 9,157	\$ 8,643
<b>Amounts Attributable to Kadant:</b>		
Income from Continuing Operations	\$ 9,154	\$ 8,647
Income (Loss) from Discontinued Operation	3	(4)
<b>Net Income Attributable to Kadant</b>	\$ 9,157	\$ 8,643
<b>Earnings per Share from Continuing Operations Attributable to Kadant (Note 4):</b>		
Basic	\$ 0.84	\$ 0.80
Diluted	\$ 0.82	\$ 0.78
<b>Earnings per Share Attributable to Kadant (Note 4):</b>		
Basic	\$ 0.84	\$ 0.80
Diluted	\$ 0.82	\$ 0.78
<b>Weighted Average Shares (Note 4):</b>		
Basic	10,901	10,861
Diluted	11,189	11,096
<b>Cash Dividend Declared per Common Share</b>	\$ 0.19	\$ 0.17

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



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

(In thousands, except per share amounts)	Nine Months Ended	
	October 1, 2016	October 3, 2015
<b>Revenues (Note 12)</b>	\$ 313,885	\$ 282,507
<b>Costs and Operating Expenses:</b>		
Cost of revenues	171,569	148,775
Selling, general, and administrative expenses	102,095	92,490
Research and development expenses	5,640	5,247
Restructuring costs and other income (Note 3)	(317)	300
	278,987	246,812
Operating Income	34,898	35,695
Interest Income	175	150
Interest Expense	(914)	(701)
Income from Continuing Operations Before Provision for Income Taxes	34,159	35,144
Provision for Income Taxes (Note 5)	9,500	10,964
Income from Continuing Operations	24,659	24,180
Income from Discontinued Operation (net of income tax provision of \$1 and \$36)	3	56
Net Income	24,662	24,236
Net Income Attributable to Noncontrolling Interest	(318)	(232)
<b>Net Income Attributable to Kadant</b>	<b>\$ 24,344</b>	<b>\$ 24,004</b>
<b>Amounts Attributable to Kadant:</b>		
Income from Continuing Operations	\$ 24,341	\$ 23,948
Income from Discontinued Operation	3	56
Net Income Attributable to Kadant	\$ 24,344	\$ 24,004
<b>Earnings per Share from Continuing Operations Attributable to Kadant (Note 4):</b>		
Basic	\$ 2.24	\$ 2.20
Diluted	\$ 2.19	\$ 2.15
<b>Earnings per Share Attributable to Kadant (Note 4):</b>		
Basic	\$ 2.24	\$ 2.20
Diluted	\$ 2.19	\$ 2.16
<b>Weighted Average Shares (Note 4):</b>		
Basic	10,854	10,900
Diluted	11,120	11,119
<b>Cash Dividends Declared per Common Share</b>	<b>\$ 0.57</b>	<b>\$ 0.51</b>

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





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

(In thousands)	Three Months Ended		Nine Months Ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Net Income	\$ 9,232	\$ 8,710	\$ 24,662	\$ 24,236
<b>Other Comprehensive Items:</b>				
Foreign currency translation adjustment	(979)	(6,263)	(243)	(16,101)
Pension and other post-retirement liability adjustments (net of tax provision (benefit) of \$68 and \$(91) in the three and nine months ended October 1, 2016, respectively, and \$66 and \$221 in the three and nine months ended October 3, 2015, respectively)	127	124	(144)	412
Deferred gain on hedging instruments (net of tax provision (benefit) of \$75 and \$(148) in the three and nine months ended October 1, 2016, respectively, and (\$43) and \$35 in the three and nine months ended October 3, 2015, respectively)	139	97	99	17
<b>Other Comprehensive Items</b>	<b>(713)</b>	<b>(6,042)</b>	<b>(288)</b>	<b>(15,672)</b>
<b>Comprehensive Income</b>	<b>8,519</b>	<b>2,668</b>	<b>24,374</b>	<b>8,564</b>
<b>Comprehensive Income Attributable to Noncontrolling Interest</b>	<b>(92)</b>	<b>(78)</b>	<b>(358)</b>	<b>(137)</b>
<b>Comprehensive Income Attributable to Kadant</b>	<b>\$ 8,427</b>	<b>\$ 2,590</b>	<b>\$ 24,016</b>	<b>\$ 8,427</b>

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	
	October 1, 2016	October 3, 2015
<b>Operating Activities:</b>		
Net income attributable to Kadant	\$ 24,344	\$ 24,004
Net income attributable to noncontrolling interest	318	232
Income from discontinued operation	(3)	(56)
Income from continuing operations	24,659	24,180
Adjustments to reconcile income from continuing operations to net cash provided by operating activities:		
Depreciation and amortization	10,934	8,247
Stock-based compensation expense	3,865	4,495
Tax benefits from stock-based compensation awards	—	(875)
Provision for losses on accounts receivable	420	205
(Gain) loss on the sale of property, plant, and equipment	(384)	3
Other items, net	256	(91)
Contributions to pension plan	(810)	(810)
Changes in current assets and liabilities, net of effects of acquisition:		
Accounts receivable	3,731	(2,052)
Unbilled contract costs and fees	1,713	(2,601)
Inventories	2,051	(16,045)
Other current assets	620	(1,529)
Accounts payable	(5,599)	813
Other current liabilities	(6,717)	14,140
Net cash provided by continuing operations	34,739	28,080
Net cash used in discontinued operation	(2)	(36)
Net cash provided by operating activities	34,737	28,044
<b>Investing Activities:</b>		
Acquisition, net of cash acquired (Note 2)	(56,617)	—
Purchases of property, plant, and equipment	(3,579)	(4,068)
Proceeds from sale of property, plant, and equipment	409	33
Net cash used in investing activities	(59,787)	(4,035)
<b>Financing Activities:</b>		
Proceeds from issuance of long-term obligations	48,046	20,000
Repayments of short- and long-term obligations	(15,429)	(16,486)
Purchases of Company common stock	—	(8,920)
Dividends paid	(5,964)	(5,346)
Tax withholding payments related to stock-based compensation	(2,572)	(2,499)
Payment of contingent consideration	(1,091)	—
Proceeds from issuance of Company common stock	1,780	285
Tax benefits from stock-based compensation awards	—	875
Change in restricted cash	(793)	(368)
Other items	(27)	—
Net cash provided by (used in) financing activities	23,950	(12,459)
Exchange Rate Effect on Cash and Cash Equivalents	(1,195)	(786)
(Decrease) Increase in Cash and Cash Equivalents	(2,295)	10,764
Cash and Cash Equivalents at Beginning of Period	65,530	45,378
Cash and Cash Equivalents at End of Period	\$ 63,235	\$ 56,142

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)**

(In thousands, except share amounts)	Common Stock		Capital in Excess of Par Value	Retained Earnings	Treasury Stock		Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
	Shares	Amount			Shares	Amount			
<b>Balance at January 3, 2015</b>	14,624,159	\$ 146	\$ 98,769	\$270,249	3,760,019	\$(87,727)	\$ (17,146)	\$ 1,168	\$ 265,459
Net income	—	—	—	24,004	—	—	—	232	24,236
Dividends declared	—	—	—	(5,549)	—	—	—	—	(5,549)
Activity under stock plans	—	—	(373)	—	(120,427)	2,818	—	—	2,445
Tax benefits related to employees' and directors' stock plans	—	—	875	—	—	—	—	—	875
Purchases of Company common stock	—	—	—	—	204,760	(8,920)	—	—	(8,920)
Other comprehensive items	—	—	—	—	—	—	(15,577)	(95)	(15,672)
<b>Balance at October 3, 2015</b>	<u>14,624,159</u>	<u>\$ 146</u>	<u>\$ 99,271</u>	<u>\$288,704</u>	<u>3,844,352</u>	<u>\$(93,829)</u>	<u>\$ (32,723)</u>	<u>\$ 1,305</u>	<u>\$ 262,874</u>
<b>Balance at January 2, 2016</b>	14,624,159	\$ 146	\$ 100,536	\$297,258	3,850,779	\$(94,359)	\$ (36,972)	\$ 1,336	\$ 267,945
Net income	—	—	—	24,344	—	—	—	318	24,662
Dividends declared	—	—	—	(6,207)	—	—	—	—	(6,207)
Activity under stock plans	—	—	(343)	—	(141,373)	3,464	—	—	3,121
Other comprehensive items	—	—	—	—	—	—	(328)	40	(288)
<b>Balance at October 1, 2016</b>	<u>14,624,159</u>	<u>\$ 146</u>	<u>\$ 100,193</u>	<u>\$315,395</u>	<u>3,709,406</u>	<u>\$(90,895)</u>	<u>\$ (37,300)</u>	<u>\$ 1,694</u>	<u>\$ 289,233</u>

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. (collectively, "we," "Kadant," "the Company," or "the Registrant") was incorporated in Delaware in November 1991 and currently trades on the New York Stock Exchange under the ticker symbol "KAI."

The Company and its subsidiaries' continuing operations include two reportable operating segments, Papermaking Systems and Wood Processing Systems, and a separate product line, Fiber-based Products.

Through its Papermaking Systems segment, the Company develops, manufactures, and markets a range of equipment and products primarily for the global papermaking, paper recycling, recycling and waste management, and other process industries. The Company's principal products in this segment include custom-engineered stock-preparation systems and equipment for the preparation of wastepaper for conversion into recycled paper and balers and related equipment used in the processing of recyclable and waste materials; fluid-handling systems used primarily in the dryer section of the papermaking process and during the production of corrugated boxboard, metals, plastics, rubber, textiles, chemicals, and food; doctoring systems and equipment and related consumables important to the efficient operation of paper machines; and cleaning and filtration systems essential for draining, purifying, and recycling process water and cleaning paper machine fabrics and rolls.

Through its Wood Processing Systems segment, the Company designs and manufactures stranders and related equipment used in the production of oriented strand board (OSB), an engineered wood panel product used primarily in home construction. This segment also supplies debarking and wood chipping equipment used in the forest products and the pulp and paper industries, and provides refurbishment and repair of pulping equipment for the pulp and paper industry.

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

*Interim Financial Statements*

The interim condensed consolidated financial statements and related notes presented have been prepared by the Company, are unaudited, and, in the opinion of management, reflect all adjustments of a normal recurring nature necessary for a fair statement of the Company's financial position at October 1, 2016 and its results of operations, comprehensive income, cash flows, and stockholders' equity for the three- and nine-month periods ended October 1, 2016 and October 3, 2015. 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 January 2, 2016 has been derived from the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended January 2, 2016. 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 January 2, 2016, filed with the SEC.

*Financial Statement Presentation*

Certain reclassifications have been made to prior periods to conform with current reporting. As a result of the adoption of the Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2016-09, "Improvements to Employee Share-Based Payment Arrangements," tax withholding payments made related to stock-based compensation awards have been reclassified from other current liabilities within operating activities and presented separately within financing activities in the condensed consolidated statement of cash flows for the 2015 period.

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

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

Critical accounting policies are defined as those that entail significant judgments and estimates, and could potentially result in materially different results under different assumptions and conditions. The Company believes that the most critical accounting policies upon which its financial position depends, and which involve the most complex or subjective decisions or assessments, concern revenue recognition and accounts receivable, warranty obligations, income taxes, the valuation of goodwill and intangible assets, inventories and pension obligations. Discussions of the application of these and other accounting policies are included in Notes 1 and 3 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the fiscal year ended January 2, 2016.

*Use of Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States (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.

*Supplemental Cash Flow Information*

(In thousands)	Nine Months Ended	
	October 1, 2016	October 3, 2015
<b>Non-Cash Investing Activities:</b>		
Fair value of assets of acquired business	\$ 87,060	\$ —
Cash paid for acquired business	(58,894)	—
Liabilities assumed of acquired business	\$ 28,166	\$ —
<b>Non-Cash Financing Activities:</b>		
Issuance of Company common stock	\$ 3,260	\$ 3,195
Dividends declared but unpaid	\$ 2,074	\$ 1,833

*Restricted Cash*

As of October 1, 2016 and January 2, 2016, the Company had restricted cash of \$2,240,000 and \$1,406,000, respectively. This cash serves as collateral for bank guarantees primarily associated with providing assurance to customers that the Company will fulfill certain customer obligations entered into during the normal course of business. All the bank guarantees will expire by the end of 2019.

*Banker's Acceptance Drafts*

The Company's Chinese subsidiaries may receive banker's acceptance drafts from customers as payment for outstanding accounts receivable. The banker's acceptance drafts are non-interest bearing obligations of the issuing bank and mature within six months of the origination date. The Company has the ability to 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 \$6,181,000 and \$8,314,000 at October 1, 2016 and January 2, 2016, respectively, are included in accounts receivable in the accompanying condensed consolidated balance sheet until the subsidiary sells or transfers the drafts, or obtains cash payment on the scheduled maturity date.

