KĀDANT

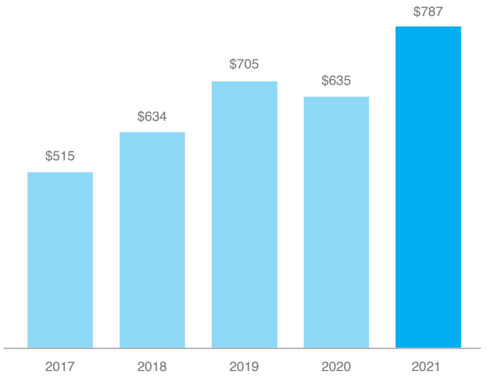
2021 ANNUAL REPORT

OUR MISSION IS TO ENABLE OUR CUSTOMERS TO IMPROVE EFFICIENCY AND REDUCE INPUT COSTS THROUGH INNOVATIVE PRODUCTS, TECHNOLOGIES, AND PROCESS EXPERTISE.

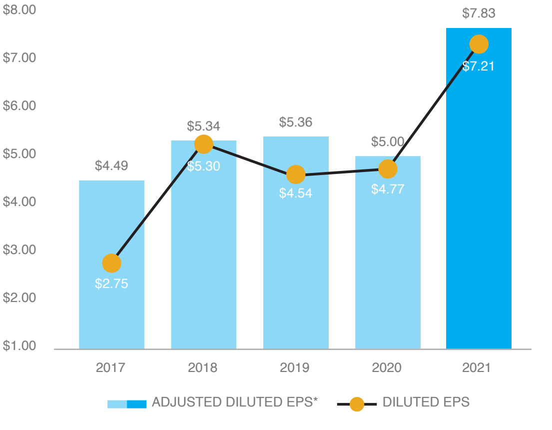
Kadant Inc. (NYSE: KAI) is a global supplier of technologies and engineered systems that drive Sustainable Industrial Processing. Our products and services play an integral role in enhancing efficiency, optimizing energy utilization, and maximizing productivity in process industries. Kadant is based in Westford, Massachusetts, with approximately 2,900 employees in 20 countries worldwide.

Revenue

(dollars in millions)

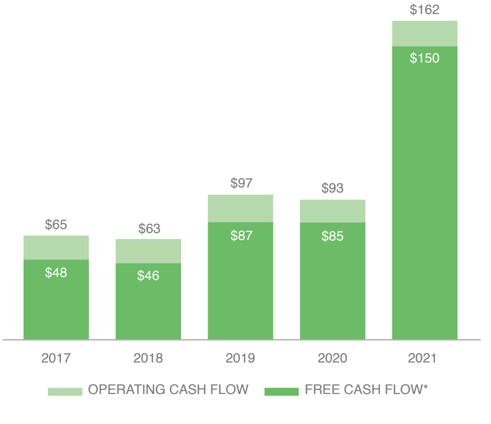


Earnings per Share



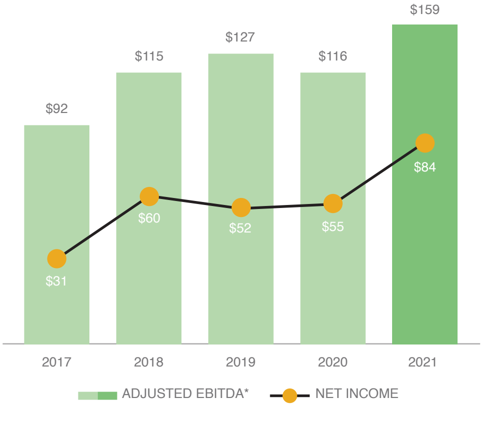
Operating Cash Flow and Free Cash Flow*

(dollars in millions)



Net Income and Adjusted EBITDA*

(dollars in millions)



* Adjusted EBITDA (adjusted earnings before interest, taxes, depreciation, and amortization), adjusted diluted EPS (adjusted diluted earnings per share), and free cash flow are non-GAAP financial measures that exclude certain items. A reconciliation of these financial measures to the most directly comparable GAAP number appears on page (ii) under the heading "Non-GAAP Financial Measures."

Dear Stockholder:

After managing through the uncertainties and challenges brought on by the pandemic in 2020, I am extremely proud of the work our talented employees accomplished to make 2021 a remarkable year. Through their tireless efforts, we delivered exceptional value to our customers and record financial results for our stockholders in virtually every key financial metric in 2021.

Solid execution by our businesses and strong demand in our end markets led to outstanding results across all our operating segments. Our full-year revenue increased 24 percent to a record $787 million while our adjusted diluted earnings per share* increased to $7.83, exceeding the prior record set in 2019 at $5.36 per share. We also achieved our adjusted EBITDA margin* goal of 20 percent, which we outlined at our Investor Day in 2019, earlier than planned with our full year 2021 adjusted EBITDA margin* a record 20.3 percent.

In the second half of 2021, we completed three acquisitions to further extend our presence in the fiber-based packaging, tissue, and material handling markets and to create a new manufacturing base for Kadant in India. These businesses have strong market positions in their respective markets and their primary product offerings complement our product portfolio. The acquisition of the manufacturing facility in India, while small, is exciting because it provides us a strategic platform to accelerate new business opportunities in the fast-growing Indian packaging and tissue markets. The integration of these businesses into the Kadant family is progressing well and we look forward to the contributions they will make in the years ahead.

As we look ahead into 2022, we are well-positioned to capitalize on new opportunities and to help our customers advance their sustainability initiatives with product innovations that reduce waste or generate more yield with fewer inputs, particularly fiber, energy, and water. This is what we refer to as Sustainable Industrial Processing—producing more while consuming less—and it is a major element of our strategic focus and value proposition. We will continue to build on our efforts to help our customers accelerate their own sustainability initiatives as we make progress on our internal initiatives to advance sustainable practices at our manufacturing sites around the world.

I would like to thank our stockholders for their continued support and confidence in Kadant and our employees for their dedication and positivity that helped us serve our customers' needs and deliver exceptional value to our stockholders in 2021.

Jeffrey L. Powell
President and Chief Executive Officer
March 30, 2022

* Adjusted diluted earnings per share, adjusted EBITDA, and adjusted EBITDA margin are non-GAAP financial measures that exclude certain items. A reconciliation of these financial measures to the most directly comparable GAAP number appears on page (ii) under the heading "Non-GAAP Financial Measures."

NON-GAAP FINANCIAL MEASURES

Adjusted Diluted EPS Reconciliation	**2017**	**2018**	**2019**	**2020**	**2021**
Diluted EPS attributable to Kadant	$ 2.75	$ 5.30	$ 4.54	$ 4.77	$ 7.21
Adjustments for the following, net of tax:					
Acquisition costs	0.39	0.10	0.06	0.03	0.26
Impairment and restructuring costs, net (a)	0.01	0.11	0.17	0.19	0.08
Gain on sale of building	–	–	–	–	(0.03)
Settlement and curtailment losses (b)	–	0.09	0.55	–	–
Amortization of acquired profit in inventory and backlog	0.43	0.02	0.32	0.04	0.34
Discrete tax items (c)	0.90	(0.29)	(0.29)	(0.03)	(0.04)
Adjusted diluted EPS (d)	$ 4.49	$ 5.34	$ 5.36	$ 5.00	$ 7.83

Adjusted EBITDA Reconciliation (in millions)	**2017**	**2018**	**2019**	**2020**	**2021**
Net income attributable to Kadant	$ 31.1	$ 60.4	$ 52.1	$ 55.2	$ 84.0
Net income attributable to noncontrolling interest	0.5	0.6	0.5	0.5	0.8
Provision for income taxes	26.1	18.5	16.3	17.9	27.2
Interest expense, net	3.1	6.7	12.5	7.2	4.6
Other expense, net (b)	0.8	2.4	6.4	0.3	0.1
Operating income	61.6	88.6	87.8	81.1	116.7
Acquisition costs	5.4	1.3	0.8	0.5	3.6
Impairment and restructuring costs, net (a)	0.2	1.7	2.5	3.0	1.0
Gain on sale of building	–	–	–	–	(0.5)
Amortization of acquired profit in inventory and backlog	6.6	0.3	5.0	0.5	5.6
Adjusted operating income	73.8	91.9	96.1	85.1	126.4
Depreciation and amortization	17.9	23.3	31.0	30.8	33.0
Adjusted EBITDA	$ 91.7	$ 115.2	$ 127.1	$ 115.9	$ 159.4
Adjusted EBITDA Margin (e)	17.8%	18.2%	18.0%	18.3%	20.3%

Free Cash Flow Reconciliation (in millions)	**2017**	**2018**	**2019**	**2020**	**2021**
Operating cash flow	$ 65.2	$ 63.0	$ 97.4	$ 92.9	$ 162.4
Capital expenditures	(17.3)	(16.6)	(9.9)	(7.6)	(12.8)
Free cash flow	$ 47.9	$ 46.4	$ 87.5	$ 85.3	$ 149.6

(a) Includes intangible asset impairment charges of $0.5 million in 2021, $1.9 million ($1.4 million after tax) in 2020, and $2.3 million ($1.8 million after tax) in 2019. Also includes restructuring costs of $0.5 million in 2021, $1.1 million ($0.8 million after tax) in 2020, $0.2 million ($0.1 million after tax) in 2019, and $1.7 million ($1.3 million after tax) in 2018.

(b) Includes a settlement loss of $5.9 million ($6.4 million after tax) in 2019 and a curtailment loss of $1.4 million ($1.1 million after tax) in 2018 associated with the termination of retirement benefit plans at one of our U.S. operations.

(c) Includes discrete tax items in 2019 related to the exercise of employee stock options, discrete tax items in 2018 related to the reversal of tax reserves associated with uncertain tax positions, and discrete tax items in 2017 related to U.S. tax legislation enacted in December 2017.

(d) Adjusted diluted EPS was calculated using the weighted average diluted shares as reported in each of the fiscal years presented.

(e) Calculated as adjusted EBITDA divided by revenue in each year.

Adjusted diluted earnings per share (adjusted diluted EPS), adjusted operating income, adjusted earnings before interest, taxes, depreciation, and amortization (adjusted EBITDA), adjusted EBITDA margin, and free cash flow are non-GAAP financial measures. Non-GAAP financial measures are not meant to be considered superior to or a substitute for the results of operations prepared in accordance with GAAP. In addition, the 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. 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.

We believe that 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 to gain an understanding of our underlying operations 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.

FORM 10-K

Kadant Inc.

2021 Annual Report
Consolidated Financial Statements

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

FORM 10-K

(mark one)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended January 1, 2022

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 Act:

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

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

The aggregate market value of the voting and non-voting common equity held by nonaffiliates of the Registrant as of July 3, 2021 (based on the closing price per share as reported on the New York Stock Exchange on the last business day of the Registrant's most recently completed second fiscal quarter), was approximately $2,020,422,000. For purposes of the immediately preceding sentence, the term "affiliate" consists of each director and executive officer of the Registrant.

As of February 18, 2022, the Registrant had 11,621,092 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended, to be used in connection with the Registrant's 2022 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

Kadant Inc.
Annual Report on Form 10-K
for the Fiscal Year Ended January 1, 2022
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Kadant Inc.

PART I

Forward-Looking Statements

This Annual Report on Form 10-K 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 the section captioned "Risk Factors" in Part I, Item 1A, of this report.

Item 1. Business

Throughout this Annual Report on Form 10-K, when we use the terms "we," "us," "our," "Registrant," and the "Company," we mean Kadant Inc., and its consolidated subsidiaries, taken as a whole, unless the context otherwise indicates. Kadant Inc. trades on the New York Stock Exchange under the ticker symbol "KAI."

Unless otherwise noted, references to 2021, 2020, and 2019 in this Annual Report on Form 10-K are to our fiscal years ended January 1, 2022, January 2, 2021, and December 28, 2019, respectively.

Description of Our Business

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 three reportable operating segments: Flow Control, Industrial Processing, and Material Handling.

We have a long and well-established history of developing, manufacturing, and servicing a range of products and equipment used in process industries such as paper, packaging, and tissue; wood products; mining; metals; food processing; and recycling and waste management, among others. Some of our businesses or their predecessor companies have been in operation for more than 100 years. Our diverse customer base includes global and regional industrial manufacturers and distributors who participate in the broader resource transformation sector. We believe we have one of the largest installed bases of equipment in the markets we serve around the globe.

We expect that a significant driver of our growth over the next several years will be the acquisition of businesses and technologies that complement or augment our existing products and services or may involve entry into a new process industry. We continue to pursue acquisition opportunities. In 2021, we acquired all partnership interests and shares in The Clouth Group of Companies (Clouth) for $92.9 million, net of cash acquired plus debt assumed. The majority of the Clouth companies were acquired on July 19, 2021 and the acquisition of the last legal entity occurred on August 10, 2021. Clouth, which is included in our Flow Control segment, is a leading European manufacturer of doctor blades and related equipment used in the production of paper, packaging, and tissue. On August 23, 2021, we acquired all the outstanding equity securities in East Chicago Machine Tool Corporation (Balemaster) and certain assets of affiliated companies for $53.7 million, net of cash acquired. Balemaster, which is included in our Material Handling segment, is a leading U.S. manufacturer of horizontal balers and related equipment used primarily for recycling packaging waste at corrugated box plants and large retail and distribution centers. See Note 2, Acquisitions, in the accompanying consolidated financial statements for further details regarding our recent acquisitions.

Business Segments and Products

We report our financial results by combining operating entities into 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. See

Note 12, Business Segment and Geographical Information, in the accompanying consolidated financial statements for financial information regarding our segments.

Flow Control Segment

Through our Flow Control segment, we provide 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 Flow Control segment consists of our fluid-handling and doctoring, cleaning, & filtration product lines.

Fluid-Handling

We develop, manufacture and market fluid-handling systems and equipment used in industrial piping systems to compensate for movement and to efficiently transfer fluid, power, and data. Our products are used primarily in the dryer section of the papermaking process and during the production of corrugated packaging, metals, plastics, pharmaceuticals, energy, rubber, textiles, chemicals, and food. Expansion joints are used in industrial piping systems. Our principal fluid-handling systems and equipment include:

- Rotary joints: Our mechanical devices, used with rotating shafts, allow the transfer of pressurized fluid from a stationary source into and out of rotating machinery for heating, cooling, or the transfer of fluid power.
- Syphons: Our devices, installed inside rotating cylinders, are used to remove fluids from the rotating cylinders through rotary joints or unions located on either end of the cylinder.
- Turbulator® bars: Our steel or stainless steel axial bars, installed on the inside of cylinders, are used to induce turbulence in the condensate layer to improve the uniformity and rate of heat transfer through the cylinders.
- Expansion joints: Our rubber, metal, fabric and other materials are used to compensate for movement due to thermal expansion, vibration and other causes.
- Engineered steam and condensate systems: Our steam systems control the flow of steam from the boiler to steam-heated rolls or processing machinery, collect condensed steam, and return it to the boiler to improve energy efficiency during the manufacturing process. Our systems and equipment are also used to efficiently and effectively distribute steam in a wide variety of industrial processing applications.

Doctoring, Cleaning, & Filtration

We develop, manufacture, and market a wide range of doctoring, cleaning, and filtration systems and related consumables that continuously clean rolls to keep paper machines and other industrial processes running efficiently. Doctoring and cleaning systems are also used in other process industries such as carbon fiber, textiles and food processing. Our principal doctoring, cleaning, and filtration products include:

- Doctor systems and holders: Our doctor systems clean papermaking rolls to maintain the efficient operation of paper machines and other equipment by placing a blade against the roll at a constant and uniform pressure. A doctor system consists of the structure supporting the blade and the blade holder.
- Doctor blades: We manufacture doctor and scraper blades made of a variety of materials including metal, bi-metal, or synthetic materials that perform a variety of functions including cleaning, creping, web removal, flaking, and applying coatings. A typical doctor blade has a life ranging from eight hours to two months, depending on the application.
- Shower and fabric-conditioning systems: Our shower and fabric-conditioning systems assist in the removal of contaminants that collect on paper machine fabrics used to convey the paper web through the forming, pressing, and drying sections of the paper machine. A typical paper machine has between three and 12 fabrics. These fabrics can easily become contaminated with fiber, fillers, pitch, and dirt that can have a detrimental effect on paper machine performance and paper quality. Our shower and fabric-conditioning systems assist in the removal of these contaminants.
- Formation systems: We supply structures that drain, purify, and recycle process water from the pulp mixture during paper sheet and web formation.
- Water-filtration systems: We offer a variety of filtration systems and strainers that remove contaminants from process water before reuse and recover reusable fiber for recycling back into the pulp mixture.

Industrial Processing Segment

Through our Industrial Processing segment, we provide 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. In addition, we provide industrial automation and digitization solutions to process industries. The Industrial Processing segment consists of our wood processing and stock-preparation product lines.

<u>Wood Processing</u>

We develop, manufacture, and market debarkers, stranders, chippers, logging machinery, and related equipment used in the harvesting and production of lumber and oriented strand board (OSB). In addition, we provide industrial automation and digitization solutions to process industries. Our principal wood processing products and services include:

- Ring and rotary debarkers: Our fixed and sliding ring debarkers utilize a rotating multi-tool to strip the bark off a non-rotating log. Our ring debarkers are used in lumber mills to remove the bark from the tree before further processing into lumber. Our rotary debarkers and related parts and consumables employ a combination of mechanical abrasion and log-to-log contact to efficiently remove bark from logs of all shapes and species.
- Stranders: Our disc and ring stranders and related parts and consumables cut batch-fed and tree-length logs into strands for OSB production and are used to manage strands in real time using our proprietary conveying and feeding equipment.
- Chippers: Our disc, drum, and veneer chippers and related parts and consumables are high-quality, robust chipper systems for waste-wood and whole-log applications found in pulp woodrooms, chip plants, and sawmill and planer mill sites.
- Logging machinery: Our log loaders and swing yarders are used to gather timber for lumber production.
- Industrial Automation and Control: We provide industrial automation, process technology, and project management services to help industrial companies digitally transform their operations.

<u>Stock-Preparation</u>

We develop, manufacture, and market custom-engineered systems and equipment, as well as standard individual components, for pulping, de-inking, screening, cleaning, and refining primarily recycled fiber for preparation for entry into the paper machine, and recausticizing and evaporation equipment and systems used in the production of virgin pulp. Our principal stock-preparation products include:

- Recycling and approach flow systems: Our equipment includes pulping, screening, cleaning, and de-inking systems that process fiber and remove contaminants, such as ink, glue, metals, and other impurities, to prepare them for entry into the paper machine during the production of recycled paper.
- Virgin pulping process equipment: Our equipment includes pulp washers, evaporators, and recausticizing and condensate treatment systems used to remove lignin, concentrate and recycle process chemicals, and remove condensate gases.

Material Handling Segment

Through our Material Handling segment, we provide 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. In addition, we manufacture and sell biodegradable, absorbent granules used as carriers in agricultural applications and for oil and grease absorption. The Material Handling segment consists of our conveying and vibratory, baling, and fiber-based product lines.

<u>Conveying and Vibratory Equipment</u>

We develop, manufacture, and market conveying and vibratory equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper. Our principal conveying and vibratory products include:

- Vibratory equipment: feeders, screens, and flow aides utilized in the feeding of rugged and non-rugged materials as well as in mixing, blending, and packaging of fragile materials with speed and precision.

- Conveying equipment: transport idlers, power terminal units, and electric controls, used to transport bulk materials in harsh above- and below-ground mining environments; and screw conveyors and bucket elevators used for material handling operations in agricultural, food, and paper markets.

Baling

We develop, manufacture, and market individual components and equipment for baling recyclable and waste materials to prepare them for secondary processing, transport, or storage. Our principal baling products include:

- Balers and related equipment: Our equipment includes horizontal channel balers, vertical balers, conveyors, compactors, and bale wrapping machines used in the processing of recyclable and waste materials.

Fiber-based Products

We manufacture and sell biodegradable, absorbent granules derived from papermaking by-products. These materials are primarily used as carriers in agricultural, home lawn and garden, professional lawn, turf and ornamental applications, and for oil and grease absorption.

Dependency on a Single Customer

No single customer accounted for 10% or more of our consolidated revenues in any of the past three years. In addition, within our Flow Control, Industrial Processing, and Material Handling segments, no customer accounted for more than 10% of each of the respective segment's revenue.

Approximately 58% in 2021, 55% in 2020, and 56% in 2019, of our consolidated revenue were to customers outside the United States, principally in Europe, Asia and Canada.

Backlog

Our backlog of firm orders by segment are as follows:

(In millions)	January 1, 2022	January 2, 2021
Flow Control	$ 73.1	$ 48.7
Industrial Processing	185.2	115.0
Material Handling	51.6	29.3
	$ 309.9	$ 193.0

We anticipate that the majority of the backlog at year-end 2021 will be shipped or completed during 2022, with the remainder expected to be shipped or completed within 15 months after year-end 2022. Some of our capital orders can be canceled by the customer upon payment of a cancellation fee.

Research and Development

We develop a broad range of products for all facets of the markets we serve. We operate research and development facilities in the United States, Europe, and Canada, and focus our product innovations on process industry challenges and the need for improved fiber processing, heat transfer, roll and fabric cleaning, fluid handling, timber harvesting, wood processing, and secondary material handling. In addition to internal product development activities, our research centers allow customers to simulate their own operating conditions and applications to identify and quantify opportunities for improvement.

Our research and development expenses were $11.4 million in 2021, $11.3 million in 2020, and $10.9 million in 2019.

Sales and Marketing

We market and sell our engineered products, services, and systems to process industries using a combination of a direct sales force and independent sales agents and distributors depending on the market and product being sold. Technical service personnel, product specialists, and independent sales agents and distributors are utilized in certain markets and with certain product lines. Our application expertise is complemented by a consultative selling approach to ensure we meet the needs of our customers.

Competition

We are a leading supplier of systems and equipment in each of our product lines within our Flow Control segment and there are several global and numerous local competitors in each market. In our Industrial Processing segment, we compete with a limited number of global and regional competitors in the forest products markets and fiber processing equipment markets. In our Material Handling segment, we compete with numerous global, regional, and local competitors for our conveying and vibratory equipment, and strong regional competitors for our baling equipment and fiber-based granules offerings. Because of the diversity of our products, we face many different types of competitors and competition. We compete primarily on the basis of technical expertise, product innovation, and product performance. We believe the reputation that we have established for high-performance, high-reliability products supported by our in-depth process knowledge and application expertise provides us with a competitive advantage. In addition, a significant portion of our business is generated from our worldwide customer base. To maintain this base, we have emphasized our global presence, local support, and problem-solving relationship with our customers. Our success primarily depends on the following factors:

- Technical expertise and process knowledge;
- Product innovation;
- Product quality, reliability, and performance;
- Operating efficiency of our products;
- Customer service and support;
- Relative price of our products; and
- Total cost of ownership of our products.

Raw Materials

The primary raw materials used by our businesses are: Flow Control segment – steel, stainless steel, ductile iron, brass, bronze, aluminum, and elastomers; Industrial Processing segment – steel and stainless steel; and Material Handling segment – steel, aluminum, and composites. These raw materials are generally purchased and available through a number of suppliers. The raw material used in the manufacture of our fiber-based granules is a by-product from the production of paper that we obtain from two paper mills. If these mills were unable or unwilling to supply us with sufficient fiber, we would be forced to find one or more alternative suppliers for this raw material. To date, our raw materials have generally been available to meet our current needs.

Patents, Licenses, and Trademarks

We protect our intellectual property rights by applying for and obtaining patents when appropriate. We also rely on technical know-how, trade secrets, and trademarks to maintain our competitive position. We also enter into license agreements with others to grant and/or receive rights to patents, trademarks, and know-how. No particular patent, or related group of patents, is so important that its expiration or loss would significantly affect our operations.

Flow Control Segment

We have numerous U.S. and foreign patents, including foreign counterparts to our U.S. patents, expiring on various dates ranging from 2022 to 2050, related to fluid handling and doctoring, cleaning, and filtration equipment. From time to time, we enter into licenses with other companies for products that serve the pulp, papermaking, converting, and paper recycling industries.

Industrial Processing Segment

We have numerous U.S. and foreign patents, including foreign counterparts to our U.S. patents, expiring on various dates ranging from 2022 to 2040, related to stock-preparation and wood processing systems and equipment.

Material Handling Segment

We have numerous U.S. and foreign patents, including foreign counterparts to our U.S. patents, expiring on various dates ranging from 2022 to 2027, related to various aspects of conveyor belt systems and conveying apparatus, and baling equipment. We license one of our two significant product brand names, Link-Belt®, from a third party pursuant to a trademark license agreement. More than a quarter of our Material Handling segment revenue in 2021 was generated by sales of conveying equipment under the Link-Belt® name. Under the terms of the license agreement, we have a worldwide, exclusive, royalty-free, perpetual license to use the Link-Belt® trademark in connection with such products.

We also currently hold several U.S. patents, expiring on various dates ranging from 2027 to 2034, related to various aspects of the processing of fiber-based granules and the use of these materials in agricultural, home lawn and garden, professional lawn, turf and ornamental applications, and for oil and grease absorption.

Government Regulations

We are subject to a variety of U.S. and international governmental regulations, including environmental regulations. We believe that our operations comply in all material respects with applicable laws and regulations. Our compliance with these requirements did not change during the past year, and is not expected to have a material adverse effect on our cash flows, earnings, or competitive position. For more information on risks related to government regulations, please see Part I, Item 1A, “Risk Factors.”

Seasonal Influences

Flow Control Segment

There are no material seasonal influences on this segment's sales of products and services.

Industrial Processing Segment

Our Industrial Processing segment is subject to seasonal variations, with demand for our wood processing products tending to be greater during the building and timber harvesting season, which generally occurs in the second and third quarters in North America.

Material Handling Segment

Our Material Handling segment may experience minor seasonal fluctuations in sales, with demand for our products tending to be greater in the second and third quarters due to the impact of weather and favorable outdoor working conditions at certain of our customers. Our fiber-based products business experiences fluctuations in sales, usually in the third quarter, when sales decline due to the seasonality of the agricultural and home lawn and garden markets.

Human Capital Resources

Talent, Development, Diversity and Inclusion

The attraction, retention and development of exceptional employees is critical to our continued success. As part of these efforts, we strive to offer a competitive compensation and benefits program and to foster a safe and inclusive work environment where everyone feels respected, valued and empowered to do their best work. We embrace the diversity of our employees, including their unique backgrounds, experiences, and talents. Everyone is valued and appreciated for their distinct contributions to the growth and sustainability of our business. We strive to cultivate a culture of diversity and inclusion that supports and enhances our ability to recruit, develop and retain talent at every level.

As of January 1, 2022, we had approximately 2,900 full-time employees worldwide. Of our full-time employees, approximately 45% were in North America, 32% were in Europe and 20% were in Asia. Other than certain of our Canadian employees and typical work councils outside of the U.S., none of our employees are represented by labor unions or covered by a collective bargaining agreement.

Our management team places significant focus and attention on matters concerning our human capital, particularly their diversity, capability development, and succession planning. Accordingly, we regularly review talent development and succession plans for each of our functions and operating segments, to identify and develop a pipeline of talent to maintain business operations. We have numerous programs to attract and retain our talent, including leadership and executive development programs as well as technical and other training. We partner with vocational schools, community colleges, universities and associations to promote future careers in manufacturing through training and apprenticeship programs. We also have a well-established performance management and talent development process in which managers provide regular feedback and coaching to develop employees.

Compensation and Benefits

As part of these efforts, we strive to offer a competitive compensation and benefits program. Our compensation and benefits program is designed to attract and retain talented individuals who possess the skills necessary to support our business objectives, assist in the achievement of our strategic goals and create long-term value for our stockholders. We offer comprehensive, locally relevant benefits to all eligible employees which include, among other benefits:

- Comprehensive health insurance coverage;
- Retirement benefits;
- Life insurance and disability benefits; and
- Leave and wellness benefits.

Safety

We maintain a safety-first culture grounded on the premise of eliminating workplace incidents, risks and hazards. We have created and implemented processes to help eliminate safety events by reducing their frequency and severity. Our commitment to safety is reinforced by our robust safety program and training.

Throughout the COVID-19 pandemic, we have remained focused on protecting the health and safety of our employees while meeting the needs of our customers. We have adopted enhanced safety measures and practices across our facilities to protect employee health and safety and ensure a reliable supply of essential products to our customers. These enhanced safety measures and practices include encouraging vaccinations and the use of face coverings, adding safety and hygiene protocols within our facilities, and other safeguards. We monitor and track the impact of COVID-19 on our employees and within our operations, and proactively modify or adopt new practices to promote their health and safety.

