

Dear Nordson shareholder,

In fiscal 2024, we continued to make progress on our Ascend Strategy, delivering record sales of \$2.7 billion and record EBITDA dollars of \$849 million, or 32% of sales. Our strategy is delivering results and tracking toward our commitment of \$3 billion in sales and 30% EBITDA by 2025. This is a testament to our employees, who have, in the last four years, embraced the Ascend Strategy and delivered results despite dynamic global macro conditions, end market changes, supply chain disruptions and more.

Nordson has unique competitive advantages that position us to accelerate growth. We are a market leader in diversified niche end markets. We demonstrate value to our customers with differentiated product solutions. In addition, our close to the customer business model ensures we are working hand-in-hand with our customers to solve problems, drive efficiency, reduce material waste and more.

NBS Next is a Competitive Advantage

Since launching the Ascend Strategy in 2021, we have added new capabilities to our model, including the NBS Next growth framework and a division-led structure, which have empowered our teams to respond rapidly to changing market conditions. The data-driven NBS Next growth framework fuels the decisions our businesses make every day in terms of how to prioritize our resources. We measure success based on four simple metrics: key account revenue growth, new product revenue as a percentage of total revenue, product quality and delivery, and employee engagement. Excellence in these NBS Next metrics accelerates profitable growth. I encourage you to visit <u>nordson.com/investors</u> to watch a recording of our October 3, 2024, Investor Day, where we shared several examples of NBS Next in action. For instance:

NBS Next is accelerating our new product go-to-market strategy. In 2024, our X-ray test and inspection product line launched the next generation Nordson[®] Quadra[™] Pro manual x-ray system in less than a year. Using data and voice of the customer research, the team was able to focus its resources on developing cutting-edge software capabilities and advancing our x-ray tube and detector technology to deliver enhanced product imaging. In addition to the accelerated launch, the team simplified the product based on customer feedback, reducing lead times of the new product from six months to two weeks and improving on-time delivery by 45%! That is a significant competitive advantage.

NBS Next is improving lead times and on-time delivery. Our Industrial Coatings division identified an opportunity to simplify its powder coating product line from engineered to configured-to-order. Based on customer data and voice of the customer research on growing technology needs, the team simplified its product SKU complexity by 75%, reducing lead times from 16 to 4 weeks and improving on-time delivery of these products by 30%.

Put simply, NBS Next is using strategic discipline to make choices, focusing on the key priorities and simplifying elsewhere. These are two great examples of the businesses using data to identify top priorities, which has resulted in operational excellence, outstanding improvement on product lead-times, and share growth with our customers.

Transforming the Portfolio through Disciplined Capital Deployment

We have a track record of strong capital deployment. Over the past five years, we have invested roughly \$800 million in capital and product development costs to support our growth. The additional \$3.7 billion we have deployed over the past five years has been biased toward growth with approximately two-thirds funding strategic acquisitions and one-third to shareholder returns in the form of both dividends and share repurchases. In August 2024, Nordson marked its 61st consecutive year of dividend increases to its shareholders, securing its position as a dividend aristocrat.

Through the Ascend Strategy, we have accelerated our inorganic growth strategy, creating significant shareholder value. In 2024, we acquired Atrion Medical, a leader in proprietary medical infusion fluid delivery and niche cardiovascular solutions. This acquisition expands our medical fluid components addressable market significantly by adding products and solutions for infusion therapies and drug delivery. It also expands our current offering to top medical device customers and broadens Nordson's exposure to significant single-use consumables with recurring revenue streams. We expect Atrion to be a solid growth driver in fiscal 2025 and beyond.

Over the last ten years, we have grown our top-line revenue cumulatively by nearly 60%. While doing so, we have increased our share of recurring revenue from 40% to well over 50%, giving us better stability in the performance of our portfolio. Roughly half of our portfolio today is focused on higher growth end markets, such as medical and electronics, with the balance focused on lower growth, but stable end markets. When end-market cycles or unique macro-conditions have slowed organic growth, the importance of recurring revenue and our inorganic capital deployment strategy are emphasized.

Supporting Growth with Winning Teams

Everything we do is predicated on having a strong team of performance-driven employees. We intentionally invest in our employees, support company growth and develop a talent pipeline by providing opportunities for education and developing leaders at all levels who inspire collaboration and trust. In turn, Nordson offers a unique culture defined by connection, impact, entrepreneurial spirit and opportunity.