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

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

*Inventories*

The components of inventories are as follows:

(In thousands)	October 1, 2016	January 2, 2016
Raw Materials and Supplies	\$ 22,292	\$ 22,324
Work in Process	14,467	13,819
Finished Goods	21,893	20,615
Total Inventories	<u>\$ 58,652</u>	<u>\$ 56,758</u>

*Intangible Assets, Net*

Acquired intangible assets are as follows:

(In thousands)	October 1, 2016	January 2, 2016
Indefinite-Lived	\$ 8,100	\$ 8,100
Definite-Lived, Gross	\$ 77,052	\$ 77,052
Acquisition (Note 2)	24,691	—
Accumulated amortization	(47,235)	(40,908)
Currency translation	(5,898)	(6,212)
Definite-Lived, Net	<u>\$ 48,610</u>	<u>\$ 29,932</u>
Total Intangible Assets, Net	<u>\$ 56,710</u>	<u>\$ 38,032</u>

*Goodwill*

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

(In thousands)	Papermaking Systems Segment	Wood Processing Systems Segment	Total
<b>Balance at January 2, 2016</b>			
Gross balance	\$ 187,720	\$ 16,840	\$ 204,560
Accumulated impairment losses	(85,509)	—	(85,509)
Net balance	<u>102,211</u>	<u>16,840</u>	<u>119,051</u>
Acquisition (Note 2)	38,561	—	38,561
Currency Translation	(893)	1,000	107
Total 2016 Adjustments	<u>37,668</u>	<u>1,000</u>	<u>38,668</u>
<b>Balance at October 1, 2016</b>			
Gross balance	225,388	17,840	243,228
Accumulated impairment losses	(85,509)	—	(85,509)
Net balance	<u>\$ 139,879</u>	<u>\$ 17,840</u>	<u>\$ 157,719</u>

*Warranty Obligations*

The Company provides for the estimated cost of product warranties at the time of sale based on the actual historical occurrence rates and repair costs, as well as knowledge of any specific warranty problems that indicate that projected warranty costs may vary from historical patterns. The Company typically negotiates the terms regarding warranty coverage and length of warranty depending on the products and applications. While the Company engages in extensive product quality programs and processes, the Company's warranty obligation is affected by product failure rates, repair costs, service delivery costs incurred in correcting a product failure, and supplier warranties on parts delivered to the Company. Should actual product failure rates,

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

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

repair costs, service delivery costs, or supplier warranties on parts differ from the Company's estimates, revisions to the estimated warranty liability would be required.

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:

(In thousands)	Nine Months Ended	
	October 1, 2016	October 3, 2015
Balance at Beginning of Period	\$ 3,670	\$ 3,875
Provision charged to income	2,454	1,625
Usage	(2,574)	(1,813)
Acquisition	991	—
Currency translation	(19)	(226)
Balance at End of Period	<u>\$ 4,522</u>	<u>\$ 3,461</u>

*Recent Accounting Pronouncements*

*Revenue from Contracts with Customers (Topic 606) Section A-Summary and Amendments That Create Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs-Contracts with Customers (Subtopic 340-40).* In May 2014, the FASB issued ASU No. 2014-09, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The new guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. The ASU will replace most existing revenue recognition guidance in GAAP when it becomes effective. In March 2016, the FASB issued ASU No. 2016-08, which further clarifies the guidance on the principal versus agent considerations within ASU No. 2014-09. In April 2016, the FASB issued ASU No. 2016-10 to expand the guidance on identifying performance obligations and licensing within ASU 2014-09. In May 2016, the FASB issued ASU No. 2016-11, which rescinds certain previously issued guidance, including, among other items, guidance relating to accounting for shipping and handling fees and freight services effective upon adoption of ASU No. 2014-09. Also in May 2016, the FASB issued ASU No. 2016-12, which narrowly amended the revenue recognition guidance regarding collectability, noncash consideration, presentation of sales tax and transition. These new ASUs are effective for the Company beginning in fiscal 2018. Early adoption is permitted in fiscal 2017. The guidance permits the use of either the retrospective or cumulative effect transition method. The Company is currently evaluating the effect that these ASUs will have on its consolidated financial statements and related disclosures. The Company has not yet selected a transition method nor has it determined the effect of these standards on its ongoing financial reporting.

*Compensation-Stock Compensation (Topic 718) Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period.* In June 2014, the FASB issued ASU No. 2014-12, which clarifies the proper method of accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period. Under the new guidance, a performance target that affects vesting and could be achieved after completion of the service period should be treated as a performance condition under FASB Accounting Standards Codification (ASC) 718 and, as a result, should not be included in the estimation of the grant-date fair value of the award. An entity should recognize compensation cost for the award when it becomes probable that the performance target will be achieved. In the event an entity determines that it is probable that a performance target will be achieved before the end of the service period, the compensation cost of the award should be recognized prospectively over the remaining service period. The Company adopted this guidance at the beginning of fiscal 2016. The adoption of this ASU did not have an impact on the Company's condensed consolidated financial statements.

*Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs.* In April 2015, the FASB issued ASU No. 2015-03, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. In addition, in June 2015, the FASB issued ASU No. 2015-15, which allows an entity to defer the requirements of ASU No. 2015-03 on deferred issuance costs related to line-of-credit arrangements. The recognition and measurement guidance for debt issuance costs are not affected by the amendments in these ASUs. These new disclosure items are effective for the Company beginning in fiscal 2016. The Company adopted these ASUs at the beginning of fiscal 2016. Adoption of these ASUs did not have an impact on the Company's condensed consolidated financial statements.



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

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

*Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).* In May 2015, the FASB issued ASU No. 2015-07, which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. This ASU also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. The Company adopted the disclosure requirements in this guidance at the beginning of fiscal 2016. As this ASU is disclosure-related only, its adoption did not have an effect on the Company's condensed consolidated financial statements.

*Inventory (Topic 330), Simplifying the Measurement of Inventory.* In July 2015, the FASB issued ASU No. 2015-11, which requires that an entity measure inventory within the scope of this ASU at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Substantial and unusual losses that result from subsequent measurement of inventory should be disclosed in the financial statements. This new guidance is effective for the Company beginning in fiscal 2017. Early adoption is permitted. The Company is currently evaluating the effect that this ASU will have on its condensed consolidated financial statements.

*Business Combinations (Topic 805), Simplifying the Accounting for Measurement-Period Adjustments.* In September 2015, the FASB issued ASU No. 2015-16, which requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The acquirer is required to record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. In addition, an entity is required to present, separately on the face of the statement of income or through disclosure in the notes, the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. The Company adopted this guidance at the beginning of fiscal 2016. Adoption of this ASU did not have an impact on the Company's condensed consolidated financial statements.

*Leases (Topic 842).* In February 2016, the FASB issued ASU No. 2016-02, which requires a lessee to recognize a right-of-use asset and a lease liability for operating leases, initially measured at the present value of the future lease payments, in its balance sheet. This ASU also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This new guidance is effective for the Company in fiscal 2019. Early adoption is permitted. The Company is currently evaluating the effects that the adoption of this ASU will have on its condensed consolidated financial statements.

*Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.* In March 2016, the FASB issued ASU No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification in the statement of cash flows. The Company early adopted this ASU at the beginning of fiscal 2016. This ASU requires that excess income tax benefits and tax deficiencies related to stock-based compensation arrangements be recognized as discrete items within the provision for income taxes instead of capital in excess of par value in the reporting period in which they occur. As a result of the adoption of this ASU, the Company recognized an income tax benefit of \$106,000, or \$0.01 per diluted share, and \$502,000, or \$0.05 per diluted share, in the Company's condensed consolidated statement of income in the third quarter and first nine months of 2016, respectively. The Company prospectively adopted the requirement to classify the excess tax benefits from stock-compensation awards within operating activities in the condensed consolidated statement of cash flows in the first quarter of 2016. Prior period amounts were not restated. The Company also adopted the guidance in this ASU that requires that taxes paid related to the withholding of common stock upon the vesting of employee stock awards be presented separately within financing activities in the condensed consolidated statement of cash flows. The Company has retrospectively restated the 2015 period to reclassify the comparable amount, which was previously presented in other current liabilities within operating activities. There were no other material effects from adoption of this ASU on the Company's condensed consolidated financial statements.

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

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

*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. Early adoption is 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.

*Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.* In August 2016, the FASB issued ASU No. 2016-15, which simplifies the diversity in practice related to the presentation and classification of certain cash receipts and cash payments in the statement of cash flows under Topic 230. This ASU addresses the following eight specific cash flow issues: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance; distributions received from equity method investees; beneficial interests in securitization transactions; and separately identifiable cash flows and application of the predominance principle. This new guidance is effective for the Company in fiscal 2018. Early adoption is permitted. The Company does not believe that adoption of this ASU will have a material impact on its condensed consolidated financial statements.

*Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory.* In October 2016, the FASB issued ASU No. 2016-16, which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs and eliminates the exception for an intra-entity transfer of an asset other than inventory. This new guidance is effective for the Company in fiscal 2018 with adoption required on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Early adoption is permitted. The Company is currently evaluating the effect that the adoption of this ASU will have on its condensed consolidated financial statements.

**2. Acquisition**

On April 4, 2016, the Company acquired all the outstanding shares of RT Holding GmbH, the parent corporation of a group of companies known as the PAALGROUP (PAAL) for approximately 49,713,000 euros, net of cash acquired, or approximately \$56,617,000. The Company entered into a \$29,866,000 euro-denominated borrowing under its unsecured revolving credit facility in the first quarter of 2016 to partially fund the acquisition. The remainder of the purchase price was funded from the Company's internal overseas cash. The Company incurred acquisition transaction costs of approximately \$1,832,000 in the first nine months of 2016, which were recorded in selling, general, and administrative expenses (SG&A) in the accompanying condensed consolidated statement of income.

PAAL, which is part of the Company's Papermaking Systems segment's Stock-Preparation product line, manufactures balers and related equipment used in the processing of recyclable and waste materials. This acquisition broadened the Company's product portfolio and extended its presence deeper into recycling and waste management. PAAL, headquartered in Germany, also has operations in the United Kingdom, France, and Spain. The Company anticipates several synergies in connection with this acquisition, including expanding sales of the products of the acquired business by leveraging Kadant's geographic presence to enter or further penetrate existing markets, as well as sourcing and manufacturing efficiencies.

This acquisition has been accounted for by using the purchase method of accounting and PAAL's results have been included in the accompanying condensed consolidated financial statements from its date of acquisition. PAAL had revenue of \$13,607,000 and earnings of \$0.10 per diluted share, including acquisition costs of \$0.01, in the third quarter of 2016. For the first nine months of 2016, PAAL had revenue of \$28,760,000 and a loss of \$0.05 per diluted share, which included acquisition costs of \$0.15 and one-time charges associated with acquired inventory and backlog of \$0.12. The excess of the purchase price for the acquisition of PAAL over the tangible and identifiable intangible assets was recorded as goodwill and amounted to approximately \$38,561,000, which is not deductible for tax purposes. The fair values are subject to adjustment upon finalization of the valuation, and therefore the current measurements of intangible assets, acquired goodwill, and assumed assets and liabilities are subject to change.

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

**2. Acquisition (continued)**

The following table summarizes the purchase method of accounting for the acquisition of PAAL and the estimated fair values of assets acquired and liabilities assumed:

<b>2016 Acquisition (In thousands)</b>	<b>Total</b>
<b>Net Assets Acquired:</b>	
Cash and Cash Equivalents	\$ 2,277
Accounts Receivable	5,441
Inventories	3,947
Property, Plant, and Equipment	7,179
Other Assets	4,964
Intangible Assets	24,691
Goodwill	38,561
Total assets acquired	<u>87,060</u>
Accounts Payable	5,536
Customer Deposits	2,471
Capital Lease Obligations	4,360
Long-Term Deferred Tax Liability	8,485
Other Liabilities	7,314
Total liabilities assumed	<u>28,166</u>
Net assets acquired	<u>\$ 58,894</u>
<b>Purchase Price:</b>	
Cash	\$ 29,028
Cash Paid to Seller Borrowed Under the Revolving Credit Facility	29,866
Total purchase price	<u>\$ 58,894</u>

Definite-lived intangible assets acquired related to the PAAL acquisition included \$15,831,000 for customer relationships, \$4,203,000 for product technology, \$2,278,000 for tradenames, and \$2,379,000 for other intangibles. The weighted-average amortization period for definite-lived intangible assets acquired is 12 years, which includes weighted-average amortization periods of 13 years for customer relationships, 9 years for product technology, and 14 years for tradenames.