We believe that our employees are the core of our business, and we intend to continue building upon our culture to drive sustainable performance across the business. For more information, please reference our Corporate Sustainability Report, which is available at www.kadant.com.

Available Information

We file annual, quarterly, and current reports, proxy statements, and other documents with the Securities and Exchange Commission (SEC) under the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements, and other information that are filed electronically by issuers with the SEC. The public can obtain any documents that we file with the SEC at www.sec.gov. In addition, we make available free of charge through our website at www.kadant.com our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and, if applicable, amendments to these reports filed with or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file these materials with, or furnish them to, the SEC. We are not including the information contained on our website as part of this report, nor are we incorporating the information on our website into this report by reference.

Information about our Executive Officers

The following table summarizes certain information concerning our executive officers as of February 18, 2022:

Name	Age	Present Title (Fiscal Year First Became Executive Officer)
Jeffrey L. Powell	63	President and Chief Executive Officer (2009)
Eric T. Langevin	59	Executive Vice President and Chief Operating Officer (2006)
Michael J. McKenney	60	Executive Vice President and Chief Financial Officer (2002)
Stacy D. Krause	45	Senior Vice President, General Counsel, and Secretary (2018)
Dara F. Mitchell	53	Senior Vice President, Corporate Development (2021)
Deborah S. Selwood	53	Senior Vice President and Chief Accounting Officer (2015)
Thomas Andrew Blanchard	63	Vice President (2021)
Michael C. Colwell	56	Vice President (2019)
Peter J. Flynn	71	Vice President (2019)
Fredrik H. Westerhout	57	Vice President (2021)

Mr. Powell has been our chief executive officer and a director since July 2019 and our president since April 2019. He served as an executive vice president and a co-chief operating officer from March 2018 to March 2019. From March 2013 to March 2018, he was an executive vice president and had supervisory responsibility for our stock-preparation, wood processing, and fiber-based products businesses. From September 2009 to March 2013, he was a senior vice president. From January 2008 to September 2009, Mr. Powell was vice president, new ventures, with principal responsibility for acquisition-related activities. Prior to joining us, Mr. Powell was the chairman and chief executive officer of Castion Corporation from April 2003 through December 2007.

Mr. Langevin, who will retire on March 31, 2022, has been an executive vice president and chief operating officer since April 2019 and has supervisory responsibility for our fluid-handling, doctoring, cleaning, & filtration, and conveying and vibratory businesses. From March 2018 to April 2019, he served as executive vice president and co-chief operating officer. From January 2010 to March 2018, he served as executive vice president and chief operating officer. Prior to January 2010, Mr. Langevin had been our senior vice president since March 2007 and had supervisory responsibility for our fluid-handling and doctoring, cleaning, & filtration businesses. He served as vice president, with responsibility for our doctoring, cleaning, & filtration business, from 2006 to 2007. From 2001 to 2006, Mr. Langevin was president of Kadant Web Systems Inc. (now our Kadant Solutions division) and before that served as its senior vice president and vice president of operations. Prior to 2001, Mr. Langevin managed several product groups and departments within Kadant Web Systems after joining us in 1986 as a product development engineer.

Mr. McKenney has been an executive vice president and our chief financial officer since March 2018. From June 2015 to March 2018, he was a senior vice president and our chief financial officer. He served as our vice president, finance and chief accounting officer from 2002 to 2015 and as corporate controller from 1997 to 2007. Mr. McKenney was controller of Kadant AES, our division acquired from Albany International Inc., from 1993 to 1997. Prior to 1993, Mr. McKenney held various financial positions at Albany International and Coopers & Lybrand LLP.

Ms. Krause has been our senior vice president, general counsel, and secretary since November 2021 and served as our vice president, general counsel and secretary from July 2018 to November 2021. She served as our deputy general counsel from December 2017 to June 2018. Prior to joining us, Ms. Krause was head of commerce cloud commercial legal at salesforce.com, inc., a global SAAS software company, from July 2016 to December 2017. She previously served assistant general counsel of Demandware, Inc., a global SAAS software company, from January 2014 to July 2016, prior to its acquisition by salesforce.com, and was assistant general counsel of Entegris, Inc., a provider of advanced materials and materials handling solutions, from 2011 to 2014. Prior to 2011, Ms. Krause was a lawyer in the corporate transactional department of Wilmer Cutler Pickering Hale and Dorr LLP.

Ms. Mitchell has been our senior vice president, corporate development, since May 2019 and served as our vice president, corporate development from 2016 to 2019 and our director of corporate development from 2013 to 2016. Prior to joining Kadant, Ms. Mitchell was a principal at NewDelta Partners, an investment banking and strategic advisory firm, and investment director at 3i, a global private equity firm where she was responsible for investing in technology companies.

Ms. Selwood has been our senior vice president and chief accounting officer since May 2019 and served as our vice president and chief accounting officer from 2015 to 2019. Prior to that, she served as our corporate controller from 2007 to 2015 and as assistant controller from 2004 to 2007. Prior to 2004, Ms. Selwood held various financial positions at Arthur Andersen LLP and Genuity Inc.

Mr. Blanchard has been our vice president since November 2021 with supervisory responsibility for portions of our Material Handling segment. Mr. Blanchard previously served as the president of our Syntron Material Handling subsidiaries (SMH) since January 2019 when we acquired SMH. He also served as the president of SMH from June 2014 to January 2019 prior to our acquisition. SMH, which is part of our Material Handling segment, designs and manufactures conveyors and vibratory feeders for bulk material handling in the aggregates, mining and food industries.

Mr. Colwell has been our vice president since July 2019 with supervisory responsibility for our wood processing business, which is part of our Industrial Processing segment. He previously had responsibility for our fiber-based products business from July 2019 to November 2021. Mr. Colwell previously served as the president of Kadant Carmanah Design, a division of our subsidiary Kadant Canada Corp., from 2013 to 2019. Carmanah, which is part of our wood processing business, designs and manufactures equipment for the oriented strand board industry. Mr. Colwell previously served as the president and chief executive officer of Carmanah Design and Manufacturing Inc. from April 2010 until its acquisition by us in November 2013.

Mr. Flynn has been our vice president since July 2019 with supervisory responsibility for our stock-preparation business, which is part of our Industrial Processing segment, and our baling product line, which is part of our Material Handling segment. Prior to July 2019, Mr. Flynn served as the president of our Kadant Black Clawson LLC subsidiary from 2003 to 2019. Kadant Black Clawson manufactures stock-preparation equipment primarily for the pulp and paper industry.

Mr. Westerhout has been our vice president since November 2021 with supervisory responsibilities for our Flow Control segment. Mr. Westerhout previously served as the vice president of our flow control subsidiaries in Europe since April 2014. These businesses are part of our Flow Control segment.

Item 1A. Risk Factors

Our business, results of operations and financial condition, and an investment in our securities, are subject to a number of risks. The risks and uncertainties described below are those that we have identified as material, but are not the only risks and uncertainties we face. Our business is also subject to general risks and uncertainties that affect many other companies, including overall economic and industry conditions. The COVID-19 pandemic continues to produce a level of general uncertainty and, in some cases, adverse changes in global economic conditions and has heightened, and in some cases manifested, certain of the risks we normally face in operating our business, including those disclosed herein. Additional risks and uncertainties not currently known to us or that we currently believe are not material may also impair our business, consolidated financial condition and results of operations.

Risks Related to our Business and Industry

Adverse changes in global and local economic conditions may negatively affect our industry, business and results of operations.

We sell products worldwide to global process industries and a significant portion of our revenue is from customers based in North America, Europe and China. Uncertainties in global and regional economic outlooks have negatively affected, and may in the future negatively affect, demand for our customers' products and, as a consequence, our products and services, especially our capital equipment systems and products, and our operating results. Also, uncertainty regarding economic conditions has caused, and may in the future cause, liquidity and credit issues for many businesses, including our customers and suppliers in the pulp and paper industry as well as other process industries, and may result in their inability to fund projects, capacity expansion plans, and to some extent, routine operations and capital expenditures. These conditions have resulted, and may in the future result, in a number of structural changes in process industries, including decreased spending, mill closures, consolidations, and bankruptcies, all of which negatively affect our business, revenue, and profitability. Financial and economic turmoil affecting the worldwide economy or the banking system and financial markets, in particular due to political or economic developments, could cause the expectations for our business to differ materially in the future.

Revenues from the sale of large capital equipment and systems projects are often difficult to predict accurately, especially in periods of economic uncertainty, and large capital equipment projects require significant investment requiring our customers to secure financing, which may be difficult.

We manufacture capital equipment and systems used in process industries, including the paper, fluid handling, wood processing and material handling industries. Approximately 35% of our revenue in 2021 was from the sale of capital equipment to be used in process industries. The demand for capital equipment is variable and depends on a number of factors, including consumer demand for end products, existing manufacturing capacity, the level of capital spending by our customers and economic conditions. As a consequence, our bookings and revenues for capital projects tend to be variable and difficult to predict. It is especially difficult to accurately forecast our operating results during periods of economic uncertainty. Our customers curtail their capital and operating spending during periods of economic uncertainty and are cautious about resuming spending as market conditions improve. Levels of consumer spending on non-durable goods, demand for food and beverage packaging, and demand for new housing and remodeling are all factors that affect paper and wood processing companies' demand for our products. Expansion of bulk material handling capacity and infrastructure spending are factors that affect demand for material handling equipment. Reductions in demand levels in any of these areas can negatively impact our business. As companies in our customers' industries consolidate operations in response to market weakness, they frequently reduce capacity, increase downtime, defer maintenance and upgrades, and postpone or even cancel capacity additions or expansion projects. Capacity growth and investment can be uneven and the larger paper producers have delayed, and may in the future delay, additional new capacity start-ups in reaction to softer market conditions. In general, as significant capacity additions come online and the economic growth rate slows, paper producers have deferred and could in the future defer further investments or the delivery of previously-ordered equipment until the market absorbs the new production.

Large capital equipment projects require a significant investment and may require our customers to secure financing from external sources. Our financial performance will be negatively impacted if there are delays in customers securing financing or our customers become unable to secure such financing due to any number of factors, including a tightening of monetary policy or regime-based sanctions such as those imposed on Russia and China. Financing delays of our customers can cause us to delay booking pending orders as well as the shipment of some orders. The inability of our customers to obtain credit may affect our ability to recognize revenue and income, particularly on large capital equipment orders from new customers for which we may require letters of credit. We may also be unable to issue letters of credit to our customers, which are required in some cases to guarantee performance, during periods of economic uncertainty. This has negatively affected our bookings and revenues in the past, particularly in China, and may negatively affect our operating results in the future.

We have significant international sales and operations and face risks related to health epidemics and pandemics, including the COVID-19 pandemic, which has and continues to present challenges to our business and results of operations.

Our business and operations have been and may continue to be challenged by the effects of the COVID-19 pandemic and may be challenged by other adverse public health developments, including disruptions or restrictions on our employees' and other service providers' ability to travel, reductions in our workforce, temporary closures of our facilities or the facilities of our customers, suppliers or other vendors in our supply chain, potentially including single source suppliers, and other disruptions in the supply chain. In addition, the COVID-19 pandemic has impacted and other disease outbreaks could impact global trade and reduce demand for our products, and adversely affect the U.S. or global economy and capital markets.

The COVID-19 pandemic has negatively affected the global economy, disrupted global supply chains, resulted in significant travel and transport restrictions, including mandated closures and orders to "shelter-in-place," and initially created significant disruption of the financial markets. The COVID-19 pandemic has adversely affected, and may adversely affect in the future, our business and results of operations, as government authorities have imposed, and may in the future impose, temporary mandatory closures of our facilities, travel restrictions, work-from-home orders, vaccine or testing mandates and social distancing protocols and other restrictions that have impacted our ability to adequately staff and maintain our operations at normal levels. Additionally, our financial results have been adversely impacted and may be adversely impacted in the future by decreased levels of bookings, customer-requested delays on certain capital projects and service work, customer downtime and shutdowns, and visitation restrictions at many customer facilities, all of which have affected and may adversely affect in the future our ability to recognize revenue for sales of our products and services. We may also incur future costs related to COVID-19, such as increased employee benefit costs if a significant number of our employees contract COVID-19 and require hospitalization or other costly medical treatment, or expenses related to repeated cleaning and sanitizing of our facilities, which may also adversely affect our financial results. In March 2020, we experienced a significant decrease in market capitalization due to a decline in our stock price, and the overall U.S. stock market also declined significantly amid market volatility driven by the uncertainty surrounding the outbreak of COVID-19. The future impact of the COVID-19 pandemic could include further disruption and volatility in the global capital markets, which, depending on future developments, could impact our capital resources and liquidity in the future.

The COVID-19 pandemic has evolved and continues to evolve rapidly. As a result, we cannot reasonably estimate the scope of the impact of the COVID-19 pandemic, including the potential impact of emerging variants or the response of government authorities to any such variants or other developments, on our business and the adverse effect and impact the COVID-19 pandemic may ultimately have on our business and our stock price. For instance, we may face additional requests from customers to delay the production or delivery of our products, particularly capital equipment products, which would affect our ability to recognize revenue for sales of such products. Other customers may decide not to proceed with large capital equipment orders in order to conserve their cash. A delay on our part of the production of our products may lead to liquidated damages owed to our customers. Further implementation, extension or renewal of government-mandated closures, "shelter-in-place" orders or vaccine or testing mandates related to the COVID-19 pandemic may create further disruption to our operations, our workforce, the supply chain, and our customer and vendor operations. The evolving effects of the COVID-19 pandemic on the global economy are uncertain, and we may be further adversely affected by general economic conditions, even if government mandates are repealed. The impact of COVID-19 could worsen if new and more virulent or transmissible variants emerge which result in a resurgence of COVID-19 infection in affected regions.

In addition, travel, commercial and other similar restrictions put in place by various government authorities in response to COVID-19 have contributed to global supply disruptions and we have, and may in the future, incur costs to mitigate such disruptions, which could be significant. New information may emerge concerning the severity of COVID-19 or any of its variants, the pace and method through which it is transmitted, contained and/or treated, and the nature of the approach of the local governments in the jurisdictions in which we operate to handling the outbreak, any of which could impact our employees, operations, suppliers, customers and/or operating and financial results, including our ability to determine our quarterly results. We operate in 20 countries and the government responses in each of those countries have differed and resulted in varying levels of containment of COVID-19, degree and duration of closures, and nature of safety precautions, all of which we have and will continue to manage. Although we have worked and continue to work diligently to ensure that our global facilities can operate with minimal disruption, mitigate the impact of the outbreak on our employees' health and safety, and address the supply chain impact on ourselves and our customers, the full extent to which COVID-19 has affected and will affect the global economy and our results will depend on future developments and factors that cannot be predicted.

Implementing our acquisition strategy involves risks, and our failure to successfully implement this strategy could have a material adverse effect on our business.

We expect that a significant driver of our growth over the next several years will be the acquisition of technologies and businesses that complement or augment our existing products and services or may involve entry into a new process industry. We continue to actively pursue acquisition opportunities, some of which may be material to our business and financial performance, and involve significant cash expenditures and the incurrence of significant debt. Although we have been successful with this strategy in the past, we may not be able to grow our business in the future through acquisitions for a number of reasons, including:

- difficulties identifying and executing acquisitions, including our ability to conduct and complete due diligence, difficulties in negotiations with the counterparty, and inability to obtain regulatory and antitrust approvals;
- competition with other prospective buyers resulting in our inability to complete an acquisition or in our paying a substantial premium over the fair value of the net assets of the acquired business;
- access to and availability of capital;
- difficulty in integrating operations, technologies, products and the key employees of the acquired business;
- inability to maintain existing customers of the acquired business or to sell the products and services of the acquired business to our existing customers;
- inability to retain key management of the acquired business;

- diversion of management's attention from other business concerns;
- inability to improve the revenues and profitability or realize the expected cost savings and synergies;
- assumption of significant liabilities, some of which may be unknown at the time of acquisition; and
- identification of internal control deficiencies of the acquired business.

We are required to record acquisition-related costs in the period incurred. Once completed, acquisitions may involve significant integration costs. These acquisition-related costs could be significant in a reporting period and have an adverse effect on our results of operations.

Any acquisition we complete may be made at a substantial premium over the fair value of the net identifiable assets of the acquired business. We are required to assess the realizability of goodwill and indefinite-lived intangible assets annually, and whenever events or changes in circumstances indicate that goodwill and intangible assets, including definite-lived intangible assets, may be impaired. These events or circumstances would generally include operating losses or a significant decline in earnings associated with the acquired business or assets, and our ability to realize the value of goodwill and intangible assets will depend on the future cash flows of these businesses. We may incur impairment charges to write down the value of our goodwill and acquired intangible assets in the future if the assets are not deemed recoverable, which could have a material adverse effect on our operating results.

We manufacture equipment used in the production of forest products, including lumber and OSB, and our financial performance may be adversely affected by decreased levels of residential construction activity.

We manufacture debarkers, stranders and related equipment used in the production of lumber and OSB. Our customers produce these products principally for new residential construction, home repair and remodeling activities. As such, the operating results for our Industrial Processing segment correlate to a significant degree to the level of this residential construction activity, primarily in North America and, to a lesser extent, in Europe. Residential construction activity is influenced by a number of factors, including the supply of and demand for new and existing homes, new housing starts, unemployment rates, interest rate levels, availability of mortgage financing, mortgage foreclosure rates, availability of construction labor and suitable land, seasonal and unusual weather conditions, general economic conditions and consumer confidence. A significant increase in long-term interest rates, changes in tax policy on the deductibility of mortgage interest, tightened lending standards, high unemployment rates and other factors that reduce the level of residential construction activity could have a negative effect on our financial performance.

The OSB market is highly concentrated and the market for building products is highly competitive. The loss of a significant customer or our customers' reductions in capital spending or OSB production could have a material adverse effect on our financial performance.

The OSB market is highly concentrated and there are a limited number of OSB manufacturers. As a percentage of our Industrial Processing segment revenues, the two largest OSB customers accounted for 11% in 2021 and 9% in both 2020 and 2019. The loss of one or more of these OSB customers to a competitor could adversely affect our revenues and profitability. In addition, the market for building products is highly competitive. Products that compete with OSB include other wood panel products and substitutes for wood building products, such as nonfiber-based alternatives. For example, plastic, wood/plastic or composite materials may be used by builders as alternatives to OSB products. Changes in component prices, such as energy, chemicals, wood-based fibers, and nonfiber alternatives can change the competitive position of OSB relative to other available alternatives and could increase substitution. Our customers' OSB production can be adversely affected by lower-cost producers of other wood panel products and substitutes for wood building products. Lower demand for OSB products or a decline in the profitability of one or more of our customers could result in a reduction in spending on capital equipment or the shutdown or closure of an OSB mill, which could have a material adverse effect on our financial performance.

Our Wood Processing product line can be materially impacted by changes to the global timber supply.

Changes in the environment that affect natural resources such as timber may have significant effects on the sales of wood processing equipment by our Industrial Processing segment. Approximately 23% of our revenue in 2021 was from our Wood Processing product line. Changes in the environment like wildfires and damage from pests such as the mountain pine beetle have affected tracts of land in Western Canada that could have otherwise been logged by the forestry industry. Reduction in availability of timber can result in decreased logging activity, mill closures, and lower operating rates at mills, as well as reduced capital expenditures. A reduction in capital expenditures by mills would likely lead to a decrease in demand for new wood processing equipment, which would in turn affect demand for parts, as our wood processing customers are likely to reduce utilization of equipment, reduce inventories, redistribute parts from closed mills and delay rebuilds and other maintenance during industry downturns. In addition to declining orders for wood processing products, adverse economic conditions for our wood processing customers may make it more difficult for us to collect accounts receivable in a timely manner, or at all, which may adversely affect our working capital.

The development and increasing use of digital media has had, and will continue to have, an adverse impact on our Flow Control and Industrial Processing segments.

Developments in digital media have adversely affected demand for newsprint and for printing and writing grades of paper, particularly in North America and Europe, a trend which is expected to continue. Approximately 8% of our revenue in 2021 was from customers producing newsprint and printing and writing grades of paper. Significant declines in the production of printing and writing paper grades have also led to a drop in the construction of recycled tissue mills, as those mills use printing and writing grades of waste paper as their fiber source. The increased use of digital media has had, and will continue to have, an adverse effect on demand for our products in those markets.

Our Material Handling segment can be materially impacted by cyclical economic conditions affecting the global mining industry.

Changes in economic conditions affecting the global mining industry can occur abruptly and unpredictably, which may have significant effects on the sales of original equipment by our subsidiary, SMH, which comprises a substantial portion of our Material Handling segment. Approximately 4% of our revenue in 2021 was from SMH's mining customers. Cyclicality for original equipment sales is driven primarily by price volatility of the commodities that are mined using SMH's equipment, including coal, salt, aggregates, potash, copper, iron ore and trona, or their substitutes, as well as product life cycles, competitive pressures and other economic factors affecting the mining industry, such as company consolidation, increased regulation and competition affecting demand for commodities, and the broader economy, including changes in government monetary or fiscal policies and from market expectations with respect to such policies. Falling commodity prices have in the past and may in the future lead to reduced capital expenditures by SMH's customers, reductions in the production levels of existing mines, a contraction in the number of existing mines and the closure of less efficient mines. Reduced capital expenditures and decreased mining activity by SMH's customers are likely to lead to a decrease in demand for new mining equipment, and may result in a decrease in demand for parts as SMH's customers are likely to reduce utilization of equipment, reduce inventories, redistribute parts from closed mines and delay rebuilds and other maintenance during industry downturns. In addition to declining orders for SMH's products, adverse economic conditions for SMH's customers may make it more difficult for SMH to collect accounts receivable in a timely manner, or at all, which may adversely affect our working capital. As a result of this cyclicality in the global mining industry, SMH may experience significant fluctuations in its business, results of operations and financial condition, and we expect SMH's business to continue to be subject to these fluctuations in the future.

A sizable portion of our Material Handling segment is dependent on continued demand for coal, which is subject to economic and environmental risks.

Approximately 4% and 2% of the Material Handling segment's 2021 revenues came from its thermal and metallurgical coal-mining customers, respectively. Many of these customers supply coal for the generation of electricity and/or steel production. Demand for electricity and steel is affected by the global level of economic activity and economic growth. The pursuit of the most cost-effective form of electricity generation continues to take place throughout the world and coal-fired electricity generation faces intense price competition from other energy sources, particularly natural gas. In addition, coal combustion typically generates significant greenhouse gas emissions and governmental and private sector goals and mandates to reduce greenhouse gas emissions may increasingly affect the mix of electricity generation sources. Further developments in connection with legislation, regulations, international agreements or other limits on greenhouse gas emissions and other environmental impacts or costs from coal combustion, both in the United States and in other countries, could diminish demand for coal as a fuel for electricity generation. If lower greenhouse gas emitting forms of electricity generation, such as nuclear, solar, natural gas or wind power, become more prevalent or cost effective, or diminished economic activity reduces demand for electricity and steel, demand for coal will decline. Reduced demand for coal could result in reduced demand for SMH's mining equipment and could adversely affect our overall business, financial condition and results of operations.

Failure of our information systems or breaches of data security and cybertheft could impact our business.

We operate a geographically dispersed business and rely on the electronic storage and transmission of proprietary and confidential information, including technical and financial information, among our operations, customers and suppliers. We also rely on information technology (IT), including IT services from third parties, in certain of our solutions, products, and services for customers as well as our enterprise infrastructure. Despite our security measures and internal controls, our information technology and infrastructure may be vulnerable to unauthorized access or attacks by nation states, hackers or cyber criminals or breaches due to employee error, malfeasance or other disruptions, such as business email compromises, phishing and other cyber-related fraud. Our systems could be compromised by malware (including ransomware), cyberattacks, and other events, ranging from widespread, non-targeted, global cyber threats to targeted advanced persistent threats. These threats could be indicators of an increased risk to our products, solutions, services, manufacturing, and IT infrastructure. Recent global cyberattacks have been perpetuated by the compromise of software updates to widely used software products, including some products that we use, which increases the risk that vulnerabilities or malicious content could be inserted into our products or IT infrastructure. We maintain a cybersecurity insurance policy that provides limited coverage for some, but not all potential risks and liabilities associated with cyberattacks and other events, which may not be fully insurable. While we continuously seek to improve the security attributes of our products, solutions, services and IT infrastructure, we cannot eliminate risk or ensure that we will not be harmed by cyberattacks or disruptions.

In some global cyberattacks, malware has been spread from one party to another via network connections that the parties had previously authorized. Our business uses IT resources on a dispersed, global basis for a wide variety of functions including development, engineering, manufacturing, sales, accounting, and human resources. Our vendors, partners, employees and customers have access to, and share, information across multiple locations via various digital technologies. In addition, we rely on partners and vendors for a wide range of outsourced activities, including cloud providers, as part of our internal IT infrastructure and our commercial offerings. Secure connectivity is important to these ongoing operations. To a significant extent, the security of systems to which we connect depends on how such systems are designed, installed, protected, configured, updated and monitored, much of which is typically outside of our control. Also, our partners and vendors frequently have access to our confidential information as well as confidential information about our customers, employees, and others. We design our security architecture to reduce the risk that a compromise of our partners' infrastructure, for example a cloud platform, could lead to a compromise of our internal systems or customer networks, but this risk cannot be eliminated and vulnerabilities at third parties could result in unknown risk exposure to our business.

As part of our ongoing effort to upgrade our current information systems, we are implementing enterprise resource planning software to manage certain of our business operations. As we implement and add functionality, problems could arise that we have not foreseen. System failures, network disruptions, and breaches of data security could limit our ability to conduct business as usual, including our ability to communicate and transact business with our customers and suppliers; result in the loss or misuse of this information, including credit card numbers or other personal information, the loss of business or customers, or damage to our brand or reputation; or interrupt or delay reporting of our financial results. Such system failures or unauthorized access could be caused by external theft or attack, misconduct by our employees, suppliers, or competitors, or natural disasters.

In addition, the cost and operational consequences of implementing further data protection measures, such as to comply with local privacy laws such as the European Union's General Data Protection Regulation, or various similar U.S. federal and state laws, could be significant.

The current cyber threat environment indicates increased risk for all companies. Like other global companies, we have experienced cyber threats and incidents, although none have been material or had a material adverse effect on our business or financial condition. Our information security efforts include major programs designed to address security governance, product security, identification and protection of critical assets, insider risk, third-party risk, and cyber defense operations. We believe these measures reduce, but cannot eliminate, the risk of an information security incident. Any significant security incidents could have an adverse impact on sales, harm our reputation and cause us to incur legal liability and increased costs to address such events and related security concerns.

It may be difficult for us to implement our strategies for improving internal growth.

Some of the markets in which we compete are mature and have relatively low growth rates. We pursue a number of strategies to improve our internal growth, including:

- strengthening our presence in selected geographic markets, including emerging markets and existing markets where we see opportunities;
- focusing on parts and consumables sales;
- using low-cost manufacturing bases, such as China, India and Mexico;
- allocating research and development funding to products with higher growth prospects;
- developing new applications for our technologies;
- combining sales and marketing operations in appropriate markets to compete more effectively;
- finding new markets for our products and expanding into different verticals or process industries;
- continuing to develop cross-selling opportunities for our products and services to take advantage of our depth of product offerings; and
- corporate efficiency programs, such as Lean manufacturing and the "80/20" rule (the Pareto Principle).

We may not be able to successfully implement these strategies, or achieve cost savings or desired efficiencies, and these strategies may not result in the expected growth of our business.

Supply chain constraints, inflationary pressure, price increases and shortages in raw materials and components, and dependency upon certain suppliers for such raw materials and components could adversely impact our operating results.

Some of our businesses have been and may continue to be impacted by supply chain constraints, resulting in inflationary pressure on material costs, longer lead times, port congestion, and increased freight costs. In addition, current or future governmental policies may increase the risk of inflation which could further increase the costs of raw materials and components for our businesses. If we are unable to mitigate the impact of supply chain constraints and inflationary pressure through price increases or other measures our results of operations and financial condition could be negatively impacted.

We use a variety of raw materials, including a significant amount of stainless steel, carbon steel, commodities and critical components to manufacture our products. Increases in the prices of such raw materials, commodities and critical components could adversely affect our operating results if we were unable to fully offset the effect of these increased costs through price increases, productivity improvements, or cost reduction programs.

Some of our businesses depend on a limited number of suppliers to provide critical components used in the manufacture of our products. If we are unable to obtain sufficient supplies of these components or these sources of supply cease to be available to us, we could experience shortages in critical components or be unable to meet our commitments to customers. Alternative sources of supply could be more expensive, or in some cases, we could be unable to locate such alternative sources. We believe our current sources of raw materials, commodities and critical components will generally be sufficient for our needs in the foreseeable future. However, our operating results could be negatively impacted if supply is insufficient for our operations or if we are unable to expand supply as needed.

