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 April 1, 2023

OR

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

For the transition period from ________ to _________

Commission file number 001-11406

KADANT INC.

(Exact name of registrant as specified in its charter)

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

One Technology Park Drive
Westford, Massachusetts 01886
(Address of principal executive offices, including zip code)

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

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

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

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

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

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

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

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

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

As of April 28, 2023, the registrant had 11,703,481 shares of common stock outstanding.

Kadant Inc.
Quarterly Report on Form 10-Q
for the Period Ended April 1, 2023
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PART 1 – FINANCIAL INFORMATION

Item 1 – Financial Statements

KADANT INC.
Condensed Consolidated Balance Sheet
(Unaudited)

(In thousands, except share and per share amounts)	April 1, 2023	December 31, 2022
Assets		
Current Assets:		
Cash and cash equivalents	$ 81,183	$ 76,371
Restricted cash	4,324	3,354
Accounts receivable, net of allowances of $3,587 and $3,595	131,268	130,297
Inventories	179,199	163,672
Contract assets	12,389	14,898
Other current assets	41,743	26,818
Total Current Assets	450,106	415,410
Property, Plant, and Equipment, net of accumulated depreciation of $125,754 and $121,442	120,274	118,855
Other Assets	39,478	54,516
Intangible Assets, Net	171,396	175,645
Goodwill	387,890	385,455
Total Assets	$ 1,169,144	$ 1,149,881
Liabilities and Stockholders' Equity		
Current Liabilities:		
Short-term obligations and current maturities of long-term obligations (Note 5)	$ 3,352	$ 3,821
Accounts payable	57,939	58,060
Accrued payroll and employee benefits	30,336	35,672
Customer deposits	80,190	64,361
Advanced billings	10,219	7,966
Other current liabilities	43,811	43,581
Total Current Liabilities	225,847	213,461
Long-Term Obligations (Note 5)	178,555	197,340
Long-Term Deferred Income Taxes	39,672	38,745
Other Long-Term Liabilities	40,765	44,764
Commitments and Contingencies (Note 11)		
Stockholders' Equity:		
Preferred stock, $.01 par value, 5,000,000 shares authorized; none issued	—	—
Common stock, $.01 par value, 150,000,000 shares authorized; 14,624,159 shares issued	146	146
Capital in excess of par value	117,547	119,924
Retained earnings	685,325	660,644
Treasury stock at cost, 2,920,678 and 2,949,997 shares	(71,569)	(72,287)
Accumulated other comprehensive items (Note 7)	(49,085)	(54,578)
Total Kadant Stockholders' Equity	682,364	653,849
Noncontrolling interest	1,941	1,722
Total Stockholders' Equity	684,305	655,571
Total Liabilities and Stockholders' Equity	$ 1,169,144	$ 1,149,881

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 April 1, 2023	Three Months Ended April 2, 2022
Revenue (Notes 1 and 10)	$ 229,758	$ 226,480
Costs and Operating Expenses:		
Cost of revenue	127,712	128,269
Selling, general, and administrative expenses	58,562	59,168
Research and development expenses	3,370	3,078
Gain on sale and other costs, net (Note 2)	—	(20,008)
	189,644	170,507
Operating Income	40,114	55,973
Interest Income	299	102
Interest Expense	(2,370)	(1,234)
Other Expense, Net	(21)	(22)
Income Before Provision for Income Taxes	38,022	54,819
Provision for Income Taxes (Note 4)	9,763	13,378
Net Income	28,259	41,441
Net Income Attributable to Noncontrolling Interest	(184)	(249)
Net Income Attributable to Kadant	$ 28,075	$ 41,192
Earnings per Share Attributable to Kadant (Note 3)		
Basic	$ 2.40	$ 3.54
Diluted	$ 2.40	$ 3.53
Weighted Average Shares (Note 3)		
Basic	11,681	11,630
Diluted	11,694	11,655

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 April 1, 2023	Three Months Ended April 2, 2022
Net Income	$ 28,259	$ 41,441
Other Comprehensive Items:		
Foreign currency translation adjustment	5,573	(2,284)
Post-retirement liability adjustments, net (net of tax of $(2) and $2)	(6)	9
Deferred (loss) gain on cash flow hedges (net of tax of $(14) and $68)	(39)	277
Other comprehensive items	5,528	(1,998)
Comprehensive Income	33,787	39,443
Comprehensive Income Attributable to Noncontrolling Interest	(219)	(203)
Comprehensive Income Attributable to Kadant	$ 33,568	$ 39,240

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

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

(In thousands)	Three Months Ended April 1, 2023		Three Months Ended April 2, 2022	
Operating Activities				
Net income attributable to Kadant	$	28,075	$	41,192
Net income attributable to noncontrolling interest		184		249
Net income		28,259		41,441
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization		8,446		9,445
Stock-based compensation expense		2,238		2,260
Gain on the sale of assets (Note 2)		—		(20,190)
Non-cash impairment costs (Note 2)		—		182
Other items, net		842		6,325
Changes in assets and liabilities, net of effects of acquisitions:				
Accounts receivable		517		(9,127)
Contract assets		2,637		(409)
Inventories		(13,997)		(9,359)
Other assets		1,293		1,113
Accounts payable		77		8,864
Customer deposits		11,114		3,329
Other liabilities		(4,560)		(10,106)
Net cash provided by operating activities		36,866		23,768
Investing Activities				
Acquisition, net of cash acquired		—		(62)
Purchases of property, plant, and equipment		(4,469)		(2,868)
Proceeds from sale of property, plant, and equipment		32		1,595
Other investing activities		(30)		44
Net cash used in investing activities		(4,467)		(1,291)
Financing Activities				
Proceeds from issuance of short- and long-term obligations		—		15,516
Repayment of short- and long-term obligations		(20,761)		(35,064)
Tax withholding payments related to stock-based compensation		(3,897)		(4,550)
Dividends paid		(3,036)		(2,905)
Other financing activities		(63)		—
Net cash used in financing activities		(27,757)		(27,003)
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash		1,140		(664)
Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash		5,782		(5,190)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period		79,725		94,161
Cash, Cash Equivalents, and Restricted Cash at End of Period	$	85,507	$	88,971

See Note 1, Nature of Operations and Summary of Significant Accounting Policies, under the heading *Supplemental Cash Flow Information* for further details.

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

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

	Three Months Ended April 1, 2023								
(In thousands, except share and per share amounts)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at December 31, 2022	14,624,159	$ 146	$ 119,924	$ 660,644	2,949,997	$ (72,287)	$ (54,578)	$ 1,722	$ 655,571
Net income	—	—	—	28,075	—	—	—	184	28,259
Dividends declared – Common Stock, $0.29 per share	—	—	—	(3,394)	—	—	—	—	(3,394)
Activity under stock plans	—	—	(2,377)	—	(29,319)	718	—	—	(1,659)
Other comprehensive items	—	—	—	—	—	—	5,493	35	5,528
Balance at April 1, 2023	14,624,159	$ 146	$ 117,547	$ 685,325	2,920,678	$ (71,569)	$ (49,085)	$ 1,941	$ 684,305

	Three Months Ended April 2, 2022								
(In thousands, except share and per share amounts)	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Retained Earnings	Treasury Stock Shares	Treasury Stock Amount	Accumulated Other Comprehensive Items	Noncontrolling Interest	Total Stockholders' Equity
Balance at January 1, 2022	14,624,159	$ 146	$ 115,888	$ 551,848	3,003,419	$ (73,596)	$ (30,350)	$ 1,680	$ 565,616
Net income	—	—	—	41,192	—	—	—	249	41,441
Dividends declared – Common Stock, $0.26 per share	—	—	—	(3,031)	—	—	—	—	(3,031)
Activity under stock plans	—	—	(3,237)	—	(38,633)	947	—	—	(2,290)
Other comprehensive items	—	—	—	—	—	—	(1,952)	(46)	(1,998)
Balance at April 2, 2022	14,624,159	$ 146	$ 112,651	$ 590,009	2,964,786	$ (72,649)	$ (32,302)	$ 1,883	$ 599,738

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

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

1. Nature of Operations and Summary of Significant Accounting Policies

Nature of Operations

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

Kadant Inc. (together with its subsidiaries, the Company) is a global supplier of technologies and engineered systems that drive Sustainable Industrial Processing. Its products and services play an integral role in enhancing efficiency, optimizing energy utilization, and maximizing productivity in process industries while helping customers advance their sustainability initiatives with products that reduce waste or generate more yield with fewer inputs, particularly fiber, energy, and water. Producing more while consuming less is a core aspect of Sustainable Industrial Processing and a major element of the strategic focus of the Company's three reportable operating segments: Flow Control, Industrial Processing, and Material Handling.