**3. Restructuring Costs and Other Income**

*Other Income*

In the first nine months of 2016, other income consisted of a pre-tax gain of \$317,000 from the sale of real estate in Sweden for cash proceeds of \$368,000.

*Restructuring Costs*

In the first nine months of 2015, the Company's Papermaking Systems segment recorded restructuring costs of \$300,000 for severance costs associated with the reduction of nine employees in Canada and Sweden. These actions were taken to streamline the Company's operations in those locations.

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

**4. Earnings per Share**

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

(In thousands, except per share amounts)	Three Months Ended		Nine Months Ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
<b>Amounts Attributable to Kadant:</b>				
Income from Continuing Operations	\$ 9,154	\$ 8,647	\$ 24,341	\$ 23,948
Income (Loss) from Discontinued Operation	3	(4)	3	56
Net Income	\$ 9,157	\$ 8,643	\$ 24,344	\$ 24,004
Basic Weighted Average Shares	10,901	10,861	10,854	10,900
Effect of Stock Options, Restricted Stock Units and Employee Stock Purchase Plan	288	235	266	219
Diluted Weighted Average Shares	11,189	11,096	11,120	11,119
<b>Basic Earnings per Share:</b>				
Continuing operations	\$ 0.84	\$ 0.80	\$ 2.24	\$ 2.20
Discontinued operation	\$ —	\$ —	\$ —	\$ 0.01
Net income per basic share	\$ 0.84	\$ 0.80	\$ 2.24	\$ 2.20
<b>Diluted Earnings per Share:</b>				
Continuing operations	\$ 0.82	\$ 0.78	\$ 2.19	\$ 2.15
Discontinued operation	\$ —	\$ —	\$ —	\$ 0.01
Net income per diluted share	\$ 0.82	\$ 0.78	\$ 2.19	\$ 2.16

Unvested restricted stock units (RSUs) equivalent to approximately 5,000 shares of common stock for the third quarter of 2015, and approximately 49,000 and 31,000 shares of common stock for the first nine months of 2016 and 2015, respectively, were not included in the computation of diluted EPS because either the effect of their inclusion would have been anti-dilutive, or for unvested performance-based RSUs, the performance conditions had not been met as of the end of the reporting period.

**5. Provision for Income Taxes**

The provision for income taxes was \$9,500,000 and \$10,964,000 in the first nine months of 2016 and 2015, respectively, and represented 28% and 31% of pre-tax income. The effective tax rate of 28% in the first nine months of 2016 was lower than the Company's statutory tax rate primarily due to the distribution of the Company's worldwide earnings, the adoption of ASU No. 2016-09 that resulted in a favorable adjustment for the net excess income tax benefits from stock-based compensation arrangements, a partial release of the U.S. valuation allowance related to state net operating losses, and a partial benefit of current-year state losses. These items were offset in part by an increase in tax related to non-deductible expenses. The effective tax rate of 31% in the first nine months of 2015 was lower than the Company's statutory tax rate primarily due to the distribution of the Company's worldwide earnings and an adjustment to increase deferred tax assets, which were offset in part by an increase in non-deductible expenses, state tax expense, and the U.S. tax cost of foreign operations.

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

## 6. Long-Term Obligations

Long-term obligations are as follows:

(In thousands)	October 1, 2016	January 2, 2016
Revolving Credit Facility, due 2018	\$ 63,517	\$ 26,000
Commercial Real Estate Loan, due 2016	—	5,250
Total Short- and Long-Term Obligations	63,517	31,250
Less: Short-Term Obligations	—	(5,250)
Long-Term Obligations	\$ 63,517	\$ 26,000

The weighted average interest rate for the Company's long-term obligations was 1.43% as of October 1, 2016.

### *Revolving Credit Facility*

The Company entered into a five-year unsecured revolving credit facility (2012 Credit Agreement) in the aggregate principal amount of up to \$100,000,000 on August 3, 2012 and amended it on November 1, 2013 and March 29, 2016. The 2012 Credit Agreement also includes an uncommitted unsecured incremental borrowing facility of up to an additional \$50,000,000. The principal on any borrowings made under the 2012 Credit Agreement is due on November 1, 2018. Interest on any loans outstanding under the 2012 Credit Agreement accrues and is payable quarterly in arrears at one of the following rates selected by the Company: (i) the highest of (a) the federal funds rate plus 0.50% plus an applicable margin of 0% to 1%, (b) the prime rate, as defined, plus an applicable margin of 0% to 1% and (c) the Eurocurrency rate, as defined, plus 0.50% plus an applicable margin of 0% to 1% or (ii) the Eurocurrency rate, as defined, plus an applicable margin of 1% to 2%. The applicable margin is determined based upon the ratio of the Company's total debt to earnings before interest, taxes, depreciation, and amortization, as defined in the 2012 Credit Agreement. For this purpose, total debt is defined as total debt less up to \$25,000,000 of unrestricted U.S. cash.

The obligations of the Company under the 2012 Credit Agreement may be accelerated upon the occurrence of an event of default under the 2012 Credit Agreement, which includes customary events of default including without limitation payment defaults, defaults in the performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy- and insolvency-related defaults, defaults relating to such matters as the Employment Retirement Income Security Act, unsatisfied judgments, the failure to pay certain indebtedness, and a change of control default. In addition, the 2012 Credit Agreement contains negative covenants applicable to the Company and its subsidiaries, including financial covenants requiring the Company to comply with a maximum consolidated leverage ratio of 3.5 to 1, a minimum consolidated interest coverage ratio of 3 to 1, and restrictions on liens, indebtedness, fundamental changes, dispositions of property, making certain restricted payments (including dividends and stock repurchases), investments, transactions with affiliates, sale and leaseback transactions, swap agreements, changing its fiscal year, arrangements affecting subsidiary distributions, entering into new lines of business, and certain actions related to the discontinued operation. As of October 1, 2016, the Company was in compliance with these covenants.

Loans under the 2012 Credit Agreement are guaranteed by certain domestic subsidiaries of the Company pursuant to a Guarantee Agreement, effective August 3, 2012.

The Company borrowed \$41,046,000 under the 2012 Credit Agreement in the first quarter of 2016, of which \$29,866,000 was a euro-denominated borrowing used to fund the PAAL acquisition, which occurred at the beginning of the second quarter of 2016. As of October 1, 2016, the outstanding balance under the 2012 Credit Agreement was \$63,517,000. As of October 1, 2016, the Company had \$36,262,000 of borrowing capacity available under the committed portion of its 2012 Credit Agreement. The amount the Company is able to borrow under the 2012 Credit Agreement is the total borrowing capacity of \$100,000,000 less any outstanding borrowings, letters of credit and multi-currency borrowings issued under the 2012 Credit Agreement.

### *Commercial Real Estate Loan*

In the second quarter of 2016, the Company repaid the outstanding principal balance on the commercial real estate loan.

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

**7. Stock-Based Compensation**

The Company recognized stock-based compensation expense of \$1,269,000 and \$1,254,000 in the third quarters of 2016 and 2015, respectively, and \$3,865,000 and \$4,495,000 in the first nine months of 2016 and 2015, respectively, within SG&A expenses in the accompanying condensed consolidated statement of income. The Company recognizes compensation cost for all stock-based awards granted to employees and directors based on the grant date estimate of fair value for those awards. The fair value of RSUs is based on the grant date trading price of the Company's common stock, reduced by the present value of estimated dividends foregone during the requisite service period. For time-based RSUs, compensation expense is recognized ratably over the requisite service period for the entire award net of forfeitures. For performance-based RSUs, compensation expense is recognized ratably over the requisite service period for each separately-vesting portion of the award net of forfeitures and remeasured at each reporting period until the total number of RSUs to be issued is known. During the first quarter of 2016, the Company granted stock-based compensation to executive officers and employees consisting of 53,811 shares of performance-based RSUs and 58,438 shares of time-based RSUs and granted 20,000 shares of time-based RSUs to its non-employee directors. Unrecognized compensation expense related to stock-based compensation totaled approximately \$5,281,000 at October 1, 2016, and will be recognized over a weighted average period of 1.7 years.

**8. Employee Benefit Plans**

The Company sponsors a noncontributory defined benefit retirement plan for the benefit of eligible employees at its Kadant Solutions division and its corporate office (included in the table below under "Pension Benefits"). The Company also sponsors a restoration plan for the benefit of certain executive officers who also participate in the noncontributory defined benefit retirement plan (included in the table below under "Other Benefits"). In addition, employees at certain of the Company's subsidiaries participate in defined benefit retirement and post-retirement welfare benefit plans (included in the table below under "Other Benefits").

The components of net periodic benefit cost for the pension benefits and other benefits plans are as follows:

(In thousands, except percentages)	Three Months Ended October 1, 2016		Three Months Ended October 3, 2015	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
<b>Components of Net Periodic Benefit Cost:</b>				
Service cost	\$ 181	\$ 58	\$ 211	\$ 55
Interest cost	318	64	307	62
Expected return on plan assets	(322)	(6)	(356)	(10)
Recognized net actuarial loss	124	21	127	17
Amortization of prior service cost	14	24	15	22
<b>Net Periodic Benefit Cost</b>	<b>\$ 315</b>	<b>\$ 161</b>	<b>\$ 304</b>	<b>\$ 146</b>

The weighted average assumptions used to determine net periodic benefit cost are as follows:

Discount Rate	4.22%	4.09%	3.87%	3.72%
Expected Long-Term Return on Plan Assets	5.00%	—	5.25%	—
Rate of Compensation Increase	3.00%	3.01%	3.00%	2.98%

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

**8. Employee Benefit Plans (continued)**

(In thousands, except percentages)	Nine Months Ended October 1, 2016		Nine Months Ended October 3, 2015	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
<b>Components of Net Periodic Benefit Cost:</b>				
Service cost	\$ 543	\$ 176	\$ 633	\$ 167
Interest cost	954	192	921	190
Expected return on plan assets	(966)	(20)	(1,068)	(31)
Recognized net actuarial loss	372	65	381	52
Amortization of prior service cost	42	71	42	68
Settlement loss	—	114	—	—
<b>Net Periodic Benefit Cost</b>	<b>\$ 945</b>	<b>\$ 598</b>	<b>\$ 909</b>	<b>\$ 446</b>

The weighted average assumptions used to determine net periodic benefit cost are as follows:

Discount Rate	4.22%	4.08%	3.87%	3.74%
Expected Long-Term Return on Plan Assets	5.00%	—	5.25%	—
Rate of Compensation Increase	3.00%	3.01%	3.00%	2.99%

The Company made cash contributions of \$810,000 to its Kadant Solutions division's noncontributory defined benefit retirement plan in the first nine months of 2016 and expects to make cash contributions of \$270,000 over the remainder of 2016. For the remaining pension and post-retirement welfare benefits plans, the Company does not expect to make any cash contributions other than to fund current benefit payments in 2016.

**9. Accumulated Other Comprehensive Items**

Comprehensive income combines net income and other comprehensive items, including foreign currency translation adjustments, unrecognized prior service cost and deferred losses associated with pension and other post-retirement plans, and deferred losses on hedging instruments.