While our businesses are working to alleviate supply chain constraints through various measures, we are unable to predict the impact of these constraints on the timing of revenue and operating costs of our business in the future.

We are subject to intense competition in all our markets.

We believe that the principal competitive factors affecting the markets for our products include technical expertise and process knowledge, product innovation, automation, product quality, and price. Our competitors include a number of large multinational corporations that may have substantially greater financial, marketing, and other resources than we do. As a result, they may be able to adapt more quickly to new or emerging technologies, such as those related to factory digitalization, the industrial internet of things, and smart technology, and changes in customer requirements, or to devote greater resources to the promotion and sale of their services and products. Competitors' technologies may prove to be superior to ours. Our current products, those under development, and our ability to develop new technologies may not be sufficient to enable us to compete effectively. Competition, especially in China, has increased as new companies enter the market and existing competitors expand their product lines and manufacturing operations.

Changes in our tax provision or exposure to additional income tax liabilities could affect our profitability.

We derive a significant portion of our revenue and earnings from our international operations, and are subject to income and other taxes in the United States and numerous foreign jurisdictions. Changes in U.S. and foreign income tax laws and regulations, or their interpretation, could result in higher or lower income tax rates assessed or changes in the taxability of certain revenues or the deductibility of certain expenses, thereby affecting our income tax expense and profitability. A number of factors may cause our effective tax rate to fluctuate, including: changes in tax rates in various jurisdictions; unanticipated changes in the amount of profit in jurisdictions in which the statutory tax rates may be higher or lower than the U.S. tax rate; the resolution of issues arising from tax audits with various tax authorities; changes in the valuation of our deferred tax assets and liabilities; adjustments to income taxes upon finalization of various tax returns; increases in expenses not deductible for tax purposes, including impairments of goodwill in connection with acquisitions; and changes in available tax credits or our ability to utilize foreign tax credits. Any of these factors could cause us to experience an effective tax rate significantly different from that of prior periods or current expectations, which could have an adverse effect on our results of operations or cash flows.

If we are unable to successfully manage our manufacturing operations, our ability to deliver products to our customers could be disrupted and our business, financial condition and results of operations could be adversely affected.

Equipment and operating systems necessary for our manufacturing businesses may break down, perform poorly, or fail. Any such disruption could cause losses in efficiencies, delays in shipments of our products and the loss of sales and customers, and insurance proceeds may not adequately compensate us for our losses.

In order to enhance the efficiency and cost effectiveness of our manufacturing operations, and to better serve customers located in various countries, as we have in the past, we may in the future move product lines from one of our plants to another and consolidate manufacturing operations in certain of our plants. Even if we successfully move our manufacturing processes, there is no assurance that the cost savings and efficiencies we anticipate will be achieved.

Changes in zoning laws in China are requiring us to relocate certain of our manufacturing facilities. For example, we received a request by local Chinese authorities to relocate one of our facilities, and have negotiated with the Chinese government regarding the relocation of such facility. Such relocation, and any relocations required in the future, may increase our costs and could have a material impact on our manufacturing operations.

In addition, our manufacture of certain products is concentrated in specific geographic locations. As a result of such concentration, we may be disproportionately exposed to the impact of any disruptions (including natural disasters), regulations or delays that impact those geographic locations, which may negatively impact our ability to manufacture products produced in those locations and have an adverse effect on our business results.

We may be required to reorganize our operations in response to changing conditions in the worldwide economy and the industries we serve, and such actions may require significant expenditures and may not be successful.

We have undertaken various restructuring measures in the past in response to changing market conditions in the countries in which we operate and we may engage in additional cost reduction programs in the future. The costs of these programs may be significant and we may not recoup the costs of these programs. In connection with any future plant closures, delays or failures in the transition of production from existing facilities to facilities in other geographic regions could also adversely affect our results of operations. In addition, it is difficult to accurately forecast our financial performance in periods of economic uncertainty in a region or globally, and the efforts we have made or may make to align our cost structure may not be sufficient or able to keep pace with rapidly changing business conditions. Our profitability may decline if our restructuring efforts do not sufficiently reduce our future costs and position us to maintain or increase our sales.

Our future success is substantially dependent on the continued service of our senior management and other key employees and effective succession planning.

Our future success is substantially dependent on the continued service of our senior management and other key employees. The loss of the services or retirement of our senior management or other key employees could make it more difficult to successfully operate our business and achieve our business goals. We also may be unable to attract qualified personnel or retain existing management, product development, sales, operational and other support personnel that are critical to our success, which could result in harm to key customer relationships, loss of key information, expertise, or know-how, and unanticipated recruitment and training costs. In addition, effective succession planning is also a key factor for our future success. Our failure to continue to enable the effective transfer of knowledge and facilitate smooth transitions with regard to key management employees, including in connection with our succession planning, could adversely affect our long-term strategic planning and execution and negatively affect our business, financial condition, operating results, and prospects. If we fail to enable the effective transfer of knowledge and facilitate smooth transitions for key personnel, the operating results and future growth for our business could be adversely affected, and the morale and productivity of the workforce could be disrupted.

Our inability to protect our intellectual property or defend ourselves against the intellectual property claims of others could have a material adverse effect on our business. In addition, litigation to enforce our intellectual property and contractual rights or defend ourselves could result in significant litigation or licensing expense.

We seek patent and trade secret protection for significant new technologies, products, and processes because of the length of time and expense associated with bringing new products through the development process and into the marketplace. We own numerous U.S. and foreign patents and we intend to file additional applications, as appropriate, for patents covering our products. Patents may not be issued for any pending or future patent applications owned by or licensed to us, and the claims allowed under any issued patents may not be sufficiently broad to protect our technology. Any issued patents owned by or licensed to us may be challenged, invalidated, or circumvented, and the rights under these patents may not provide us with competitive advantages. In addition, competitors may design around our technology, copy our technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, which could make it easier for competitors to capture increased market share. In addition, as our patents expire, we rely on trade secrets and proprietary know-how to protect our products. We cannot be sure the steps we have taken, or will take in the future, will be adequate to deter misappropriation of our proprietary information and intellectual property. Of particular concern are developing countries, such as China and India, where the laws, courts, and administrative agencies may not protect our intellectual property rights as fully as in the United States or Europe.

We seek to protect trade secrets and proprietary know-how, in part, through confidentiality and non-competition agreements with our collaborators, employees, and consultants. These agreements may be breached, we may not have adequate remedies for any breach, and our trade secrets and proprietary know-how may otherwise become known or be independently developed by our competitors, or our competitors may otherwise gain access to our intellectual property.

Others may assert intellectual property infringement claims against us or our customers. We may provide a limited intellectual property indemnity in connection with our terms and conditions of sale to our customers and in other types of contracts with third parties. Indemnification payments and legal expenses to defend claims could be costly.

We could incur substantial costs to defend ourselves in suits brought against us, including for alleged infringement of third-party rights, or in suits in which we may assert our intellectual property or contractual rights against others. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

SMH holds numerous U.S. and foreign patents, including foreign counterparts to its U.S. patents, and licenses the trademarked brand name of one of its significant products, Link-Belt®, from a third party. If the third party were to terminate that license agreement, we would lose the right to use the Link-Belt® trademark in the marketplace and cease to benefit from any of its associated goodwill.

Effects of climate change may adversely impact our business.

Climate change may pose environmental risks that could harm our results of operations and affect the way we conduct business. Many of our operations are located in regions that may become increasingly vulnerable due to climate change, which may cause extreme weather conditions such as more intense hurricanes, thunderstorms, tornadoes and snow or ice storms, winds, and rainfall, as well as rising sea levels and increased volatility in seasonal temperatures. Extreme weather conditions or weather-driven natural disasters could impact our ability to maintain our operations in those areas. For example, we have manufacturing locations in the southeastern United States, which region has experienced record hurricanes in recent years reportedly due to the effects of climate change. Climate change could also affect demand for our products by our customers that are affected by weather and weather-driven events, including seasonal changes in outdoor working conditions and rainfall levels. Climate change has also been cited as contributing to the increased likelihood around the world of hot and dry conditions in which wildfires and the destructive mountain pine beetle thrive. As a result of the effects of climate change, our customers in the forestry industry may face damage to assets and losses from business interruption, which could lead to the reduced operation or closure of mills, and disruption of supply chains of which we may be a part. These risks could harm our business and results of operations.

Our insurance coverage may be inadequate or expensive.

We are subject to claims in the ordinary course of business. It is not always possible to prevent or detect activities giving rise to claims, and the precautions we take may not be effective in all cases. We maintain insurance policies that provide limited coverage for some, but not all, potential risks and liabilities associated with our business. We may not obtain insurance if we believe the cost of available insurance is excessive relative to the risks presented. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially, and in some instances, certain insurance may become unavailable or available only for reduced amounts of coverage. As a result, we may not be able to renew our existing insurance policies or procure other desirable insurance on commercially reasonable terms, if at all. In addition, certain risks generally are not fully insurable. Even where insurance coverage applies, insurers may contest their obligations to make payments. Our financial condition, results of operations and cash flows could be materially and adversely affected by losses and liabilities from uninsured or under-insured events, as well as by delays in the payment of insurance proceeds, or the failure by insurers to make payments.

Risks Related to our Foreign Operations

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

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

- agreements may be difficult to enforce and receivables difficult to collect through a foreign country's legal system;
- foreign customers may have longer payment cycles;
- foreign countries may impose additional withholding taxes or otherwise tax our foreign income;
- economic sanctions, trade embargoes, tariffs, currency restrictions or other adverse trade regulations;
- environmental and other regulations can adversely impact our ability to operate our facilities;
- disruption from climate change, natural disaster, including earthquakes and/or tornadoes, fires, war, terrorist activity, and other force majeure events beyond our control;
- changes in zoning laws that may require relocation of our manufacturing operations;
- disruption from fast-spreading health epidemics and pandemics which have and may continue to result in widespread interruption of our business operations and those of our customers, supplier and vendors;
- worsening economic conditions may result in worker unrest, labor actions, and potential work stoppages;
- political and/or civil unrest may disrupt commercial activities of ours or our customers;

- fluctuations in foreign currency exchange rates and foreign interest rates beyond our control;
- it may be difficult to repatriate funds, due to unfavorable domestic and foreign tax consequences or other restrictions or limitations imposed by foreign governments; and
- the protection of intellectual property in foreign countries may be more difficult to enforce.

Operating globally subjects us to various risks that may adversely affect our results of operations in the future.

Policies of the Chinese government may negatively impact our business.

We operate significant manufacturing facilities in China. In 2021, our sales to China were $82.1 million, or 10%, of our revenue. Our Chinese manufacturing facilities provide low-cost sourcing to many of our subsidiaries. Changes in the policies of the Chinese government, devaluation of the Chinese currency, restrictions on the expatriation of cash, political unrest, unstable economic conditions, or other developments in China or in U.S.-China relations that are adverse to trade, including enactment of protectionist legislation or trade or currency restrictions, could negatively impact our business and operating results. Policies of the Chinese government to target slower economic growth may negatively affect our business in China if customers are unable to expand capacity or obtain financing for expansion or improvement projects. The United States has restricted investment in certain companies with ties to the Chinese military; if such restrictions are expanded, or if investment was otherwise restricted, our business would be negatively affected.

Policies of the Chinese government to advance internal political priorities may potentially negatively affect our business in any number of ways that we may not foresee. For example, the Chinese government has imposed a ban on all recovered paper imports effective as of January 1, 2021. According to Fastmarkets RISI, the Chinese government's actions have led to a severe shortage of recovered paper in China, which has forced mills to incur additional downtime. Chinese containerboard producers have been looking to build capacity for fiber in Southeast Asia, with the intent to ship pulp back to China for further processing. These policies have and could in the future continue to have a significant influence on the price, nature and availability of the type of paper imported into China, could have a negative effect on the operating capacity of our customers in China, and have and may in the future continue to affect the demand for our products and our operating results in China and the surrounding region.

Our sales of capital equipment in China tend to be more variable and are subject to a number of uncertainties.

Our bookings and revenues from China have tended to be more variable than in other geographic regions. The Chinese pulp and paper industry has experienced periods of significant capacity expansion to meet demand followed by periods of reduced activity while overcapacity is absorbed. These cycles result in periods of significant bookings activity for our capital products and increased revenues followed by a significant decrease in bookings or potential delays in shipments and order placements by our customers as they attempt to balance supply and demand.

Orders from customers in China, particularly for large stock-preparation systems that have been tailored to a customer's specific requirements, have credit risks higher than we generally incur elsewhere, and some orders are subject to the receipt of financing approvals from the Chinese government or can be impacted by the availability of credit and more restrictive monetary policies. We generally do not record bookings for signed contracts from customers in China for large stock-preparation systems until we receive the down payments for such contracts. The timing of the receipt of these orders and the down payments are uncertain and there is no assurance that we will be able to recognize revenue on these contracts. We may experience a loss if a contract is canceled prior to the receipt of a down payment if we have commenced engineering or other work associated with the contract or we may not be able to retain a down payment. We typically have inventory awaiting shipment to customers and could incur a loss if contracts are canceled and we cannot re-sell the equipment. In addition, we may experience a loss if the contract is canceled, or the customer does not fulfill its obligations under the contract, prior to the receipt of a letter of credit or final payments covering the remaining balance of the contract, which could represent a significant portion of the total order. As a result of these factors, our revenues recognized in China have varied, and will in the future vary from period to period and be difficult to predict.

Our results of operations may be adversely affected by currency fluctuations.

As a multinational corporation, we are exposed to fluctuations in currency exchange rates that impact our business in many ways. We are exposed to both translation as well as transaction risk associated with transactions denominated in currencies that differ from our subsidiaries' functional currencies. Although most of our subsidiaries' costs are denominated in the same currency as their revenues, changes in the relative values of currencies occur from time to time and can adversely affect our operating results. Some of the foreign currency translation risk is mitigated when foreign subsidiaries have revenue and expenses in the same foreign currency. Further, certain foreign subsidiaries may hold U.S. dollar assets or liabilities which, as the U.S. dollar strengthens versus the applicable functional currencies, will result in currency transaction gains on assets or losses on liabilities. While some foreign currency transaction risks can be hedged using derivatives or other financial instruments, or may be insurable, such attempts to mitigate these risks may be costly and may not always be successful.

When we translate the local currency results of our foreign subsidiaries into U.S. dollars during a period in which the U.S. dollar is strengthening, our financial results will reflect decreases due to foreign currency translation. In addition, our consolidated financial results are adversely affected when foreign governments devalue their currencies. Our major foreign currency translation exposures involve the currencies in Europe, China, Brazil, Canada, and Mexico. For example, China's central bank has previously devalued the renminbi to boost the Chinese economy, which had a negative translation impact on our consolidated revenues and may in the future have a negative translation impact if this recurs. The overall favorable or unfavorable effect of foreign currency translation on our financial results will vary by quarter. We do not enter into derivatives or other financial instruments to hedge this type of foreign currency translation risk.

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

The United Kingdom's (U.K.) exit from the European Union (E.U.), referred to as Brexit, which was effective as of January 31, 2020, and the related transition period which ended on December 31, 2020, has caused, and may from time to time cause volatility in the global stock markets, currency exchange rate fluctuations, effects on cross border trade and labor, and political and regulatory uncertainty in the U.K. and across Europe generally.

The global economic uncertainty that has occurred and may continue to occur may cause our customers to closely monitor their costs and reduce their spending budgets. Our revenues to customers in the U.K. represented approximately 3% of total revenues in 2021. All of these events, should they occur, could adversely affect our business, financial condition, operating results, and cash flows.

Risks Related to Regulation of our Business and Industry

Operating globally subjects us to changes in government regulations and policies in multiple jurisdictions around the world, including those related to tariffs and trade barriers, taxation, exchange controls and political risks.

Changes in government policies, political unrest, economic sanctions, trade embargoes, or other adverse trade regulations can negatively impact our business. Non-U.S. markets contribute a substantial portion of our revenues, and we intend to continue expanding our presence in these regions. For example, we operate businesses in Mexico and Canada, and we benefited from the North American Free Trade Agreement, which has been replaced by the United States-Mexico-Canada Agreement (USMCA), from which we also benefit. If the United States were to withdraw from or materially modify the USMCA or impose significant tariffs or taxes on goods imported into the United States, the cost of our products could significantly increase or no longer be priced competitively, which in turn could have a material adverse effect on our business and results of operations.

In addition, the Office of the United States Trade Representative has imposed tariffs on a wide variety of products from China, including pulp and paper machinery equipment, pursuant to Section 301 of the Trade Act of 1974. The tariffs on pulp and paper machinery are set at 25%. In addition, the U.S. Department of Commerce has imposed tariffs of 25% on numerous categories of steel imports, and 10% on numerous categories of aluminum imports, from most countries under Section 232 of the Trade Expansion Act of 1962. While we try to mitigate the impact of the existing and other proposed tariffs through pricing and sourcing strategies, we cannot be certain how our customers and competitors will react to the actions we take. The tariffs have and could in the future negatively affect our ability to compete against competitors who do not manufacture in China and/or are not subject to the tariffs.

The United States has tightened trade sanctions targeting countries like China and Russia. For example, since 2018 the United States has imposed various trade and economic sanctions targeting certain persons in Russia and certain types of business with Russia, and, as a result of the February 2022 Russian invasion of Ukraine, the United States, the European Union, and many other countries have imposed sanctions on Russia, individuals in Russia and Russian businesses, including several large banks. In 2021, our sales to Russia were $10.7 million, or 1% of our revenue. The United States has continued to expand export control restrictions applicable to certain Chinese firms and continued its assessment of new controls for "emerging foundational technologies," escalating U.S.-China tension over technology competition. In response, Russia and China have begun considering and, in some cases, implementing trade sanctions that could affect U.S.-owned businesses. The imposition of trade sanctions may, and with respect to the Ukraine-related sanctions are expected to, make it generally more difficult to do business in Russia and China and cause delays or prevent shipment of products or services performed by our personnel, or to receive payment for products or services. Such restrictions could have a material adverse impact on our business and operating results going forward.

We are required to comply with a wide variety of laws and regulations, and are subject to regulation by various federal, state and foreign agencies.

We are subject to various local, state, federal, foreign and transnational laws and regulations, particularly those relating to environmental protection, the importation and exportation of products, tariffs and trade barriers, taxation, exchange controls, current good manufacturing practices, data protection, health and safety and our business practices in the U.S. and abroad, such as anti-corruption and anti-competition laws, and, in the future, any changes to such laws and regulations could adversely affect us. Any noncompliance by us with applicable laws and regulations or the failure to maintain, renew or obtain necessary permits and licenses could result in criminal, civil and administrative penalties and could have an adverse effect on our results of operations.

We are subject to risks and costs associated with environmental laws and regulations.

The manufacturing of our products requires the use of hazardous materials that are subject to a broad array of environmental, health and safety laws and regulations. Our failure to manage the use, transportation, emissions, discharge, storage, recycling, or disposal of hazardous materials could lead to increased costs or regulatory penalties, fines and legal liability. Our ability to expand, modify or operate our manufacturing facilities in the future may be impeded by environmental regulations, such as air quality, wastewater requirements, and energy supply and use restrictions. The Chinese government has pledged to tackle the country's hazardous smog and improve air quality conditions, which has prompted authorities to impose strict pollution control measures when certain pollution levels are detected and ahead of high-profile events. Regulators have in the past and may in the future temporarily restrict the operations of our manufacturing facilities in a particular geographic location as a result of attempts to control pollution levels, or energy supply or use restrictions in China. Environmental laws and regulations could also require us to acquire pollution abatement or remediation equipment, modify product designs, or incur other expenses. New regulations promulgated in reaction to climate change could result in increased manufacturing costs associated with air pollution control or energy requirements, and increased or new monitoring, recordkeeping, and reporting of greenhouse gas emissions. We also see the potential for higher energy costs driven by climate change regulations. Implementation of such new regulations could increase our costs or require us to modify our operations and negatively impact our business and results of operations.

Environmental, health and mine safety laws and regulations impacting the mining industry may adversely affect demand for products manufactured by our Material Handling segment.

SMH, which is in our Material Handling segment, supplies equipment to mining companies operating in major mining regions throughout the world. SMH's customers' operations are subject to or affected by a wide array of regulations in the jurisdictions where they operate, including those directly impacting mining activities and those indirectly affecting their businesses, such as applicable environmental and mine safety laws. New environmental and health legislation or administrative regulations relating to mining or affecting demand for mined materials or more stringent interpretations of existing laws and regulations, may require SMH's customers to significantly change or curtail their operations. The mining industry has also encountered increased scrutiny as it relates to safety regulations. New legislation or regulations and the high cost of compliance with such regulations relating to mine safety standards may induce customers to discontinue or limit their mining operations and may discourage companies from developing new mines or maintaining existing mines, which in turn could diminish demand for our products and services. As a result of these factors, demand for SMH's mining equipment could be adversely affected by environmental and health regulations directly or indirectly impacting the mining industry. Any reduction in demand for SMH's products as a result of environmental, health or mine safety regulations could have an adverse effect on SMH's and our overall business, financial condition or results of operations.

Risks Related to Indebtedness and our Credit Agreement

Our debt may adversely affect our cash flow and may restrict our investment opportunities.

We have borrowed amounts under our five-year, unsecured multi-currency revolving credit facility (Credit Agreement) and under other agreements to fund our operations and our acquisition strategy. Our borrowing capacity under the Credit Agreement may decrease as a result of the impact that foreign exchange rate fluctuations could have on our foreign-denominated borrowings.

Pursuant to the Credit Agreement, we have a borrowing capacity of $400.0 million with an uncommitted, unsecured incremental borrowing facility of $150.0 million with a maturity date of December 14, 2023. In 2018, we also issued $10.0 million in senior notes under our Multi-Currency Note Purchase and Private Shelf Agreement with PGIM, Inc., an affiliate of Prudential (Note Purchase Agreement). We may also in the future obtain additional long-term debt and working capital lines of credit to meet future financing needs, which would have the effect of increasing our total leverage. Our indebtedness could have negative consequences, including:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- limiting our ability to pay dividends on or to repurchase our capital stock;

- limiting our ability to complete a merger or an acquisition or acquire new products and technologies through acquisitions or licensing agreements; and
- limiting our flexibility in planning for, or reacting to, changes in our business and the industries in which we compete.

Our existing indebtedness bears interest at fixed and floating rates, and as a result, our interest payment obligations on our indebtedness will fluctuate if interest rates increase or decrease. From time to time, we hedge a portion of our variable rate interest payment obligations through interest rate swap agreements. The counterparty to the swap agreements could demand an early termination of the swap agreements if we 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 we were unable to cure the default. If our swap agreements were to be terminated prior to the applicable scheduled maturity date and if we were required to pay cash for the value of the swap, we could incur a loss, which could adversely affect our financial results.

In addition, the Tax Cuts and Jobs Act of 2017 (2017 Tax Act) places certain limitations on the deductibility of interest expense as a percentage of adjusted taxable income. If interest rates or the level of our debt increase, to the extent that the associated interest expense exceeds the limitation established by the 2017 Tax Act, the amount of interest expense that we would not be able to deduct for income tax purposes, if significant, could adversely affect our financial results and cash flows.

Our ability to satisfy our obligations and to reduce our total debt depends on our future operating performance and on economic, financial, competitive, and other factors beyond our control. Our business may not generate sufficient cash flows to meet these obligations or to successfully execute our business strategy. If we were unable to service our debt and fund our business, we could be forced to reduce or delay capital expenditures or research and development expenditures, seek additional financing or equity capital, restructure or refinance our debt, curtail or eliminate our cash dividend to stockholders, or sell assets.

Restrictions in our Credit Agreement and Note Purchase Agreement may limit our activities.

Our Credit Agreement and the Note Purchase Agreement contain, and future debt instruments to which we may become subject may contain, restrictive covenants that limit our ability to engage in activities that could otherwise benefit us, including restrictions on our ability (including the ability of our subsidiaries) to: incur additional indebtedness; pay dividends on, redeem, or repurchase our capital stock; make investments; create liens; sell assets; enter into transactions with affiliates; and consolidate, merge, or transfer all or substantially all of our assets and the assets of our subsidiaries.

We are also required to meet specified financial covenants under the terms of our Credit Agreement and the Note Purchase Agreement. Our ability to comply with these financial restrictions and covenants is dependent on our future performance, which is subject to prevailing economic conditions and other factors, including factors that are beyond our control. Our failure to comply with any of these restrictions or covenants may result in an event of default under our Credit Agreement, the Note Purchase Agreement, our swap agreement and other loan and note obligations, which could permit acceleration of the debt under those instruments and require us to repay the debt before its scheduled due date. If an event of default were to occur, we might not have sufficient funds available to make the payments required under our indebtedness. In addition, our inability to borrow funds under our Credit Agreement would have significant consequences for our business, including reducing funds available for acquisitions and other investments in our business; and impacting our ability to pay dividends and meet other financial obligations.

Furthermore, our Credit Agreement requires that any amounts borrowed under the facility be repaid by the maturity date in 2023. If we are unable to roll over the amounts borrowed into a new credit facility and we do not have sufficient cash to repay our borrowings, we may default under the Credit Agreement. We may need to repatriate cash from our overseas operations, which may not be possible, to fund the repayment and we may be required to pay taxes on the repatriated amounts. Such repatriation would have an adverse effect on our effective tax rate and cash flows.

Our Credit Agreement has variable interest tied to the London Interbank Offered Rate (LIBOR) and we could become subject to higher interest rates if the replacement rate we agree on with our banks is higher.

Borrowings under our Credit Agreement use LIBOR as a benchmark for establishing the interest rate for our LIBOR Loans, as defined in the Credit Agreement. LIBOR has been the subject of national, international and other regulatory guidance and proposals for reform. These reforms and other pressures will cause LIBOR to disappear entirely or to perform differently than in the past. In 2021, we amended the Credit Agreement to include customary provisions to provide for the replacement of LIBOR with an alternative benchmark rate when any applicable tenor of LIBOR ceases to be available. In addition, we may need to amend other financial or contractual obligations that use LIBOR, and we cannot predict what alternative benchmark would be negotiated with our counterparties. We may incur additional expenses to amend such agreements to reference the alternative benchmark, which may differ significantly from LIBOR. Accordingly, the use of an alternative benchmark could result in increased costs, including increased interest expense on our Credit Agreement borrowings and increased borrowing costs in the future, and could adversely affect our available cash flow for general corporate requirements. At this time, we are unable to predict the effect of any such alternatives to LIBOR on our business, results of operations or financial condition.

Adverse changes to the soundness of financial institutions could affect us.

We have relationships with many financial institutions, including lenders under our credit facilities and insurance underwriters, and from time to time we execute transactions with counterparties in the financial industry, such as our interest rate swap agreements and other hedging transactions. In addition, our subsidiaries in China often hold banker's acceptance drafts that are received from customers in the normal course of business. These drafts may be discounted or used to pay vendors prior to the scheduled maturity date or submitted to an acceptance bank for payment at the scheduled maturity date. These financial institutions or counterparties could be adversely affected by volatile conditions in the financial markets, economic downturns, and difficult economic conditions. These conditions could result in financial instability, bankruptcy, or other adverse effects at these financial institutions or counterparties. We may not be able to access credit facilities in the future, complete transactions as intended, or otherwise obtain the benefit of the arrangements we have entered into with such financial parties, which could adversely affect our business and results of operations.

Risks Related to Ownership of our Capital Stock

Our share price fluctuates and experiences price and volume volatility.

Stock markets in general and our common stock in particular experience significant price and volume volatility from time to time. The market price and trading volume of our common stock may continue to be subject to significant fluctuations due not only to general stock market conditions but also to a change in sentiment in the market regarding our operations, business prospects, or future funding. Given the nature of the markets in which we participate and the volatility of orders, we may not be able to reliably predict future revenues and profitability, and unexpected changes may cause us to adjust our operations. A large proportion of our costs are fixed, due in part to our significant selling, research and development, and manufacturing costs. Thus, small declines in revenues could disproportionately affect our operating results. Other factors that could affect our share price and quarterly operating results include:

– changes in the assumptions used for revenue recognized over time;
– fluctuations in revenues due to customer-initiated delays in product shipments;
– failure of a customer to comply with an order's contractual obligations or inability of a customer to provide financial assurances of performance;
– adverse changes in demand for and market acceptance of our products;
– failure of our products to pass contractually agreed upon acceptance tests, which could delay or prohibit recognition of revenues under applicable accounting guidelines;
– competitive pressures resulting in lower sales prices for our products;
– adverse changes in the process industries we serve;
– delays or problems in our introduction of new products or in the manufacture of our products;
– our competitors' announcements of new products, services, or technological innovations;
– contractual liabilities incurred by us related to guarantees of our product performance;
– increased costs of raw materials or supplies, including the cost of energy;
– changes in the timing of product orders;
– changes in the estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, or expenses;
– the impact of acquisition accounting and the treatment of acquisition and restructuring costs as period costs;
– fluctuations in our outstanding indebtedness and associated interest expense;
– fluctuations in our effective tax rate;
– fluctuations in foreign currency exchange rates;
– the operating and share price performance of companies that investors consider to be comparable to us; and
– changes in global financial markets and global economies and general market conditions.