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 April 1, 2023, its results of operations, comprehensive income, cash flows and stockholders' equity for the three-month periods ended April 1, 2023 and April 2, 2022. Interim results are not necessarily indicative of results for a full year or for any other interim period.

The condensed consolidated balance sheet presented as of December 31, 2022 has been derived from the consolidated financial statements contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the Annual Report). The condensed consolidated financial statements and related notes are presented as permitted by the rules and regulations of the Securities and Exchange Commission (SEC) 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 Annual Report.

Use of Estimates and Critical Accounting Policies

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

Note 1 to the consolidated financial statements in the Annual Report describes the significant accounting estimates and policies used in preparation of the consolidated financial statements. There have been no material changes in the Company’s significant accounting policies during the three months ended April 1, 2023.

Supplemental Cash Flow Information

	Three Months Ended	
(In thousands)	April 1, 2023	April 2, 2022
Cash Paid for Interest	$ 2,161	$ 1,017
Cash Paid for Income Taxes, Net of Refunds	$ 9,558	$ 8,013
Non-Cash Investing Activities:		
Reduction in fair value of assets acquired	$ —	$ (983)
Cash paid for acquired businesses	—	(62)
Reduction in liabilities assumed	$ —	$ (1,045)
Purchases of property, plant, and equipment in accounts payable	$ 299	$ 264

(In thousands)	Three Months Ended April 1, 2023	Three Months Ended April 2, 2022
Non-Cash Financing Activities:		
Issuance of Company common stock upon vesting of restricted stock units	$ 4,246	$ 4,578
Dividends declared but unpaid	$ 3,394	$ 3,031

Restricted Cash

The Company's restricted cash generally serves as collateral for bank guarantees associated with providing assurance to customers that the Company will fulfill certain customer obligations entered into in the normal course of business and for certain banker's acceptance drafts issued to vendors. The majority of the bank guarantees will expire over the next twelve months.

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

(In thousands)	April 1, 2023	April 2, 2022	December 31, 2022	January 1, 2022
Cash and cash equivalents	$ 81,183	$ 86,192	$ 76,371	$ 91,186
Restricted cash	4,324	2,779	3,354	2,975
Total Cash, Cash Equivalents, and Restricted Cash	$ 85,507	$ 88,971	$ 79,725	$ 94,161

Inventories

The components of inventories are as follows:

(In thousands)	April 1, 2023	December 31, 2022
Raw Materials	$ 74,726	$ 71,040
Work in Process	49,868	38,612
Finished Goods	54,605	54,020
	$ 179,199	$ 163,672

Intangible Assets, Net

Gross intangible assets were $342,732,000 at April 1, 2023 and $343,130,000 at December 31, 2022. Intangible assets are recorded at fair value at the date of acquisition. Subsequent impairment charges are reflected as a reduction in the gross balance, as applicable. Definite-lived intangible assets are stated net of accumulated amortization and currency translation in the accompanying condensed consolidated balance sheet. The Company amortizes definite-lived intangible assets over lives that have been determined based on the anticipated cash flow benefits of the intangible asset. Accumulated amortization was $160,694,000 at April 1, 2023 and $155,834,000 at December 31, 2022.

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

Goodwill

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

(In thousands)	Flow Control	Industrial Processing	Material Handling	Total
Balance at December 31, 2022				
Gross balance	$ 118,309	$ 209,919	$ 142,765	$ 470,993
Accumulated impairment losses	—	(85,538)	—	(85,538)
Net balance	118,309	124,381	142,765	385,455
2023 Activity				
Acquisition adjustments	—	—	(13)	(13)
Currency translation	1,181	581	686	2,448
Total 2023 activity	1,181	581	673	2,435
Balance at April 1, 2023				
Gross balance	119,490	210,500	143,438	473,428
Accumulated impairment losses	—	(85,538)	—	(85,538)
Net balance	$ 119,490	$ 124,962	$ 143,438	$ 387,890

Warranty Obligations

The Company's contracts covering the sale of its products include warranty provisions that provide assurance to its customers that the products will comply with agreed-upon specifications during a defined period of time. The Company provides for the estimated cost of product warranties at the time of sale based on historical occurrence rates and repair costs, as well as knowledge of any specific warranty problems that indicate projected warranty costs may vary from historical patterns. The Company negotiates the terms regarding warranty coverage and length of warranty depending on the products and applications.

The Company's liability for warranties is included in other current liabilities in the accompanying condensed consolidated balance sheet. The changes in the carrying amount of product warranty obligations are as follows:

	Three Months Ended	
(In thousands)	April 1, 2023	April 2, 2022
Balance at Beginning of Year	$ 7,283	$ 7,298
Provision charged to expense	1,425	1,462
Usage	(1,068)	(1,538)
Currency translation	87	(74)
Balance at End of Period	$ 7,727	$ 7,148

Revenue Recognition

Most of the Company’s revenue relates to products and services that require minimal customization and is recognized at a point in time for each performance obligation under the contract when the customer obtains control of the goods or service. The remaining portion of the Company’s revenue is recognized over time based on an input method that compares the costs incurred to date to the total expected costs required to satisfy the performance obligation. Contracts are accounted for on an over time basis when they include products which have no alternative use and an enforceable right to payment over time. Most of the contracts recognized on an over time basis are for large capital projects. These projects are highly customized for the customer and, as a result, would include a significant cost to rework in the event of cancellation.

The following table presents revenue by revenue recognition method:

(In thousands)	Three Months Ended April 1, 2023	Three Months Ended April 2, 2022
Point in Time	$ 204,239	$ 203,311
Over Time	25,519	23,169
	$ 229,758	$ 226,480

The Company disaggregates its revenue from contracts with customers by reportable operating segment, product type and geography as this best depicts how its revenue is affected by economic factors.

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

(In thousands)	Three Months Ended April 1, 2023	Three Months Ended April 2, 2022
Revenue by Product Type:		
Parts and consumables	$ 151,563	$ 146,244
Capital	78,195	80,236
	$ 229,758	$ 226,480
Revenue by Geography (based on customer location):		
North America	132,453	124,336
Europe	54,157	58,366
Asia	27,770	31,987
Rest of world	15,378	11,791
	$ 229,758	$ 226,480

See Note 10, Business Segment Information, for information on the disaggregation of revenue by reportable operating segment.

The following table presents contract balances from contracts with customers:

(In thousands)	April 1, 2023	December 31, 2022
Contract Assets	$ 12,389	$ 14,898
Contract Liabilities	$ 96,348	$ 82,413

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

The Company recognized revenue of $27,016,000 in the first quarter of 2023 and $34,477,000 in the first quarter of 2022 that was included in the contract liabilities balance at the beginning of 2023 and 2022, respectively. The majority of the Company's contracts for capital equipment have an original expected duration of one year or less. Certain capital contracts require long lead times and could take up to 24 months to complete. For contracts with an original expected duration of over one year, the aggregate amount of the transaction price allocated to the remaining unsatisfied or partially unsatisfied performance obligations as of April 1, 2023 was $51,838,000. The Company will recognize revenue for these performance obligations as they are satisfied, approximately 74% of which is expected to occur within the next twelve months and the remaining 26% after the first quarter of 2024.