Changes in each component of accumulated other comprehensive items (AOCI), net of tax, in the accompanying condensed consolidated balance sheet are as follows:

(In thousands)	Foreign Currency Translation Adjustment	Unrecognized Prior Service Cost	Deferred Loss on Pension and Other Post- Retirement Plans	Deferred Loss on Hedging Instruments	Accumulated Other Comprehensive Items
Balance at January 2, 2016	\$ (27,932)	\$ (489)	\$ (8,322)	\$ (229)	\$ (36,972)
Other Comprehensive Loss Before Reclassifications	(283)	(1)	(575)	(265)	(1,124)
Reclassifications from AOCI	—	71	361	364	796
Net Current Period Other Comprehensive (Loss) Income	(283)	70	(214)	99	(328)
<b>Balance at October 1, 2016</b>	<b>\$ (28,215)</b>	<b>\$ (419)</b>	<b>\$ (8,536)</b>	<b>\$ (130)</b>	<b>\$ (37,300)</b>
Balance at January 3, 2015	\$ (7,371)	\$ (589)	\$ (8,394)	\$ (792)	\$ (17,146)
Other Comprehensive (Loss) Income Before Reclassifications	(16,006)	3	57	1,325	(14,621)
Reclassifications from AOCI	—	70	282	(1,308)	(956)
Net Current Period Other Comprehensive (Loss) Income	(16,006)	73	339	17	(15,577)
<b>Balance at October 3, 2015</b>	<b>\$ (23,377)</b>	<b>\$ (516)</b>	<b>\$ (8,055)</b>	<b>\$ (775)</b>	<b>\$ (32,723)</b>

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

**9. Accumulated Other Comprehensive Items (continued)**

Amounts reclassified from AOCI are as follows:

(In thousands)	Three Months Ended		Nine Months Ended		Statement of Income
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015	Line Item
<b>Pension and Other Post-Retirement Plans: (a)</b>					
Amortization of prior service costs	\$ (38)	\$ (37)	\$ (113)	\$ (110)	SG&A expenses
Amortization of actuarial losses	(145)	(144)	(551)	(433)	SG&A expenses
<b>Total expense before income taxes</b>	<b>(183)</b>	<b>(181)</b>	<b>(664)</b>	<b>(543)</b>	
Income tax benefit	64	64	232	191	Provision for income taxes
	<u>(119)</u>	<u>(117)</u>	<u>(432)</u>	<u>(352)</u>	
<b>Cash Flow Hedges: (b)</b>					
Interest rate swap agreements	(21)	(106)	(157)	(317)	Interest expense
Forward currency-exchange contracts	—	—	(24)	—	Revenues
Forward currency-exchange contracts	(113)	—	(182)	—	Cost of revenues
Forward currency-exchange contracts	—	237	—	1,743	SG&A expenses
<b>Total (expense) income before income taxes</b>	<b>(134)</b>	<b>131</b>	<b>(363)</b>	<b>1,426</b>	
Income tax benefit (provision)	47	6	(1)	(118)	Provision for income taxes
	<u>(87)</u>	<u>137</u>	<u>(364)</u>	<u>1,308</u>	
<b>Total Reclassifications</b>	<b>\$ (206)</b>	<b>\$ 20</b>	<b>\$ (796)</b>	<b>\$ 956</b>	

(a) Included in the computation of net periodic benefit cost. See Note 8 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. When the Company enters into a derivative contract, the Company makes a determination as to whether the transaction is deemed to be a hedge for accounting purposes. For a contract deemed to be a hedge, the Company formally documents the relationship between the derivative instrument and the risk being hedged. In this documentation, the Company specifically identifies the asset, liability, forecasted transaction, cash flow, or net investment that has been designated as the hedged item, and evaluates whether the derivative instrument is expected to reduce the risks associated with the hedged item. To the extent these criteria are not met, the Company does not use hedge accounting for the derivative. The changes in the fair value of a derivative not deemed to be a hedge are recorded currently in earnings. The Company does not hold or engage in transactions involving derivative instruments for purposes other than risk management.

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



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

**10. Derivatives (continued)**

*Interest Rate Swap Agreements*

On January 16, 2015, the Company entered into a swap agreement (2015 Swap Agreement) to hedge its exposure to movements in the three-month London Inter-Bank Offered Rate (LIBOR) rate on future outstanding debt and has designated the 2015 Swap Agreement as a cash flow hedge. The 2015 Swap Agreement expires on March 27, 2020 and has a \$10,000,000 notional value. Under the 2015 Swap Agreement, on a quarterly basis, the Company receives a three-month LIBOR rate and pays a fixed rate of interest of 1.50% plus an applicable margin. The fair value of the 2015 Swap Agreement as of October 1, 2016 is included in other long-term liabilities, with an offset to AOCI (net of tax) in the accompanying condensed consolidated balance sheet.

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

The counterparty to the 2015 Swap Agreement could demand an early termination of the 2015 Swap Agreement if the Company is in default under the 2012 Credit Agreement, or any agreement that amends or replaces the 2012 Credit Agreement in which the counterparty is a member, and the Company is unable to cure the default. An event of default under the 2012 Credit Agreement includes customary events of default and failure to comply with financial covenants, including a maximum consolidated leverage ratio of 3.5 to 1, and a minimum consolidated interest coverage ratio of 3 to 1. As of October 1, 2016, the Company was in compliance with these covenants. The unrealized loss associated with the 2015 Swap Agreement was \$147,000 as of October 1, 2016, which represents the estimated amount that the Company would pay to the counterparty in the event of an early termination.

The Company entered into a swap agreement in 2006 (2006 Swap Agreement) to convert a portion of the Company's outstanding debt from a floating to a fixed rate of interest. The 2006 Swap Agreement expired in May 2016.

*Forward Currency-Exchange Contracts*

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

Forward currency-exchange contracts that hedge forecasted accounts receivable or accounts payable are designated as cash flow hedges. The fair values for these instruments are included in other current assets for unrecognized gains and in other current liabilities for unrecognized losses, with an offset in AOCI (net of tax). For forward currency-exchange contracts that are designated as fair value hedges, the gain or loss on the derivative, as well as the offsetting loss or gain on the hedged item are recognized currently in earnings. The fair values of forward currency-exchange contracts that are not designated as hedges are recorded currently in earnings.

The Company recognized within SG&A expenses in the accompanying condensed consolidated statement of income a loss of \$120,000 and a gain of \$46,000 in the third quarters of 2016 and 2015, respectively, and a loss of \$556,000 and a gain of \$53,000 in the first nine months of 2016 and 2015, respectively, associated with forward currency-exchange contracts that were not designated as hedges. Management believes that any credit risk associated with forward currency-exchange contracts is remote based on the Company's financial position and the creditworthiness of the financial institutions issuing the contracts.

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

**10. Derivatives (continued)**

The following table summarizes the fair value of the Company's derivative instruments designated and not designated as hedging instruments, the notional value of the associated derivative contracts, and the location of these instruments in the accompanying condensed consolidated balance sheet:

(In thousands)	Balance Sheet Location	October 1, 2016		January 2, 2016	
		Asset (Liability) (a)	Notional Amount (b)	Asset (Liability) (a)	Notional Amount
<b>Derivatives Designated as Hedging Instruments:</b>					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	\$ 10	\$ 950	\$ —	\$ —
Interest rate swap agreement	Other Assets	\$ —	\$ —	\$ 38	\$ 10,000
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	\$ (65)	\$ 1,683	\$ (101)	\$ 6,525
Interest rate swap agreement	Other Current Liabilities	\$ —	\$ —	\$ (91)	\$ 5,250
Interest rate swap agreement	Other Long-Term Liabilities	\$ (147)	\$ 10,000	\$ —	\$ —
<b>Derivatives Not Designated as Hedging Instruments:</b>					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	\$ 7	\$ 384	\$ 2,536	\$ 15,612
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	\$ (134)	\$ 17,611	\$ —	\$ —

(a) See Note 11 for the fair value measurements relating to these financial instruments.

(b) The total notional amount is indicative of the level of the Company's derivative activity during the first nine months of 2016.

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 period ended October 1, 2016:

(In thousands)	Interest Rate Swap Agreements	Forward Currency-Exchange Contracts	Total
Unrealized loss, net of tax, at January 2, 2016	\$ (162)	\$ (67)	\$ (229)
Loss reclassified to earnings (a)	230	134	364
Loss recognized in AOCI	(163)	(102)	(265)
Unrealized loss, net of tax, at October 1, 2016	<u>\$ (95)</u>	<u>\$ (35)</u>	<u>\$ (130)</u>

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

As of October 1, 2016, the Company expects to reclassify \$73,000 of the net unrealized loss included in AOCI to earnings over the next twelve months.

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

**11. Fair Value Measurements**

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)	Fair Value as of October 1, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds and time deposits	\$ 7,464	\$ —	\$ —	\$ 7,464
Forward currency-exchange contracts	\$ —	\$ 17	\$ —	\$ 17
Banker's acceptance drafts (a)	\$ —	\$ 6,181	\$ —	\$ 6,181
<b>Liabilities:</b>				
Forward currency-exchange contracts	\$ —	\$ 199	\$ —	\$ 199
Interest rate swap agreement	\$ —	\$ 147	\$ —	\$ 147
(In thousands)	Fair Value as of January 2, 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Money market funds and time deposits	\$ 9,767	\$ —	\$ —	\$ 9,767
Forward currency-exchange contracts	\$ —	\$ 2,536	\$ —	\$ 2,536
Interest rate swap agreement	\$ —	\$ 38	\$ —	\$ 38
Banker's acceptance drafts (a)	\$ —	\$ 8,314	\$ —	\$ 8,314
<b>Liabilities:</b>				
Forward currency-exchange contracts	\$ —	\$ 101	\$ —	\$ 101
Interest rate swap agreement	\$ —	\$ 91	\$ —	\$ 91
Contingent consideration (b)	\$ —	\$ —	\$ 1,091	\$ 1,091

- (a) Included in accounts receivable in the accompanying condensed consolidated balance sheet.  
(b) Included in other current liabilities 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 2016. The Company's financial assets and liabilities carried at fair value are comprised of cash equivalents, banker's acceptance drafts, and derivative instruments used to hedge the Company's foreign currency and interest rate risks. The Company's cash equivalents are comprised of money market funds and bank deposits which are highly liquid and readily tradable. These investments are valued using inputs observable in active markets for identical securities. The carrying value of banker's acceptance drafts approximates their fair value due to the short-term nature of the negotiable instrument. The fair values of the Company's interest rate swap agreements are based on LIBOR yield curves at the reporting date. The fair values of the Company's forward currency-exchange contracts are based on quoted forward foreign exchange rates 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. Changes in values of the underlying hedged assets and liabilities or anticipated transactions are not reflected in the table above. The Company recorded contingent consideration as part of its acquisition of a European manufacturer on December 30, 2013. The fair value of the contingent consideration was based on the present value of the estimated future cash flows. Changes to the fair value of contingent

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

**11. Fair Value Measurements (continued)**

consideration were recorded in SG&A expenses in the accompanying condensed consolidated statement of income. This contingent consideration was paid during the first quarter of 2016.

The following table provides a rollforward of the fair value, as determined by Level 3 inputs, of the contingent consideration:

(In thousands)	Nine Months Ended October 1, 2016
Balance at January 2, 2016	\$ 1,091
Payment	(1,091)
Balance at October 1, 2016	<u>\$ —</u>

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

(In thousands)	October 1, 2016		January 2, 2016	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Debt Obligations	\$ 63,517	\$ 63,517	\$ 31,250	\$ 31,250

The carrying value of the Company's debt obligations approximates fair value as the obligations bear variable rates of interest, which adjust quarterly based on prevailing market rates.

**12. Business Segment Information**

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

(In thousands)	Three Months Ended		Nine Months Ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Revenues:				
Papermaking Systems	\$ 96,078	\$ 80,789	\$ 280,436	\$ 248,069
Wood Processing Systems	7,962	9,119	25,437	25,910
Fiber-based Products	1,479	2,021	8,012	8,528
	<u>\$ 105,519</u>	<u>\$ 91,929</u>	<u>\$ 313,885</u>	<u>\$ 282,507</u>

Income from Continuing Operations Before Provision for Income

Taxes:				
Papermaking Systems	\$ 16,915	\$ 14,246	\$ 44,747	\$ 41,559
Wood Processing Systems	2,150	2,724	5,406	7,512
Corporate and Fiber-based Products (a)	(6,504)	(4,289)	(15,255)	(13,376)
Total operating income	12,561	12,681	34,898	35,695
Interest expense, net	(251)	(185)	(739)	(551)
	<u>\$ 12,310</u>	<u>\$ 12,496</u>	<u>\$ 34,159</u>	<u>\$ 35,144</u>

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

**12. Business Segment Information (continued)**

(In thousands)	Three Months Ended		Nine Months Ended	
	October 1, 2016	October 3, 2015	October 1, 2016	October 3, 2015
Capital Expenditures:				
Papermaking Systems	\$ 1,501	\$ 1,258	\$ 3,159	\$ 3,412
Other	342	159	420	656
	\$ 1,843	\$ 1,417	\$ 3,579	\$ 4,068

(In thousands)	October 1, 2016	January 2, 2016
	Total Assets:	
Papermaking Systems	\$ 420,623	\$ 354,417
Wood Processing Systems	54,328	53,347
Corporate and Fiber-based Products (b)	9,147	7,719
Total assets from continuing operations	484,098	415,483
Total assets from discontinued operation	20	15
	\$ 484,118	\$ 415,498

- (a) Corporate primarily includes general and administrative expenses.  
(b) Primarily includes cash and cash equivalents and property, plant, and equipment.