Anti-takeover provisions in our charter documents and under Delaware law could prevent or delay transactions that our shareholders may favor.

Provisions of our charter and bylaws may discourage, delay, or prevent a merger or acquisition that our shareholders may consider favorable, including transactions in which shareholders might otherwise receive a premium for their shares.

For example, these provisions:

- authorize the issuance of "blank check" preferred stock without any need for action by shareholders;
- provide for a classified board of directors with staggered three-year terms;
- require supermajority shareholder voting to effect various amendments to our charter and bylaws;
- eliminate the ability of our shareholders to call special meetings of shareholders;
- prohibit shareholder action by written consent; and
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by shareholders at shareholder meetings.

Our board of directors could adopt a shareholder rights plan in the future that could have anti-takeover effects and might discourage, delay, or prevent a merger or acquisition that our board of directors does not believe is in our best interest and those of our shareholders, including transactions in which shareholders might otherwise receive a premium for their shares.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

We believe that our facilities are in good condition and are suitable and adequate for our present operations. We do not anticipate significant difficulty in obtaining lease renewals or alternative space as needed.

The location and general character of our principal properties as of year-end 2021 are as follows:

Flow Control Segment

We own approximately 1,449,000 square feet and lease approximately 234,000 square feet, under leases expiring on various dates ranging from 2022 to 2028, of manufacturing, engineering, and office space. In addition, in China, we lease the land associated with our buildings under long-term leases, which expire on dates ranging from 2050 to 2062. Our principal engineering and manufacturing facilities are located in Huckeswagen, Germany; Valinhos, Brazil; Kamienna Gora, Poland; Three Rivers, Michigan, United States; Anderson, South Carolina, United States; Auburn, Massachusetts, United States; Eltmann, Germany; Weesp, The Netherlands; Wuxi, China; Moers, Germany; Guadalajara, Mexico; Bury, England and Huskvarna, Sweden.

Industrial Processing Segment

We own approximately 1,241,000 square feet and lease approximately 148,000 square feet, under leases expiring on various dates ranging from 2022 to 2025 of manufacturing, engineering, and office space. In addition, in China, we lease the land associated with our existing and future-planned facilities under long-term leases, which expire on dates ranging from 2054 to 2071. Also, in Sidney, British Columbia, Canada, we lease the land associated with our building under a long-term lease, which expires in 2032. Our principal engineering and manufacturing facilities are located in Vitry-le-Francois, France; Jining, China; Lebanon, Ohio, United States; Sidney, British Columbia, Canada; Lohja, Finland; Surrey, British Columbia, Canada and Pell City, Alabama, United States.

Material Handling Segment

We own approximately 105,000 square feet and lease approximately 639,000 square feet, under leases expiring on various dates ranging from 2022 to 2034. Our principal manufacturing and office space is located in Saltillo, Mississippi, United States; Georgsmarienhutte, Germany; Crown Point, Indiana, United States; Green Bay, Wisconsin, United States and Alfreton, England.

Corporate

We lease approximately 18,000 square feet in Westford, Massachusetts, United States, for our corporate headquarters under a lease expiring in 2026.

Item 3. Legal Proceedings

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities

Market Price of Common Stock

Our common stock trades on the New York Stock Exchange under the symbol "KAI." The closing market price on the New York Stock Exchange for our common stock on February 18, 2022 was $199.36 per share.

Holders of Common Stock

As of February 18, 2022, we had approximately 1,976 holders of record of our common stock. This does not include holdings in street or nominee name.

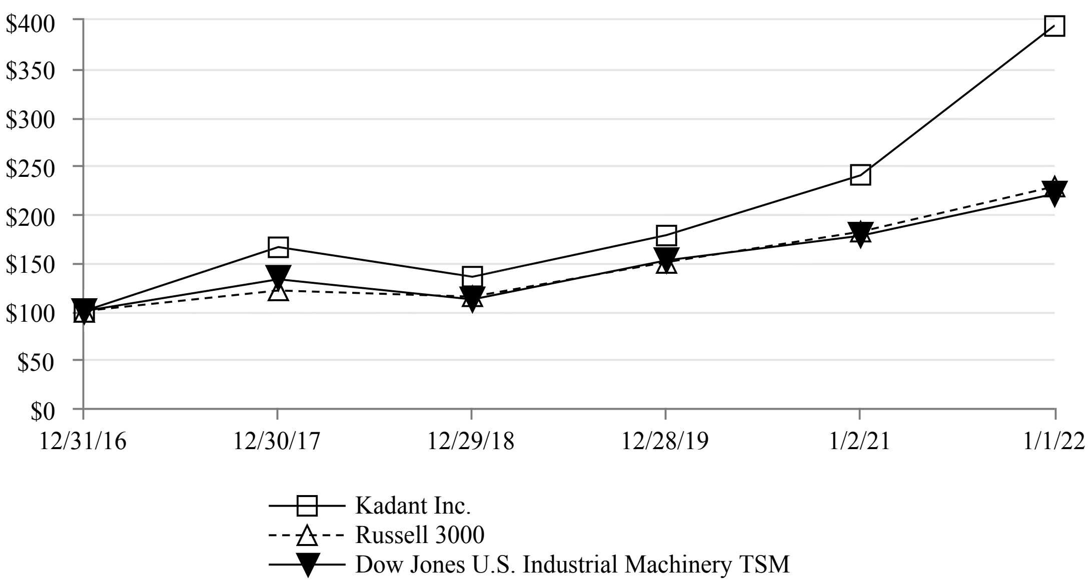
Issuer Purchases of Equity Securities

On May 20, 2021, our board of directors approved the repurchase of up to $20 million of our equity securities during the period from May 20, 2021 to May 20, 2022. We did not repurchase any shares of our common stock during 2021.

Performance Graph

This performance graph compares the cumulative, five-year total shareholder return assuming an investment of $100 (and the reinvestment of dividends) in our common stock, the Russell 3000 Stock Index, and the Dow Jones U.S. Industrial Machinery TSM Index. Because our fiscal year ends on a Saturday, the graph values are calculated using the last trading day prior to the end of our fiscal year.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN
Among Kadant Inc., the Russell 3000 Index,
and the Dow Jones U.S. Industrial Machinery TSM Index



	12/31/2016	12/30/2017	12/29/2018	12/28/2019	1/2/2021	1/1/2022
Kadant Inc.	100.00	165.94	135.31	178.28	239.97	394.55
Russell 3000	100.00	121.13	114.78	150.39	181.80	228.45
Dow Jones U.S. Industrial Machinery TSM	100.00	132.70	111.92	152.22	177.61	220.86

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations should be read together with the consolidated financial statements and related notes set forth in Item 8, "Financial Statements and Supplementary Data." The following discussion also contains forward-looking statements, including the outlook for our business, that involve a number of risks and uncertainties. See Part I, "Forward-Looking Statements," for a discussion of the forward-looking statements contained below and Part I, Item 1A, "Risk Factors," for a discussion of certain risks that could cause our actual results to differ materially from the results anticipated in such forward-looking statements.

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 businesses.

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. See Note 12, Business Segment and Geographical Information, in the accompanying consolidated financial statements for a description and financial information of our reportable operating segments.

Industry and Business Overview

We had record consolidated bookings of $893.2 million for 2021 as our businesses rebounded from the impact of the COVID-19 pandemic, which adversely affected our bookings and revenue for a substantial part of 2020. Our consolidated 2021 bookings included $36.9 million attributable to acquisitions and $27.0 million from a favorable foreign currency effect, and consisted of record orders for both parts and consumables products and capital equipment. See *Acquisitions* below for further details. We ended the year with record consolidated backlog of $309.9 million, increasing 61% from the end of 2020. An overview of our business by segment is as follows:

- *Flow Control* – Our Flow Control segment ended a strong year with record bookings for both parts and consumables products and capital equipment. In 2021, we acquired The Clouth Group of Companies (Clouth), which contributed $23.2 million of bookings. Orders for both parts and consumables products and capital equipment at our existing Flow Control businesses have been bolstered by growth in the industries we serve, particularly the packaging and tissue markets. Our bookings in the earlier part of 2021 were also boosted by pent-up demand from depressed levels encountered during most of 2020.
- *Industrial Processing* – Strong quarterly bookings, particularly in the latter half of 2021, contributed to record orders in 2021 for our Industrial Processing segment. Orders for our wood processing business products continue to be fueled by a robust U.S. housing market and high demand for lumber, oriented strand board and plywood, which has driven new capital equipment investment and high parts consumption by our customers. During the second half of 2021, maintenance requirements at many of our customers have augmented demand for our parts products, which we expect to continue into the first half of 2022. In the fourth quarter of 2021, wood processing capital equipment bookings were exceptionally strong, resulting in a backlog that will be fulfilled primarily through mid-2023. Bookings at our stock-preparation business increased 28% in 2021 largely due to a rebound in capital equipment orders compared with the depressed capital spending environment for most of 2020 and due to steady demand for our parts and consumables products. We expect the demand for our Industrial Processing segment products to moderate somewhat in 2022 compared to the record level in 2021.
- *Material Handling* – Our Material Handling segment also ended the year with record bookings. In August 2021, we acquired East Chicago Machine Tool Corporation (Balemaster) and certain assets of affiliated companies, which contributed $13.2 million of orders. Bookings for baling products at our European operations continue to be bolstered by improved business conditions, including the recovery of recycled commodity prices. Bookings for parts and consumables at our conveying and vibratory equipment business have rebounded from depressed 2020 levels due to the relaxation of pandemic-related restrictions and an increased demand from our mining customers, while bookings for capital equipment have moderated.

In 2021, many of our operations were impacted by labor availability and supply chain constraints, the latter of which resulted in inflationary pressure on material costs, longer lead times, and increased freight costs, as well as customer-requested delays in shipments. We believe these challenges will generally persist into 2022. Our businesses are alleviating supply chain constraints through various measures, including advance purchases of raw materials to prevent potential manufacturing disruptions and mitigating increased material and freight costs through price adjustments, when possible.

We believe that the fundamentals of our business will remain positive, particularly given our high backlog levels, continued strong bookings, and ongoing strength in the markets we serve as we enter 2022. Despite this optimism, we expect our operating environment to continue to be challenging as a result of the factors impacting our business discussed above and the uncertainties and risks surrounding the COVID-19 pandemic. For more information on risks related to health epidemics to our business, including COVID-19, and other factors impacting our business discussed above, please see Part I, Item 1A, “Risk Factors.”

International Sales

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 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 are working 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 Part I, Item 1A, "Risk Factors."

Acquisitions

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

In the third quarter of 2021, we acquired Clouth for $92.9 million, net of cash acquired plus debt assumed. Clouth, which is included in our Flow Control segment, is a leading manufacturer of doctor blades and related equipment used in the production of paper, packaging, and tissue. We expect several synergies in connection with this acquisition, including deepening our presence in the growing ceramic blade market and expansion of product sales at our existing businesses by leveraging Clouth's complementary global geographic footprint. Clouth has three manufacturing facilities in Germany and one in Poland and generated revenue of approximately 40.5 million euros for the trailing twelve months ended June 30, 2021 prior to its acquisition by us.

In the third quarter of 2021, we also acquired Balemaster for $53.7 million, net of cash acquired. Balemaster, which is included in our Material Handling segment, is a leading U.S. manufacturer of horizontal balers and related equipment used primarily for recycling packaging waste at corrugated box plants and large retail and distribution centers. We expect several synergies in connection with this acquisition, including expanding our presence in the secondary material processing sector and creating new opportunities for leveraging our high-performance balers produced in Europe. Balemaster generated revenue of approximately $22.2 million for the trailing twelve months ended June 30, 2021 prior to its acquisition by us.

In the fourth quarter of 2021, we acquired a business in India, which is included in our Industrial Processing segment, for approximately $2.9 million.

In 2020, we acquired a business in Canada, which is included in our Industrial Processing segment, for approximately $6.9 million, net of cash acquired.

See Note 2, Acquisitions, in the accompanying consolidated financial statements for further details.

Results of Operations

2021 Compared to 2020

Revenue

The following table presents changes in revenue by segment between 2021 and 2020, and those changes excluding the effect of foreign currency translation and acquisitions which we refer to as change in organic revenue. 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 GAAP measure.

Revenue by segment in 2021 and 2020 was as follows:

(In thousands, except percentages)	January 1, 2022	January 2, 2021	Total Increase	% Change	Currency Translation	Acquisitions	(Non-GAAP) Change in Organic Revenue Increase	% Change
Flow Control	$ 288,788	$ 225,444	$ 63,344	28 %	$ 6,425	$ 23,221	$ 33,698	15 %
Industrial Processing	328,762	261,577	67,185	26 %	13,012	589	53,584	20 %
Material Handling	169,029	148,007	21,022	14 %	2,796	9,038	9,188	6 %
Consolidated Revenue	$ 786,579	$ 635,028	$ 151,551	24 %	$ 22,233	$ 32,848	$ 96,470	15 %

Consolidated revenue in 2021 increased 24%, while consolidated organic revenue increased 15%, driven by higher demand for both parts and consumables products and capital equipment principally at our Industrial Processing and Flow Control segments as described below.

Revenue at our Flow Control segment increased 28% in 2021, while organic revenue increased 15% due to higher demand for parts and consumables products and, to a lesser extent, capital equipment at substantially all locations. Increased demand for parts and consumables products in 2021 was due in part to customer maintenance requirements, pent-up demand, and orders in the latter part of the year to mitigate potential supply chain disruptions. Conversely, revenue during most of 2020 was depressed as a result of customer downtimes, shutdowns, and visitation restrictions related to the COVID-19 pandemic. Higher capital equipment revenue in 2021 resulted from improved market conditions and pent-up demand, while revenue in 2020 was adversely impacted by customer reductions in capital spending and deferrals of equipment installations as a result of the pandemic.

Revenue at our Industrial Processing segment increased 26% in 2021, while organic revenue increased 20% due to higher demand for both capital equipment and parts and consumables products. Our wood processing business continues to experience high demand for its products, driven by near capacity mill rates resulting in increased capital investment and parts consumption. Additionally, demand for parts was augmented by maintenance requirements in the latter part of 2021 at many of our wood processing customers. Increased revenue at our stock-preparation business was led by increased demand for parts and consumables at our North American stock-preparation operation due to improved market conditions and pent-up demand coupled with a depressed 2020 period. Capital equipment revenue also increased as a result of large orders at our Chinese operation, offset in part by lower shipments at our North American and European operations due to the timing of orders and curtailed spending by our customers in 2020, which impacted revenue in the first half of 2021.

Revenue at our Material Handling segment increased 14% in 2021, while organic revenue increased 6%. Demand for our European baling products was bolstered by improved business conditions in Europe, including the recovery of recycled commodity prices. This improvement was partially offset by lower capital equipment revenue at our conveying and vibratory equipment business in 2021.

Gross Profit Margin

Gross profit margin by segment in 2021 and 2020 was as follows:

	January 1, 2022	January 2, 2021
Flow Control	51.0%	52.9%
Industrial Processing	40.1%	41.3%
Material Handling	34.4%	33.7%
Consolidated Gross Profit Margin	42.9%	43.7%

Consolidated gross profit margin declined to 42.9% in 2021 compared with 43.7% in 2020. The 2021 period included $4.3 million of amortization of acquired profit in inventory, which lowered consolidated gross profit margin by 0.5 percentage points, and lower benefits received from government employee retention assistance programs. Benefits received from these programs were $0.9 million, or 0.1 percentage points of consolidated gross profit margin, in 2021 and $3.7 million, or 0.6 percentage points of consolidated gross profit margin, in 2020.

Gross profit margin at our Flow Control segment decreased to 51.0% in 2021 compared with 52.9% in 2020 due to the inclusion of $3.1 million of amortization of acquired profit in inventory, which lowered gross profit margin in 2021 by 1.1 percentage points, and a lower gross profit margin profile for Clouth. We expect the lower gross profit margin profile for Clouth to continue to have a negative impact on our Flow Control gross profit margin in 2022.

Gross profit margin at our Industrial Processing segment decreased to 40.1% in 2021 compared with 41.3% in 2020 due principally to lower benefits received from government employee retention assistance programs. Cost of revenue included benefits received of $0.7 million in 2021 compared with $2.9 million in 2020 related to these programs. The gross profit margin was also impacted by lower-margin capital equipment revenue at our Chinese stock-preparation business offset in part by a higher margin at our wood processing business.

Gross profit margin at our Material Handling segment increased to 34.4% in 2021 compared with 33.7% in 2020 due to a higher gross profit margin profile for Balemaster and an improvement in gross profit margin for capital equipment at our existing baler business. This was offset in part by $1.2 million of amortization of acquired profit in inventory, which lowered gross profit margin by 0.7 percentage points in 2021.

Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses by segment in 2021 and 2020 were as follows:

(In thousands, except percentages)	January 1, 2022	% of Revenue	January 2, 2021	% of Revenue	Increase	% Change
Flow Control	$ 76,730	27 %	$ 63,382	28 %	$ 13,348	21 %
Industrial Processing	60,802	18 %	57,702	22 %	3,100	5 %
Material Handling	38,575	23 %	33,526	23 %	5,049	15 %
Corporate	32,680	N/A	27,295	N/A	5,385	20 %
Consolidated SG&A Expenses	$ 208,787	27 %	$ 181,905	29 %	$ 26,882	15 %

Consolidated SG&A expenses as a percentage of revenue decreased to 27% in 2021 compared with 29% in 2020 principally due to higher revenue. Consolidated SG&A expenses increased $26.9 million as a result of the inclusion of $9.7 million of SG&A expenses from acquisitions, higher incentive compensation resulting from our improved financial performance, $5.1 million from the unfavorable effect of currency translation, and an incremental $4.0 million of acquisition-related costs. SG&A expenses included benefits received from government employee retention assistance programs of $1.4 million in 2021 and $2.2 million in 2020.

SG&A expenses at our Flow Control segment increased $13.3 million principally due to the inclusion of $7.0 million of SG&A expenses from Clouth, $3.1 million of acquisition-related costs, and $1.7 million from the unfavorable effect of foreign currency translation. The remaining increase is principally attributable to higher incentive compensation in 2021.

SG&A expenses at our Industrial Processing segment increased $3.1 million principally due to $2.7 million from the unfavorable effect of foreign currency translation.

SG&A expenses at our Material Handling segment increased $5.0 million principally due the inclusion of $2.4 million of SG&A expenses from Balemaster and an incremental $1.3 million of acquisition-related costs.

SG&A expenses at Corporate increased $5.4 million primarily due to higher incentive compensation and, to a lesser extent, increased professional service fees.

Impairments and Other Costs, Net

Impairments and other costs, net in 2021 included an impairment charge of $0.5 million related to the write down of an intangible asset and restructuring costs totaling $0.5 million for severance costs and the write down of certain assets associated with the closure of a redundant business in our Flow Control segment. Impairments and other costs, net in 2021 also included a gain on the sale of a building of $0.5 million within our Industrial Processing segment.

Impairments and other costs, net in 2020 included impairment charges of $1.9 million related to the write down of intangible assets associated with our timber-harvesting products, which are included in our Industrial Processing segment, as a result of a continued decline in revenue and operating results for this business. Impairments and other costs, net in 2020 also included restructuring costs of $1.1 million, which consisted of severance costs of $0.7 million at our Flow Control segment, $0.2 million at our Industrial Processing segment, and $0.2 million at our Material Handling segment. These restructuring costs represent severance associated with a restructuring plan implemented in response to the slowdown in the global economy that was largely driven by the impact of the COVID-19 pandemic.

See Note 1, Nature of Operations and Summary of Significant Accounting Policies, under the heading *Impairment of Long-Lived Assets*, and Note 8, Other Costs, Net in the accompanying consolidated financial statements for further details relating to the items discussed above.

Interest Expense

Interest expense decreased to $4.8 million in 2021 from $7.4 million in 2020 due to a lower weighted average interest rate and lower outstanding debt in 2021.

Provision for Income Taxes

Our provision for income taxes increased to $27.2 million in 2021 from $17.9 million in 2020 and represented 24% of pre-tax income in both periods. The effective tax rate in 2021 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 were offset in part by a decrease in tax related to the net excess income tax benefits from stock-based compensation arrangements. The effective tax rate in 2020 was higher than our statutory rate of 21% primarily due to nondeductible expenses, the distribution of our worldwide earnings, and state taxes. These increases in tax expense were offset in part by a decrease in tax related to the net reversal of tax reserves associated with uncertain tax positions, the net excess income tax benefits from stock-based compensation arrangements, and a tax benefit for the partial release of a valuation allowance.

Net Income

Net income increased $29.1 million in 2021 from $55.7 million in 2020 primarily due to a $35.6 million increase in operating income and a $2.6 million decrease in interest expense, offset in part by a $9.2 million increase in provision for income taxes (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 and restructuring 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 from net income attributable to Kadant is as follows:

(In thousands, except percentages)	January 1, 2022	January 2, 2021	December 28, 2019
Net Income Attributable to Kadant	$ 84,043	$ 55,196	$ 52,068
Net Income Attributable to Noncontrolling Interest	838	543	496
Provision for Income Taxes	27,171	17,948	16,358
Interest Expense, Net	4,554	7,242	12,542
Other Expense, Net	104	195	6,359
Operating Income	116,710	81,124	87,823
Impairment and Restructuring Costs	980	2,979	2,528
Gain on Sale of Building	(515)	—	—
Acquisition Costs	3,655	485	843
Acquired Backlog Amortization	1,326	544	1,323
Acquired Profit in Inventory	4,284	—	3,549
Adjusted Operating Income	126,440	85,132	96,066
Depreciation and Amortization	32,976	30,790	31,067
Adjusted EBITDA	$ 159,416	$ 115,922	$ 127,133
Adjusted EBITDA Margin	20.3%	18.3%	18.0%

As a percentage of revenue, adjusted EBITDA margin increased 200 basis points in 2021 and 30 basis points in 2020. The 2021 increase was primarily due to organic revenue growth without a proportionate increase in operating expenses. The 2020 increase was primarily due to cost reduction efforts, including the impact of benefits received from government employee retention assistance programs, to mitigate lower revenue and an increased proportion of higher margin parts and consumables revenue.

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

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Cash Provided by Operating Activities	$ 162,420	$ 92,884	$ 97,413
Less: Capital Expenditures	(12,771)	(7,595)	(9,957)
Free Cash Flow	$ 149,649	$ 85,289	$ 87,456

Free cash flow increased to $149.6 million in 2021 from $85.3 million in 2020 primarily due to improvements in operating assets and liabilities and net income. See below for further discussion of cash provided by operating activities. Free cash flow decreased to $85.3 million in 2020 from $87.5 million in 2019 primarily due to a use of cash for working capital purposes, driven by a reduction in accounts payable as a result of reduced spending levels in 2020 for capital equipment orders.

2020 Compared to 2019

A detailed discussion of the year-over-year results of operations for 2020 compared with 2019 can be found in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the fiscal year ended January 2, 2021, filed with the SEC.

Liquidity and Capital Resources

Consolidated working capital was $162.4 million at January 1, 2022, compared with $155.1 million at January 2, 2021. Cash and cash equivalents were $91.2 million at January 1, 2022, compared with $65.7 million at January 2, 2021, which included cash and cash equivalents held by our foreign subsidiaries of $83.8 million at January 1, 2022 and $63.6 million at January 2, 2021.

Cash Flows

Cash flow information is as follows:

(In thousands)	January 1, 2022	January 2, 2021
Net Cash Provided by Operating Activities	$ 162,420	$ 92,884
Net Cash Used in Investing Activities	(154,475)	(14,545)
Net Cash Provided by (Used in) Financing Activities	22,808	(84,556)
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash	(3,232)	4,584
Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	$ 27,521	$ (1,633)

Operating Activities

Cash provided by operating activities increased to $162.4 million in 2021 from $92.9 million in 2020. Our operating cash flows primarily consist of 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. The increase in cash provided by operating activities in 2021 was principally driven by improvements in operating assets and liabilities and net income.

Cash provided by operating assets and liabilities was $29.3 million in 2021, including sources of cash of $27.7 million from customer deposits and $26.3 million from accounts payable, reflecting the impact of increased capital equipment order activity. Other liabilities provided cash of $19.5 million, which includes a $6.2 million deposit received for the anticipated sale of a building in China and an increase in our accrued incentive compensation, advance billings, and accrued income taxes resulting from our improved financial performance. These sources of cash were offset in part by cash used of $16.7 million for accounts receivable mostly due to revenue growth and timing of shipments, $15.0 million for other assets due in part to prepayments for raw materials and a land use right operating lease related to the relocation of our existing facility in China, and $11.2 million for a buildup of inventories for capital equipment orders and to mitigate potential supply chain issues.

Cash used for operating assets and liabilities of $8.0 million in 2020 included cash used of $15.6 million for accounts payable primarily due to reduced spending levels for capital equipment projects and $8.6 million for other liabilities due in part to a decrease in advance billings resulting from lower contract activity and a payment of $2.4 related to the settlement of a post-retirement benefit plan. These uses of cash were offset by cash provided of $13.2 million due to a reduction in unbilled revenue and accounts receivable primarily as a result of lower capital equipment revenue during 2020.

Investing Activities

Cash used in investing activities was $154.5 million in 2021 compared to $14.5 million in 2020. Cash used in investing activities included consideration paid for acquisitions, net of cash acquired, of $144.0 million in 2021 and $7.1 million in 2020. Additionally, cash used in investing activities included purchases of property, plant, and equipment of $12.8 million in 2021 and $7.6 million in 2020, reflecting depressed capital expenditures in 2020 due to the impact of the COVID-19 pandemic.

Financing Activities

Cash provided by financing activities was $22.8 million in 2021 compared with cash used in financing activities of $84.6 million in 2020. Borrowings under our revolving credit facility were $151.9 million in 2021, including $140.3 million to fund acquisitions, and $26.0 million in 2020, including $18.9 million used to prepay the outstanding principal balance on our real estate loan. Repayment of short- and long-term obligations was $115.6 million in 2021 and $99.5 million in 2020, including the $18.9 million prepayment of our real estate loan.

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 $3.2 million negative exchange rate effect in 2021 was primarily attributable to the strengthening of the U.S. dollar against the euro and the Swedish krona, offset in part by the weakening of the U.S. dollar against the Chinese renminbi. The $4.6 million positive exchange rate effect in 2020 primarily related to the weakening of the U.S. dollar against the euro and Chinese renminbi.

Borrowing Capacity and Debt Obligations

We entered into an unsecured multi-currency revolving credit facility, dated as of March 1, 2017 (as amended and restated to date, the Credit Agreement). At year-end 2021, we have a borrowing capacity available under our Credit Agreement of $149.9 million in addition to a $150 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 4.00. As of January 1, 2022, our leverage ratio was 1.3 and we were in compliance with our debt covenants. We expect to renew our Credit Agreement prior to its maturity date of December 14, 2023. See Note 6, Short- and Long-Term Obligations, in the accompanying consolidated financial statements for additional information regarding our debt obligations.

Additional Liquidity and Capital Resources

On May 20, 2021, our board of directors approved the repurchase of up to $20 million of our equity securities during the period from May 20, 2021 to May 20, 2022. We have not repurchased any shares of our common stock under this authorization or our previous authorization, which expired on May 13, 2021.

We paid cash dividends of $11.5 million in 2021. On November 18, 2021, we declared a quarterly cash dividend of $0.25 per share totaling $2.9 million that was paid on February 3, 2022. Future declarations of dividends are subject to our board of directors' approval and may be adjusted as business needs or market conditions change. The declaration of cash dividends is subject to our compliance with the covenant in our revolving credit facility related to our consolidated leverage ratio.

We plan to make expenditures of approximately $18.0 million during 2022 for property, plant, and equipment. In addition, one of our Chinese subsidiaries expects to build a new facility and relocate over the next two years. Capital expenditures for the new facility are estimated to be approximately $20 million, which will be offset by the proceeds received from the sale of our existing facility. See Note 15, Subsequent Event, in the accompanying consolidated financial statements for additional information regarding the anticipated relocation of our Chinese manufacturing facility.