Banker's Acceptance Drafts Included in Accounts Receivable

The Company's Chinese subsidiaries may receive banker's acceptance drafts from customers as payment for their trade accounts receivable. The drafts are non-interest bearing obligations of the issuing bank and generally mature within six months of the origination date. The Company's Chinese subsidiaries may sell the drafts at a discount to a third-party financial institution or transfer the drafts to vendors in settlement of current accounts payable prior to the scheduled maturity date. These drafts, which totaled $5,325,000 at April 1, 2023 and $5,729,000 at December 31, 2022, are included in accounts receivable in the accompanying condensed consolidated balance sheet until the subsidiary sells the drafts to a bank and receives a discounted amount, transfers the banker's acceptance drafts in settlement of current accounts payable prior to maturity, or obtains cash payment on the scheduled maturity date.

2. Gain on Sale and Other Costs, Net

Gain on sale and other costs, net recognized during the first quarter of 2022 was $20,008,000, and was comprised of a gain on the sale of a building of $20,190,000, net of an impairment charge of $182,000.

Gain on Sale of Assets

The Company entered into several agreements with the local government in China to sell the existing manufacturing building and land use rights of one of its subsidiaries in China for $25,159,000 and relocate to a new facility (China Transaction). The agreements became effective in the first quarter of 2022 after a 31% down payment was received, including 25% in 2021 and 6% in the first quarter of 2022, and a land use right in a new location was secured. As a result, the Company recognized a gain on the China Transaction of $20,190,000, or $15,143,000, net of deferred taxes of $5,047,000, in the first quarter of 2022. A receivable of $16,082,000 was recognized for the present value of the remaining amount of the sale proceeds, which is due the earlier of when the government sells the property or within two years from the effective date of the agreements. The subsidiary, which is part of the Industrial Processing segment, will continue to occupy its current facility until construction of its new facility is complete, which is expected during the second half of 2023.

A summary of the change in the outstanding receivable on the China Transaction is as follows:

(In thousands)	April 1, 2023
Balance at Inception	$ 17,294
Present value discount	(1,212)
Receivable recorded, net	16,082
Accretion of interest income	422
Currency translation	(1,323)
Balance at December 31, 2022 *(included in other assets)*	15,181
Accretion of interest income	141
Currency translation	125
Balance at April 1, 2023 *(included in other current assets)*	$ 15,447

Impairment Costs

During the first quarter of 2022, the Company recognized an impairment charge of $182,000 within its Industrial Processing segment associated with the write-down of certain fixed assets that will not be moved to the new manufacturing facility in China in connection with the China Transaction.

3. Earnings per Share

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

	Three Months Ended	
(In thousands, except per share amounts)	April 1, 2023	April 2, 2022
Net Income Attributable to Kadant	$ 28,075	$ 41,192
Basic Weighted Average Shares	11,681	11,630
Effect of Stock Options, Restricted Stock Units and Employee Stock Purchase Plan Shares	13	25
Diluted Weighted Average Shares	11,694	11,655
Basic Earnings per Share	$ 2.40	$ 3.54
Diluted Earnings per Share	$ 2.40	$ 3.53

The effect of outstanding and unvested restricted stock units (RSUs) of the Company's common stock totaling 38,000 shares in the first quarter of 2023 and 17,000 shares in the first quarter of 2022 were not included in the computation of diluted EPS for the respective periods as the effect would have been antidilutive or, for unvested performance-based RSUs, the performance conditions had not been met as of the end of the reporting periods.

4. Provision for Income Taxes

The provision for income taxes was $9,763,000 in the first quarter of 2023 and $13,378,000 in the first quarter of 2022. The effective tax rate of 26% in the first quarter of 2023 was higher than the Company's statutory rate of 21% primarily due to the distribution of the Company's worldwide earnings, nondeductible expenses, and state taxes. These increases in tax expense in the first quarter of 2023 were offset in part by a decrease in tax expense related to the net excess income tax benefits from stock-based compensation arrangements. The effective tax rate of 24% in the first quarter of 2022 was higher than the Company's statutory rate of 21% primarily due to the distribution of the Company's worldwide earnings, nondeductible expenses, state taxes, and tax expense associated with the Global Intangible Low-Taxed Income provisions. These increases in tax expense in the first quarter of 2022 were offset in part by a decrease in tax expense related to the net excess income tax benefits from stock-based compensation arrangements and the reversal of tax reserves associated with uncertain tax positions.

5. Short- and Long-Term Obligations

Short- and long-term obligations are as follows:

(In thousands)	April 1, 2023	December 31, 2022
Revolving Credit Facility, due 2027	$ 167,514	$ 186,131
Senior Promissory Notes, due 2023 to 2028	10,000	10,000
Finance Leases, due 2023 to 2026	1,759	1,940
Other Borrowings, due 2023 to 2028	2,634	3,090
Total	181,907	201,161
Less: Short-term Obligations and Current Maturities of Long-Term Obligations	(3,352)	(3,821)
Long-Term Obligations	$ 178,555	$ 197,340

See Note 9, Fair Value Measurements and Fair Value of Financial Instruments, for the fair value information related to the Company's long-term obligations.

Revolving Credit Facility

On November 30, 2022, the Company entered into a sixth amendment to its unsecured multi-currency revolving credit facility, originally entered into on March 1, 2017 (as amended and restated to date, the Credit Agreement). Among other things, this amendment extended the maturity date to November 30, 2027, and increased the uncommitted, unsecured incremental borrowing facility from $150,000,000 to $200,000,000. Pursuant to the Credit Agreement, the Company has a borrowing capacity of $400,000,000 and interest on borrowings outstanding accrues and is payable in arrears calculated at one of the following rates selected by the Company: (i) the Base Rate, as defined, plus an applicable margin of 0% to 1.25%, or (ii) Eurocurrency Rate, Term SOFR (plus a 10 basis point credit spread adjustment), CDOR Rate, and RFR, as applicable and defined, plus an applicable margin of 1.0% to 2.25%. The margin is determined based upon the ratio of the Company's total debt, net of unrestricted cash up to $50,000,000, to earnings before interest, taxes, depreciation, and amortization as defined in the Credit Agreement. Additionally, the Credit Agreement requires the payment of a commitment fee payable in arrears on the available borrowing capacity under the Credit Agreement, which ranges from 0.125% to 0.350%.

Obligations under the Credit Agreement may be accelerated upon the occurrence of an event of default, which includes customary events of default under such financing arrangements. In addition, the Credit Agreement contains negative covenants applicable to the Company and its subsidiaries, including financial covenants requiring the Company to maintain a maximum consolidated leverage ratio of 3.75 to 1.00, or, if the Company elects, for the quarter during which a material acquisition occurs and for the three fiscal quarters thereafter, 4.25 to 1.00, and limitations on making certain restricted payments (including dividends and stock repurchases).

Loans under the Credit Agreement are guaranteed by certain domestic subsidiaries of the Company.

As of April 1, 2023, the outstanding balance under the Credit Agreement was $167,514,000, which included $74,514,000 of euro-denominated borrowings. The Company had $232,760,000 of borrowing capacity available as of April 1, 2023, which was calculated by translating its foreign-denominated borrowings using the administrative agent's borrowing date foreign exchange rates, in addition to the $200,000,000 uncommitted, unsecured incremental borrowing facility.

The weighted average interest rate for the outstanding balance under the Credit Agreement was 4.81% as of April 1, 2023 and 4.33% as of year-end 2022.

See Note 8, Derivatives, under the heading *Interest Rate Swap Agreement,* for information relating to the swap agreement.

Senior Promissory Notes

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

The Initial Notes are *pari passu* with the Company’s indebtedness under the Credit Agreement, and any other senior debt of the Company, subject to certain specified exceptions, and participate in a sharing agreement with respect to the obligations of the Company and its subsidiaries under the Credit Agreement. The Senior Promissory Notes are guaranteed by certain of the Company’s domestic subsidiaries.

Debt Compliance

As of April 1, 2023, the Company was in compliance with the covenants related to its debt obligations.