**13. Contingencies and Litigation**

*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 outstanding accounts receivable. These banker's acceptance drafts are non-interest bearing and mature within six months of the origination date. The Company's subsidiaries in China may use these banker's acceptance drafts prior to the scheduled maturity date to settle outstanding accounts payable with vendors. Banker's acceptance drafts transferred to vendors are subject to customary right of recourse provisions prior to their scheduled maturity dates. As of October 1, 2016 and January 2, 2016, the Company had \$4,119,000 and \$6,897,000, respectively, of banker's acceptance drafts subject to recourse, which were transferred to vendors and had not reached their scheduled maturity dates. Historically, the banker's acceptance drafts have settled upon maturity without any claim of recourse against the Company.

*Litigation*

From time to time, the Company is subject to various claims and legal proceedings covering a range of matters that arise in the ordinary course of business. Such litigation may include claims and counterclaims by and against the Company for breach of contract or warranty, canceled contracts, product liability, or bankruptcy-related claims. For legal proceedings in which a loss is probable and estimable, the Company accrues a loss based on the low end of the range of estimated loss when there is no better estimate within the range. If the Company were found to be liable for any of the claims or counterclaims against it, the Company would incur a charge against earnings for amounts in excess of legal accruals.

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

This Quarterly Report on Form 10-Q includes forward-looking statements that are not statements of historical fact, and may include statements regarding possible or assumed future results of operations. Forward-looking statements are subject to risks and uncertainties and are based on the beliefs and assumptions of our management, using information currently available to our management. When we use words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "seeks," "should," "likely," "will," "would," "may," "continue," "could," or similar expressions, we are making forward-looking statements.

Forward-looking statements are not guarantees of performance. They involve risks, uncertainties, and assumptions. Our future results of operations may differ materially from those expressed in the forward-looking statements. Many of the important factors that will determine these results and values are beyond our ability to control or predict. You should not put undue reliance on any forward-looking statements. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise. For a discussion of important factors that may cause our actual results to differ materially from those suggested by the forward-looking statements, you should read carefully the section captioned "Risk Factors" in Part I, Item 1A, of the Company's Annual Report on Form 10-K for the fiscal year ended January 2, 2016 (fiscal 2015), as filed with the Securities and Exchange Commission (SEC) and subsequent filings with the SEC.

**Overview**

*Company Background*

We are a leading global supplier of equipment and critical components used in process industries worldwide. In addition, we manufacture granules made from papermaking by-products. We have a diverse and large customer base, including most of the world's major paper and oriented strand board (OSB) manufacturers, and our products, technologies, and services play an integral role in enhancing process efficiency, optimizing energy utilization, and maximizing productivity in resource-intensive industries. We believe our large installed base provides us with a spare parts and consumables business that yields higher margins than our capital equipment business. In the first nine months of 2016, approximately 62% of our revenue was from the sale of parts and consumables products.

On April 4, 2016, we acquired all the outstanding shares of RT Holding GmbH, the parent corporation of a group of companies known as the PAALGROUP (PAAL), for approximately 49.7 million euros, net of cash acquired, or approximately \$56.6 million. PAAL manufactures balers and related equipment used in the processing of recyclable and waste materials. This acquisition, which is included in our Papermaking Systems segment's Stock-Preparation product line, broadened our product portfolio and extended our presence deeper into recycling and waste management. PAAL, headquartered in Germany, also has operations in the United Kingdom, France, and Spain.

Our continuing operations are comprised of two reportable operating segments: Papermaking Systems and Wood Processing Systems, and a separate product line, Fiber-based Products. Through our Papermaking Systems segment, we develop, manufacture, and market a range of equipment and products for the global papermaking, paper recycling, recycling and waste management, and other process industries. Through our Wood Processing Systems segment, we design, manufacture, and market stranders and related equipment used in the production of OSB, and sell debarking and wood chipping equipment used in the forest products and the pulp and paper industries. Through this segment, we also provide refurbishment and repair of pulping equipment for the pulp and paper industry. Through our Fiber-based Products business, we manufacture and sell granules derived from pulp fiber for use as carriers for agricultural, home lawn and garden, and professional lawn, turf and ornamental applications, as well as for oil and grease absorption.

**Overview (continued)**

*Papermaking Systems Segment*

Our Papermaking Systems segment consists of the following product lines:

- Stock-Preparation: custom-engineered systems and equipment, as well as standard individual components, for pulping, de-inking, screening, cleaning, and refining primarily recyclable fibers; balers and related equipment used in the processing of recyclable and waste materials; and filtering, recausticizing, and evaporation equipment and systems used in the production of virgin pulp;
- Doctoring, Cleaning, & Filtration: doctoring systems and related consumables that continuously clean rolls to keep paper machines running efficiently; doctor blades made of a variety of materials to perform functions including cleaning, creping, web removal, flaking, and the application of coatings; profiling systems that control moisture, web curl, and gloss during paper converting; and systems and equipment used to continuously clean paper machine fabrics and rolls, drain water from pulp mixtures, form the sheet or web, and filter the process water for reuse. Doctoring and cleaning systems are also used in other industries, such as carbon fiber, textiles and food processing; and
- Fluid-Handling: rotary joints, precision unions, steam and condensate systems, components, and controls used primarily in the dryer section of the papermaking process and during the production of corrugated boxboard, metals, plastics, rubber, textiles, chemicals, and food.

*Wood Processing Systems Segment*

Our principal wood-processing products and services include:

- Stranders: disc and ring stranders and related parts and consumables that cut trees into strands for OSB production;
- Rotary Debarkers: rotary debarkers and related parts and consumables that employ a combination of mechanical abrasion and log-to-log contact to efficiently remove bark from logs of all shapes and species;
- Chippers: disc, drum, and veneer chippers and related parts and consumables that are high quality, robust chipper systems for waste-wood and whole-log applications found in pulp woodrooms, chip plants, and sawmill and planer mill sites; and
- Repair: refurbishment and repair of pulping equipment used in the pulp and paper industry.

*Fiber-based Products*

We produce biodegradable, absorbent granules 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.

*International Sales*

During the first nine months of 2016 and 2015, approximately 59% and 48%, respectively, of our sales were to customers outside the United States, principally in Europe and Asia. The increase in the percentage of sales to customers outside the United States was primarily due to the acquisition of PAAL, which is headquartered in Europe. We generally seek to charge our customers in the same currency in which our operating costs are incurred. However, our financial performance and competitive position can be affected by currency exchange rate fluctuations affecting the relationship between the U.S. dollar and foreign currencies. We seek to reduce our exposure to currency fluctuations through the use of forward currency exchange contracts. We may enter into forward contracts to hedge certain firm purchase and sale commitments denominated in currencies other than our subsidiaries' functional currencies.

**Overview (continued)***Application of Critical Accounting Policies and Estimates*

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

Critical accounting policies are defined as those that entail significant judgments and uncertainties, and could potentially result in materially different results under different assumptions and conditions. We believe that our most critical accounting policies, upon which our financial position depends and which involve the most complex or subjective decisions or assessments, are those described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the section captioned "Application of Critical Accounting Policies and Estimates" in Part II, Item 7, of our Annual Report on Form 10-K for the fiscal year ended January 2, 2016, filed with the SEC. There have been no material changes to these critical accounting policies since fiscal year-end 2015 that warrant disclosure.

*Industry and Business Outlook*

Our products are primarily sold in global process industries and used to produce packaging, tissue, and OSB, among other products, as well as for recycling and waste management. In the first nine months of 2016, approximately 58% of our revenue was from the sale of products that support packaging, tissue, and OSB production. Consumption of packaging, which is primarily comprised of corrugated boxboard and cartonboard, is driven by many factors, including regional economic conditions, consumer spending on non-durable goods, demand for processed foods and beverages, and greater urbanization in developing regions. Consumption of tissue is fairly stable, and in the developed world, tends to grow with the population. For both tissue and packaging, growth rates in the developing world are expected to increase as per capita consumption increases with rising standards of living. For balers and related equipment, demand is generally driven by rising standards of living and population growth, shortage and costs of landfilling, increasing recycling rates, and environmental regulation. The majority of OSB demand is in North America, as North American houses are more often constructed of wood compared to other parts of the world. Demand for OSB is tied to new home construction and remodeling. The remainder of our revenue was from sales to other industries that in general grow with the overall economy.

Our results of operations in the first nine months of 2016 were negatively affected by foreign currency translation compared to the first nine months of 2015. When we translate the local currency results of our foreign subsidiaries into U.S. dollars during a period in which the U.S. dollar is strengthening, our financial results will reflect decreases due to foreign currency translation. The negative effect on our financial results will continue if the U.S. dollar continues to strengthen relative to the functional currencies of our foreign subsidiaries. Similarly, if the U.S. dollar weakens compared to the functional currencies of our foreign subsidiaries, our financial results will reflect increases due to foreign currency translation. Further, certain foreign subsidiaries may hold U.S. dollar assets or liabilities which, as the U.S. dollar strengthens versus the applicable functional currencies, will result in currency transaction gains on assets and losses on liabilities. We have presented the material effects of foreign currency translation on our financial results under Results of Operations below.

Our bookings decreased 4% to \$95 million in the third quarter of 2016 compared to \$99 million in the third quarter of 2015. Third quarter bookings in 2016 included a \$13 million, or 13%, increase from the acquisition of PAAL offset in part by a \$1 million, or 1%, decrease from the unfavorable effects of foreign currency translation. Excluding the impacts of the acquisition and foreign currency translation, our bookings in the third quarter of 2016 decreased 16% compared to the third quarter of 2015. However, we are seeing increased project activity in certain regions such as China and Europe and expect a sequential increase in bookings for the fourth quarter of 2016. Our revenue, bookings and income tend to be variable as demand for our capital equipment is dependent on regional economic conditions and the level of capital spending by our customers, among other factors. Demand for our parts and consumables products tends to be more predictable. Bookings for our parts and consumables products were \$64 million, or 67% of total bookings, in the third quarter of 2016, compared to \$61 million, or 61% of total bookings, in the third quarter of 2015.



**Overview (continued)**

The largest and most impactful regional market for our products in the third quarter of 2016 continued to be North America. Our revenues and bookings in North America have declined in the last two quarters due to general economic uncertainty in the region which has led to more cautious spending by our customers, and has particularly impacted our parts and consumables business. Our bookings in North America were \$47 million in the third quarter of 2016, down 14% compared to the third quarter of 2015. During the first nine months of 2016, demand for printing and writing grades declined compared to the same period in 2015, while containerboard production was essentially flat as total inventories declined more than 10% in September 2016 compared to the same period last year according to Resource Information Systems Inc. (RISI) reports. U.S. housing starts in September 2016 declined 9% to a seasonally adjusted rate of 1.047 million compared to August 2016, and are at their lowest level since March 2015 according to the U.S. Census Bureau and the U.S. Department of Housing and Urban Development.

In Europe, demand for our products was slightly below second quarter 2016 levels, although we expect a sequential increase in bookings in Europe for the fourth quarter of 2016. Our bookings in Europe were \$31 million in the third quarter of 2016, up 34% compared to \$23 million in the third quarter of 2015, including a \$13 million increase from the acquisition of PAAL. Our bookings in Asia were \$11 million in the third quarter of 2016, down 31% from \$15 million in the third quarter of 2015. This decrease includes a \$1 million decrease from the negative effect of foreign currency translation. Weak demand and a relatively soft domestic economy affected most paper grades in China in 2015 and the first nine months of 2016, although we are seeing increased project activity in China and expect a sequential increase in bookings for the fourth quarter of 2016. The most recent RISI forecasts of containerboard demand growth of slightly less than 3% per year for the next few years suggest new capital project activity may remain at reduced levels in China in the near term. Our bookings in the rest of the world increased 7% to \$7 million in the third quarter of 2016 compared to the third quarter of 2015.

Based on our performance in the third quarter and current visibility for the remainder of the year, we expect for the full year 2016 GAAP diluted earnings per share (EPS) of \$2.76 to \$2.82, revised from our previous guidance of \$2.75 to \$2.81. Our revised 2016 guidance includes \$0.15 of acquisition costs, \$0.12 of expense related to acquired inventory and backlog, a \$0.02 benefit from a discrete tax item, and a \$0.02 gain on the sale of assets. For 2016, we expect revenue of \$412 to \$416 million, revised from our previous guidance of \$415 to \$421 million. For the fourth quarter of 2016, we expect to achieve GAAP diluted EPS of \$0.57 to \$0.63 on revenue of \$98 to \$102 million.

**Results of Operations**

Third Quarter 2016 Compared With Third Quarter 2015

The following table sets forth our unaudited condensed consolidated statement of income expressed as a percentage of total revenues from continuing operations for the third fiscal quarters of 2016 and 2015. The results of operations for the fiscal quarter ended October 1, 2016 are not necessarily indicative of the results to be expected for the full fiscal year.