As of January 1, 2022, we had approximately $245.1 million of total unremitted foreign earnings. It is our intent to indefinitely reinvest $223.0 million of these earnings to support the current and future capital needs of our foreign operations, including debt repayments, if any. In 2021, we recorded withholding taxes on the earnings in certain foreign subsidiaries that we plan to repatriate in the foreseeable future. The foreign withholding taxes that would be required if we were to remit the indefinitely-reinvested foreign earnings to the United States would be approximately $4.1 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 the foreseeable future.

Material Contractual Obligations

The following table summarizes our material contractual obligations as of January 1, 2022 and the timing and effect that such commitments are expected to have on our liquidity and capital requirements in future periods. Detailed information concerning these obligations can be found in Notes 6, 7, and 9 in the accompanying consolidated financial statements.

(In millions)	Less than 1 Year	1-3 Years	3-5 Years	After 5 Years	Total
Debt Obligations:					
Principal payments (a)	$ 1.2	$ 255.2	$ 4.4	$ 3.8	$ 264.6
Interest payments (b)	4.3	4.6	0.6	0.2	9.7
Operating and Finance Lease Obligations	5.4	7.0	4.0	9.8	26.2
Letters of Credit and Bank Guarantees	18.5	4.4	0.6	—	23.5
Total	$ 29.4	$ 271.2	$ 9.6	$ 13.8	$ 324.0

(a) Excludes $1.5 million related to a net fixed price purchase option exercisable in 2022.
(b) Includes interest expense on both variable and fixed rate debt assuming no prepayments. Variable interest rates have been assumed to remain constant through the end of the term at the rates that existed as of year-end 2021.

Application of Critical Accounting Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our 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 assets and liabilities at the date of our consolidated financial statements, and the reported amounts of revenue and expenses during the reporting period. Our actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies and estimates are defined as those that entail significant judgments and uncertainties and could potentially result in materially different results under different assumptions and conditions. For a discussion on the application of these estimates and other accounting policies, see Note 1, Nature of Operations and Summary of Significant

Accounting Policies, in the accompanying consolidated financial statements. We believe that our most critical accounting policies and estimates upon which our financial position depends, and which involve the most complex or subjective decisions or assessments, are those described below.

Income Taxes

We operate in numerous countries under many legal forms and, as a result, are subject to the jurisdiction of numerous domestic and non-U.S. tax authorities, as well as to tax agreements and treaties among these governments. Determination of taxable income in any jurisdiction requires the interpretation of the related tax laws and regulations and the use of estimates and assumptions regarding significant future events, such as the amount, timing and character of deductions, permissible revenue recognition methods under the tax law and the sources and character of income and available tax credits. Changes in tax laws, regulations, agreements and treaties, currency-exchange restrictions or our level of operations or profitability in each taxing jurisdiction could have an impact upon the amount of current and deferred tax balances and our results of operations.

We compute our provision for income taxes using the asset and liability method, and we recognize deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial reporting and tax bases of assets and liabilities and for tax loss or credit carryforwards. We measure deferred tax assets and liabilities using the currently enacted tax rates that are expected to apply to taxable income in the years in which we expect to realize those deferred tax assets and liabilities. We estimate the degree to which our deferred tax assets on deductible temporary differences and tax loss or credit carryforwards will result in an income tax benefit based on the expected profitability by tax jurisdiction, and we provide a valuation allowance for these deferred tax assets if it is more likely than not that they will not be realized in the future. If it were to become more likely than not that these deferred tax assets would be realized, we would reverse the related valuation allowance. Should our actual future taxable income by tax jurisdiction vary from our estimates, additional valuation allowances or reversals thereof may be necessary. When assessing the need for a valuation allowance in a tax jurisdiction, we evaluate the weight of all available evidence to determine whether it is more likely than not that some portion or all of the deferred income tax assets will not be realized. As part of this evaluation, we consider our cumulative three-year history of earnings before income taxes, taxable income in prior carryback years, future reversals of existing taxable temporary differences, prudent and feasible tax planning strategies, and expected future results of operations. At year-end 2021, we continued to maintain a valuation allowance in the United States against certain of our state operating loss carryforwards due to the uncertainty of future profitability in these state jurisdictions in the United States, and we maintained valuation allowances in certain foreign jurisdictions because of the uncertainty of future profitability. Our tax valuation allowance was $9.2 million at year-end 2021.

In the ordinary course of business there are inherent uncertainties and judgements required in quantifying our income tax positions. It is our policy to provide for uncertain tax positions and the related interest and penalties based upon our assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. On a quarterly basis, we evaluate our uncertain tax positions against various factors, including changes in facts or circumstances, tax laws, or the status of audits by tax authorities. We believe that we have appropriately accounted for any liability for unrecognized tax benefits, and at year-end 2021, our liability for these unrecognized tax benefits, including an accrual for the related interest and penalties, totaled $11.4 million. To the extent we prevail in matters for which a liability for an unrecognized tax benefit is established or are required to pay amounts in excess of the liability, our effective tax rate in a given financial statement period may be affected.

We intend to repatriate the distributable reserves of select foreign subsidiaries back to the United States and, during 2021, we recorded $0.6 million of net tax expense associated with these foreign earnings that we plan to repatriate in 2022. Except for these select foreign subsidiaries, we intend to reinvest indefinitely the earnings of our international subsidiaries in order to support the current and future capital needs of their operations, including the repayment of our foreign debt.

Revenue Recognition

Approximately 90% of our revenue is recognized at a point in time following the transfer of control of the goods or service to the customer, primarily relating to our products that require minimal customization for the customer. The remaining portion of our revenue is recognized on an over time basis using an input method that compares the costs incurred to date to the total expected costs required to satisfy the performance obligation. Most revenue recognized on an over time basis is for large capital products that are highly customized for the customer and, as a result, would include significant cost to rework in the event of cancellation. The over time basis of accounting requires significant judgment in determining applicable contract costs and the corresponding revenue to be recognized, which could be different if there were to be changes to the circumstances of the contract. When adjustments to revenue and costs are required, the adjustments are included in earnings in the period of the change. Judgment is also required for contracts involving variable consideration and multiple performance obligations.

Valuation of Goodwill and Intangible Assets

We use assumptions and estimates in determining the fair value of assets acquired and liabilities assumed in a business combination, including the determination of the fair value of intangible assets acquired, which represents a significant portion of the purchase price in many of our acquisitions. We estimate the fair value of intangible assets primarily based on projections of discounted cash flows which we expect to arise from identifiable intangible assets of acquired businesses. The determination of the allocation of the purchase price for the fair value of intangible assets acquired requires significant judgment as does the determination as to whether such intangibles are amortizable or non-amortizable and, if amortizable, the amortization period of the intangible asset.

We evaluate the recoverability of goodwill and indefinite-lived intangible assets as of the end of each fiscal year, or more frequently if events or changes in circumstances indicate that the carrying value of an asset might be impaired. Estimates of discounted future cash flows arising from intangible assets acquired require assumptions related to revenue and operating income growth rates, discount rates, and other factors. Different assumptions from those made in our analysis could materially affect projected cash flows and our evaluation of goodwill and indefinite-lived intangible assets for impairment. At year-end 2021 and 2020, we performed a qualitative impairment analysis (Step 0) for our reporting units, except for the material handling reporting unit for which we performed a quantitative impairment analysis (Step 1) at year-end 2020. Based on these analyses, we determined goodwill and indefinite-lived intangible assets were not impaired. Goodwill totaled $396.9 million and indefinite-lived intangible assets totaled $28.9 million at year-end 2021.

Definite-lived intangible assets are evaluated for impairment if events or changes in circumstances indicate that the carrying value of an asset might be impaired, such as a significant reduction in cash flows associated with the assets. Actual cash flows arising from a particular intangible asset could vary from projected cash flows which could imply different carrying values from those established at the dates of acquisition and which could result in impairment of such asset. No indicators of impairment were identified in 2021 and 2020, except for impairment charges of $0.5 million in 2021 related to the closure of a business in our Flow Control Segment and $1.9 million in 2020 associated with our timber-harvesting product line, which is included in our Industrial Processing segment. Definite-lived intangible assets were $170.4 million at year-end 2021.

A material adverse change in the business climate including a prolonged economic downturn and weakness in demand for our products could negatively affect the revenue and profitability assumptions used in our assessment of goodwill and intangible assets, which may result in impairment charges. Any future impairment charges could have a material adverse effect on our results of operations in the period in which an impairment is determined to exist.

See Note 1, Nature of Operations and Summary of Significant Accounting Policies, under the heading *Impairment of Long-Lived Assets*, in the accompanying consolidated financial statements for further details regarding impairment costs recorded in 2021 and 2020.

Inventories

We value our inventory at the lower of the actual cost (on a first-in, first-out; or weighted average basis) or net realizable value and include materials, labor, and manufacturing overhead. The valuation of inventory requires us to make judgments, based on currently available information, about the forecasted usage of and demand for each particular product or product line. Assumptions about future dispositions of inventory are inherently uncertain and, although we make every effort to ensure the accuracy of our forecasts of future product usage and demand, any changes in those assumptions may result in a write-down of inventory in the period in which inventory is deemed excessive or obsolete, which could adversely affect our results of operations.

Recent Accounting Pronouncements

See Note 1, Nature of Operations and Summary of Significant Accounting Policies, under the headings *Recently Adopted Accounting Pronouncements* and *Recent Accounting Pronouncements Not Yet Adopted*, in the accompanying consolidated financial statements for further details.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in interest rates and foreign currency exchange rates, which could affect our future results of operations and financial condition. We manage our exposure to these risks through our regular operating and financing activities. We enter into swap agreements to hedge a portion of our exposure to variable rate long-term debt. Additionally, we use short-term forward contracts to manage certain exposures to foreign currencies. We enter into forward currency-exchange contracts to hedge firm purchase and sale commitments denominated in currencies other than our subsidiaries' functional currencies. We do not engage in extensive foreign currency hedging activities. However, when we do enter into foreign currency hedging activities, the purpose is to protect our functional currency cash flows related to these commitments from fluctuations in foreign exchange rates. Our forward currency-exchange contracts hedge transactions primarily denominated in U.S. dollars, Canadian dollars, and euros. Gains and losses arising from forward contracts are recognized as offsets to gains and losses resulting from the transactions being hedged. We do not hold or engage in transactions involving derivative instruments for purposes other than risk management.

Interest Rates

Our exposure to changes in interest rates relates primarily to our long-term debt. Our borrowings under the Credit Agreement of $250.3 million at year-end 2021 and $218.0 million at year-end 2020 bear variable rates of interest, which adjust frequently based on prevailing market rates. Assuming year-end borrowing levels, a 10% increase in interest rates on our variable-rate debt would have increased our annual pre-tax interest expense by an immaterial amount in 2021 and 2020. A portion of our outstanding variable-rate debt at year-end 2021 and 2020 was hedged with a swap agreement sensitive to changes in the three-month LIBOR forward curve. A 10% decrease in the three-month LIBOR forward curve would have increased our unrealized loss by immaterial amounts in both 2021 and 2020.

Currency Exchange Rates

We generally view our investment in foreign subsidiaries in a functional currency other than our reporting currency as long-term. Our investment in foreign subsidiaries is sensitive to fluctuations in foreign currency exchange rates. The functional currencies of our foreign subsidiaries are principally denominated in euros, British pounds sterling, Mexican pesos, Canadian dollars, Chinese renminbi, Brazilian reals, and Swedish krona. The effect of changes in foreign exchange rates on our net investment in foreign subsidiaries is reflected in the "accumulated other comprehensive items" component of stockholders' equity. A 10% decrease in functional currencies relative to the U.S. dollar, would have resulted in a reduction in stockholders' equity of $36.4 million at year-end 2021.

At year-end 2021, we had $78.3 million of euro-denominated borrowings outstanding. The translation of our foreign-denominated debt impacts our borrowing capacity available under our Credit Agreement, which is calculated in U.S. dollars. A 10% negative movement in the euro foreign exchange rates against the U.S. dollar would have decreased our borrowing capacity by approximately $7.8 million at year-end 2021.

The fair value of forward currency-exchange contracts is sensitive to fluctuations in foreign currency exchange rates. The fair value of forward currency-exchange contracts is the estimated amount that we would pay or receive upon termination of the contracts. A 10% adverse change in year-end 2021 foreign currency exchange rates related to our foreign currency exchange contracts would have resulted in an increase in unrealized losses of $0.1 million in 2021, which would have been largely offset by the corresponding change in the fair value of the underlying hedged items.

Item 8. Financial Statements and Supplementary Data

This data is submitted as a separate section to this report and incorporated herein by reference. See Item 15, "Exhibits and Financial Statement Schedules."

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. 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 at year-end 2021. 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 at year-end 2021, our Chief Executive Officer and Chief Financial Officer concluded that at year-end 2021, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Securities Exchange Act Rules 13a-15(f) and 15d-15(f). Our management assessed the effectiveness of our internal control over financial reporting at year-end 2021. In making this assessment, our management used the criteria set forth in "Internal Control—Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our assessment, management believes that at year-end 2021 our internal control over financial reporting was effective based on the criteria issued by COSO.

In the third quarter of 2021, we acquired Clouth and Balemaster. Our audited consolidated financial statements include the results of Clouth and Balemaster since their dates of acquisition, including total assets of $174.5 million and total revenue of $32.3 million as of and for the fiscal year ended January 1, 2022, but management's assessment does not include an assessment of the internal control over financial reporting of the Clouth and Balemaster businesses.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our independent registered public accountants, KPMG LLP, have issued an audit report on our internal control over financial reporting, which is included herein on pages F-2 and F-3 and incorporated into this Item 9A by reference.

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 January 1, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not applicable.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

Information about our Directors

This information will be included under the heading "Election of Directors" in our 2022 proxy statement for our 2022 Annual Meeting of Shareholders and is incorporated in this report by reference, except for the information concerning executive officers, which is included under the heading "Information about our Executive Officers" in Item 1 of Part I of this report.

Section 16(a) Beneficial Ownership Reporting Compliance

The information required under Item 405 of Regulation S-K will be included under the heading "Stock Ownership–Delinquent Section 16(a) Reports" in our 2022 proxy statement and is incorporated in this report by reference.

Corporate Governance

The information required under Items 406 and 407 of Regulation S-K will be included under the heading "Corporate Governance" in our 2022 proxy statement and is incorporated in this report by reference.

Item 11. Executive Compensation

This information will be included under the headings "Executive Compensation," "Corporate Governance - Compensation Committee Interlocks and Insider Participation," and "Compensation Discussion and Analysis" in our 2022 proxy statement and is incorporated in this report by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Except for the information concerning equity compensation plans, this information will be included under the heading "Stock Ownership" in our 2022 proxy statement and is incorporated in this report by reference.

The following table provides information about the securities authorized for issuance under our equity compensation plans at year-end 2021:

Equity Compensation Plan Information

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants, and Rights		Weighted Average Exercise Price of Outstanding Options, Warrants, and Rights		Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in the First Column)	
Equity compensation plans approved by security holders	106,735	(a)	$ —	(b)	427,800	(c)
Equity compensation plans not approved by security holders	—		$ —		—	
Total	106,735	(a)	$ —	(b)	427,800	(c)

(a) Consists of shares of our common stock issuable upon the vesting of restricted stock units and performance-based restricted stock units under the 2006 Plan.
(b) Shares of restricted stock units and performance-based restricted stock units outstanding on January 1, 2022 had a weighted average grant date fair value of $127.70.
(c) Includes an aggregate of 91,643 shares of common stock issuable under our employees' stock purchase plan in connection with current and future offering periods under the plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

This information will be included under the heading "Corporate Governance" in our 2022 proxy statement and is incorporated in this report by reference.

Item 14. Principal Accountant Fees and Services

Our independent registered public accounting firm is KPMG LLP, located in Boston, Massachusetts, auditor firm ID:185. The information required by this item will be included under the heading "Independent Registered Public Accounting Firm" in our 2022 proxy statement and is incorporated in this report by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this report:

(1) Consolidated Financial Statements (see Index on Page F-1 of this report):

Report of Independent Registered Public Accounting Firm
Consolidated Balance Sheet
Consolidated Statement of Income
Consolidated Statement of Comprehensive Income
Consolidated Statement of Cash Flows
Consolidated Statement of Stockholders' Equity
Notes to Consolidated Financial Statements

(2) All schedules are omitted because they are not applicable or not required, or because the required information is shown either in the consolidated financial statements or in the notes thereto.

(3) Exhibits filed herewith or incorporated in this report by reference are set forth in the Exhibit Index beginning on page 37. This list of exhibits identifies each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report.

(b) Exhibits

Exhibit Index

Exhibit Number	Description of Exhibit
2.1	Equity Purchase Agreement by and among the Registrant, LLCP PCS Alternative Syntron, LLC, Syntron Material Handling Group, LLC, PCS Alternative Corp Seller 1, LLC, PCS Alternative Corp Seller 2, LLC, and SMH Equity, LLC and Levine Leichtman Capital Partners Private Capital Solutions, L.P., dated as of December 9, 2018 (filed as Exhibit 2.2 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 29, 2018 [File No. 001-11406] and incorporated in this document by reference). (1)
3.1	Restated Certificate of Incorporation of the Registrant (filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 [File No. 001-11406] and incorporated in this document by reference).
3.2	Amended and Restated Bylaws of the Registrant effective November 20, 2014 (filed as Exhibit 3.1 to the Registrant's Form 8-K [File No. 001-11406] filed with the Commission on November 25, 2014 and incorporated in this document by reference).
4.1	Description of Securities Registered under Section 12 of the Securities Exchange Act of 1934 (filed as Exhibit 4.1 to the Registrant's Annual Report on Form 10-K for the year ended December 28, 2019 [File No. 001-11406] and incorporated in this document by reference).
10.1*	Form of Indemnification Agreement between the Registrant and its directors and officers (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 [File No. 001-11406] and incorporated in this document by reference).
10.2*	Form of Amended and Restated Executive Retention Agreement (change in control agreement) between the Registrant and its named executive officers, as amended and restated on December 9, 2008 (filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the year ended January 3, 2009 [File No. 001-11406] and incorporated in this document by reference).
10.3*	Form of Executive Retention Agreement (change in control agreement) between the Registrant and its executive officers for new agreements entered into from and after November 16, 2016 (filed as Exhibit 10.3 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2016 [File No. 001-11406] and incorporated in this document by reference).
10.4*	Employment Contract Statutory Director between The Johnson Corporation Holland B.V. and Fredrik H. Westerhout dated November 29, 2004.
10.5*	Amended and Restated 2006 Equity Incentive Plan of the Registrant effective as of May 17, 2017 (filed as Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 1, 2017 [File No. 011-11406] and incorporated in this document by reference).
10.6*	Cash Incentive Plan of the Registrant (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 1, 2017 [File No. 001-11406] and incorporated in this document by reference).
10.7*	Summary of non-employee director compensation of the Registrant (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 3, 2021 [File No. 001-11406] and incorporated in this document by reference).
10.8*	Executive Transition Agreement between the Registrant and Eric T. Langevin dated October 27, 2021 (filed as Exhibit 10 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended October 2, 2021 [File No. 001-11406] and incorporated in this document by reference).
10.9*	Form of Performance-Based Restricted Stock Unit Award Agreement between the Registrant and its executive officers used for restricted stock unit awards on or after March 5, 2014 (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 29, 2014 [File No. 001-11406] and incorporated in this document by reference).

Kadant Inc.

Exhibit Index

Exhibit Number	Description of Exhibit
10.10*	Form of Time-Based Restricted Stock Unit Award Agreement between the Registrant and its executive officers used for restricted stock unit awards on or after March 5, 2014 (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 29, 2014 [File No. 001-11406] and incorporated in this document by reference).
10.11*	Form of Performance-Based Restricted Stock Unit Award Agreement between the Registrant and its executive officers used for restricted stock unit awards on or after March 5, 2014 (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 [File No. 011-11406] and incorporated in this document by reference).
10.12*	Form of Time-Based Restricted Stock Unit Award Agreement between the Registrant and its executive officers used for restricted stock unit awards on or after March 5, 2014 (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 [File No. 011-11406] and incorporated in this document by reference).
10.13*	Form of Directors Restricted Stock Unit Award Agreement between the Registrant and its non-employee directors used for restricted stock unit awards on or after March 5, 2014 (filed as Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 [File No. 011-11406] and incorporated in this document by reference).
10.14	Amended and Restated Credit Agreement dated as of March 1, 2017, among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 99.1 to the Registrant's Current Report on Form 8-K [File No. 001-11406] filed with the Commission on March 7, 2017 and incorporated in this document by reference).
10.15	First Amendment and Limited Consent, dated as of May 24, 2017, to the Amended and Restated Credit Agreement dated as of March 1, 2017 by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 1, 2017 [File No. 011-11406] and incorporated in this document by reference).
10.16	Limited Consent, dated as of December 9, 2018, to the Amended and Restated Credit Agreement dated as of March 1, 2017 by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.24 to the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 29, 2018 [File No. 001-11406] and incorporated in this document by reference).
10.17	Second Amendment, dated as of December 14, 2018, to the Amended and Restated Credit Agreement dated as of March 1, 2017 by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the year ended December 29, 2018 [File No. 001-11406] and incorporated in this document by reference).
10.18	Third Amendment, dated as of March 16, 2020, to the Amended and Restated Credit Agreement dated as of March 1, 2017 by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 28, 2020 [File No. 001-11406] and incorporated in this document by reference).

Exhibit Index

Exhibit Number	Description of Exhibit
10.19	Fourth Amendment, dated as of May 4, 2021, to the Amended and Restated Credit Agreement, dated as of March 1, 2017, by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, and Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 3, 2021 [File No. 001-11406] and incorporated in this document by reference).
10.20	Joinder Agreement, dated as of May 4, 2021, to the Amended and Restated Credit Agreement, dated as of March 1, 2017, by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, and Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent (filed as Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 3, 2021 [File No. 001-11406] and incorporated in this document by reference).
10.21	Fifth Amendment, dated as of December 9, 2021, to the Amended and Restated Credit Agreement, dated as of March 1, 2017, by and among the Registrant, the Foreign Subsidiary Borrowers from time to time parties thereto, the several banks and other financial institutions or entities from time to time parties thereto, and Citizens Bank, N.A., as Administrative Agent and Multicurrency Administrative Agent.
10.22	Amended and Restated Guarantee Agreement dated as of March 1, 2017, among the Registrant, as Borrower, and each of the Subsidiary Guarantors, in favor of Citizens Bank, N.A., as Administrative Agent and as Multicurrency Administrative Agent for the bank and other financial institutions or entities from time to time parties to the Amended and Restated Credit Facility (filed as Exhibit 99.2 to the Registrant's Current Report on Form 8-K [File No. 001-11406] filed with the Commission on March 7, 2017 and incorporated in this document by reference).
10.23	Guarantee Agreement dated as of March 1, 2017, by Kadant Cayman Ltd. in favor of Citizens Bank, N.A., as Administrative Agent and as Multicurrency Administrative Agent for the banks and other financial institutions or entities from time to time parties to the Amended and Restated Credit Facility (filed as Exhibit 99.3 to the Registrant's Current Report on Form 8-K [File No. 001-11406] filed with the Commission on March 7, 2017 and incorporated in this document by reference).
10.24	Multi-Currency Note Purchase and Private Shelf Agreement, dated as of December 14, 2018 among the Registrant, PGIM, Inc. and the Purchasers as defined therein (filed as Exhibit 10.28 to the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 29, 2018 [File No. 001-11406] and incorporated in this document by reference). (1)
10.25	International Swap Dealers Association, Inc. Master Agreement dated May 13, 2005 between the Registrant and Citizens Bank of Massachusetts and Swap Confirmation dated May 18, 2005 (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended July 2, 2005 [File No. 001-11406] filed with the Commission on August 11, 2005 and incorporated in this document by reference).
10.26	Swap Confirmation dated May 16, 2018 between the Registrant and Citizens Bank, National Association (filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 [File No. 001-11406] filed with the Commission on August 8, 2018 and incorporated in this document by reference).
21	Subsidiaries of the Registrant.
23	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
24	Power of Attorney (included on the signatures page to the Annual Report on Form 10-K).
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.

Exhibit Index

Exhibit Number	Description of Exhibit
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
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).

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* Management contract or compensatory plan or arrangement.

(1) The schedules to this document have been omitted from this filing pursuant to Item 601(b)(2) of Regulation S-K. The Company will furnish copies of any of the schedules to the U.S. Securities and Exchange Commission upon request.

Item 16. Form 10-K Summary

Not applicable.

Kadant Inc.

Signatures

Pursuant to the requirements of Section 13 or 15(d) 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: March 1, 2022	By: /s/ Jeffrey L. Powell
	Jeffrey L. Powell
	Chief Executive Officer and President

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jeffrey L. Powell, Michael J. McKenney and Deborah S. Selwood, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated, on March 1, 2022.

	Signature	Title
By:	/s/ Jeffrey L. Powell **Jeffrey L. Powell**	Chief Executive Officer, President and Director (Principal Executive Officer)
By:	/s/ Michael J. McKenney **Michael J. McKenney**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
By:	/s/ Deborah S. Selwood **Deborah S. Selwood**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
By:	/s/ Jonathan W. Painter **Jonathan W. Painter**	Director and Chairman of the Board
By:	/s/ John M. Albertine **John M. Albertine**	Director
By:	/s/ Thomas C. Leonard **Thomas C. Leonard**	Director
By:	/s/ Erin L Russell **Erin L. Russell**	Director
By:	/s/ William P. Tully **William P. Tully**	Director

Kadant Inc.
Annual Report on Form 10-K
Index to Consolidated Financial Statements and Schedule

The following Consolidated Financial Statements of the Registrant and its subsidiaries are required to be included in Item 8:

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Kadant Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Kadant Inc. and subsidiaries (the Company) as of January 1, 2022 and January 2, 2021, the related consolidated statements of income, comprehensive income, cash flows, and stockholders' equity for each of the fiscal years in the three-year period ended January 1, 2022, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of January 1, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of January 1, 2022 and January 2, 2021, and the results of its operations and its cash flows for each of the fiscal years in the three-year period ended January 1, 2022, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 1, 2022 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company acquired The Clouth Group of Companies (Clouth) and East Chicago Machine Tool Corporation (Balemaster) during the fiscal year ended January 1, 2022, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of January 1, 2022, Clouth's and Balemaster's internal control over financial reporting associated with total assets of $174.5 million and total revenues of $32.3 million included in the consolidated financial statements of the Company as of and for the fiscal year ended January 1, 2022. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Clouth and Balemaster.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Assessment of uncertain tax positions

As discussed in Note 1 to the consolidated financial statements, it is the Company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. As disclosed in Note 5 to the consolidated financial statements, the Company has recognized uncertain tax positions amounting to $9,731,000 as of January 1, 2022. The Company's tax positions are subject to audit by local taxing authorities across multiple global jurisdictions. Tax law can be complex and tax audits can take an extended period of time to resolve, and accordingly, the ultimate outcome with respect to taxes the Company may owe may differ from the amounts recognized.

We identified the assessment of uncertain tax positions as a critical audit matter. Complex auditor judgment, including specialized skills and knowledge, was required in evaluating the Company's interpretation of, and compliance with, tax law globally and the estimate of the amount of tax benefits expected to be realized.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's process to assess uncertain tax positions. This included controls related to the identification of uncertain tax positions, interpretation of tax law and its application in the liability estimation process. We involved domestic and international tax professionals with specialized skills and knowledge, who assisted in:

- assessing tax positions for compliance with applicable laws and regulations
- evaluating the Company's uncertain tax positions by developing independent expectations of the uncertain tax positions using independent assumptions and comparing them to the Company's estimates
- assessing the expiration of statutes of limitations with applicable laws and regulations.

/s/ KPMG LLP

We have served as the Company's auditor since 2012.