6. Stock-Based Compensation

The Company recognized stock-based compensation expense of $2,238,000 in the first quarter of 2023 and $2,260,000 in the first quarter of 2022 within selling, general, and administrative (SG&A) expenses in the accompanying condensed consolidated statement of income. The Company recognizes compensation expense for all stock-based awards granted to employees and directors based on the grant date estimate of fair value for those awards. The fair value of RSUs is based on the grant date price of the Company's common stock, reduced by the present value of estimated dividends foregone during the requisite service period. For time-based RSUs, compensation expense is recognized ratably over the requisite service period for the entire award based on the grant date fair value, and net of actual forfeitures recorded when they occur. For performance-based RSUs, compensation expense is recognized ratably over the requisite service period for each separately vesting portion of the award based on the grant date fair value, net of actual forfeitures recorded when they occur, and remeasured each reporting period until the total number of RSUs to be issued is known. Unrecognized compensation expense related to stock-based compensation totaled approximately 12,796,000 at April 1, 2023, which will be recognized over a weighted average period of 2.0 years.

Performance-based RSUs

On March 7, 2023, the Company granted performance-based RSUs to certain of its officers, which represented, in aggregate, the right to receive 21,009 shares (target RSU amount), with an aggregate grant date fair value of $4,528,000. The RSUs are subject to adjustment based on the achievement of the performance measure selected for the fiscal year, which is a specified target for adjusted earnings before interest, taxes, depreciation, and amortization (target adjusted EBITDA) generated from operations for the fiscal year. The RSUs are adjusted by comparing the actual adjusted EBITDA for the performance period to the target adjusted EBITDA. Actual adjusted EBITDA between 50% and 100% of the target adjusted EBITDA results in an adjustment of 50% to 100% of the target RSU amount. Actual adjusted EBITDA between 100% and 115% of the target adjusted EBITDA results in an adjustment using a straight-line linear scale between 100% and 150% of the target RSU amount. Actual adjusted EBITDA in excess of 115% results in an adjustment capped at 150% of the target RSU amount. If actual adjusted EBITDA is below 50% of the target adjusted EBITDA for the 2023 fiscal year, these performance-based RSUs will be forfeited. The Company recognizes compensation expense based on the probable number of performance-based RSUs expected to vest. Following the adjustment, the performance-based RSUs will be subject to additional time-based vesting, and will vest in three equal annual installments on March 10 of 2024, 2025, and 2026, provided that the officer is employed by the Company on the applicable vesting dates.

Time-based RSUs

On March 7, 2023, the Company granted time-based RSUs representing 16,528 shares to certain of its officers and employees with an aggregate grant date fair value of $3,562,000. These time-based RSUs vest in three equal annual installments on March 10 of 2024, 2025, and 2026, provided that a recipient is employed by the Company on the applicable vesting dates.

7. Accumulated Other Comprehensive Items

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

Changes in each component of accumulated other comprehensive items (AOCI), net of tax, are as follows:

(In thousands)	Foreign Currency Translation Adjustment	Pension and Other Post-Retirement Benefit Liability Adjustments	Deferred Gain on Cash Flow Hedges	Total
Balance at December 31, 2022	$ (54,488)	$ (148)	$ 58	$ (54,578)
Other comprehensive items before reclassifications	5,538	(8)	7	5,537
Reclassifications from AOCI	—	2	(46)	(44)
Net current period other comprehensive items	5,538	(6)	(39)	5,493
Balance at April 1, 2023	$ (48,950)	$ (154)	$ 19	$ (49,085)

Amounts reclassified from AOCI are as follows:

	Three Months Ended		
(In thousands)	April 1, 2023	April 2, 2022	Statement of Income Line Item
Retirement Benefit Plans			
Recognized net actuarial loss	$ (1)	$ (7)	Other expense, net
Amortization of prior service cost	(2)	(3)	Other expense, net
Total expense before income taxes	(3)	(10)	
Income tax benefit	1	3	Provision for income taxes
	(2)	(7)	
Cash Flow Hedges (a)			
Interest rate swap agreements	60	(111)	Interest expense
Income tax (provision) benefit	(14)	27	Provision for income taxes
	46	(84)	
Total Reclassifications	$ 44	$ (91)	

(a) See Note 8, Derivatives, for additional information.

8. Derivatives

Interest Rate Swap Agreement

In 2018, the Company entered into an interest rate swap agreement (2018 Swap Agreement) with Citizens Bank to hedge its exposure to movements in USD LIBOR on its U.S. dollar-denominated debt. The 2018 Swap Agreement has a $15,000,000 notional value and expires on June 30, 2023. On a quarterly basis, the Company receives three-month USD LIBOR, which is subject to a zero percent floor, and pays a fixed rate of interest of 3.15% plus an applicable margin as defined in the Credit Agreement.

The Company designated its 2018 Swap Agreement as a cash flow hedge and structured it to be 100% effective. Unrealized gains and losses related to the fair value of the 2018 Swap Agreement are recorded to AOCI, net of tax. In the event of early termination, the Company will receive from or pay to the counterparty the fair value of the 2018 Swap Agreement, and the unrealized gain or loss outstanding will be recognized in earnings.

The counterparty to the 2018 Swap Agreement could demand an early termination of that agreement if the Company were to be in default under the Credit Agreement, or any agreement that amends or replaces the Credit Agreement in which the counterparty is a member, and if it were to be unable to cure the default. See Note 5, Short- and Long-Term Obligations, for further details.

Forward Currency-Exchange Contracts

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

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

Gains and losses reported within SG&A expenses in the accompanying condensed consolidated statement of income associated with the Company's forward currency-exchange contracts that were not designated as hedges were not material for the three-month periods ended April 1, 2023 and April 2, 2022.

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

(In thousands)	Balance Sheet Location	April 1, 2023 Asset (Liability) (a)	April 1, 2023 Notional Amount (b)	December 31, 2022 Asset (Liability) (a)	December 31, 2022 Notional Amount
Derivatives Designated as Hedging Instruments:					
Derivative in an Asset Position:					
2018 Swap Agreement	Other Current Assets	$ 75	$ 15,000	$ 131	$ 15,000
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	$ (51)	$ 430	$ (54)	$ 430
Derivatives Not Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	$ 2	$ 189	$ 15	$ 647

(a) See Note 9, Fair Value Measurements and Fair Value of Financial Instruments, for the fair value measurements relating to these financial instruments.
(b) The 2023 notional amounts are indicative of the level of the Company's recurring derivative activity.

The following table summarizes the activity in AOCI associated with the Company's derivative instruments designated as cash flow hedges as of and for the three months ended April 1, 2023:

(In thousands)	Interest Rate Swap Agreement	Forward Currency-Exchange Contract	Total
Unrealized Gain (Loss), Net of Tax, at December 31, 2022	$ 99	$ (41)	$ 58
Gain reclassified to earnings (a)	(46)	—	(46)
Gain recognized in AOCI	4	3	7
Unrealized Gain (Loss), Net of Tax, at April 1, 2023	$ 57	$ (38)	$ 19

(a) See Note 7, Accumulated Other Comprehensive Items, for the income statement classification.

As of April 1, 2023, the Company expects to reclassify gains of $19,000 from AOCI to earnings over the next twelve months based on the estimated cash flows of the 2018 Swap Agreement and the maturity date of the forward currency-exchange contract.

9. Fair Value Measurements and Fair Value of Financial Instruments

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

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

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

	Fair Value as of April 1, 2023			
(In thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds and time deposits	$ 5,162	$ —	$ —	$ 5,162
Banker's acceptance drafts (a)	$ —	$ 5,325	$ —	$ 5,325
2018 Swap Agreement	$ —	$ 75	$ —	$ 75
Forward currency-exchange contracts	$ —	$ 2	$ —	$ 2
Liabilities:				
Forward currency-exchange contracts	$ —	$ 51	$ —	$ 51

	Fair Value as of December 31, 2022			
(In thousands)	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds and time deposits	$ 8,351	$ —	$ —	$ 8,351
Banker's acceptance drafts (a)	$ —	$ 5,729	$ —	$ 5,729
2018 Swap Agreement	$ —	$ 131	$ —	$ 131
Forward currency-exchange contracts	$ —	$ 15	$ —	$ 15
Liabilities:				
Forward currency-exchange contract	$ —	$ 54	$ —	$ 54

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

The Company uses the market approach technique to value its financial assets and liabilities, and there were no changes in valuation techniques during the first three months of 2023. Banker's acceptance drafts are carried at face value, which approximates their fair value due to the short-term nature of the negotiable instrument. The fair values of the forward currency-exchange contracts are based on quoted forward foreign exchange rates at the reporting date. The fair value of the 2018 Swap Agreement is based on USD LIBOR yield curves at the reporting date. The forward currency-exchange contracts and the 2018 Swap Agreement are hedges of either recorded assets or liabilities or anticipated transactions and represent the estimated amount the Company would receive or pay upon liquidation of the contracts. Changes in values of the underlying hedged assets and liabilities or anticipated transactions are not reflected in the table above.