	Three Months Ended	
	October 1, 2016	October 3, 2015
Revenues	100%	100%
Costs and Operating Expenses:		
Cost of revenues	54	53
Selling, general, and administrative expenses	32	32
Research and development expenses	2	2
	88	87
Operating Income	12	13
Interest Income (Expense), Net	—	—
Income from Continuing Operations Before Provision for Income Taxes	12	13
Provision for Income Taxes	3	4
Income from Continuing Operations	9%	9%

**Results of Operations (continued)**

*Revenues*

Revenues for the third quarters of 2016 and 2015 were as follows:

(In thousands)	Three Months Ended	
	October 1, 2016	October 3, 2015
Revenues:		
Papermaking Systems	\$ 96,078	\$ 80,789
Wood Processing Systems	7,962	9,119
Fiber-based Products	1,479	2,021
	<u>\$ 105,519</u>	<u>\$ 91,929</u>

*Papermaking Systems Segment.* Revenues increased \$15.3 million, or 19%, to \$96.1 million in the third quarter of 2016 from \$80.8 million in the third quarter of 2015, including \$13.6 million in revenues from the acquisition of PAAL in April 2016, offset in part by a \$1.0 million decrease from the unfavorable effect of foreign currency translation. Excluding revenues from the acquisition and the unfavorable effect of foreign currency translation, revenues in our Papermaking Systems segment increased \$2.7 million, or 3%, in the third quarter of 2016 compared to the third quarter of 2015 due to increased demand for our capital products at our European and Chinese operations. These increases were offset in part by decreased demand for both our parts and consumables and capital products at our North American operations due to general economic uncertainty which has led to more cautious spending by our North American customers.

*Wood Processing Systems Segment.* Revenues decreased \$1.1 million, or 13%, to \$8.0 million in the third quarter of 2016 from \$9.1 million in the third quarter of 2015, primarily due to decreased demand for our capital products.

*Fiber-based Products.* Revenues decreased \$0.5 million, or 27%, to \$1.5 million in the third quarter of 2016 from \$2.0 million in the third quarter of 2015, primarily due to decreased demand for our biodegradable granular products.

*Papermaking Systems Segment by Product Line.* The following table presents revenues for our Papermaking Systems segment by product line, the changes in revenues by product line between the third quarters of 2016 and 2015, and the changes in revenues by product line between the third quarters of 2016 and 2015 excluding the effect of foreign currency translation. The increase in revenues excluding the effect of foreign currency translation represents the increase resulting from converting third quarter of 2016 revenues in local currency into U.S. dollars at third quarter of 2015 exchange rates, and then comparing this result to actual revenues in the third quarter of 2015. The presentation of the changes in revenues by product line excluding the effect of foreign 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 our 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 measure.

(In thousands)	Three Months Ended			Increase Excluding Effect of Foreign Currency Translation
	October 1, 2016	October 3, 2015	Increase	
Papermaking Systems Product Lines:				
Stock-Preparation	\$ 44,099	\$ 35,708	\$ 8,391	\$ 8,713
Doctoring, Cleaning, & Filtration	28,955	23,058	5,897	6,494
Fluid-Handling	23,024	22,023	1,001	1,110
	<u>\$ 96,078</u>	<u>\$ 80,789</u>	<u>\$ 15,289</u>	<u>\$ 16,317</u>

Revenues from our Stock-Preparation product line in the third quarter of 2016 increased \$8.4 million, or 23%, compared to the third quarter of 2015, including \$13.6 million in revenues from the acquisition of PAAL, offset in part by a \$0.3 million decrease from the unfavorable effect of foreign currency translation. Excluding the acquisition and unfavorable effect of foreign currency translation, revenues in our Stock-Preparation product line decreased \$4.9 million, or 14%, primarily

**Results of Operations (continued)**

due to lower demand for both our capital and parts and consumables products at our North American operations as a result of general economic uncertainty which has led to more cautious spending by our North America customers. This decrease was offset in part by increased demand for our capital and, to a lesser extent, parts and consumables products at our Chinese operations. Revenues from our Doctoring, Cleaning, & Filtration product line in the third quarter of 2016 increased \$5.9 million, or 26%, compared to the third quarter of 2015, including a \$0.6 million decrease from the unfavorable effect of foreign currency translation. Excluding the unfavorable effect of foreign currency translation, revenues from our Doctoring, Cleaning & Filtration product line increased \$6.5 million, or 28%, compared to the third quarter of 2015, primarily due to increased demand for our capital products at our European and North American operations and, to a lesser extent, our Chinese operations. Revenues from our Fluid-Handling product line in the third quarter of 2016 increased \$1.0 million, or 5%, compared to the third quarter of 2015, primarily due to increased demand for our capital products at our Chinese and European operations, offset in part by decreased demand for our products at our North American operations.

*Gross Margin*

Gross margins for the third quarters of 2016 and 2015 were as follows:

	Three Months Ended	
	October 1, 2016	October 3, 2015
Gross Margin:		
Papermaking Systems	46.0%	47.7%
Wood Processing Systems	45.3	46.4
Fiber-based Products	15.0	44.1
	45.6%	47.5%

*Papermaking Systems Segment.* The gross margin in our Papermaking Systems segment decreased to 46.0% in the third quarter of 2016 from 47.7% in the third quarter of 2015. This decrease was primarily due to the inclusion of lower gross margins from the acquisition of PAAL and a decrease in the proportion of higher-margin parts and consumables revenues.

*Wood Processing Systems Segment.* The gross margin in our Wood Processing Systems segment decreased to 45.3% in the third quarter of 2016 from 46.4% in the third quarter of 2015 primarily due to lower gross profit margins on our parts and consumables products due to product mix compared to the third quarter of 2015.

*Fiber-based Products.* The gross margin in our Fiber-based Products business decreased to 15.0% in the third quarter of 2016 from 44.1% in the third quarter of 2015 primarily due to decreased manufacturing efficiency related to lower production volumes.

*Operating Expenses*

Selling, general, and administrative (SG&A) expenses as a percentage of revenues were 32% in both the third quarters of 2016 and 2015. SG&A expenses increased \$4.3 million, or 15%, to \$33.5 million in the third quarter of 2016 from \$29.2 million in the third quarter of 2015, primarily due to an increase of \$3.2 million from the inclusion of SG&A and acquisition-related expenses from the PAAL acquisition. These increases were offset in part by \$0.3 million from the favorable effect of foreign currency translation.

Total stock-based compensation expense was \$1.3 million in both the third quarters of 2016 and 2015 and is included in SG&A expenses in the accompanying condensed consolidated statement of income.

Research and development expenses were \$2.0 million and \$1.8 million in the third quarters of 2016 and 2015, respectively, and represented 2% of revenues in both periods.

*Interest Expense*

Interest expense increased to \$0.3 million in the third quarter of 2016 from \$0.2 million in the third quarter of 2015 primarily due to higher average outstanding borrowings, offset in part by lower average interest rates in the third quarter of 2016 compared to the third quarter of 2015.

**Results of Operations (continued)**

*Provision for Income Taxes*

Our provision for income taxes was \$3.1 million and \$3.8 million in the third quarters of 2016 and 2015, respectively, and represented 25% and 30% of pre-tax income. The effective tax rate of 25% in the third quarter of 2016 was lower than our statutory tax rate primarily due to the distribution of our worldwide earnings, a partial release of the U.S. valuation allowance related to state net operating losses, and a partial benefit of current-year state losses. These benefits were offset in part by an increase in tax related to non-deductible expenses. The effective tax rate of 30% in the third quarter of 2015 was lower than our statutory tax rate primarily due to the distribution of our worldwide earnings and an adjustment to increase deferred tax assets, which was offset in part by an increase in non-deductible expenses, state tax expense, and the U.S. tax cost of foreign operations.

*Income from Continuing Operations*

Income from continuing operations increased \$0.5 million to \$9.2 million in the third quarter of 2016 from \$8.7 million in the third quarter of 2015, primarily due to a decrease in our provision for income taxes, offset in part by an increase in interest expense and a decrease in operating income (see *Revenues, Gross Margin, Operating Expenses, Interest Expense* and *Provision for Income Taxes* discussed above).

First Nine Months 2016 Compared With First Nine Months 2015

The following table sets forth our unaudited condensed consolidated statement of income expressed as a percentage of total revenues from continuing operations for the first nine months of 2016 and 2015. The results of operations for the first nine months of 2016 are not necessarily indicative of the results to be expected for the full fiscal year.

	Nine Months Ended	
	October 1, 2016	October 3, 2015
Revenues	100%	100%
Costs and Operating Expenses:		
Cost of revenues	55	52
Selling, general, and administrative expenses	32	33
Research and development expenses	2	2
Restructuring costs and other income, net	—	—
	89	87
Operating Income	11	13
Interest Income (Expense), Net	—	—
Income from Continuing Operations Before Provision for Income Taxes	11	13
Provision for Income Taxes	3	4
Income from Continuing Operations	8%	9%

**Results of Operations (continued)**

*Revenues*

Revenues for the first nine months of 2016 and 2015 were as follows:

(In thousands)	Nine Months Ended	
	October 1, 2016	October 3, 2015
Revenues:		
Papermaking Systems	\$ 280,436	\$ 248,069
Wood Processing Systems	25,437	25,910
Fiber-based Products	8,012	8,528
	<u>\$ 313,885</u>	<u>\$ 282,507</u>

*Papermaking Systems Segment.* Revenues increased \$32.4 million, or 13%, to \$280.4 million in the first nine months of 2016 from \$248.0 million in the first nine months of 2015, including \$28.8 million in revenues from the acquisition of PAAL in April 2016, offset in part by a \$5.4 million decrease from the unfavorable effect of foreign currency translation. Excluding the acquisition and foreign currency translation effect, revenues in our Papermaking Systems segment increased \$9.0 million, or 4%, primarily due to increased demand for our capital products at our European and Chinese operations. These increases were offset in part by decreased demand for both our parts and consumables and capital products at our North American operations due to general economic uncertainty which has led to more cautious spending by our North American customers.

*Wood Processing Systems Segment.* Revenues decreased \$0.5 million, or 2%, to \$25.4 million in the first nine months of 2016 from \$25.9 million in the first nine months of 2015, including a decrease of \$1.3 million from the unfavorable effect of foreign currency translation. Excluding the effect of foreign currency translation, revenues in our Wood Processing Systems segment increased \$0.8 million, or 3%, due to increased demand for our capital products.

*Fiber-based Products.* Revenues decreased \$0.5 million, or 6%, to \$8.0 million in the first nine months of 2016 from \$8.5 million in the first nine months of 2015, primarily due to decreased demand for our biodegradable granular products.

*Papermaking Systems Segment by Product Line.* The following table presents revenues for our Papermaking Systems segment by product line, the changes in revenues by product line between the first nine months of 2016 and 2015, and the changes in revenues by product line between the first nine months of 2016 and 2015 excluding the effect of foreign currency translation. The increase in revenues excluding the effect of foreign currency translation represents the increase resulting from converting the first nine months of 2016 revenues in local currency into U.S. dollars at the first nine months of 2015 exchange rates, and then comparing this result to actual revenues in the first nine months of 2015. The presentation of the changes in revenues by product line excluding the effect of foreign 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 our 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 measure.

(In thousands)	Nine Months Ended			Increase Excluding Effect of Foreign Currency Translation
	October 1, 2016	October 3, 2015	Increase (Decrease)	
Papermaking Systems Product Lines:				
Stock-Preparation	\$ 132,158	\$ 101,625	\$ 30,533	\$ 31,651
Doctoring, Cleaning, & Filtration	80,374	77,144	3,230	6,013
Fluid-Handling	67,904	69,300	(1,396)	119
	<u>\$ 280,436</u>	<u>\$ 248,069</u>	<u>\$ 32,367</u>	<u>\$ 37,783</u>

**Results of Operations (continued)**

Revenues from our Stock-Preparation product line in the first nine months of 2016 increased \$30.5 million, or 30%, compared to the first nine months of 2015, including \$28.8 million in revenues from the acquisition of PAAL, offset in part by a \$1.1 million decrease from the unfavorable effect of foreign currency translation. Excluding the acquisition and unfavorable effect of foreign currency translation, revenues from our Stock-Preparation product line increased \$2.8 million, or 3%, compared to the first nine months of 2015, primarily due to increased demand for our capital products at our European operations and, to a lesser extent, our Chinese operations. These increases were offset in part by decreased demand for our capital products at our North American operations due to general economic uncertainty which has led to more cautious spending by our North American customers. Revenues from our Doctoring, Cleaning, & Filtration product line in the first nine months of 2016 increased \$3.2 million, or 4%, including a \$2.8 million decrease from the unfavorable effect of foreign currency translation. Excluding the effect of foreign currency translation, revenues from our Doctoring, Cleaning, & Filtration product line increased \$6.0 million, or 8%, compared to the first nine months of 2015 due to increased demand for our capital products at our European and Chinese operations, offset in part by decreased demand for our products at our North American operations. Revenues from our Fluid-Handling product line in the first nine months of 2016 decreased \$1.4 million, or 2%, compared to the first nine months of 2015, including a \$1.5 million decrease from the unfavorable effect of foreign currency translation. Excluding the effect of foreign currency translation, revenues from our Fluid-Handling product line increased \$0.1 million primarily due to an increase in demand for our capital products at our Chinese operations, as well as increased demand for our products at our European operations, which were largely offset by a decrease in demand for our parts and consumables products at our North American operations.