Boston, Massachusetts
March 1, 2022

Consolidated Balance Sheet

(In thousands, except share and per share amounts)	January 1, 2022	January 2, 2021
Assets		
Current Assets:		
Cash and cash equivalents	$ 91,186	$ 65,682
Restricted cash	2,975	958
Accounts receivable, net of allowances of $2,735 and $2,977	117,209	91,540
Inventories	134,356	106,814
Contract assets	8,626	7,576
Other current assets	29,530	17,250
Total Current Assets	383,882	289,820
Property, Plant, and Equipment, Net	107,989	84,642
Other Assets	44,111	40,391
Intangible Assets, Net (Notes 1 and 2)	199,343	160,965
Goodwill (Notes 1 and 2)	396,887	351,753
Total Assets	$ 1,132,212	$ 927,571
Liabilities and Stockholders' Equity		
Current Liabilities:		
Short-term obligations and current maturities of long-term obligations (Note 6)	$ 5,356	$ 1,474
Accounts payable	59,250	32,264
Accrued payroll and employee benefits	37,203	31,168
Customer deposits	59,262	29,433
Advanced billings	11,894	8,513
Other current liabilities	48,532	31,836
Total Current Liabilities	221,497	134,688
Long-Term Obligations (Note 6)	264,158	232,000
Long-Term Deferred Income Taxes (Note 5)	34,944	21,669
Other Long-Term Liabilities	45,997	42,309
Commitments and Contingencies (Note 7)		
Stockholders' Equity (Notes 3 and 4):		
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	115,888	110,824
Retained earnings	551,848	479,400
Treasury stock at cost, 3,003,419 and 3,081,919 shares	(73,596)	(75,519)
Accumulated other comprehensive items (Note 14)	(30,350)	(19,492)
Total Kadant Stockholders' Equity	563,936	495,359
Noncontrolling interest	1,680	1,546
Total Stockholders' Equity	565,616	496,905
Total Liabilities and Stockholders' Equity	$ 1,132,212	$ 927,571

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

Consolidated Statement of Income

(In thousands, except per share amounts)	January 1, 2022	January 2, 2021	December 28, 2019
Revenue (Notes 1 and 12)	$ 786,579	$ 635,028	$ 704,644
Costs and Operating Expenses:			
Cost of revenue	449,214	357,722	410,884
Selling, general, and administrative expenses	208,787	181,905	192,525
Research and development expenses	11,403	11,298	10,884
Impairments and other costs, net (Notes 1 and 8)	465	2,979	2,528
	669,869	553,904	616,821
Operating Income	116,710	81,124	87,823
Interest Income	267	181	213
Interest Expense	(4,821)	(7,423)	(12,755)
Other Expense, Net (Note 3)	(104)	(195)	(6,359)
Income Before Provision for Income Taxes	112,052	73,687	68,922
Provision for Income Taxes (Note 5)	27,171	17,948	16,358
Net Income	84,881	55,739	52,564
Net Income Attributable to Noncontrolling Interest	(838)	(543)	(496)
Net Income Attributable to Kadant	$ 84,043	$ 55,196	$ 52,068
Earnings per Share Attributable to Kadant (Note 13)			
Basic	$ 7.26	$ 4.81	$ 4.63
Diluted	$ 7.21	$ 4.77	$ 4.54
Weighted Average Shares (Note 13)			
Basic	11,579	11,482	11,235
Diluted	11,655	11,564	11,457

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

Consolidated Statement of Comprehensive Income

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Net Income	$ 84,881	$ 55,739	$ 52,564
Other Comprehensive Items:			
Foreign currency translation adjustment	(11,324)	18,395	(1,392)
Pension and other post-retirement liability adjustments, net (net of tax of $(1), $78, and $(137))	(22)	180	(282)
Effect of pension plan settlement (net of tax of $0, $0, and $(653))	—	(119)	3,826
Deferred gain (loss) on cash flow hedges (net of tax of $118, $(57), and $(143))	366	(184)	(447)
Other Comprehensive Items	(10,980)	18,272	1,705
Comprehensive Income	73,901	74,011	54,269
Comprehensive Income Attributable to Noncontrolling Interest	(716)	(687)	(445)
Comprehensive Income Attributable to Kadant	$ 73,185	$ 73,324	$ 53,824

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

Consolidated Statement of Cash Flows

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Operating Activities			
Net income attributable to Kadant	$ 84,043	$ 55,196	$ 52,068
Net income attributable to noncontrolling interest	838	543	496
Net income	84,881	55,739	52,564
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	34,302	31,334	32,390
Stock-based compensation expense	8,527	6,776	6,815
Provision for losses on accounts receivable	5	356	114
Gain on sale of property, plant, and equipment	(375)	(8)	(79)
U.S. pension benefit plan settlement loss	—	—	5,887
Impairment charges (Notes 1 and 8)	804	1,861	2,336
Deferred income tax (benefit) provision	(1,384)	142	(2,491)
Other items, net	6,333	4,720	5,390
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(16,737)	7,116	6,553
Contract assets	(1,222)	6,073	2,559
Inventories	(11,173)	(89)	(3,076)
Other assets	(15,033)	(833)	(7,559)
Accounts payable	26,346	(15,620)	7,358
Customer deposits	27,693	3,903	(5,686)
Other liabilities	19,453	(8,586)	(5,662)
Net cash provided by operating activities	162,420	92,884	97,413
Investing Activities			
Acquisitions, net of cash acquired (Note 2)	(143,981)	(7,095)	(177,798)
Purchases of property, plant, and equipment	(12,771)	(7,595)	(9,957)
Proceeds from sale of property, plant, and equipment	1,740	145	398
Other investing activities	537	—	—
Net cash used in investing activities	(154,475)	(14,545)	(187,357)
Financing Activities			
Proceeds from issuance of long-term obligations	151,944	26,000	247,196
Repayment of short- and long-term obligations	(115,576)	(99,547)	(126,315)
Dividends paid	(11,460)	(10,903)	(10,196)
Proceeds from issuance of Company common stock	1,892	3,207	5,176
Tax withholding payments related to stock-based compensation	(3,432)	(2,599)	(2,691)
Dividend paid to noncontrolling interest	(560)	(525)	(664)
Other financing activities	—	(189)	(56)
Net cash provided by (used in) financing activities	22,808	(84,556)	112,450
Exchange Rate Effect on Cash, Cash Equivalents, and Restricted Cash	(3,232)	4,584	(350)
Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	27,521	(1,633)	22,156
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	66,640	68,273	46,117
Cash, Cash Equivalents, and Restricted Cash at End of Year	$ 94,161	$ 66,640	$ 68,273

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 consolidated financial statements.

Consolidated Statement of Stockholders' Equity

(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 29, 2018	14,624,159	$ 146	$104,731	$393,578	3,514,163	$(86,111)	$ (39,376)	$ 1,603	$ 374,571
Net income	—	—	—	52,068	—	—	—	496	52,564
Adoption of ASU No. 2016-02, *Leases (Topic 842)*	—	—	—	(17)	—	—	—	—	(17)
Dividends declared – Common Stock, $0.92 per share	—	—	—	(10,380)	—	—	—	—	(10,380)
Dividend paid to noncontrolling interest	—	—	—	—	—	—	—	(664)	(664)
Activity under stock plans	—	—	1,967	—	(299,275)	7,333	—	—	9,300
Other comprehensive items	—	—	—	—	—	—	1,756	(51)	1,705
Balance at December 28, 2019	14,624,159	$ 146	$106,698	$435,249	3,214,888	$(78,778)	$ (37,620)	$ 1,384	$ 427,079
Net income	—	—	—	55,196	—	—	—	543	55,739
Dividends declared – Common Stock, $0.96 per share	—	—	—	(11,045)	—	—	—	—	(11,045)
Dividend paid to noncontrolling interest	—	—	—	—	—	—	—	(525)	(525)
Activity under stock plans	—	—	4,126	—	(132,969)	3,259	—	—	7,385
Other comprehensive items	—	—	—	—	—	—	18,128	144	18,272
Balance at January 2, 2021	14,624,159	$ 146	$110,824	$479,400	3,081,919	$(75,519)	$ (19,492)	$ 1,546	$ 496,905
Net income	—	—	—	84,043	—	—	—	838	84,881
Dividends declared – Common Stock, $1.00 per share	—	—	—	(11,595)	—	—	—	—	(11,595)
Dividend paid to noncontrolling interest	—	—	—	—	—	—	—	(560)	(560)
Noncontrolling interest acquired (Note 2)	—	—	—	—	—	—	—	367	367
Purchase of shares of noncontrolling interest (Note 2)	—	—	—	—	—	—	—	(389)	(389)
Activity under stock plans	—	—	5,064	—	(78,500)	1,923	—	—	6,987
Other comprehensive items	—	—	—	—	—	—	(10,858)	(122)	(10,980)
Balance at January 1, 2022	14,624,159	$ 146	$115,888	$551,848	3,003,419	$(73,596)	$ (30,350)	$ 1,680	$ 565,616

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

Notes to Consolidated Financial Statements

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.

Noncontrolling Interest

One of the Company's foreign subsidiaries that manufactures fluid-handling products is part of a joint venture agreement with an Italian company in which each holds a 50% ownership interest. The agreement provides the Company's subsidiary with the option to purchase the remaining 50% interest in the joint venture.

Principles of Consolidation

The accompanying consolidated financial statements of the Company include the accounts of its wholly and majority-owned subsidiaries. All material intercompany accounts and transactions have been eliminated.

Fiscal Year

Typically, the Company's fiscal quarters and fiscal year consist of 13 and 52 weeks, respectively, ending on the Saturday closest to the end of the corresponding calendar quarter for its fiscal quarters and on the Saturday closest to December 31 for its fourth fiscal quarter and fiscal year. As a result of the difference between the fiscal and calendar periods, a 53rd week is added to the Company's fiscal year every five or six years. In a 53-week fiscal year, the Company's fourth fiscal quarter contains 14 weeks. The Company's fiscal year ended January 1, 2022 (fiscal 2021 or 2021) contained 52 weeks, its fiscal year ended January 2, 2021 (fiscal 2020 or 2020) contained 53 weeks, and its fiscal year ended December 28, 2019 (fiscal 2019 or 2019) contained 52 weeks. Each quarter of fiscal 2021, 2020 and 2019 contained 13 weeks, except the fourth quarter of 2020, which contained 14 weeks. The impact of the additional week in 2020 was not material to the Company's financial results.

Financial Statement Presentation

Certain reclassifications have been made to prior periods to conform with the current period presentation. On the consolidated statement of cash flows, the Company reclassified the change in customer deposits within operating activities from other current liabilities to a separate line item and the changes in long-term assets and liabilities from other items, net to other assets and other liabilities, respectively.

Use of Estimates and Critical Accounting Policies

The preparation of consolidated 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 consolidated 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 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 consolidated financial statements.

Critical accounting policies are defined as those that entail significant judgments and estimates, and could potentially result in materially different results under different assumptions and conditions. The Company believes that the most critical accounting policies upon which its financial position depends, and which involve the most complex or subjective decisions or assessments, concern income taxes, revenue recognition, the valuation of goodwill and intangible assets, and inventories. A discussion of the application of these and other accounting policies is included within this note.

Revenue Recognition

The Company recognizes revenue in accordance with Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers* (ASC 606). Most of the Company's revenue is recognized at a point in time for each performance obligation under the contract when the customer obtains control of the goods or service. Most of the Company's parts and consumables products and its capital products with minimal customization are accounted for at a point in time. The Company has made a policy election to not treat the obligation to ship as a separate performance obligation under the contract and, as a result, the associated shipping costs are reflected in the cost of revenue when revenue is recognized.

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)	January 1, 2022	January 2, 2021	December 28, 2019
Point in Time	$ 705,709	$ 557,702	$ 611,528
Over Time	80,870	77,326	93,116
	$ 786,579	$ 635,028	$ 704,644

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

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)	January 1, 2022	January 2, 2021	December 28, 2019
Revenue by Product Type:			
Parts and Consumables	$ 511,766	$ 417,545	$ 440,699
Capital	274,813	217,483	263,945
	$ 786,579	$ 635,028	$ 704,644
Revenue by Geography (based on customer location):			
North America	$ 420,382	$ 360,061	$ 386,952
Europe	220,578	161,527	180,888
Asia	103,810	72,268	84,705
Rest of World	41,809	41,172	52,099
	$ 786,579	$ 635,028	$ 704,644

See Note 12, Business Segment and Geographical Information, for information on the disaggregation of revenue by reportable operating segment.

The following table presents contract balances from contracts with customers:

(In thousands)	January 1, 2022	January 2, 2021
Contract Assets	$ 8,626	$ 7,576
Contract Liabilities	$ 77,004	$ 39,269

Contract assets in the accompanying consolidated balance sheet 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 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. Contract liabilities increased at year end 2021 principally due to capital equipment orders in the Industrial Processing segment's wood processing business, which the Company expects to recognize as revenue through 2023.

The Company recognized revenue of $33,128,000 in 2021 and $30,426,000 in 2020 that was included in the contract liabilities balance at the beginning of 2021 and 2020, 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 longer 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 year-end 2021 was $37,905,000. The Company will recognize revenue for these performance obligations as they are satisfied, approximately 50% of which is expected to occur within the next twelve months and the remaining 50% after December 31, 2022.

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

The Company includes in revenue amounts invoiced for shipping and handling with the corresponding costs reflected in cost of revenue. Provisions for discounts, warranties, returns and other adjustments are provided for in the period in which the related sale was recorded. Sales taxes, value-added taxes, and certain excise taxes collected from customers and remitted to governmental authorities are accounted for on a net basis and therefore are excluded from revenue.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable arise from sales on credit to customers, are recorded at the invoiced amount, and do not bear interest. The Company establishes an allowance for credit losses to reduce accounts receivable to the net amount expected to be collected. The Company exercises judgment in determining its allowance for credit losses, which is based on its historical collection and write-off experience, adjusted for current macroeconomic trends and conditions, credit policies, specific customer collection issues, and accounts receivable aging. The Company performs ongoing credit evaluations of its customers and adjusts credit limits based upon payment history and each customer's current creditworthiness. The Company continuously monitors collections and payments from its customers. Account balances are charged off against the allowance when the Company believes it is probable the receivable will not be recovered. In some instances, the Company utilizes letters of credit to mitigate its credit exposure.

The changes in the allowance for credit losses are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Balance at Beginning of Year	$ 2,977	$ 2,698	$ 2,897
Provision charged to expense	5	356	114
Accounts written off	(178)	(266)	(263)
Currency translation	(69)	189	(50)
Balance at End of Year	$ 2,735	$ 2,977	$ 2,698

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 $8,049,000 at year-end 2021 and $9,445,000 at year-end 2020, are included in accounts receivable in the accompanying 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.

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 the 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. While the Company engages in extensive product quality programs and processes, the Company's warranty obligation is affected by product failure rates, repair costs, service delivery costs incurred in correcting a product failure, and supplier warranties on parts delivered to the Company. Should these factors or actual results differ from the Company's estimates, revisions to the estimated warranty liability would be required.

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

(In thousands)	January 1, 2022	January 2, 2021
Balance at Beginning of Year	$ 7,064	$ 6,467
Provision charged to expense	4,366	5,555
Usage	(4,268)	(5,439)
Acquisitions	429	—
Currency translation	(293)	481
Balance at End of Year	$ 7,298	$ 7,064

Leases

In accordance with ASC 842, *Leases* (ASC 842), the Company determines whether an arrangement is, or contains, a lease at inception. Operating lease liabilities are included in other current liabilities and other long-term liabilities and the corresponding right-of use (ROU) assets are included in other assets in the accompanying consolidated balance sheet. Classification of operating lease liabilities as either current or noncurrent is based on the expected timing of payments due under the Company's lease obligations.

ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities with original contract terms greater than 12 months are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. Operating leases with an original term of 12 months or less are not recorded in the accompanying consolidated balance sheet.

In determining the present value of future lease payments, the Company utilizes either the rate implicit in the lease if that rate is readily determinable or its incremental secured borrowing rate commensurate with the term of the underlying lease. Lease terms may include the effect of options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. The Company recognizes operating lease expense for lease payments on a straight-line basis over the lease term. Variable lease costs are not included in fixed lease payments and, as a result, are excluded from the measurement of the ROU assets and lease liabilities. The Company expenses all variable lease costs as incurred, which were not material in 2021 and 2020.

As a lessee, the Company accounts for the lease and non-lease components of its real estate and equipment leases as a single lease component. For vehicle leases, the Company does not combine lease and non-lease components.

See Note 9, Leases, for additional information about the Company's lease obligations.

Income Taxes

In accordance with ASC 740, *Income Taxes* (ASC 740), the Company recognizes deferred income taxes based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using enacted tax rates in effect for the year in which these differences are expected to reverse. A tax valuation allowance is established, as needed, to reduce deferred tax assets to the amount expected to be realized. In the period in which it becomes more likely than not that some or all of the deferred tax assets will be realized, the valuation allowance will be adjusted.

It is the Company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. The Company recognizes accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. At January 1, 2022, the Company believes that it has appropriately accounted for any liability for unrecognized tax benefits. To the extent the Company prevails in matters for which a liability for an unrecognized tax benefit is established, the statute of limitations expires for a tax jurisdiction year, or the Company is required to pay amounts in excess of the liability, its effective tax rate in a given financial statement period may be affected.

Earnings per Share

Basic earnings per share (EPS) is computed by dividing net income attributable to Kadant by the weighted average number of shares outstanding during the year. Diluted EPS is computed using the treasury stock method assuming the effect of all potentially dilutive securities, including stock options, restricted stock units (RSUs) and employee stock purchase plan shares.

Cash, Cash Equivalents, and Restricted Cash

At year-end 2021 and year-end 2020, cash equivalents included investments in money market funds and highly liquid short-term investments, which had maturities of three months or less at the date of purchase. The carrying amounts of cash equivalents approximate their fair values due to the short-term nature of these instruments.

The Company's restricted cash generally serves as collateral for certain banker's acceptance drafts issued to vendors and 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. The majority of these restrictions will expire over the next twelve months.

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

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Cash and cash equivalents	$ 91,186	$ 65,682	$ 66,786
Restricted cash	2,975	958	1,487
Total Cash, Cash Equivalents, and Restricted Cash	$ 94,161	$ 66,640	$ 68,273

Supplemental Cash Flow Information

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Cash Paid for Interest	$ 4,441	$ 6,899	$ 12,344
Cash Paid for Income Taxes, Net of Refunds	$ 24,174	$ 17,506	$ 24,533
Non-Cash Investing Activities:			
Fair value of assets acquired	$ 190,977	$ 9,295	$ 207,223
Cash paid for acquired businesses	(152,661)	(7,565)	(179,693)
Liabilities Assumed of Acquired Businesses	$ 38,316	$ 1,730	$ 27,530
Non-cash additions to property, plant, and equipment	$ 363	$ 1,060	$ 626
Non-Cash Financing Activities:			
Issuance of Company common stock upon vesting of RSUs	$ 4,108	$ 4,781	$ 4,100
Dividends declared but unpaid	$ 2,905	$ 2,770	$ 2,628

Inventories

Inventories are stated at the lower of cost (on a first-in, first-out; or weighted average basis) or net realizable value and include materials, labor, and manufacturing overhead. The Company regularly reviews its quantities of inventories on hand and compares these amounts to the historical and forecasted usage of and demand for each particular product or product line. The Company records a charge to cost of revenue for excess and obsolete inventory to reduce the carrying value of inventories to net realizable value.

The components of inventories are as follows:

(In thousands)	January 1, 2022	January 2, 2021
Raw Materials	$ 59,177	$ 46,413
Work in Process	29,448	17,692
Finished Goods (includes $1,163 and $427 at customer locations)	45,731	42,709
	$ 134,356	$ 106,814

Property, Plant, and Equipment

Property, plant, and equipment are stated at cost. Assets acquired as part of a business combination are initially recorded at fair value. The costs of additions and improvements are capitalized, while maintenance and repairs are charged to expense as incurred. The Company provides for depreciation and amortization primarily using the straight-line method over the estimated useful lives of the property as follows: buildings, 10 to 40 years; machinery and equipment, 2 to 10 years; and leasehold improvements, the shorter of the term of the lease or the life of the asset. For construction in progress, no provision for depreciation is made until the assets are available and ready for use.

Property, plant, and equipment consist of the following:

(In thousands)	January 1, 2022	January 2, 2021
Land	$ 11,011	$ 7,676
Buildings	67,787	60,702
Machinery, Equipment, and Leasehold Improvements	136,656	120,804
Construction in Progress	6,567	3,292
	222,021	192,474
Less: Accumulated Depreciation and Amortization	114,032	107,832
	$ 107,989	$ 84,642

Depreciation and amortization expense was $13,433,000 in 2021, $12,209,000 in 2020, and $12,236,000 in 2019. See Note 9, Leases, for further details relating to assets under financing leases included in property, plant and equipment in the accompanying consolidated balance sheet.

Intangible Assets, Net

Acquired intangible assets by major asset class are as follows:

(In thousands)	Gross	Accumulated Amortization	Currency Translation	Net
January 1, 2022				
Definite-Lived				
Customer relationships	$ 217,021	$ (79,839)	$ (3,455)	$ 133,727
Product technology	67,230	(35,833)	(1,752)	29,645
Tradenames	7,427	(3,405)	(373)	3,649
Other	20,210	(16,250)	(561)	3,399
	311,888	(135,327)	(6,141)	170,420
Indefinite-Lived				
Tradenames	29,059	—	(136)	28,923
Acquired Intangible Assets	$ 340,947	$ (135,327)	$ (6,277)	$ 199,343

Notes to Consolidated Financial Statements

(In thousands)	Gross	Accumulated Amortization	Currency Translation	Net
January 2, 2021				
Definite-Lived				
Customer relationships	$ 173,728	$ (65,488)	$ (1,316)	$ 106,924
Product technology	56,111	(31,655)	(1,005)	23,451
Tradenames	6,027	(2,946)	(282)	2,799
Other	18,248	(14,369)	(515)	3,364
	254,114	(114,458)	(3,118)	136,538
Indefinite-Lived				
Tradenames	24,100	—	327	24,427
Acquired Intangible Assets	$ 278,214	$ (114,458)	$ (2,791)	$ 160,965

Gross intangible assets include $63,228,000 for acquired intangible assets from acquisitions that occurred in 2021. See Note 2, Acquisitions, for further details.

In connection with its impairment analysis, the Company reduced its definite-lived intangible assets by $499,000 in 2021 and definite and indefinite-lived intangible assets by $1,861,000 in 2020. Additionally, the Company reclassified $1,300,000 of an indefinite-lived tradename to definite-lived in 2020. See *Impairment of Long-Lived Assets* under the heading *Intangible Assets* within this note for further details.

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 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. Definite-lived intangible assets as of year-end 2021 have a weighted average amortization period of 13 years. Amortization of definite-lived intangible assets was $20,869,000 in 2021, $19,125,000 in 2020, and $20,154,000 in 2019 and was included in selling, general, and administrative (SG&A) expenses in the accompanying consolidated statement of income. The estimated future amortization expense of definite-lived intangible assets is $20,994,000 in 2022; $18,725,000 in 2023; $17,830,000 in 2024; $15,754,000 in 2025; $15,119,000 in 2026; and $81,998,000 in the aggregate thereafter.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the identifiable net assets of the acquired business at the date of acquisition. The Company's acquisitions have historically been made at prices above the fair value of the acquired net assets, resulting in goodwill, due to the expectation of synergies from combining the businesses.

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

(In thousands)	Flow Control	Industrial Processing	Material Handling	Total
Balance as of December 28, 2019				
Gross balance	$ 97,680	$ 207,536	$ 116,325	$ 421,541
Accumulated impairment losses	—	(85,509)	—	(85,509)
Net balance	97,680	122,027	116,325	336,032
2020 Activity				
Acquisition (Note 2)	—	3,953	—	3,953
Currency translation	3,757	4,392	3,619	11,768
Total 2020 activity	3,757	8,345	3,619	15,721
Balance at January 2, 2021				
Gross balance	101,437	215,881	119,944	437,262
Accumulated impairment losses	—	(85,509)	—	(85,509)
Net balance	101,437	130,372	119,944	351,753
2021 Activity				
Acquisitions (Note 2)	25,805	1,116	26,836	53,757
Currency translation	(3,653)	(2,015)	(2,955)	(8,623)
Total 2021 activity	22,152	(899)	23,881	45,134
Balance at January 1, 2022				
Gross balance	123,589	214,982	143,825	482,396
Accumulated impairment losses	—	(85,509)	—	(85,509)
Net balance	$ 123,589	$ 129,473	$ 143,825	$ 396,887

Impairment of Long-Lived Assets

The Company evaluates the recoverability of goodwill and indefinite-lived intangible assets as of the end of each fiscal year, or more frequently if events or changes in circumstances indicate that it is more likely than not that the carrying value of an asset might be impaired. Potential impairment indicators include a significant decline in sales, earnings, or cash flows, material adverse changes in the business climate, and a significant decline in the market capitalization due to a sustained decrease in the Company's stock price.

The Company assesses its definite-lived intangible assets for impairment whenever facts and circumstances indicate that the carrying amounts may not be fully recoverable. To analyze recoverability, the Company projects undiscounted net future cash flows over the remaining lives of such assets or asset groups. If these projected cash flows were to be less than the carrying amounts, an impairment loss would be recognized, resulting in a write-down of the assets with a corresponding charge to earnings. The impairment loss would be measured based upon the difference between the carrying amounts of the assets and their fair values calculated using projected discounted cash flows.

Goodwill

At year-end 2021 and 2020, in connection with its annual impairment analysis, the Company performed a qualitative goodwill impairment assessment (Step 0) for each of its reporting units, except the material handling reporting unit in 2020 discussed below, which indicated that the fair value of each reporting unit exceeded its carrying value, and determined that the assets were not impaired. The impairment analysis included an assessment of certain qualitative factors including, but not limited to, the results of prior fair value calculations, the movement of the Company's share price and market capitalization, the reporting units' and the Company's overall financial performance, and macroeconomic and industry conditions. The Company considered the qualitative factors and weighed the evidence obtained and determined that it was not more likely than not that the fair value of any of the respective reporting unit's assets was less than its carrying amount. Although the Company believes the factors considered in the impairment analysis are reasonable, significant changes in any one of the assumptions used could have produced a different result.

In March 2020, the Company experienced a significant decrease in market capitalization due to a decline in the Company’s stock price. During that time, the U.S. stock market also declined significantly amid market volatility driven by the uncertainty surrounding the COVID-19 pandemic. Based on these occurrences, the Company concluded that a triggering event had occurred related to the indefinite-lived assets within its material handling reporting unit. As a result, for each reporting period in 2020, the Company prepared a quantitative impairment analysis (Step 1) for its material handling reporting unit, which indicated that its fair value exceeded its carrying value and the indefinite-lived assets were not impaired.

Goodwill by reporting unit is as follows:

(In thousands)	January 1, 2022	January 2, 2021
Fluid-Handling	$ 64,003	$ 65,755
Doctoring, Cleaning, & Filtration	59,586	35,682
Stock-Preparation	20,819	19,685
Wood Processing	108,654	110,687
Material Handling	143,825	119,944
	$ 396,887	$ 351,753

Intangible Assets

At year-end 2021 and 2020, the Company performed a qualitative impairment analysis on its indefinite-lived intangible assets and determined that the assets were not impaired.

No triggering events or indicators of impairment were identified in 2021 or 2020 related to the Company's definite-lived intangible assets, except for the definite-lived intangible assets associated with its existing ceramic blade product line in France in 2021 and its timber-harvesting product line in 2020 both discussed below.

In the fourth quarter of 2021, the Company decided to exit its ceramic blade business in France, which became a redundant manufacturing operation as a result of its acquisition of The Clouth Group of Companies in the third quarter of 2021. The Company expects to cease production in June 2022 and exit the facility by the end of 2022. As a result of this decision, the Company recorded an impairment charge of $499,000 in the fourth quarter of 2021 related to its product technology intangible asset.

In the fourth quarter of 2020, due to the continued and anticipated decline in demand for the Company's timber-harvesting business' products, and following impairment charges totaling $2,336,000 in 2019 related to this business, the Company performed a quantitative analysis of the recoverability of the related intangible assets in which the income approach discounted cash flow methodology was used. As a result of this analysis, the Company determined that the fair values of the timber-harvesting product line's definite-lived intangible assets related to customer relationships, product technology and tradename were less than their carrying values, and therefore recorded additional impairment charges totaling $1,861,000 in the fourth quarter of 2020. The remaining intangible asset as of year-end 2021 for the timber-harvesting product line is $443,000.

Impairment charges for 2021, 2020 and 2019 are included in impairment and other costs, net in the accompanying consolidated statement of income.

Business Combinations

The Company's acquisitions have been accounted for using the purchase method of accounting under ASC 805, *Business Combinations* (ASC 805), and the results of the acquired businesses have been included in its consolidated financial statements from their respective dates of acquisition. The Company accounts for all transactions and events in which it obtains control over a business under ASC 805 by establishing the acquisition date and recognizing the fair value of all assets acquired and liabilities assumed. The Company’s acquisitions have historically been made at prices above the fair value of identifiable net assets, resulting in goodwill, due to synergies expected to be realized by combining the businesses.

While the Company uses its best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business acquisition date, the estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the purchase price allocation period, which is generally one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. For changes in the valuation of intangible assets between the preliminary and final purchase price allocation, the related amortization is adjusted in the period it occurs. Subsequent to the purchase price allocation period, any adjustment to assets acquired or liabilities assumed is included in operating results in the period in which the adjustment is determined. Acquisition transaction costs are recorded as incurred in SG&A expenses in the accompanying consolidated statement of income and were $3,655,000 in 2021, $485,000 in 2020, and $843,000 in 2019.