The carrying value and fair value of debt obligations, excluding lease obligations, are as follows:

	April 1, 2023		December 31, 2022	
(In thousands)	Carrying Value	Fair Value	Carrying Value	Fair Value
Debt Obligations:				
Revolving credit facility	$ 167,514	$ 167,514	$ 186,131	$ 186,131
Senior promissory notes	10,000	10,019	10,000	9,773
Other	2,634	2,634	3,090	3,090
	$ 180,148	$ 180,167	$ 199,221	$ 198,994

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

10. Business Segment Information

The Company has three reportable operating segments: Flow Control, Industrial Processing, and Material Handling. The Flow Control segment consists of the fluid-handling and doctoring, cleaning, & filtration product lines; the Industrial Processing segment consists of the wood processing and stock-preparation product lines; and the Material Handling segment consists of the conveying and vibratory, baling, and fiber-based product lines.

A description of each segment follows:

- *Flow Control* – Custom-engineered products, systems, and technologies that control the flow of fluids used in industrial and commercial applications to keep critical processes running efficiently in the packaging, tissue, food, metals, and other industrial sectors. The Company's primary products include rotary sealing devices, steam systems, expansion joints, doctor systems, roll and fabric cleaning devices, and filtration and fiber recovery systems.
- *Industrial Processing* – Equipment, machinery, and technologies used to recycle paper and paperboard and process timber for use in the packaging, tissue, wood products and alternative fuel industries, among others. The Company's primary products include stock-preparation systems and recycling equipment, chemical pulping equipment, debarkers, stranders, chippers, and logging machinery. In addition, the Company provides industrial automation and digitization solutions to process industries.
- *Material Handling* – Products and engineered systems used to handle bulk and discrete materials for secondary processing or transport in the aggregates, mining, food, and waste management industries, among others. The Company's primary products include conveying and vibratory equipment and balers. In addition, the Company manufactures and sells biodegradable, absorbent granules used as carriers in agricultural applications and for oil and grease absorption.

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

	Three Months Ended	
(In thousands)	April 1, 2023	April 2, 2022
Revenue		
Flow Control	$ 89,521	$ 85,826
Industrial Processing	83,542	93,085
Material Handling	56,695	47,569
	$ 229,758	$ 226,480
Income Before Provision for Income Taxes		
Flow Control	$ 24,189	$ 21,725
Industrial Processing (a)	15,967	38,159
Material Handling (b)	9,287	5,844
Corporate (c)	(9,329)	(9,755)
Total operating income	40,114	55,973
Interest expense, net (d)	(2,071)	(1,132)
Other expense, net (d)	(21)	(22)
	$ 38,022	$ 54,819
Capital Expenditures		
Flow Control	$ 1,404	$ 525
Industrial Processing	2,579	1,952
Material Handling	462	384
Corporate	24	7
	$ 4,469	$ 2,868

(a) Includes a gain on the sale of a facility of $20,190,000 (see Note 2, Gain on Sale and Other Costs, Net) and non-cash charges for the write-off of an indemnification asset of $575,000 and the write-down of machinery and equipment of $182,000 in the three months ended April 2, 2022.
(b) Includes acquisition-related expenses of $717,000 in the three months ended April 2, 2022.
(c) Represents general and administrative expenses.
(d) The Company does not allocate interest and other expense, net to its segments.

11. Commitments and Contingencies

Right of Recourse

In the ordinary course of business, the Company's Chinese subsidiaries may receive banker's acceptance drafts from customers as payment for their trade accounts receivable. The drafts are non-interest bearing obligations of the issuing bank and generally mature within six months of the origination date. The Company's Chinese subsidiaries may use these banker's acceptance drafts prior to the scheduled maturity date to settle outstanding accounts payable with vendors. Banker's acceptance drafts transferred to vendors are subject to customary right of recourse provisions prior to their scheduled maturity dates. The Company had $5,981,000 at April 1, 2023 and $11,238,000 at December 31, 2022 of banker's acceptance drafts subject to recourse, which were transferred to vendors and had not reached their scheduled maturity dates. Historically, the banker's acceptance drafts have settled upon maturity without any claim of recourse against the Company.

Litigation

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

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

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

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

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 *Risk Factors* included in Part I, Item 1A, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the Annual Report) and as may be further amended and/or restated in subsequent filings with the SEC.

Overview

Company Background

We are a global supplier of technologies and engineered systems that drive Sustainable Industrial Processing. Our products and services play an integral role in enhancing efficiency, optimizing energy utilization, and maximizing productivity in process industries while helping our customers advance their sustainability initiatives with products that reduce waste or generate more yield with fewer inputs, particularly fiber, energy, and water. Producing more while consuming less is a core aspect of Sustainable Industrial Processing and a major element of the strategic focus of our business.

Our financial results are reported in three reportable operating segments: Flow Control, Industrial Processing, and Material Handling. The Flow Control segment consists of our fluid-handling and doctoring, cleaning, & filtration product lines; the Industrial Processing segment consists of our wood processing and stock-preparation product lines; and the Material Handling segment consists of our conveying and vibratory, baling, and fiber-based product lines. A description of each segment is as follows:

- *Flow Control* – Custom-engineered products, systems, and technologies that control the flow of fluids used in industrial and commercial applications to keep critical processes running efficiently in the packaging, tissue, food, metals, and other industrial sectors. Our primary products include rotary sealing devices, steam systems, expansion joints, doctor systems, roll and fabric cleaning devices, and filtration and fiber recovery systems.
- *Industrial Processing* – Equipment, machinery, and technologies used to recycle paper and paperboard and process timber for use in the packaging, tissue, wood products, and alternative fuel industries, among others. Our primary products include stock-preparation systems and recycling equipment, chemical pulping equipment, debarkers, stranders, chippers, and logging machinery. In addition, we provide industrial automation and digitization solutions to process industries.
- *Material Handling* – Products and engineered systems used to handle bulk and discrete materials for secondary processing or transport in the aggregates, mining, food, and waste management industries, among others. Our primary products include conveying and vibratory equipment and balers. In addition, we manufacture and sell biodegradable, absorbent granules used as carriers in agricultural applications and for oil and grease absorption.

Industry and Business Overview

We had record bookings of $274.5 million in the first quarter of 2023, surpassing the previous record set in the first quarter of 2022 despite inflationary pressures and a $9.2 million unfavorable effect of foreign currency translation. Strong contributions from our Material Handling and Flow Control segments led to record bookings for our parts and consumable products in the first quarter of 2023 and the second highest quarterly bookings for our capital equipment. Our backlog increased 14% sequentially to $393.0 million at the end of the first quarter of 2023, providing a robust start to 2023. An overview of our business by segment is as follows:

- *Flow Control* – Our Flow Control segment bookings set a new quarterly record, increasing 33% sequentially and 4% compared to the prior record set in the first quarter of 2022. We experienced strong demand in Europe due to the strength in the end markets we serve as customers seek to optimize energy utilization. The first quarter of the year is historically the strongest as customers prepare for annual spring maintenance shutdowns. As a result, we expect subsequent quarterly bookings to moderate as the year progresses, but expect our end markets to remain healthy.
- *Industrial Processing* – Our Industrial Processing segment bookings decreased 9% compared to a strong first quarter of 2022. Although bookings were softer in the first quarter of 2023, demand for both parts and capital equipment remained good. Demand for our wood processing capital equipment returned to more typical levels after the record-setting pace experienced over the last two years, which was fueled by a robust U.S. housing market and high demand for lumber, oriented strand board, and plywood. We expect activity in this product line to continue to moderate as the year progresses. Demand for our stock-preparation products remains steady and we expect this to continue throughout the year. However, as we look forward, there is uncertainty as to how governmental efforts to control inflation may impact this segment's end markets and we expect comparatively lower bookings given the high level of bookings we experienced in the first half of 2022.
- *Material Handling* – Our Material Handling segment bookings set a new record, increasing 24% compared to the prior record set in the first quarter of 2022, led by strong demand for our vibratory and conveying equipment. Our first quarter bookings included a capital equipment order valued at approximately $12 million for the longest conveying line in North America. Growth trends in recycling led to strong demand in our baling business in both the U.S. and Europe. We expect our quarterly bookings for the remainder of 2023 to be strong, but lower than the first quarter record bookings.