*Gross Margin*

Gross margins for the first nine months of 2016 and 2015 were as follows:

	Nine Months Ended	
	October 1, 2016	October 3, 2015
Gross Margin:		
Papermaking Systems	45.7%	47.1%
Wood Processing Systems	41.5	48.7
Fiber-based Products	45.7	50.1
	45.3%	47.3%

*Papermaking Systems Segment.* The gross margin in our Papermaking Systems segment decreased to 45.7% in the first nine months of 2016 from 47.1% in the first nine months of 2015. This decrease was primarily due to the inclusion of lower gross margins from the acquisition of PAAL and a decrease in the proportion of higher-margin parts and consumables revenues.

*Wood Processing Systems Segment.* The gross margin in our Wood Processing Systems segment decreased to 41.5% in the first nine months of 2016 from 48.7% in the first nine months of 2015 due to lower gross profit margins on our parts and consumables products due to product mix, and on our capital products due to targeted pricing. Also contributing to the lower gross profit margin in the first nine months of 2016 was a decrease in the proportion of higher-margin parts and consumables revenues compared to the first nine months of 2015.

*Fiber-based Products.* The gross margin in our Fiber-based Products business decreased to 45.7% in the first nine months of 2016 from 50.1% in the first nine months of 2015, primarily due to decreased manufacturing efficiency related to lower production volumes.

*Operating Expenses*

SG&A expenses as a percentage of revenues was 32% and 33% in the first nine months of 2016 and 2015, respectively. SG&A expenses increased \$9.6 million, or 10%, to \$102.1 million in the first nine months of 2016 from \$92.5 million in the first nine months of 2015, principally due to an increase of \$7.9 million from the inclusion of SG&A expenses from the PAAL acquisition and \$1.8 million of acquisition-related expenses. These increases were offset in part by a \$1.8 million decrease from the favorable effect of foreign currency translation.

## Results of Operations (continued)

Total stock-based compensation expense was \$3.9 million and \$4.5 million in the first nine months of 2016 and 2015, respectively, and is included in SG&A expenses in the accompanying condensed consolidated statement of income.

Research and development expenses were \$5.6 million and \$5.2 million in the first nine months of 2016 and 2015, respectively, and represented 2% of revenues in both periods.

### *Restructuring Costs and Other Income*

We recorded other income in the first nine months of 2016 from a pre-tax gain of \$0.3 million related to the sale of real estate in Sweden for cash proceeds of \$0.4 million.

Restructuring costs in the Papermaking Systems segment were \$0.3 million in the first nine months of 2015, due to severance costs associated with the reduction of nine employees in Canada and Sweden. These actions were taken to further streamline our operations in those locations.

### *Interest Income*

Interest income was \$0.2 million in both the first nine months of 2016 and 2015.

### *Interest Expense*

Interest expense increased to \$0.9 million in the first nine months of 2016 from \$0.7 million in the first nine months of 2015 primarily due to higher average outstanding borrowings, offset in part by lower average interest rates in the first nine months of 2016 compared to the first nine months of 2015.

### *Provision for Income Taxes*

Our provision for income taxes was \$9.5 million and \$11.0 million in the first nine months of 2016 and 2015, respectively, and represented 28% and 31% of pre-tax income. The effective tax rate of 28% in the first nine months of 2016 was lower than our statutory tax rate primarily due to the distribution of our worldwide earnings, the adoption of Accounting Standards Update (ASU) No. 2016-09 that resulted in a favorable adjustment for the net excess income tax benefits from stock-based compensation arrangements, a partial release of the U.S. valuation allowance related to state net operating losses, and a partial benefit of current-year state losses. These items were offset in part by an increase in tax related to non-deductible expenses. The effective tax rate of 31% in the first nine months of 2015 was lower than our statutory tax rate primarily due to the distribution of our worldwide earnings and an adjustment to increase deferred tax assets, which were offset in part by an increase in non-deductible expenses, state tax expense, and the U.S. tax cost of foreign operations.

### *Income from Continuing Operations*

Income from continuing operations increased \$0.5 million to \$24.7 million in the first nine months of 2016 compared to \$24.2 million in the first nine months of 2015, primarily due to a decrease in our provision for income taxes, offset in part by a decrease in our operating income and an increase in interest expense (see *Revenues, Gross Margin, Operating Expenses, Interest Expense* and *Provision for Income Taxes* discussed above).

### *Recent Accounting Pronouncements*

*Revenue from Contracts with Customers (Topic 606) Section A-Summary and Amendments That Create Revenue from Contracts with Customers (Topic 606) and Other Assets and Deferred Costs-Contracts with Customers (Subtopic 340-40)*. In May 2014, the Financial Accounting Standards Board (FASB) issued ASU No. 2014-09, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The new guidance provides a five-step analysis of transactions to determine when and how revenue is recognized. The ASU will replace most existing revenue recognition guidance in GAAP when it becomes effective. In March 2016, the FASB issued ASU No. 2016-08, which further clarifies the guidance on the principal versus agent considerations within ASU No. 2014-09. In April 2016, the FASB issued ASU No. 2016-10 to expand the guidance on identifying performance obligations and licensing within ASU 2014-09. In May 2016, the FASB issued ASU No. 2016-11, which rescinds certain previously issued guidance, including, among other items, guidance relating to accounting for shipping and handling fees and freight services effective upon adoption of ASU No. 2014-09. Also in May 2016, the FASB issued ASU No. 2016-12, which narrowly amended the revenue recognition guidance regarding collectability, noncash consideration, presentation of sales tax and transition. These new ASUs are effective

**Results of Operations (continued)**

for us beginning in fiscal 2018. Early adoption is permitted in fiscal 2017. The guidance permits the use of either the retrospective or cumulative effect transition method. We are currently evaluating the effect that these ASUs will have on our consolidated financial statements and related disclosures. We have not yet selected a transition method nor have we determined the effect of these standards on our ongoing financial reporting.

*Compensation-Stock Compensation (Topic 718) Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period.* In June 2014, the FASB issued ASU No. 2014-12, which clarifies the proper method of accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period. Under the new guidance, a performance target that affects vesting and could be achieved after completion of the service period should be treated as a performance condition under FASB Accounting Standards Codification (ASC) 718 and, as a result, should not be included in the estimation of the grant-date fair value of the award. An entity should recognize compensation cost for the award when it becomes probable that the performance target will be achieved. In the event an entity determines that it is probable that a performance target will be achieved before the end of the service period, the compensation cost of the award should be recognized prospectively over the remaining service period. We adopted this guidance at the beginning of fiscal 2016. The adoption of this ASU did not have an impact on our condensed consolidated financial statements.

*Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs.* In April 2015, the FASB issued ASU No. 2015-03, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. In addition, in June 2015, the FASB issued ASU No. 2015-15, which allows an entity to defer the requirements of ASU No. 2015-03 on deferred issuance costs related to line-of-credit arrangements. The recognition and measurement guidance for debt issuance costs are not affected by the amendments in these ASUs. These new disclosure items are effective for us beginning in fiscal 2016. We adopted the guidance in these ASUs at the beginning of fiscal 2016. Adoption of these ASUs did not have an impact on our condensed consolidated financial statements.

*Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent).* In May 2015, the FASB issued ASU No. 2015-07, which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient. This ASU also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. Rather, those disclosures are limited to investments for which the entity has elected to measure the fair value using that practical expedient. We adopted the disclosure requirements in this guidance at the beginning of fiscal 2016. As this ASU is disclosure-related only, its adoption did not have an effect on our condensed consolidated financial statements.

*Inventory (Topic 330), Simplifying the Measurement of Inventory.* In July 2015, the FASB issued ASU No. 2015-11, which requires that an entity measure inventory within the scope of this ASU at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Substantial and unusual losses that result from subsequent measurement of inventory should be disclosed in the financial statements. This new guidance is effective for us beginning in fiscal 2017. Early adoption is permitted. We are currently evaluating the effect that this ASU will have on our condensed consolidated financial statements.

*Business Combinations (Topic 805), Simplifying the Accounting for Measurement-Period Adjustments.* In September 2015, the FASB issued ASU No. 2015-16, which requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The acquirer is required to record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. In addition, an entity is required to present, separately on the face of the statement of income or through disclosure in the notes, the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. We adopted this guidance at the beginning of fiscal 2016. Adoption of this ASU did not have an impact on our condensed consolidated financial statements.



**Results of Operations (continued)**

*Leases (Topic 842).* In February 2016, the FASB issued ASU No. 2016-02, which requires a lessee to recognize a right-of-use asset and a lease liability for operating leases, initially measured at the present value of the future lease payments, in its balance sheet. This ASU also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, generally on a straight-line basis. This new guidance is effective for us in fiscal 2019. Early adoption is permitted. We are currently evaluating the effects that the adoption of this ASU will have on our condensed consolidated financial statements.

*Compensation -Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting.* In March 2016, the FASB issued ASU No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification in the statement of cash flows. We early adopted this ASU at the beginning of fiscal 2016. This ASU requires that excess income tax benefits and tax deficiencies related to stock-based compensation arrangements be recognized as discrete items within the provision for income taxes instead of capital in excess of par value in the reporting period in which they occur. As a result of the adoption of this ASU, we recognized an income tax benefit of \$0.1 million, or \$0.01 per diluted share, and \$0.5 million, or \$0.05 per diluted share, in our condensed consolidated statement of income in the third quarter and first nine months of 2016, respectively. We prospectively adopted the requirement to classify the excess tax benefits from stock-compensation awards within operating activities in the condensed consolidated statement of cash flows in the first quarter of 2016. Prior period amounts were not restated. We have also adopted the guidance in this ASU that requires that taxes paid related to the withholding of common stock upon the vesting of employee stock awards be presented separately within financing activities in the condensed consolidated statement of cash flows. We have retrospectively restated the 2015 period to reclassify the comparable amount, which was previously presented in other current liabilities within operating activities. There were no other material effects from adoption of this ASU on our condensed consolidated financial statements.

*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 us in fiscal 2020. Early adoption is permitted beginning in fiscal 2019. We are currently evaluating the effects that the adoption of this ASU will have on our condensed consolidated financial statements.

*Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments.* In August 2016, the FASB issued ASU No. 2016-15, which simplifies the diversity in practice related to the presentation and classification of certain cash receipts and cash payments in the statement of cash flows under Topic 230. This ASU addresses the following eight specific cash flow issues: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance; distributions received from equity method investees; beneficial interests in securitization transactions; and separately identifiable cash flows and application of the predominance principle. This new guidance is effective for us in fiscal 2018. Early adoption is permitted. We do not believe that adoption of this ASU will have a material impact on our condensed consolidated financial statements.

*Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory.* In October 2016, the FASB issued ASU No. 2016-16, which requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs and eliminates the exception for an intra-entity transfer of an asset other than inventory. This new guidance is effective for us in fiscal 2018 with adoption required on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Early adoption is permitted. We are currently evaluating the effect that the adoption of this ASU will have on our condensed consolidated financial statements.

## Liquidity and Capital Resources

Consolidated working capital was \$114.4 million at October 1, 2016, compared with \$108.5 million at January 2, 2016. Included in working capital are cash and cash equivalents of \$63.2 million and \$65.5 million at October 1, 2016 and January 2, 2016, respectively. At October 1, 2016, \$60.2 million of our cash and cash equivalents were held by our foreign subsidiaries.