Foreign Currency Translation and Transactions

All assets and liabilities of the Company's foreign subsidiaries are translated at fiscal year-end exchange rates, and revenue and expenses are translated at average exchange rates for each quarter in accordance with ASC 830, *Foreign Currency Matters*. Resulting translation adjustments are reflected in the "accumulated other comprehensive items" (AOCI) component of stockholders' equity (see Note 14, Accumulated Other Comprehensive Items). Foreign currency transaction gains and losses are included in the accompanying consolidated statement of income and are not material in the three years presented.

Stock-Based Compensation

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. Compensation expense related to any modified stock-based awards is based on the fair value for those awards as of the modification date with any remaining incremental compensation expense recognized ratably over the remaining requisite service period.

Derivatives

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

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

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

Income Taxes (Topic 740), Simplifying the Accounting for Income Taxes. In December 2019, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2019-12, which simplifies the accounting for income taxes by removing certain exceptions to the general principles in Topic 740 and by clarifying and amending existing guidance, including the recognition of franchise tax, the treatment of a step up in the tax basis of goodwill, and the timing for recognition of enacted changes in tax laws or rates in the interim period annual effective tax rate computation. This new guidance is effective in fiscal 2021, and the transition requirements are primarily prospective. The Company adopted this ASU prospectively at the beginning of fiscal 2021 and its adoption did not have an impact on the consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting. In March 2020, the FASB issued ASU No. 2020-04, which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by the discontinuation of reference rates, such as the London Interbank Offered Rate (LIBOR), if certain criteria are met. Generally, contract modifications related to reference rate reform may be considered an event that does not require remeasurement or reassessment of a previous accounting determination at the modification date. The guidance in this ASU is applicable to the Company's existing contracts and hedging relationships that reference LIBOR and may be adopted prospectively through December 31, 2022. The Company is currently evaluating the effects that the adoption of this ASU will have on its consolidated financial statements.

Business Combinations (Topic 805), Accounting for Contract Assets and Contract Liabilities from Contracts with Customers. In October 2021, the FASB issued ASU 2021-08, which requires entities to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The guidance in this ASU will generally result in the Company recognizing contract assets and contract liabilities at amounts consistent with those recorded by the acquiree immediately before the acquisition date rather than at fair value. This new guidance is effective on a prospective basis in fiscal 2023, with early adoption permitted. The Company is currently evaluating the effect that the adoption of this ASU will have on its consolidated financial statements, which will be dependent on the contract assets and liabilities acquired in future business combinations.

2. Acquisitions

2021

In the third quarter of 2021, the Company acquired all partnership interests and shares in The Clouth Group of Companies (Clouth), for $92,864,000, net of cash acquired plus debt assumed. The majority of the Clouth companies were acquired on July 19, 2021 and the acquisition of the last legal entity occurred on August 10, 2021, which the Company accounted for as a noncontrolling interest during the period from July 19, 2021 to August 10, 2021. The Company funded the purchase price with euro-denominated borrowings under its revolving credit facility and existing cash. Clouth, which is included in the Company's Flow Control segment, is a leading manufacturer of doctor blades and related equipment used in the production of paper, packaging, and tissue. The Company expects several synergies in connection with this acquisition, including deepening its presence in the growing ceramic blade market and expansion of sales at its existing businesses by leveraging Clouth's complementary global geographic footprint. Clouth has three manufacturing facilities in Germany and one in Poland. Goodwill from the Clouth acquisition was $25,806,000, of which $6,836,000 is expected to be deductible for tax purposes over 15 years. In addition, intangible assets acquired were $34,467,000, of which $5,326,000 is expected to be deductible for tax purposes over 15 years. The Company recorded revenue of $23,221,000 and an operating loss of $4,068,000 for Clouth from the date of acquisition, including amortization expense of $3,481,000 associated with acquired profit in inventory and backlog and $2,710,000 of acquisition transaction costs.

On August 23, 2021, the Company acquired all the outstanding equity securities in East Chicago Machine Tool Corporation (Balemaster) and certain assets of affiliated companies for $53,747,000, net of cash acquired. Balemaster, which is included in the Company's Material Handling segment, is a leading U.S. manufacturer of horizontal balers and related equipment used primarily for recycling packaging waste at corrugated box plants and large retail and distribution centers. The Company funded the purchase price with borrowings under its revolving credit facility. The Company expects several synergies in connection with the acquisition, including expansion of its presence in the secondary material processing market and creation of new opportunities for leveraging its high-performance balers produced in Europe. Goodwill from the Balemaster acquisition was $26,836,000, none of which is deductible for tax purposes. In addition, intangible assets acquired were $28,060,000, none of which is deductible for tax purposes. The Company recorded revenue of $9,038,000 and operating loss of $641,000 for Balemaster from the date of acquisition, including amortization expense of $2,042,000 associated with acquired profit in inventory and backlog and $782,000 of acquisition transaction costs.

In the fourth quarter of 2021, the Company acquired the assets of a business in India, which is included in its Industrial Processing segment, for approximately $2,882,000.

The following table summarizes the estimated fair values of assets acquired and liabilities assumed and the purchase price for Clouth and the Company's other acquisitions in 2021. The final purchase accounting and purchase price allocations remain subject to change as the Company continues to refine its preliminary valuation of certain acquired assets and liabilities assumed and the valuation of acquired intangibles, which may result in adjustments to the assets and liabilities, including goodwill. Measurement period adjustments in 2021 did not have a material effect on the Company's consolidated balance sheet or statement of income.

(In thousands)	Clouth	Other	Total
Net Assets Acquired:			
Cash and Cash Equivalents	$ 4,923	$ 3,757	$ 8,680
Accounts Receivable	6,808	1,641	8,449
Inventories	14,119	4,628	18,747
Property, Plant, and Equipment	24,498	5,143	29,641
Other Assets	5,309	3,167	8,476
Definite-Lived Intangible Assets			
Customer relationships	20,192	23,100	43,292
Product technology	8,915	2,700	11,615
Tradenames	—	1,400	1,400
Other	401	1,560	1,961
Indefinite-Lived Intangible Assets		—	
Tradenames	4,959	—	4,959
Goodwill	25,806	27,951	53,757
Total assets acquired	115,930	75,047	190,977
Short-term Obligations and Current Maturities of Long-term Obligations	1,393	—	1,393
Accounts Payable	1,287	797	2,084
Long-Term Deferred Income Taxes	9,465	6,698	16,163
Long-Term Obligations	4,244	—	4,244
Other Liabilities	7,391	7,166	14,557
Total liabilities assumed	23,780	14,661	38,441
Net assets acquired	$ 92,150	$ 60,386	$ 152,536
Purchase Price:			
Cash Paid	$ 92,150	$ 60,386	$ 152,536

The weighted-average amortization period for Clouth's definite-lived intangible assets is 19 years, including weighted-average amortization periods of 24 years for customer relationships and 10 years for product technology. The weighted-average amortization period for the Company's other acquisitions' definite-lived intangible assets is 16 years, including weighted-average amortization periods of 17 years for customer relationships, 13 years for product technology, and 16 years for tradenames.

Unaudited Supplemental Pro Forma Information

The following unaudited pro forma information provides the effect of the Company's 2021 acquisition of Clouth as if it had occurred at the beginning of 2020:

(In thousands, except per share amounts)	January 1, 2022	January 2, 2021
Revenue	$ 812,016	$ 682,248
Net Income Attributable to Kadant	$ 90,184	$ 55,760
Earnings per Share Attributable to Kadant		
Basic	$ 7.79	$ 4.86
Diluted	$ 7.74	$ 4.82

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

Pro forma results include the following non-recurring pro forma adjustments:

- Pre-tax charge to cost of revenue of $3,082,000 in 2020 and reversal of $3,082,000 in 2021, for the sale of inventory revalued at the date of acquisition.
- Pre-tax charge to SG&A expenses of $3,109,000 in 2020 and reversal of $2,710,000 in 2021 and $399,000 in 2021, for acquisition costs and intangible asset amortization related to acquired backlog, respectively.
- Estimated tax effects related to the pro forma adjustments.

Pro forma results in 2020 include a pre-tax gain of $4,409,000 from the forgiveness of a shareholder loan at Clouth.

These pro forma results of operations have been prepared for comparative purposes only, and they do not purport to be indicative of the results of operations that would have resulted had the acquisition of Clouth occurred as of the beginning of 2020, or that may result in the future.

The Company's pro forma results exclude the Company's other acquisitions in 2021 as the inclusion of those results would not have been materially different from the pro forma results presented above had the acquisitions occurred at the beginning of 2020.

2020

On June 1, 2020, the Company acquired Cogent Industrial Technologies Ltd. (Cogent), which is included in its Industrial Processing segment, for approximately $6,866,000, net of cash acquired. The Company funded the acquisition through borrowings under its revolving credit facility. Intangible assets acquired primarily relate to customer relationships with a fair value of $3,350,000. Cogent, based in British Columbia, Canada, is an industrial automation and controls solution provider that offers expertise in process technology integration, industrial automation and controls, industrial safety, project management, and operational performance management systems.

On May 28, 2020, the Company also acquired certain intellectual property from a company in Austria, which is included in its Industrial Processing segment, for $416,000, of which $229,000 was paid in the second quarter of 2020 and $125,000 in the first quarter of 2021. The Company expects to pay the remaining amount no later than the first quarter of 2022. Intangible assets acquired represent product technology with a fair value of $557,000 at acquisition date.

2019

On September 3, 2019, the Company acquired certain assets of a business in Brazil, which is included in its Flow Control segment, for approximately $407,000 in cash.

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

SMH, which is included in the Company's Material Handling segment, has manufacturing operations in Mississippi, United States, and China, and is a leading provider of material handling equipment and systems to various process industries, including mining, aggregates, food processing, packaging, and pulp and paper. Goodwill from the SMH acquisition was $78,592,000, of which $59,195,000 is expected to be deductible for tax purposes over 15 years. In addition, intangible assets acquired were $83,020,000, of which $69,969,000 is expected to be deductible for tax purposes over 15 years. For 2019, the Company recorded revenue of $83,364,000 and operating income of $3,132,000 for SMH from the date of acquisition, including amortization expense of $4,872,000 associated with acquired profit in inventory and backlog and $843,000 of acquisition transaction costs.

The following table summarizes the estimated fair values of assets acquired and liabilities assumed and the purchase price for SMH.

(In thousands)		January 2, 2019
Net Assets Acquired:		
Cash, Cash Equivalents, and Restricted Cash	$	2,431
Accounts Receivable		10,275
Inventories		13,061
Property, Plant, and Equipment		7,383
Other Assets		12,054
Definite-Lived Intangible Assets		
Customer relationships		58,300
Product technology		11,000
Other		4,220
Indefinite-Lived Intangible Assets		
Tradenames		9,500
Goodwill		78,592
Total assets acquired		206,816
Accounts Payable		3,380
Other Current Liabilities		7,954
Long-Term Lease Liabilities		15,244
Long-Term Deferred Income Taxes		952
Total liabilities assumed		27,530
Net assets acquired	$	179,286
Purchase Price:		
Cash Paid	$	179,286

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

Unaudited Supplemental Pro Forma Information

The following unaudited pro forma information provides the effect of the Company's 2019 acquisition of SMH as if it had occurred at the beginning of 2018:

(In thousands, except per share amounts)		December 28, 2019
Revenue	$	704,644
Net Income Attributable to Kadant	$	56,409
Earnings per Share Attributable to Kadant		
Basic	$	5.02
Diluted	$	4.92

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

Pro forma results include the following non-recurring pro forma adjustments, which have been included in the determination of pro forma net income for the year ended December 29, 2018 (not presented), as follows:

- Pre-tax reversal of $843,000 to SG&A expenses in 2019 for acquisition transaction costs.
- Pre-tax reversal of $3,549,000 to cost of revenue in 2019 for the sale of inventory revalued at the date of acquisition.

- Pre-tax reversal of $1,323,000 to SG&A expenses in 2019 for intangible asset amortization related to acquired backlog.
- Tax effects related to pro forma adjustments.

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

3. Employee Benefit Plans

Stock-Based Compensation Plans

The Company maintains stock-based compensation plans primarily for its key employees and directors, although the plans permit awards to others expected to make significant contributions to the future of the Company. The plans authorize the compensation committee of the Company's board of directors (the board committee) to award a variety of stock and stock-based incentives, such as restricted stock, RSUs, nonqualified and incentive stock options, stock bonus shares, or performance-based shares. The award recipients and the terms of awards granted under these plans are determined by the board committee. Upon a change of control, as defined in the plans, all options or other awards become fully vested and all restrictions lapse. The Company had 336,157 shares available for grant under these stock-based compensation plans at year-end 2021. The Company generally issues its common stock out of treasury stock, to the extent available, for share issuances related to its stock-based compensation plans.

The Company recognizes compensation cost for all stock-based awards granted to employees and directors based on the grant date estimate of fair value for those awards. The fair value of RSUs is based on the grant date price of the Company's common stock, reduced by the present value of estimated dividends foregone during the requisite service period.

The components of pre-tax stock-based compensation expense included in SG&A expenses in the accompanying consolidated statement of income are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
RSU Awards	$ 8,224	$ 6,453	$ 6,616
Employee Stock Purchase Plan Awards	303	323	199
Total	$ 8,527	$ 6,776	$ 6,815

The Company grants RSUs to non-employee directors and certain employees. Holders of RSUs have no voting rights and are not entitled to receive cash dividends.

Non-Employee Director Restricted Stock Units

The Company granted RSU awards consisting of 1,009 RSUs in 2021, 2,085 RSUs in 2020 and 1,858 RSUs in 2019 to each of its incumbent non-employee directors. Half of the RSUs vested on June 1 of each year and the remaining RSUs vested ratably on the last day of the third and fourth fiscal quarters of each year. In addition, the Company granted RSU awards consisting of 1,042 RSUs in July 2020 to its then new non-employee director (former executive director), which vested ratably on the last day of the third and fourth fiscal quarters of 2020. Each RSU issued to the directors represents the right to receive one share of the Company's common stock upon vesting.

Performance-Based Restricted Stock Units

The Company grants performance-based RSUs to certain officers of the Company. Each performance-based RSU represents the right to receive one share of the Company's common stock upon vesting. The RSUs are subject to adjustment based on the achievement of a performance measure selected for the fiscal year, which historically has been a specified target for adjusted earnings before interest, taxes, depreciation, and amortization (adjusted EBITDA) generated from operations. Following the adjustment, the RSUs are subject to additional time-based vesting, and vest in three equal annual installments, provided that the officer is employed by the Company on the applicable vesting dates.

The Company recognizes compensation expense associated with performance-based RSUs 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 the unvested performance-based RSUs totaled $3,231,000 at year-end 2021, and will be recognized over a weighted average period of 1.4 years.

The performance-based RSU agreements provide for forfeiture in certain events, such as voluntary or involuntary termination of employment, and for acceleration of vesting in certain events, such as death, disability or a change in control of the Company. If death, disability, or a change in control occurs prior to the end of the performance period, the officer will receive the target RSU amount; otherwise, the officer will receive the number of deliverable RSUs based on the achievement of the performance goal, as stated in the RSU agreements.

Time-Based Restricted Stock Units

The Company grants time-based RSUs to its officers and other employees of the Company. Each time-based RSU represents the right to receive one share of the Company's common stock upon vesting. The Company recognizes compensation expense associated with these time-based RSUs 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. The time-based RSU agreement provides for forfeiture in certain events, such as voluntary or involuntary termination of employment, and for acceleration of vesting in certain events, such as death, disability, or a change in control of the Company. Unrecognized compensation expense related to the time-based RSUs totaled $3,932,000 at year-end 2021, and will be recognized over a weighted average period of 1.8 years.

Vesting of Restricted Stock Units

A summary of the activity of the Company's unvested RSUs in 2021 is as follows:

(In thousands, except per share amounts)	Units	Weighted Average Grant-Date Fair Value
Unvested RSUs at January 2, 2021	120	$ 92.42
Granted	49	$ 174.52
Vested	(61)	$ 96.96
Forfeited	(1)	$ 91.71
Unvested RSUs at January 1, 2022	107	$ 127.70

The weighted average grant date fair value of RSUs granted was $174.52 in 2021, $88.22 in 2020, and $86.50 in 2019. The total fair value of shares vested was $5,892,000 in 2021, $7,343,000 in 2020, and $5,452,000 in 2019.

Stock Options

The Company has not granted stock options since 2013. Prior to 2014, the Company granted nonqualified stock options to its executive officers that vested over three years and were not exercisable until vested. All options awarded in prior periods were granted at an exercise price equal to the fair market value of the Company's common stock on the date of grant. There were no stock options outstanding at year-end 2021 as all remaining stock options were exercised during the year.

A summary of the Company's stock option activity in 2021 is as follows:

(In thousands, except per share amounts)	Number of Shares	Weighted Average Exercise Price
Options Outstanding at January 2, 2021	27	$ 24.44
Exercised	(27)	$ 24.44
Options Outstanding at January 1, 2022	—	$ —

A summary of the Company's stock option exercises are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Total Intrinsic Value of Options Exercised	$ 4,986	$ 4,071	$ 16,796
Cash Received from Options Exercised	$ 665	$ 1,123	$ 4,454

Employee Stock Purchase Plan

The Company's eligible U.S. employees may elect to participate in its employee stock purchase plan. Under the plan, shares of the Company's common stock may be purchased at a 15% discount from the fair market value at the beginning or end of the purchase period, whichever is lower. Shares purchased under the plan are subject to a one-year resale restriction and are purchased through payroll deductions of up to 10% of each participating employee's gross wages. The Company issued 10,230 shares in 2021, 13,062 shares in 2020, and 13,195 shares for 2019 (issued in 2020) of its common stock under this plan. The Company had 91,643 shares available for grant under the employee stock purchase plan at year-end 2021.

401(k) Savings and Other Defined Contribution Plans

The Company's U.S. subsidiaries participate in the Kadant Inc. 401(k) Retirement Savings Plan sponsored by the Company. Contributions to the plan are made by both the employee and the Company and are immediately vested. Company contributions are based upon the level of employee contributions.

Certain of the Company's subsidiaries offer other retirement plans, the majority of which are defined contribution plans. Company contributions to these plans are based on formulas determined by the Company.

For these plans, the Company contributed and charged to expense $4,706,000 in 2021, $4,501,000 in 2020, and $4,412,000 in 2019.

Pension and Other Post-Retirement Defined Benefits Plans

The Company sponsors pension and other post-retirement defined benefit plans covering employees at certain U.S. and foreign subsidiaries.

In accordance with ASC 715, *Compensation-Retirement Benefits* (ASC 715), the Company recognizes the funded status of its plans as an asset or liability and changes in the funded status through AOCI, net of tax, in the accompanying consolidated balance sheet. The amounts in AOCI are recognized as net periodic benefit cost pursuant to the Company's accounting policy for amortizing such amounts. Further, actuarial gains and losses that arise in subsequent periods and are not recognized as net periodic benefit cost will be recognized as a component of AOCI, net of tax.

The Company records the non-service component of net periodic pension cost in other expense, net in the accompanying consolidated statement of income. Other expense, net in 2019 included a loss of $5,887,000 related to the settlement of the Company’s noncontributory defined benefit pension plan for eligible employees at one of its U.S. divisions and its corporate office (Retirement Plan). The Retirement Plan was terminated in December 2018. Other expense, net in 2019 also included activity related to the Retirement Plan prior to its settlement, including interest costs of $1,334,000, net of an expected return on plan assets of $995,000. The weighted average assumptions used to determine net periodic benefit costs in 2019 for the Retirement Plan was 4.10% for both the discount rate and expected return on plan assets, which were valued using the FTSE Pension Discount Curve. In 2020, the Company made a settlement payment of $2,427,000 related to a restoration plan, also terminated in 2018, which fully supplemented benefits lost for certain executive officers under the Retirement Plan. The remaining disclosure requirements related to the Company’s defined benefit plans are not material for the fiscal years presented.

4. Stockholders' Equity

Preferred Stock

The Company's Certificate of Incorporation authorizes up to 5,000,000 shares of preferred stock, $.01 par value per share, for issuance by the Company's board of directors without further shareholder approval.

Common Stock

At year-end 2021, the Company had reserved 534,535 unissued shares of its common stock for possible issuance under its stock-based compensation plans.

5. Income Taxes

The components of income before provision for income taxes are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Domestic	$ 26,599	$ 14,132	$ 93
Foreign	85,453	59,555	68,829
	$ 112,052	$ 73,687	$ 68,922

The components of the provision for income taxes are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Current Provision (Benefit):			
Federal	$ 2,173	$ 339	$ (264)
Foreign	25,512	16,800	18,778
State	870	667	335
	28,555	17,806	18,849
Deferred Provision (Benefit):			
Federal	1,823	2,146	(453)
Foreign	(3,430)	(2,361)	(1,253)
State	223	357	(785)
	(1,384)	142	(2,491)
	$ 27,171	$ 17,948	$ 16,358

The Company receives a tax deduction upon the exercise of nonqualified stock options and the vesting of RSUs. The Company recognizes excess income tax benefits and tax deficiencies related to stock-based compensation arrangements as discrete items within the provision for income taxes in the reporting period in which they occur. The Company recognized an income tax benefit of $1,808,000 in 2021, $758,000 in 2020 and $3,754,000 in 2019 in the accompanying consolidated statement of income.

The provision for income taxes in the accompanying consolidated statement of income differs from the provision calculated by applying the statutory federal income tax rate to income before provision for income taxes due to the following:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Provision for Income Taxes at Statutory Rate	$ 23,531	$ 15,474	$ 14,474
Increases (Decreases) Resulting From:			
Foreign tax rate differential	2,819	1,891	2,584
Nondeductible expenses	1,673	2,117	2,407
Excess tax benefit related to stock-based compensation	(1,525)	(661)	(3,305)
State income taxes, net of federal income tax	863	807	(355)
U.S. tax cost of foreign earnings	481	599	146
Reversal of tax benefit reserves, net	(444)	(730)	(286)
Research and development tax credits	(454)	(465)	(381)
Change in valuation allowance	(31)	(469)	81
Other	258	(615)	993
	$ 27,171	$ 17,948	$ 16,358

The Company's net deferred tax liability consists of the following:

(In thousands)	January 1, 2022	January 2, 2021
Deferred Tax Asset:		
Net operating loss carryforwards	$ 14,162	$ 13,719
Lease liabilities	6,393	6,855
Inventory basis difference	4,600	4,576
Employee compensation	4,368	3,189
Reserves and accruals	3,167	3,565
Capitalized research expenses	2,349	2,668
Foreign, state, and alternative minimum tax credit carryforwards	508	472
Allowance for credit losses	420	397
Other	48	213
Deferred tax asset, gross	36,015	35,654
Less: valuation allowance	(9,212)	(9,609)
Deferred tax asset, net	26,803	26,045
Deferred Tax Liability:		
Goodwill and intangible assets	(43,780)	(30,166)
Fixed asset basis difference	(6,009)	(4,964)
ROU assets	(5,431)	(5,812)
Provision for unremitted foreign earnings	(559)	(1,233)
Other	(1,819)	(1,574)
Deferred tax liability	(57,598)	(43,749)
Net deferred tax liability	$ (30,795)	$ (17,704)

Deferred tax assets and liabilities are presented in the accompanying consolidated balance sheet within other assets and long-term deferred income taxes on a net basis by tax jurisdiction. The Company has established valuation allowances related to certain domestic and foreign deferred tax assets on deductible temporary differences, tax losses, and tax credit carryforwards. The valuation allowance at year-end 2021 was $9,212,000, consisting of $190,000 in the United States and $9,022,000 in foreign jurisdictions. The decrease in the valuation allowance in 2021 of $397,000 is related primarily to fluctuations in foreign currency exchange rates and utilization of foreign net operating losses, partially offset by an increase in valuation allowance associated with acquired net operating losses. Compliance with ASC 740 requires the Company to periodically evaluate the necessity of establishing or adjusting a valuation allowance for deferred tax assets depending on whether it is more likely than not that a related tax benefit will be realized in future periods. When assessing the need for a valuation allowance in a tax jurisdiction, the Company evaluates the weight of all available evidence to determine whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. As part of this evaluation, the Company considers its cumulative three-year history of earnings before income taxes, taxable income in prior carryback years, future reversals of existing taxable temporary differences, prudent and feasible tax planning strategies, and expected future results of operations. As of year-end 2021, the Company continued to maintain a valuation allowance in the United States against a portion of its state net operating loss carryforwards due to the uncertainty of future profitability in certain state jurisdictions. As of year-end 2021, the Company maintained valuation allowances in certain foreign jurisdictions because of the uncertainty of future profitability within those foreign jurisdictions.

At year-end 2021, the Company had U.S. federal and state net operating loss carryforwards of $2,304,000 and $30,830,000, respectively, and foreign net operating loss carryforwards of $56,537,000. The U.S. federal net operating loss carryforward does not expire. The state net operating loss carryforwards begin to expire in 2024 and a portion does not expire. Of the foreign net operating loss carryforwards, $1,499,000 will expire in the years 2024 through 2041, and the remainder do not expire. As of year-end 2021, the Company also had state disallowed business interest expense carryforwards of $67,000 and foreign tax credits of $368,000, of which $120,000 came from the acquisition of SMH. The disallowed business interest expense carryforward does not expire, and the foreign tax credit carryforward begins to expire in 2024. The utilization of these tax attributes is limited to the Company’s future taxable income, and certain of these tax attributes are subject to an annual limitation as a result of the acquisition of SMH, which constitutes a change of ownership as defined under Internal Revenue Code Section 382.

At year-end 2021, the Company had approximately $245,079,000 of unremitted foreign earnings. During 2021, the Company repatriated $116,853,000 of previously taxed foreign earnings to the United States and recognized a foreign exchange gain of $517,000 associated with these earnings. Of the earnings repatriated in 2021, $100,765,000 related to a distribution of shares of a foreign subsidiary. The Company intends to repatriate the distributable reserves of select foreign subsidiaries back to the United States and has recognized $570,000 of net tax expense on the estimated repatriation amount during 2021. Except for these select foreign subsidiaries, the Company intends to indefinitely reinvest $223,035,000 of these earnings of its foreign subsidiaries in order to support the current and future capital needs of their operations, including the repayment of the Company's foreign debt. The related foreign withholding taxes, which would be required if the Company were to remit these foreign earnings to the United States, would be approximately $4,116,000.

The Company operates within multiple tax jurisdictions and could be subject to audit in those jurisdictions. Such audits can involve complex income tax issues, which may require an extended period of time to resolve and may cover multiple years. In management's opinion, adequate provisions for income taxes have been made for all years subject to audit.

As of year-end 2021, the Company had a liability of $9,731,000 for unrecognized tax benefits which, if recognized, would reduce the effective tax rate. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(In thousands)	January 1, 2022	January 2, 2021
Unrecognized Tax Benefits, Beginning of Year	$ 8,337	$ 8,331
Gross Increases—Tax Positions in Prior Periods	2,409	4
Gross Decreases—Tax Positions in Prior Periods	(2,182)	(21)
Gross Increases—Current-period Tax Positions	1,920	1,468
Lapses of Statutes of Limitations	(649)	(1,488)
Currency Translation	(104)	43
Unrecognized Tax Benefits, End of Year	$ 9,731	$ 8,337

A portion of the unrecognized tax benefits generated in 2021 is offset by deferred tax assets in the accompanying consolidated balance sheet. The Company recognizes accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. The Company has accrued $1,704,000 at year-end 2021 and $1,600,000 at year-end 2020 for the potential payment of interest and penalties. The interest and penalties included in the accompanying consolidated statement of income was a benefit of $129,000 in 2021 and $145,000 in 2020.

The Company is currently under audit in one of its foreign tax jurisdictions. During 2021, the Company finalized its examination with the Internal Revenue Service for the tax years 2017 and 2018 with no material adjustments. It is reasonably possible that over the next fiscal year the amount of liability for unrecognized tax benefits may be reduced by up to $1,367,000 primarily from the expiration of tax statutes of limitations.

The Company remains subject to U.S. federal income tax examinations for the tax years 2019 through 2021, and to non-U.S. income tax examinations for the tax years 2008 through 2021. In addition, the Company remains subject to state and local income tax examinations in the United States for the tax years 2003 through 2021.