Our global operations have been and continue to be impacted by complex market conditions fueled by inflationary pressures, geopolitical tensions, labor availability and lingering global supply chain constraints. Although supply chain constraints have resulted in inflationary pressure on material costs, longer lead times, and increased freight costs, these constraints have recently eased. We expect our operating environment to continue to be challenging as central banks work to address inflationary pressures, which creates more uncertainty for the latter half of 2023. We believe that the fundamentals of our business remain strong, particularly given our high backlog levels, solid global operations team, and ongoing strength in the markets we serve.

For more information related to these challenges, and other factors impacting our business, please see *Risk Factors* included in Part I, Item 1A, of our Annual Report and subsequent filings with the SEC.

International Sales

Slightly more than half of our sales are to customers outside the United States, mainly in Europe, Asia, and Canada. As a result, our financial performance can be materially affected by currency exchange rate fluctuations between the U.S. dollar and foreign currencies. To mitigate the impact of foreign currency transaction fluctuations, we generally seek to charge our customers in the same currency in which our operating costs are incurred. Additionally, we may enter into forward currency exchange contracts to hedge certain firm purchase and sale commitments denominated in currencies other than our subsidiaries' functional currencies. We currently do not use derivative instruments to hedge our exposure to exchange rate fluctuations created by the translation into the U.S. dollar of our foreign subsidiaries' results that are in functional currencies other than the U.S. dollar.

Global Trade

The United States imposes tariffs on certain imports from China, which has and will continue to increase the cost of some of the equipment that we import. Although we have worked to mitigate the impact of tariffs through pricing and sourcing strategies, we cannot be sure these strategies will effectively mitigate the impact of these costs. For more information on risks associated with our global operations, including tariffs, please see *Risk Factors,* included in Part I, Item 1A, of our Annual Report and subsequent filings with the SEC.

Acquisitions

We expect that one significant driver of our growth over the next several years will be the acquisition of businesses and technologies that complement or augment our existing products and services or may involve entry into a new process industry. In recent years, we have acquired several businesses and continue to pursue acquisition opportunities.

Results of Operations

First Quarter 2023 Compared With First Quarter 2022

Revenue

The following table presents the change in revenue by segment between the first quarters of 2023 and 2022, and those changes excluding the effect of foreign currency translation and acquisitions which we refer to as change in organic revenue. Organic revenue excludes the effect of acquisitions for the four quarterly reporting periods following the date of the acquisition. The presentation of the change in organic revenue is a non-GAAP measure. We believe this non-GAAP measure helps investors gain an understanding of our underlying operations consistent with how management measures and forecasts its performance, especially when comparing such results to prior periods. This non-GAAP measure should not be considered superior to or a substitute for the corresponding U.S. generally accepted accounting principles (GAAP) measure.

Revenue by segment in the first quarters of 2023 and 2022 is as follows:

	Three Months Ended					(Non-GAAP) Change in Organic Revenue	
(In thousands, except percentages)	April 1, 2023	April 2, 2022	Increase (Decrease)	% Change	Currency Translation	Increase (Decrease)	% Change
Flow Control	$ 89,521	$ 85,826	$ 3,695	4 %	$ (2,555)	$ 6,250	7 %
Industrial Processing	83,542	93,085	(9,543)	(10)%	(3,823)	(5,720)	(6)%
Material Handling	56,695	47,569	9,126	19 %	(1,014)	10,140	21 %
Consolidated Revenue	$ 229,758	$ 226,480	$ 3,278	1 %	$ (7,392)	$ 10,670	5 %

Consolidated revenue increased 1% in the first quarter of 2023, including a 4% decrease from the unfavorable effect of foreign currency translation. Organic revenue increased 5% due to higher demand for parts and consumables products across all segments and capital equipment at our Material Handling segment, partially offset by a decrease in demand for capital equipment at our Industrial Processing segment as described below.

Revenue at our Flow Control segment increased 4% in the first quarter of 2023, while organic revenue increased 7%. The increase in organic revenue was primarily due to higher demand for parts and consumables driven by strength in the underlying packaging industry, especially in North America, and demand from our customers, especially in Europe, seeking to address high energy prices with our products that optimize energy utilization.

Revenue at our Industrial Processing segment decreased 10% in the first quarter of 2023, while organic revenue decreased 6%. Organic revenue decreased principally due to softening demand for capital equipment at our wood processing businesses, primarily in North America and, to a lesser extent, at our stock-preparation businesses in China, as the pace of capacity expansion has moderated and new equipment is brought online and mills focus on installing and optimizing capital equipment purchased in prior periods. These decreases were partially offset by an increase in demand for parts and consumables products at our stock-preparation business due to maintenance requirements at many of our customers.

Revenue at our Material Handling segment increased 19% in the first quarter of 2023, while organic revenue increased 21%, due to higher demand across all industries for capital equipment and, to a lesser extent, parts and consumables products at our vibratory and conveying business in North America. Also contributing to the organic revenue increase was higher demand for our baling products driven by greater market and government-backed policy demand for recycling.

Gross Profit Margin

Gross profit margin by segment in the first quarters of 2023 and 2022 is as follows:

	Three Months Ended		
	April 1, 2023	April 2, 2022	Basis Point Change
Flow Control	53.3%	52.4%	90 bps
Industrial Processing	40.6%	38.6%	200 bps
Material Handling	36.1%	36.4%	(30) bps
Consolidated	44.4%	43.4%	100 bps

Consolidated gross profit margin increased to 44.4% in the first quarter of 2023 compared with 43.4%`in the first quarter of 2022 due to higher margins achieved on the mix of capital projects, especially at our Industrial Processing segment. Also contributing to the improved gross profit margin was an increase in the percentage of higher-margin parts and consumables revenue, which increased to 66% compared to 65% in the prior year period.

Within our operating segments, gross profit margin:

- Increased to 53.3% at our Flow Control segment from 52.4% in the 2022 period, due to higher margins achieved on our capital equipment revenue, and to a lesser extent, a higher percentage of parts and consumables product revenue compared to the prior year period.
- Increased to 40.6% from 38.6% in the 2022 period at our Industrial Processing segment due to an increase in the proportion of higher-margin parts and consumables revenue and higher margins achieved on the mix of capital projects.
- Decreased to 36.1% at our Material Handling segment from 36.4% in the 2022 period primarily due to a lower percentage of higher-margin parts and consumables revenue compared to the prior year period.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses by segment in the first quarters of 2023 and 2022 are as follows:

	Three Months Ended					
(In thousands, except percentages)	April 1, 2023	% of Revenue	April 2, 2022	% of Revenue	Increase (Decrease)	% Change
Flow Control	$ 22,217	25 %	$ 22,084	26 %	$ 133	1 %
Industrial Processing	16,298	20 %	16,369	18 %	(71)	— %
Material Handling	10,719	19 %	11,004	23 %	(285)	(3)%
Corporate	9,328	N/A	9,711	N/A	(383)	(4)%
Consolidated	$ 58,562	25 %	$ 59,168	26 %	$ (606)	(1)%

Consolidated SG&A expenses as a percentage of revenue decreased to 25% in the first quarter of 2023 compared with 26% in the first quarter of 2022 principally due to the increase in revenue. Consolidated SG&A expenses were lower in the first quarter of 2023 due to the inclusion of a $1.8 million favorable effect of foreign currency translation. In the first quarter of 2022, consolidated SG&A expenses included $0.8 million in acquisition-related costs and a $0.6 indemnification asset reversal related to the release of tax reserves. Excluding these items in both periods, consolidated SG&A expenses increased $2.6 million, or 4%, due to increased compensation expense and travel-related costs.