### *First Nine Months of 2016*

Our operating activities provided cash of \$34.7 million in the first nine months of 2016. Working capital used cash of \$4.2 million in the first nine months of 2016, including decreases of \$5.6 million in accounts payable due to reduced project activity in our Stock-Preparation product line and \$6.7 million in other current liabilities primarily related to income tax and incentive compensation payments and a decrease in billings in excess of costs and fees. These uses of cash were offset in part by \$5.4 million of cash provided by decreases in accounts receivable and unbilled costs and fees primarily in our Stock-Preparation product line, and \$2.1 million from a decrease in inventory primarily due to the shipment of Stock-Preparation orders in the third quarter of 2016.

Our investing activities used cash of \$59.8 million in the first nine months of 2016 primarily related to the acquisition of PAAL for approximately \$56.6 million in cash, net of cash acquired. In addition, we used \$3.6 million for purchases of property, plant, and equipment in the first nine months of 2016.

Our financing activities provided cash of \$24.0 million in the first nine months of 2016. We received cash proceeds of \$48.0 million from borrowings under our unsecured revolving credit facility (2012 Credit Agreement), of which \$29.9 million was used to fund the PAAL acquisition, and \$1.8 million from the issuance of our common stock due to the exercise of employee stock options. These sources of cash were offset in part by \$15.4 million used for principal payments on our outstanding debt obligations in the first nine months of 2016, of which \$5.3 million was used to repay the remaining principal balance on our commercial real estate loan, \$6.0 million used for cash dividends paid to stockholders, and \$2.6 million used for tax withholding payments related to stock-based compensation. In addition, we paid \$1.1 million of contingent consideration in the first nine months of 2016 related to a prior period acquisition.

### *First Nine Months of 2015*

Our operating activities provided cash of \$28.0 million in the first nine months of 2015. We used cash of \$16.0 million for inventory and \$4.7 million for accounts receivable and unbilled contract costs and fees. The cash used for inventory was primarily due to an increase in work in process at our Stock-Preparation product line in China related to projects that shipped later in 2015 and in 2016. The cash used for accounts receivable and unbilled contract costs and fees related to increased project activity, especially in our Stock-Preparation product line. These uses of cash were offset in part by \$14.1 million of cash provided by other current liabilities primarily due to an increase in customer deposits related to capital equipment projects.

Our investing activities used cash of \$4.0 million in the first nine months of 2015 primarily for purchases of property, plant, and equipment.

Our financing activities used cash of \$12.5 million in the first nine months of 2015. We used cash of \$16.5 million for principal payments on our outstanding debt obligations, \$8.9 million for the repurchase of our common stock on the open market, \$5.3 million for cash dividends paid to stockholders and \$2.5 million for tax withholding payments related to stock-based compensation. These uses of cash were offset in part by cash proceeds of \$20 million from borrowings under our 2012 Credit Agreement.

### *Additional Liquidity and Capital Resources*

On May 20, 2015, our board of directors approved the repurchase by us of up to \$20 million of our equity securities during the period from May 20, 2015 to May 20, 2016. On May 18, 2016, our board of directors approved the repurchase by us of up to an additional \$20 million of our equity securities during the period from May 18, 2016 to May 18, 2017. We did not purchase any shares of our common stock under these authorizations in the first nine months of 2016.

## Liquidity and Capital Resources (continued)

We paid quarterly cash dividends totaling \$6.0 million in the first nine months of 2016. On September 14, 2016, we declared a quarterly cash dividend of \$0.19 per outstanding share of our common stock, which will be paid on November 10, 2016 to shareholders of record on October 13, 2016. Future declarations of dividends are subject to board of directors' approval and may be adjusted as business needs or market conditions change. The payment of cash dividends is subject to our compliance with the consolidated leverage ratio contained in our 2012 Credit Agreement.

It is our intent to reinvest indefinitely the earnings of our international subsidiaries in order to support the current and future capital needs of their operations. We do not anticipate the need to repatriate funds to the United States to satisfy domestic liquidity needs arising in the ordinary course of business. Through October 1, 2016, we have not provided for U.S. income taxes on approximately \$185.7 million of unremitted foreign earnings. The U.S. tax cost has not been determined due to the fact that it is not practicable to estimate at this time. The related foreign tax withholding, which would be required if we were to remit the foreign earnings to the U.S., would be approximately \$4.0 million.

Although we currently have no material commitments for capital expenditures, we plan to make expenditures of approximately \$3 to \$4 million during the remainder of 2016 for property, plant, and equipment.

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

### *Revolving Credit Facility*

We entered into our 2012 Credit Agreement in the aggregate principal amount of up to \$100 million on August 3, 2012 and amended it on November 1, 2013 and March 29, 2016. The 2012 Credit Agreement includes an uncommitted unsecured incremental borrowing facility of up to an additional \$50 million. The principal on any borrowings made under the 2012 Credit Agreement is due on November 1, 2018. Interest on any loans outstanding under the 2012 Credit Agreement accrues and is payable quarterly in arrears at one of the following rates selected by us: (i) the highest of (a) the federal funds rate plus 0.50% plus an applicable margin of 0% to 1%, (b) the prime rate, as defined, plus an applicable margin of 0% to 1%, and (c) the Eurocurrency rate, as defined, plus 0.50% plus an applicable margin of 0% to 1% or (ii) the Eurocurrency rate, as defined, plus an applicable margin of 1% to 2%. The applicable margin is determined based upon the ratio of our total debt to earnings before interest, taxes, depreciation, and amortization, as defined in the 2012 Credit Agreement. For this purpose, total debt is defined as total debt less up to \$25 million of unrestricted U.S. cash.

As of October 1, 2016, the outstanding balance under the 2012 Credit Agreement was \$63.5 million, an increase of \$37.5 million from January 2, 2016. This increase includes a \$29.9 million euro-denominated borrowing used to fund the acquisition of PAAL in April 2016. As of October 1, 2016, we had \$36.3 million of borrowing capacity available under the committed portion of the 2012 Credit Agreement. The amount we are able to borrow under the 2012 Credit Agreement is the total borrowing capacity of \$100 million less any outstanding borrowings, letters of credit and multi-currency borrowings issued under the 2012 Credit Agreement.

Our obligations under the 2012 Credit Agreement may be accelerated upon the occurrence of an event of default under the 2012 Credit Agreement, which includes customary events of default including without limitation payment defaults, defaults in the performance of affirmative and negative covenants, the inaccuracy of representations or warranties, bankruptcy- and insolvency-related defaults, defaults relating to such matters as the Employment Retirement Income Security Act, unsatisfied judgments, the failure to pay certain indebtedness, and a change of control default. In addition, the 2012 Credit Agreement contains negative covenants applicable to us and our subsidiaries, including financial covenants requiring us to comply with a maximum consolidated leverage ratio of 3.5 to 1 and a minimum consolidated interest coverage ratio of 3 to 1, and restrictions on liens, indebtedness, fundamental changes, dispositions of property, making certain restricted payments (including dividends and stock repurchases), investments, transactions with affiliates, sale and leaseback transactions, swap agreements, changing our fiscal year, arrangements affecting subsidiary distributions, entering into new lines of business, and certain actions related to the discontinued operation. As of October 1, 2016, we were in compliance with these covenants.

Loans under the 2012 Credit Agreement are guaranteed by certain of our domestic subsidiaries pursuant to a Guarantee Agreement, effective August 3, 2012.

## **Liquidity and Capital Resources (continued)**

### *Commercial Real Estate Loan*

On May 4, 2006, we borrowed \$10 million under a promissory note. We repaid the outstanding balance on the loan of \$5.1 million in the second quarter of 2016.

### *Interest Rate Swap Agreements*

On January 16, 2015, we entered into a swap agreement (2015 Swap Agreement) to hedge our exposure to movements in the three-month LIBOR rate on future outstanding debt. The 2015 Swap Agreement expires on March 27, 2020 and has a \$10 million notional value. Under the 2015 Swap Agreement, on a quarterly basis we receive a three-month LIBOR rate and pay a fixed rate of interest of 1.50% plus an applicable margin.

As of October 1, 2016, the 2015 Swap Agreement had a net unrealized loss of \$0.1 million. We believe that any credit risk associated with the swap agreement is remote based on our financial position and the creditworthiness of the financial institution issuing the swap agreement.

The counterparty to the 2015 Swap Agreement could demand an early termination of the 2015 Swap Agreement if we are in default under the 2012 Credit Agreement, or any agreement that amends or replaces the 2012 Credit Agreement in which the counterparty is a member, and we are unable to cure the default. An event of default under the 2012 Credit Agreement includes customary events of default and failure to comply with financial covenants, including a maximum consolidated leverage ratio of 3.5 to 1 and a minimum consolidated interest coverage ratio of 3 to 1. The net unrealized loss of \$0.1 million associated with the 2015 Swap Agreement as of October 1, 2016 represents the estimated amount that we would pay to the counterparty in the event of an early termination.

We entered into a swap agreement in 2006 (2006 Swap Agreement) to convert the Commercial Real Estate Loan from a floating to a fixed rate of interest. The 2006 Swap Agreement expired in May 2016.

## **Item 3 – Quantitative and Qualitative Disclosures About Market Risk**

Our exposure to market risk from changes in interest rates and foreign currency exchange rates has not changed materially from our exposure at fiscal year-end 2015 as disclosed in Item 7A of our Annual Report on Form 10-K for the fiscal year ended January 2, 2016, filed with the SEC.

## **Item 4 – Controls and Procedures**

### **(a) Evaluation of Disclosure Controls and Procedures**

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of October 1, 2016. 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 October 1, 2016, our Chief Executive Officer and Chief Financial Officer concluded that as of October 1, 2016, our disclosure controls and procedures were effective at the reasonable assurance level.

(b) Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the fiscal quarter ended October 1, 2016 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 risk factor shown 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 January 2, 2016, filed with the SEC.

*Economic conditions and regulatory changes caused by the United Kingdom's likely exit from the European Union could adversely affect our business.*

The announcement in June 2016 that voters in the United Kingdom (U.K.) have approved an exit from the European Union (E.U.), referred to as Brexit, has resulted in volatility in the global stock market as well as currency exchange rate fluctuations. The announcement of Brexit and likely withdrawal of the U.K. from the E.U. may also create global economic uncertainty, which may cause our customers to closely monitor their costs and reduce their spending budgets. This could adversely affect our business, financial condition, operating results, and cash flows. Our revenues to customers in the U.K. represented 3% of total revenues in the first nine months of 2016.

Item 6 – Exhibits

See Exhibit Index on the page immediately preceding the exhibits.

**KADANT INC.**

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized as of the 9th day of November, 2016.

KADANT INC.

/s/ Michael J. McKenney

Michael J. McKenney

Senior Vice President and Chief Financial Officer

(Principal Financial Officer)

**KADANT INC.**

## EXHIBIT INDEX

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	XBRL Instance Document.*
101.SCH	XBRL Taxonomy Extension Schema Document.*
101.CAL	XBRL Taxonomy Calculation Linkbase Document.*
101.LAB	XBRL Taxonomy Label Linkbase Document.*
101.PRE	XBRL Taxonomy Presentation Linkbase Document.*
101.DEF	XBRL Taxonomy Definition Linkbase Document.*

\* Submitted electronically herewith.

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Condensed Consolidated Balance Sheet at October 1, 2016 and January 2, 2016, (ii) Condensed Consolidated Statement of Income for the three and nine months ended October 1, 2016 and October 3, 2015, (iii) Condensed Consolidated Statement of Comprehensive Income for the three and nine months ended October 1, 2016 and October 3, 2015, (iv) Condensed Consolidated Statement of Cash Flows for the nine months ended October 1, 2016 and October 3, 2015, (v) Condensed Consolidated Statement of Stockholders' Equity for the nine months ended October 1, 2016 and October 3, 2015, and (vi) Notes to Condensed Consolidated Financial Statements.

**CERTIFICATION**

I, Jonathan W. Painter, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended October 1, 2016 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 9, 2016

/s/ Jonathan W. Painter

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Jonathan W. Painter  
Chief Executive Officer



**CERTIFICATION**

I, Michael J. McKenney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended October 1, 2016 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 9, 2016

/s/ Michael J. McKenney

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Michael J. McKenney  
Chief Financial Officer

**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, the undersigned, Jonathan W. Painter, Chief Executive Officer, and Michael J. McKenney, Chief Financial Officer, of Kadant Inc., a Delaware corporation (the "Company"), do hereby certify, to our best knowledge and belief, that:

The Quarterly Report on Form 10-Q for the period ended October 1, 2016 of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 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 9, 2016

/s/ Jonathan W. Painter

Jonathan W. Painter  
Chief Executive Officer

/s/ Michael J. McKenney

Michael J. McKenney  
Chief Financial Officer

This certification accompanies this Quarterly Report on Form 10-Q pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by such Act, be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (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.