6. Short- and Long-Term Obligations

Short- and long-term obligations are as follows:

(In thousands)	January 1, 2022	January 2, 2021
Revolving Credit Facility, due 2023	$ 250,267	$ 217,963
Senior Promissory Notes, due 2023 to 2028	10,000	10,000
Finance Leases, due 2022 to 2026	1,610	1,631
Other Borrowings, due 2022 to 2028	7,637	3,880
Total	269,514	233,474
Less: Short-Term Obligations and Current Maturities of Long-Term Obligations	(5,356)	(1,474)
Long-Term Obligations	$ 264,158	$ 232,000

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

Revolving Credit Facility

The Company entered into an unsecured multi-currency revolving credit facility, dated as of March 1, 2017 (as amended and restated to date, the Credit Agreement). Pursuant to the Credit Agreement, the Company has a borrowing capacity of $400,000,000, with an uncommitted, unsecured incremental borrowing facility of $150,000,000 with a maturity date of December 14, 2023. 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 a margin of 0% to 1.25%, or (ii) Eurocurrency Rate, CDOR Rate, and RFR, (with a zero percent floor), as applicable and defined, plus a margin of 1% to 2.25%. The margin is determined based upon the ratio of the Company's total debt, net of unrestricted cash up to $30,000,000 and certain debt obligations, to earnings before interest, taxes, depreciation, and amortization as defined in the Credit Agreement.

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, 4.00 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.

The Company borrowed an aggregate $151,944,000 under the Credit Agreement in fiscal 2021, including $89,944,000 of euro-denominated borrowings, which were primarily used to fund the Company's acquisitions during the year. At year-end 2021, the outstanding balance under the Credit Agreement included $78,267,000 of euro-denominated borrowings. The Company had $149,920,000 of borrowing capacity available at year-end 2021, which was calculated by translating its foreign-denominated borrowings using the borrowing date foreign exchange rate.

The weighted average interest rate for the outstanding balance under the Credit Agreement was 1.50% as of year-end 2021.

See Note 10, Derivatives, under the heading *Interest Rate Swap Agreements*, for information relating to the Company's 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, 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 Initial Notes are guaranteed by certain of the Company’s domestic subsidiaries.

Debt Compliance

At year-end 2021, the Company was in compliance with the covenants related to its debt obligations.

Finance Leases

The Company's finance leases primarily relate to contracts for vehicles. See Note 9, Leases, for further information relating to the Company's finance leases.

Other Borrowings

Other borrowings include a sale-leaseback financing arrangement for a manufacturing facility in Germany. Under this arrangement, the quarterly lease payment includes principal, interest, and a payment to the landlord toward a loan receivable. The interest rate on the outstanding obligation is 1.79%. The secured loan receivable, which was included in other current assets in the accompanying consolidated balance sheet, was $1,408,000 at year-end 2021. The lease arrangement provides for a fixed price purchase option, net of the projected loan receivable, of $1,508,000 at the end of the lease term in August 2022. If the

Company does not exercise the purchase option for the facility, it will receive cash from the landlord to settle the loan receivable. As of year-end 2021, $3,297,000 was outstanding under this obligation.

Other borrowings also include $4,331,000 of debt obligations outstanding at year-end 2021 assumed in the acquisition of Clouth, which has maturity dates ranging from 2022 to 2028 and interest rates up to 1.95%.

Annual Repayment Requirements

The following schedule presents the annual repayment requirements for the Company’s short-and long-term obligations, excluding finance leases and the sale-leaseback financing arrangement, as of year-end 2021.

(In thousands)	
2022	$ 1,197
2023	252,855
2024	2,319
2025	2,322
2026	2,150
2027 and Thereafter	3,764
	$ 264,607

7. Commitments and Contingencies

Letters of Credit and Bank Guarantees

Outstanding letters of credit and bank guarantees issued on behalf of the Company, principally relating to performance obligations and customer deposit guarantees, totaled $23,464,000 at year-end 2021. Certain of the Company's contracts require the Company to provide a standby letter of credit or bank guarantee to a customer as beneficiary, limited in amount to a negotiated percentage of the total contract value, in order to guarantee warranty and performance obligations of the Company under the contract. Typically, these standby letters of credit and bank guarantees expire without being drawn by the beneficiary.

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 noninterest-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 $9,593,000 at year-end 2021 and $7,568,000 at year-end 2020 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.

Contingencies

In the ordinary course of business, the Company is, at times, required to issue limited performance guarantees, some of which do not require the issuance of letters of credit to customers in support of these guarantees, relating to its equipment and systems. The Company generally limits its liability under these guarantees to amounts typically capped at 10% or less of the value of the contract. The Company believes that it has adequate reserves for any potential liability in connection with such guarantees.

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.

8. Other Costs, Net

Restructuring Costs

During 2021, the Company recorded restructuring costs totaling $481,000 within its Flow Control segment, including charges for the write-down of certain machinery and equipment of $226,000 and an ROU asset of $79,000, and severance costs of $176,000 related to the reduction of three employees. These actions were taken to eliminate a redundant ceramic blade manufacturing operation in France that resulted from the Company's acquisition of Clouth in the third quarter of 2021.

During 2020, the Company recorded restructuring costs totaling $1,118,000, representing severance costs of $659,000 for 34 employees within its Flow Control segment, $277,000 for 26 employees in its Industrial Processing segment, and $182,000 for four employees in its Material Handling segment. The Company also reduced its workforce by 21 employees in its Industrial Processing segment with no associated severance costs. The Company took these cost-containment actions to reduce payroll-related overhead and operating costs in response to the slowdown in the global economy, largely driven by the COVID-19 pandemic.

During 2019, the Company experienced a significant decrease in revenue and operating results in its timber-harvesting product line included within its Industrial Processing segment. Given the decline in this business, the Company undertook a restructuring plan in the fourth quarter of 2019 and incurred $192,000 of severance costs associated with the reduction of six employees in Canada.

The Company expects to incur additional restructuring charges in 2022 primarily for severance and facility closure costs related to its 2021 restructuring plan, which are not expected to be significant. The Company does not expect to incur additional charges related to the 2020 and 2019 restructuring plans. Restructuring costs are included in impairment and other costs, net in the accompanying consolidated statement of income.

A summary of the changes in accrued restructuring costs included in other accrued expenses in the accompanying consolidated balance sheet, which are expected to be paid in 2022, are as follows:

(In thousands)	**Severance**
2021 Restructuring Plan	
Provision	$ 176
Usage	(19)
Currency translation	(1)
Balance at January 1, 2022	$ 156
2020 Restructuring Plan	
Provision	$ 1,118
Usage	(1,052)
Currency translation	(5)
Balance at January 2, 2021	61
Usage	(61)
Balance at January 1, 2022	$ —
2019 Restructuring Plan	
Provision	$ 192
Usage	(109)
Currency translation	1
Balance at December 28, 2019	84
Usage	(90)
Currency translation	6
Balance at January 2, 2021	$ —

Other Income

Other income consisted of a gain of $515,000 in 2021 related to the sale of a building in Theodore, Alabama, within the Company's Industrial Processing segment for net cash proceeds of $1,634,000. The building was vacated as part of the Company's 2017 restructuring plan to consolidate three of its stock-preparation operations into a single new facility, which was completed in 2018.

9. Leases

The Company enters into operating and finance lease commitments primarily for its manufacturing and office space, vehicles, and equipment leases that expire on various dates over the next 13 years, some of which include one or more options to extend the lease for up to 5 years. In addition, the Company leases land associated with certain of its buildings in Canada and China under long-term leases expiring on various dates ranging from 2032 to 2071, one of which includes an assumed option to extend the lease for up to 10 years.

The components of lease expense are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Operating Lease Cost	$ 5,895	$ 5,602	$ 5,534
Short-Term Lease Cost	674	671	715
Finance Lease Cost:			
ROU asset amortization	1,045	1,157	1,213
Interest on lease liabilities	46	74	94
Total Finance Lease Cost	1,091	1,231	1,307
Total Lease Costs	$ 7,660	$ 7,504	$ 7,556

Supplemental cash flow information related to leases is as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Cash Paid for Amounts Included in the Measurement of Lease Liabilities:			
Operating cash flows from operating leases	$ 12,474	$ 5,782	$ 5,636
Operating cash flows from finance leases	$ 46	$ 74	$ 93
Financing cash flows from finance leases	$ 1,044	$ 1,139	$ 1,144
ROU Assets Obtained in Exchange for Lease Obligations (a):			
Operating leases	$ 7,247	$ 2,560	$ 28,484
Finance leases	$ 1,147	$ 622	$ 3,847

(a) Included in 2019 were additions related to the transition adjustment for the adoption of ASC 842. The post-adoption additions of operating leases were $13,167,000, of which $10,994,000 related to ROU assets obtained as part of the acquisition of SMH in 2019. The post-adoption additions of finance leases were $2,496,000, of which $528,000 related to ROU assets obtained as part of the acquisition of SMH.

Supplemental balance sheet information related to leases is as follows:

(In thousands)	Balance Sheet Line Item	January 1, 2022	January 2, 2021
Operating Leases:			
ROU assets (a)	Other current assets	$ 2,341	$ —
ROU assets	Other assets	24,998	25,460
Total operating lease assets		$ 27,339	$ 25,460
Short-term liabilities	Other current liabilities	$ 4,596	$ 4,396
Long-term liabilities	Other long-term liabilities	19,959	22,198
Total operating lease liabilities		$ 24,555	$ 26,594

(In thousands)	Balance Sheet Line Item	January 1, 2022	January 2, 2021
Finance Leases:			
ROU assets, at cost	Property, plant, and equipment, at cost	$ 4,076	$ 3,707
ROU assets accumulated amortization	Accumulated depreciation and amortization	(2,489)	(2,108)
ROU assets, net	Property, plant, and equipment, net	$ 1,587	$ 1,599
Short-term obligations	Short-term obligations and current maturities of long-term obligations	$ 862	$ 915
Long-term obligations	Long-term obligations	748	716
Total finance lease liabilities		$ 1,610	$ 1,631

(a) See Note 15, Subsequent Event, for further details.

	January 1, 2022	January 2, 2021
Weighted Average Remaining Lease Term (in years):		
Operating leases	8.7	9.4
Finance leases	2.1	2.0
Weighted Average Discount Rate:		
Operating leases	3.82 %	3.88 %
Finance leases	2.55 %	3.52 %

As of January 1, 2022, future lease payments for lease liabilities are as follows:

(In thousands)	Operating Leases	Finance Leases
2022	$ 5,379	$ 889
2023	4,316	561
2024	3,292	178
2025	2,727	17
2026	2,179	3
2027 and Thereafter	11,343	—
Total Future Lease Payments	29,236	1,648
Less: Imputed Interest	(4,681)	(38)
Present Value of Lease Payments	$ 24,555	$ 1,610

As of January 1, 2022, the Company had no significant operating and finance leases that had not yet commenced.

10. Derivatives

Interest Rate Swap Agreements

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 6, 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 consolidated statement of income associated with the Company's forward currency-exchange contracts that were not designated as hedges were not material in 2021, 2020, and 2019.

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

		January 1, 2022		January 2, 2021	
(In thousands)	**Balance Sheet Location**	**Asset (Liability) (a)**	**Notional Amount (b)**	**Asset (Liability) (a)**	**Notional Amount**
Derivatives Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Forward currency-exchange contract	Other Current Assets	$ —	$ —	$ 25	$ 842
Derivatives in a Liability Position:					
Forward currency-exchange contract	Other Current Liabilities	$ (44)	$ 842	$ —	$ —
2018 Swap Agreement	Other Long-Term Liabilities	$ (550)	$ 15,000	$ (1,099)	$ 15,000
Derivatives Not Designated as Hedging Instruments:					
Derivatives in an Asset Position:					
Forward currency-exchange contracts	Other Current Assets	$ 14	$ 1,200	$ 12	$ 582
Derivatives in a Liability Position:					
Forward currency-exchange contracts	Other Current Liabilities	$ —	$ —	$ (7)	$ 825

(a) See Note 11, Fair Value Measurements and Fair Value of Financial Instruments, for the fair value measurements relating to these financial instruments.

(b) The year-end 2021 notional amounts are indicative of the level of the Company's recurring derivative activity during the year.

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 year ended January 1, 2022:

(In thousands)	Interest Rate Swap Agreements	Forward Currency-Exchange Contracts	Total
Unrealized (Loss) Gain, Net of Tax, at January 2, 2021	$ (846)	$ 18	$ (828)
Loss (gain) reclassified to earnings (a)	343	(119)	224
Gain recognized in AOCI	74	68	142
Unrealized Loss, Net of Tax, at January 1, 2022	$ (429)	$ (33)	$ (462)

(a) See Note 14, Accumulated Other Comprehensive Items, for the income statement classification.

At year-end 2021, the Company expects to reclassify losses of $337,000 from AOCI to earnings over the next twelve months based on the estimated cash flows of the interest rate swap agreement and the maturity date of the forward currency-exchange contract.

11. Fair Value Measurements and Fair Value of Financial Instruments

Fair value measurement is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date.

A fair value hierarchy is established, which prioritizes the inputs used in measuring fair value into three broad levels as follows:

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

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

	Fair Value as of January 1, 2022			
(In thousands)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets:				
Money market funds and time deposits	$ 13,458	$ —	$ —	$ 13,458
Banker's acceptance drafts (a)	$ —	$ 8,049	$ —	$ 8,049
Forward currency-exchange contracts	$ —	$ 14	$ —	$ 14
Liabilities:				
2018 Swap Agreement	$ —	$ 550	$ —	$ 550
Forward currency-exchange contract	$ —	$ 44	$ —	$ 44

	Fair Value as of January 2, 2021			
(In thousands)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets:				
Money market funds and time deposits	$ 8,054	$ —	$ —	$ 8,054
Banker's acceptance drafts (a)	$ —	$ 9,445	$ —	$ 9,445
Forward currency-exchange contracts	$ —	$ 37	$ —	$ 37
Liabilities:				
2018 Swap Agreement	$ —	$ 1,009	$ —	$ 1,009
Forward currency-exchange contracts	$ —	$ 7	$ —	$ 7

(a) Included in accounts receivable in the accompanying 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 2021. 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 the Company's debt obligations, excluding lease obligations, are as follows:

	January 1, 2022		January 2, 2021	
(In thousands)	**Carrying Value**	**Fair Value**	**Carrying Value**	**Fair Value**
Debt Obligations:				
Revolving credit facility	$ 250,267	$ 250,267	$ 217,963	$ 217,963
Senior promissory notes	10,000	10,947	10,000	11,157
Other	4,331	4,331	—	—
	$ 264,598	$ 265,545	$ 227,963	$ 229,120

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

12. Business Segment and Geographical Information

The Company has combined its operating entities into 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:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Revenue			
Flow Control (a)	$ 288,788	$ 225,444	$ 250,339
Industrial Processing	328,762	261,577	301,948
Material Handling (b)	169,029	148,007	152,357
	$ 786,579	$ 635,028	$ 704,644
Income Before Provision for Income Taxes			
Flow Control (a,c)	$ 65,509	$ 51,530	$ 55,343
Industrial Processing (d)	66,569	42,971	49,599
Material Handling (b,e)	17,543	14,375	11,600
Corporate (f)	(32,911)	(27,752)	(28,719)
Total operating income	116,710	81,124	87,823
Interest expense, net (g)	(4,554)	(7,242)	(12,542)
Other expense, net (g,h)	(104)	(195)	(6,359)
	$ 112,052	$ 73,687	$ 68,922
Total Assets			
Flow Control (a)	$ 382,379	$ 263,141	$ 262,320
Industrial Processing	405,575	379,965	375,194
Material Handling (b)	334,785	273,909	281,057
Corporate (i)	9,473	10,556	20,816
	$ 1,132,212	$ 927,571	$ 939,387

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019
Depreciation and Amortization			
Flow Control (a)	$ 8,366	$ 6,333	$ 6,603
Industrial Processing	13,467	13,163	13,012
Material Handling (b)	12,341	11,628	12,528
Corporate	128	210	247
	$ 34,302	$ 31,334	$ 32,390
Capital Expenditures			
Flow Control (a)	$ 4,128	$ 2,808	$ 2,639
Industrial Processing	6,412	3,123	5,113
Material Handling (b)	2,211	1,539	2,144
Corporate	20	125	61
	$ 12,771	$ 7,595	$ 9,957
Geographical Information			
Revenue (j):			
United States (b)	$ 328,456	$ 286,015	$ 309,957
China	82,121	51,003	66,480
Canada	79,426	62,059	64,010
Germany (a)	37,178	23,292	29,076
France	28,258	19,725	21,054
Other	231,140	192,934	214,067
	$ 786,579	$ 635,028	$ 704,644
Long-lived Assets (k):			
United States (b)	$ 43,418	$ 40,293	$ 42,094
Germany (a)	25,188	6,051	5,925
Canada	8,460	7,221	7,948
Finland	7,347	8,013	6,960
China	6,613	9,844	10,319
Other	16,963	13,220	12,786
	$ 107,989	$ 84,642	$ 86,032

(a) Includes the Clouth business in 2021, which was acquired between July 19, 2021 and August 10, 2021 (see Note 2, Acquisitions).
(b) Includes the Balemaster business in 2021, which was acquired on August 23, 2021 (see Note 2, Acquisitions).
(c) Includes acquisition-related expenses of $6,191,000 and impairment and restructuring charges of $980,000 in 2021. Acquisition-related expenses include amortization expense associated with acquired profit in inventory and backlog, and acquisition costs.
(d) Includes $1,861,000 of impairment charges in 2020 and $2,336,000 in 2019.
(e) Includes acquisition-related expenses of $2,851,000 in 2021, $350,000 in 2020 and $5,715,000 in 2019. Acquisition-related expenses include amortization expense associated with acquired profit in inventory and backlog, and acquisition costs.
(f) Represents general and administrative expenses.
(g) The Company does not allocate interest and other expense, net to its segments.
(h) Includes a pension plan settlement loss of $5,887,000 in 2019.
(i) Primarily includes cash and cash equivalents, tax assets, ROU assets, and property, plant, and equipment, net.
(j) Revenue is attributed to countries based on customer location.
(k) Represents property, plant, and equipment, net.

13. Earnings per Share

Basic and diluted EPS were calculated as follows:

(In thousands, except per share amounts)	January 1, 2022	January 2, 2021	December 28, 2019
Net Income Attributable to Kadant	$ 84,043	$ 55,196	$ 52,068
Basic Weighted Average Shares	11,579	11,482	11,235
Effect of Stock Options, Restricted Stock Units and Employee Stock Purchase Plan Shares	76	82	222
Diluted Weighted Average Shares	11,655	11,564	11,457
Basic Earnings per Share	$ 7.26	$ 4.81	$ 4.63
Diluted Earnings per Share	$ 7.21	$ 4.77	$ 4.54

The effect of outstanding and unvested RSUs of the Company's common stock totaling 14,200 shares in 2021, 22,900 shares in 2020, and 24,000 shares in 2019 was not included in the computation of diluted EPS for the respective periods as the effect would have been antidilutive or, for unvested performance-based RSUs, the performance conditions had not been met as of the end of the reporting periods.

14. 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 consolidated balance sheet.

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

(In thousands)	Foreign Currency Translation Adjustment	Pension and Other Post-Retirement Benefit Liability Adjustments	Deferred Loss on Cash Flow Hedges	Total
Balance at January 2, 2021	$ (17,894)	$ (770)	$ (828)	$ (19,492)
Other comprehensive items before reclassifications	(11,202)	(67)	142	(11,127)
Reclassifications from AOCI	—	45	224	269
Net current period other comprehensive items	(11,202)	(22)	366	(10,858)
Balance at January 1, 2022	$ (29,096)	$ (792)	$ (462)	$ (30,350)

Amounts reclassified out of AOCI are as follows:

(In thousands)	January 1, 2022	January 2, 2021	December 28, 2019	Statement of Income Line Item
Retirement Benefit Plans				
Recognized net actuarial loss	$ (50)	$ (66)	$ (70)	Other expense, net
Amortization of prior service cost	(12)	(55)	(6)	Other expense, net
Pension plan settlement loss	—	—	(5,887)	Other expense, net
Total expense before income taxes	(62)	(121)	(5,963)	
Income tax benefit (provision)	17	153	(641)	Provision for income taxes
	(45)	32	(6,604)	
Cash Flow Hedges (a)				
Interest rate swap agreements	(451)	(333)	(8)	Interest expense
Forward currency-exchange contracts	—	28	(169)	Cost of revenue
Forward currency-exchange contracts	157	—	—	SG&A expense
Total expense before income taxes	(294)	(305)	(177)	
Income tax benefit	70	73	54	Provision for income taxes
	(224)	(232)	(123)	
Total Reclassifications	$ (269)	$ (200)	$ (6,727)	

(a) See Note 10, Derivatives, for additional information.

Notes to Consolidated Financial Statements

15. Subsequent Event

The Company's largest subsidiary in China, which manufactures stock-preparation equipment, is located in an area that has become primarily residential. As a result, the Company entered into several agreements with the local government to sell its existing manufacturing building and land use rights for approximately $25,140,000 and build a new facility in another location. These agreements will become effective when the Company receives the required down payment and secures a land use right in a new location. As of year-end 2021, the Company has received a 25% down payment on the agreed upon sale price with an additional required down payment of 6% expected in the first quarter of 2022. Once the agreements are effective, which is expected in the first quarter of 2022, the Company will recognize a gain on sale and a receivable for the remaining amount of the sale proceeds. The remaining amount of the sale proceeds is due the earlier of when the government sells the property or within two years from the effective date of the agreements. The Company's subsidiary will continue to occupy its current facility until construction on its new facility is complete. As of year-end 2021, the carrying value of the existing building and land use right totaling $5,264,000 is included in other current assets in the accompanying consolidated balance sheet. In addition, in the fourth quarter of 2021, the Company entered into an agreement for a new land use right valued at $3,719,000, which is included in other assets in the accompanying consolidated balance sheet.

DIRECTORS AND EXECUTIVE OFFICERS

(As of March 30, 2022)

DIRECTORS

Jonathan W. Painter Chairman of the Board of Directors, Former President and Chief Executive Officer, Kadant Inc.

John M. Albertine Chairman and Chief Executive Officer, Albertine Enterprises, Inc. (public policy consulting firm)

Thomas C. Leonard Director, Former Chief Financial Officer and Chief Accounting Officer, Dynasil Corporation of America (manufacturer of detection and optical components)

Jeffrey L. Powell President, Chief Executive Officer, and Director, Kadant Inc.

Erin L. Russell Former Principal, Vestar Capital Partners, L.P. (Private equity firm specializing in management buyouts, recapitalizations, and growth equity investments)

William P. Tully Emeritus Provost, Vice President and Professor, State University of New York, College of Environmental Science and Forestry (educational institution)

EXECUTIVE OFFICERS

Jeffrey L. Powell President, Chief Executive Officer, and Director

Michael J. McKenney Executive Vice President and Chief Financial Officer

Eric T. Langevin Executive Vice President and Chief Operating Officer

Stacy D. Krause Senior Vice President, General Counsel, and Secretary

Dara F. Mitchell Senior Vice President, Corporate Development

Deborah S. Selwood Senior Vice President and Chief Accounting Officer

Thomas Andrew Blanchard Vice President

Michael C. Colwell Vice President

Peter J. Flynn Vice President

Fredrik H. Westerhout Vice President

CORPORATE INFORMATION

STOCKHOLDER INFORMATION REQUESTS

Stockholders who desire information about Kadant Inc. may contact us at One Technology Park Drive, Westford, MA 01886 (telephone: 978-776-2000). Information of interest to stockholders and investors, such as our quarterly reports, annual reports, press releases and other information, is available on our website at www.kadant.com, under “Investors.”

STOCK TRANSFER AGENT

American Stock Transfer & Trust Company is our stock transfer agent and maintains stockholder activity records. The agent will respond to questions on issuance of stock certificates, change of ownership, lost stock certificates, and change of address. For these and similar matters, please direct inquiries to: American Stock Transfer & Trust Company, Shareholder Services Department, 6201 15th Avenue, Brooklyn, NY 11219 (telephone: 718-921-8124 or 800-937-5449) or visit www.ASTfinancial.com.

ANNUAL MEETING

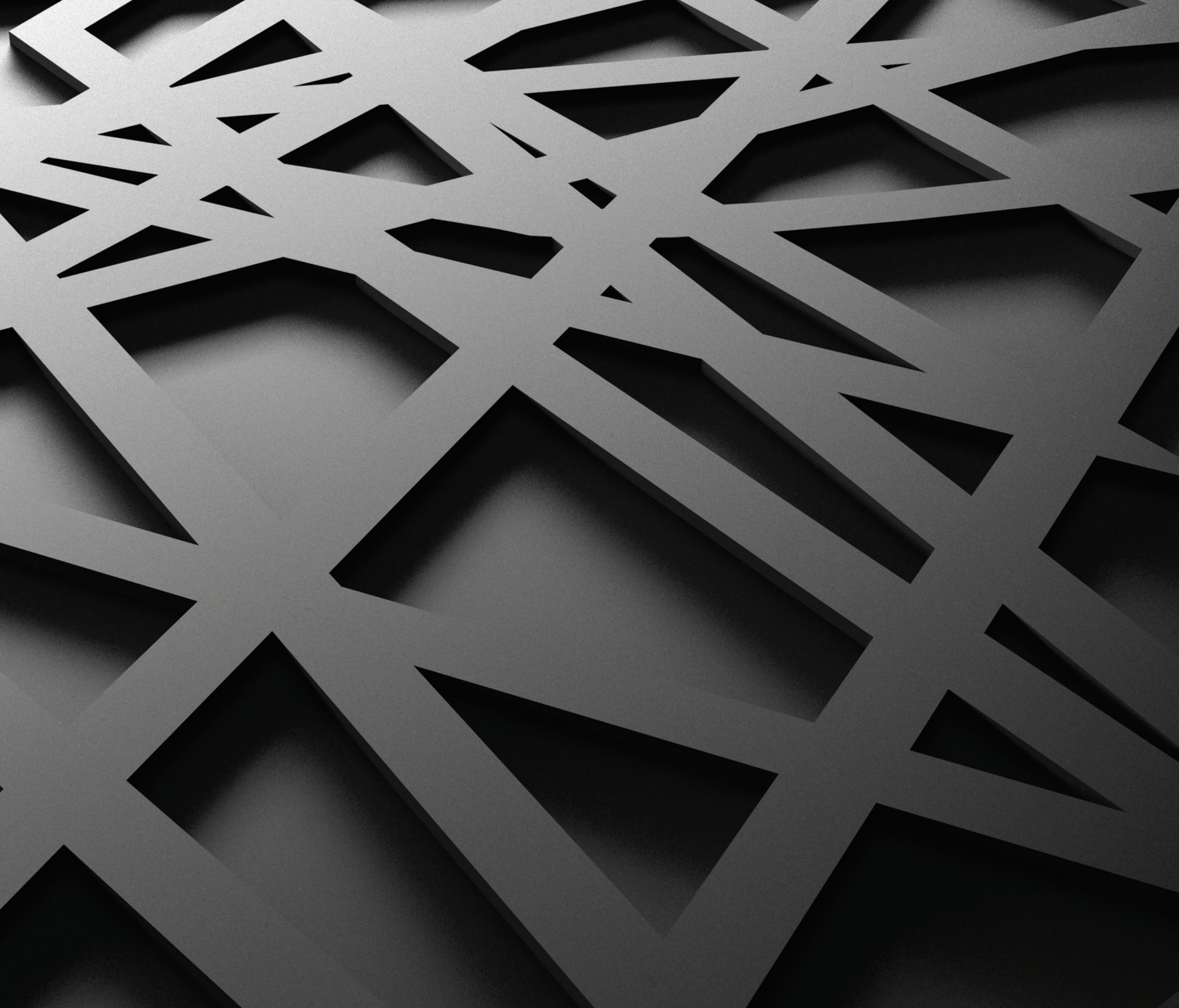
The annual meeting of stockholders will be held on Wednesday, May 18, 2022 in person at Kadant Inc., One Technology Park Drive, Westford, MA 01886 and online at https://agn.issuerdirect.com/kai.

ANNUAL REPORT ON FORM 10-K

The accompanying Annual Report on Form 10-K for the fiscal year ended January 1, 2022, does not contain exhibits. Exhibits have been filed with the Securities and Exchange Commission (SEC). To obtain a copy of these exhibits, as well as periodic reports filed with the SEC, please contact Michael McKenney, Executive Vice President and Chief Financial Officer, Kadant Inc., One Technology Park Drive, Westford, MA 01886 (telephone: 978-776-2000).

FORWARD-LOOKING STATEMENTS

This annual report contains “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “intends,” “anticipates,” “plans,” “expects,” “seeks,” “estimates,” “would,” “should,” “likely,” “will,” “may,” “continue,” “could,” or similar expressions are intended to identify forward-looking statements. While we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change. A number of factors could cause our results to differ materially from those indicated by such forward-looking statements, including those detailed under the heading “Risk Factors” in Part 1, Item 1A in the accompanying Annual Report on Form 10-K for the fiscal year ended January 1, 2022 and subsequent filings with the Securities and Exchange Commission.



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