Within our operating segments, SG&A expenses:

- Increased $0.1 million at our Flow Control segment principally due to increased compensation expense and travel costs. These increases were partially offset by a $0.8 million favorable effect of foreign currency translation and a decrease in bad debt expense.
- Decreased $0.1 million at our Industrial Processing segment principally due to a $0.8 million favorable effect of foreign currency translation and the inclusion of an indemnification asset reversal related to the release of tax reserves of $0.6 million in 2022. These decreases were offset in part by increased compensation expense and travel costs.
- Decreased $0.3 million at our Material Handling segment principally due a $0.2 million favorable effect of foreign currency translation and the inclusion of $0.7 million in acquisition-related costs in 2022. These decreases were largely offset by increased compensation expense associated with existing and new personnel.
- Decreased $0.4 million at Corporate primarily due to a decrease in incentive compensation.

Gain on Sale and Other Costs, Net

Gain on sale and other costs, net recognized during the first quarter of 2022 was $20.0 million and was comprised of a gain on the sale of a building of $20.2 million, net of an impairment charge of $0.2 million. See Note 2, Gain on Sale and Other Costs, Net, in the accompanying condensed consolidated financial statements for further details.

Gain on Sale of Assets

We entered into several agreements with the local government in China to sell the existing manufacturing building and land use rights of one of our subsidiaries in China for $25.2 million and relocate to a new facility (China Transaction). The agreements became effective in the first quarter of 2022 after a 31% down payment was received, including 25% in 2021 and 6% in the first quarter of 2022, and a land use right in a new location was secured. As a result, we recognized a gain on the China Transaction of $20.2 million, or $15.1 million, net of deferred taxes of $5.0 million, in the first quarter of 2022. Our subsidiary, which is part of the Industrial Processing segment, will continue to occupy its current facility until construction of its new facility is complete, which is expected during the second half of 2023.

Impairment Costs

During the first quarter of 2022, we recognized an impairment charge of $0.2 million within our Industrial Processing segment associated with the write-down of certain fixed assets that will not be moved to the new manufacturing facility in China in connection with the China Transaction.

Interest Expense

Interest expense increased to $2.4 million in the first quarter of 2023 from $1.2 million in the first quarter of 2022 due to a higher weighted-average interest rate, partially offset by lower average debt outstanding in the first quarter of 2023 compared to the first quarter of 2022.

Provision for Income Taxes

Provision for income taxes decreased to $9.8 million in the first quarter of 2023 from $13.4 million in the first quarter of 2022. The effective tax rate of 26% in the first quarter of 2023 was higher than our statutory rate of 21% primarily due to the distribution of our worldwide earnings, nondeductible expenses, and state taxes. These increases in tax expense in the first quarter of 2023 were offset in part by a decrease in tax expense related to the net excess income tax benefits from stock-based compensation arrangements. The effective tax rate of 24% in the first quarter of 2022 was higher than our statutory rate of 21% primarily due to the distribution of our worldwide earnings, nondeductible expenses, state taxes, and tax expense associated with the Global Intangible Low-Taxed Income provisions. These increases in tax expense in the first quarter of 2022 were offset in part by a decrease in tax expense related to the net excess income tax benefits from stock-based compensation arrangements and the reversal of tax reserves associated with uncertain tax positions.

Net Income

Net income decreased to $28.3 million in the first quarter of 2023 from $41.4 million in the first quarter of 2022 primarily due to the inclusion of a $15.1 million after-tax gain on the sale of a building in 2022 (see discussions above for further details).

Non-GAAP Key Performance Indicators

In addition to the financial measures prepared in accordance with GAAP, we use certain non-GAAP financial measures, including organic revenue (defined as revenue excluding the effect of foreign currency translation and acquisitions), adjusted operating income, earnings before interest, taxes, depreciation, and amortization (EBITDA), adjusted EBITDA, adjusted EBITDA margin (defined as adjusted EBITDA divided by revenue), and free cash flow (defined as cash flow provided by operations less capital expenditures).

We use organic revenue in order to understand our trends and to forecast and evaluate our financial performance and compare revenue to prior periods (see discussion in *Revenue* above). Adjusted operating income, adjusted EBITDA, and adjusted EBITDA margin exclude impairment costs, acquisition costs, amortization expense related to acquired profit in inventory and backlog, and certain gains or losses. These items are excluded as they are not indicative of our core operating results and are not comparable to other periods, which have differing levels of incremental costs, expenditures or income, or none at all. Additionally, we use free cash flow in order to provide insight on our ability to generate cash for acquisitions and debt repayments, as well as for other investing and financing activities.

We believe these non-GAAP financial measures, when taken together with the corresponding GAAP financial measures, provide meaningful supplemental information regarding our performance by excluding certain items that may not be indicative of our core business, operating results, or future outlook. We believe that the inclusion of such measures helps investors gain an understanding of our underlying operating performance and future prospects, consistent with how management measures and forecasts our performance, especially when comparing such results to previous periods or forecasts and to the performance of our competitors. Such measures are also used by us in our financial and operating decision-making and for compensation purposes. We also believe this information is responsive to investors' requests and gives them an additional measure of our performance.

Our non-GAAP financial measures are not meant to be considered superior to or a substitute for the results of operations or cash flow prepared in accordance with GAAP. In addition, our non-GAAP financial measures have limitations associated with their use as compared to the most directly comparable GAAP measures, in that they may be different from, and therefore not comparable to, similar measures used by other companies.

A reconciliation of adjusted operating income, adjusted EBITDA, and adjusted EBITDA margin is as follows:

	Three Months Ended	
(In thousands, except percentages)	April 1, 2023	April 2, 2022
Net Income Attributable to Kadant	$ 28,075	$ 41,192
Net Income Attributable to Noncontrolling Interest	184	249
Provision for Income Taxes	9,763	13,378
Interest Expense, Net	2,071	1,132
Other Expense, Net	21	22
Operating Income	40,114	55,973
Gain on Sale (a)	—	(20,190)
Acquisition Costs	—	76
Indemnification Asset Reversal (b)	—	575
Impairment Costs	—	182
Acquired Backlog Amortization (c)	—	703
Acquired Profit in Inventory Amortization (d)	—	(218)
Adjusted Operating Income *(non-GAAP measure)*	40,114	37,101
Depreciation and Amortization	8,446	8,742
Adjusted EBITDA *(non-GAAP measure)*	$ 48,560	$ 45,843
Adjusted EBITDA Margin *(non-GAAP measure)*	21.1%	20.2%

(a) Represents a $20.2 million pre-tax gain on the China Transaction in our Industrial Processing segment.
(b) Represents an indemnification asset reversal related to the release of tax reserves associated with uncertain tax positions.
(c) Represents intangible amortization expense associated with acquired backlog.
(d) Represents income within the cost of revenue associated with amortization of acquired profit in inventory.

A reconciliation of free cash flow from cash flow provided by operating activities is as follows:

	Three Months Ended	
(In thousands)	April 1, 2023	April 2, 2022
Cash Provided by Operating Activities	$ 36,866	$ 23,768
Less: Capital Expenditures	(4,469)	(2,868)
Free Cash Flow *(non-GAAP measure)*	$ 32,397	$ 20,900

Liquidity and Capital Resources

Consolidated working capital was $224.3 million at April 1, 2023, compared with $201.9 million at December 31, 2022. Cash and cash equivalents were $81.2 million at April 1, 2023, compared with $76.4 million at December 31, 2022, which included cash and cash equivalents held by our foreign subsidiaries of $70.7 million at April 1, 2023 and $75.8 million at December 31, 2022.

Cash Flows

Cash flow information in the first three months of 2023 and 2022 is as follows:

	Three Months Ended	
(In thousands)	April 1, 2023	April 2, 2022
Net Cash Provided by Operating Activities	$ 36,866	$ 23,768
Net Cash Used in Investing Activities	(4,467)	(1,291)
Net Cash Used in Financing Activities	(27,757)	(27,003)
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash	1,140	(664)
Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	$ 5,782	$ (5,190)

Operating Activities

Cash provided by operating activities increased to $36.9 million in the first quarter of 2023 from $23.8 million in the first quarter of 2022 principally driven by a reduction in cash used for working capital. Our operating cash flows are primarily generated from cash received from customers, offset by cash payments for items such as inventory, employee compensation, operating leases, income taxes and interest payments on outstanding debt obligations.

During the first quarter of 2023, increases in inventory used cash of $14.0 million primarily related to capital equipment orders that will ship throughout 2023. This use of cash was offset in part by $11.1 million of cash provided by customer deposits. Changes in other liabilities used cash of $4.6 million primarily related to incentive compensation payments in the first quarter of 2023.

During the first quarter of 2022, increases in inventory and accounts receivable used cash of $18.5 million, primarily to support our revenue growth. An increase in accounts payable related to raw material purchases and customer deposits provided cash of $12.2 million. Changes in other liabilities used cash of $10.1 million primarily related to incentive compensation payments in the first quarter of 2022.

Investing Activities

Cash used in investing activities was $4.5 million in the first quarter of 2023, compared with $1.3 million in the first quarter of 2022. Capital expenditures were $4.5 million in the first quarter of 2023 compared to $2.9 million in the first quarter of 2022. Proceeds received from the sale of assets were $1.6 million in the first quarter of 2022.

Financing Activities

Cash used in financing activities was $27.8 million in the first quarter of 2023, compared with $27.0 million in the first quarter of 2022. Repayments of short- and long-term obligations were $20.8 million in the first quarter of 2023. Repayments of short- and long-term obligations were $35.1 million in the first quarter of 2022, partially offset by borrowings under our revolving credit facility of $15.5 million. Cash dividends paid to stockholders were $3.0 million in the first quarter of 2023 and $2.9 million in the first quarter of 2022. In addition, taxes paid related to the vesting of equity awards was $3.9 million in the first quarter of 2023 compared to $4.6 million in the first quarter of 2022.

Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash

The exchange rate effect on cash, cash equivalents, and restricted cash represents the impact of translation of cash balances at our foreign subsidiaries. The $1.1 million increase in cash, cash equivalents, and restricted cash in the first quarter of 2023 was primarily attributable to the weakening of the U.S. dollar against the euro, and to a lesser extent, the Mexican peso and the Chinese renminbi.

Borrowing Capacity and Debt Obligations

On November 30, 2022, we entered into a sixth amendment to our unsecured multi-currency revolving credit facility, originally entered into on March 1, 2017 (as amended and restated to date, the Credit Agreement). Among other things, this amendment extended the maturity date to November 30, 2027, and increased the uncommitted, unsecured incremental borrowing facility from $150 million to $200 million.

We have a total borrowing capacity of $400 million under our Credit Agreement. At April 1, 2023, we had $232.8 million of borrowing capacity available under our Credit Agreement, in addition to the $200 million uncommitted, unsecured incremental borrowing facility. Under our debt agreements, our leverage ratio must be less than 3.75 or, if we elect, for the quarter during which a material acquisition occurs and for the three fiscal quarters thereafter, must be less than 4.25. As of April 1, 2023, our leverage ratio was 0.64 and we were in compliance with our debt covenants. See Note 5, Short- and Long-Term Obligations, in the accompanying condensed consolidated financial statements for additional information regarding our debt obligations.

Additional Liquidity and Capital Resources

On May 19, 2022, our board of directors approved the repurchase of up to $50 million of our equity securities during the period from May 19, 2022 to May 19, 2023. We have not repurchased any shares of our common stock under this authorization.

We paid a cash dividend of $3.0 million in the first quarter of 2023. On March 8, 2023, we declared a quarterly cash dividend of $0.29 per share totaling $3.4 million that was paid on May 10, 2023. Future declarations of dividends are subject to our board of directors' approval and may be adjusted as business needs or market conditions change. The declaration of cash dividends is subject to our compliance with the covenant in our Credit Agreement related to our consolidated leverage ratio.

We plan to make expenditures of approximately $28 to $30 million during the remainder of 2023 for property, plant, and equipment, including $8 to $9 million for a new manufacturing facility in China.

As of April 1, 2023, we had approximately $254.0 million of total unremitted foreign earnings. It is our intent to indefinitely reinvest $208.0 million of these earnings to support the current and future capital needs of our foreign operations, including debt repayments, if any. In the first quarter of 2023, we recorded withholding taxes on the earnings in certain foreign subsidiaries that we plan to repatriate in the foreseeable future. The foreign withholding taxes that would be required if we were to remit the indefinitely-reinvested foreign earnings to the United States would be approximately $3.3 million.

We believe that existing cash and cash equivalents, along with cash generated from operations, our existing borrowing capacity and continued access to debt markets, will be sufficient to meet the capital requirements of our operations for the next 12 months and foreseeable future.

Contractual Obligations and Other Commercial Commitments

There have been no material changes to our contractual obligations and other commercial commitments during the first quarter of 2023 compared with those disclosed in Management's Discussion and Analysis of Financial Condition and Results of Operations under the heading *Liquidity and Capital Resources* in Part II, Item 7, of our Annual Report.

Application of Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent liabilities, and the reported amounts of revenue and expenses during the reporting period. Our 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. Management evaluates its estimates on an ongoing basis based on historical experience, current economic and market conditions, and other assumptions management believes are reasonable. We believe that our most critical accounting policies which are significant to our consolidated financial statements, 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 heading *Application of Critical Accounting Estimates* in Part II, Item 7, of our Annual Report. There have been no material changes to these critical accounting policies since the end of fiscal 2022 that warrant disclosure.

Item 3 – Quantitative and Qualitative Disclosures About Market Risk

Our exposure to market risk from changes in interest rates and foreign currency exchange rates has not changed materially from our exposure as disclosed in Part II, Item 7A, of our Annual Report.

Item 4 – Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of April 1, 2023. 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 April 1, 2023, our Chief Executive Officer and Chief Financial Officer concluded that as of April 1, 2023, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There have not been any changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) during the fiscal quarter ended April 1, 2023 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

Careful consideration should be given to the factors discussed in Part I, Item 1A, *Risk Factors*, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2022, which could materially affect our business, financial condition or future results, in addition to the information set forth in this Quarterly Report on Form 10-Q.

Item 6 – Exhibits

Exhibit Number	Description of Exhibit
31.1	Certification of the Principal Executive Officer of the Registrant Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of the Principal Financial Officer of the Registrant Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32	Certification of the Chief Executive Officer and the Chief Financial Officer of the Registrant Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

KADANT INC.

SIGNATURE

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

	KADANT INC.
Date: May 10, 2023	/s/ Michael J. McKenney
	Michael J. McKenney Executive Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 31.1

CERTIFICATION

I, Jeffrey L. Powell, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended April 1, 2023 of Kadant Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 10, 2023

/s/ Jeffrey L. Powell
Jeffrey L. Powell
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Michael J. McKenney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended April 1, 2023 of Kadant Inc.;

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

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

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

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

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

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

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

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

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

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

Date: May 10, 2023

/s/ Michael J. McKenney

Michael J. McKenney
Executive Vice President and Chief Financial Officer

Exhibit 32

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

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

The Quarterly Report on Form 10-Q for the period ended April 1, 2023 of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the information contained in this Quarterly Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 10, 2023

/s/ Jeffrey L. Powell
Jeffrey L. Powell
President and Chief Executive Officer

/s/ Michael J. McKenney
Michael J. McKenney
Executive Vice President and Chief Financial Officer

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