Our leadership team is supported by a strong and diverse board of directors. In 2024, we were fortunate to add two leaders to our board:

- Christopher Mapes, retired president and chief executive officer of Lincoln Electric
- Annette Clayton, retired president and chief executive officer of Schneider Electric North America

Both Chris and Annette bring extensive experience leading diversified global manufacturing companies. Chris has significant experience in the areas of mergers and acquisitions, global operations, international compliance and developing and implementing strategic operating plans. Annette brings great insight on electronics end markets and applications, as well as her robust knowledge on manufacturing, engineering operations, quality and productivity improvements.

Thank You for Your Support

In 2024, our Ascend Strategy continued to deliver results. Even in uncertain times, our team delivers operational excellence and strong cash flow due to our core competitive advantages, including the NBS Next growth framework. Nordson is better positioned today than ever, as a reliable growth compounder with steady cash flow.

Thank you to our shareholders, customers and employees for another strong year.



Sincerely,

S. Nagnafz

Sundaram Nagarajan President and Chief Executive Officer

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 X

For the fiscal year ended October 31, 2024

OR

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

> For the transition period from to

Commission file number 0-7977

NORDSON CORPORATION

(Exact name of Registrant as specified in its charter)

Ohio (State or other jurisdiction of incorporation or organization

28601 Clemens Road Westlake, Ohio

(Address of principal executive offices)

34-0590250 (I.R.S. Employer Identification No.) 44145

(Zip Code)

(440) 892-1580 (Registrant's Telephone Number, including area code)

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

<u>Title of Each Class</u>	Trading Symbol(s)	<u>Name of Each Exchange on which</u> <u>Registered</u>
Common Shares, without par value	NDSN	Nasdaq Stock Market LLC

Common Shares, without par value

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 \boxtimes No \square

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 \boxtimes No \square

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	X	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 \Box

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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to 240.10D-1(b).

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

The aggregate market value of Common Shares, no par value per share, held by nonaffiliates (based on the closing sale price on the Nasdaq Stock Market) as of April 30, 2024 was approximately \$14,758,563,021.

There were 57,016,026 Common Shares outstanding as of November 30, 2024.

Documents incorporated by reference:

Portions of the Definitive Proxy Statement for the 2025 Annual Meeting of Shareholders - Part III of the Form 10-K

Table of Contents

PART I		4
Item 1.	Business	4
	General Description of Business	4
	Corporate Purpose and Goals	4
	Principal Products and Uses	5
	Manufacturing, Raw Materials and Other Resources	6
	Intellectual Property	7
	Seasonal Variation in Business	7
	Competitive Conditions	7
	Compliance with Governmental Regulations	8
	Human Capital Resources	9
	Available Information	10
Item 1A.	Risk Factors	10
Item 1B.	Unresolved Staff Comments	18
Item 1C.	Cybersecurity	18
Item 2.	Properties	19
Item 3.	Legal Proceedings	21
Item 4.	Mine Safety Disclosures	21
	Information about Our Executive Officers	22
PART II		24
Item 5.	Market for the Company's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	24
	Market Information and Dividends	24
	Performance Graph	24
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	26
	Critical Accounting Policies and Estimates	26
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	33
Item 8.	Financial Statements and Supplementary Data	34
	Consolidated Statements of Income	34
	Consolidated Statements of Comprehensive Income	35
	Consolidated Balance Sheets	36
	Consolidated Statements of Shareholders' Equity	37
	Consolidated Statements of Cash Flows	38
	Notes to Consolidated Financial Statements	39
	Management's Report on Internal Control Over Financial Reporting	69
	Report of Independent Registered Public Accounting Firm - Internal Controls Opinion	70
	Report of Independent Registered Public Accounting Firm - Financial Statement Opinion	71
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	73
Item 9A.	Controls and Procedures	73
Item 9B.	Other Information	73
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	73

Table of Contents

PART III		74
Item 10.	Directors, Executive Officers and Corporate Governance	74
Item 11.	Executive Compensation	74
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	74
	Equity Compensation Table	74
Item 13.	Certain Relationships and Related Transactions, and Director Independence	75
Item 14.	Principal Accountant Fees and Services	75
PART IV		76
Item 15.	Exhibits and Financial Statement Schedule	76
	(a) 1. Financial Statements	76
	(a) 2. Financial Statement Schedule	76
	(a) 3. Exhibits	76
	Index to Exhibits	77
Item 16.	Form 10-K Summary	80
	Signatures	81
	Schedule II – Valuation and Qualifying Accounts and Reserves	83

PART I

NOTE REGARDING AMOUNTS AND FISCAL YEAR REFERENCES

In this annual report, all amounts related to United States dollars and foreign currency and to the number of Nordson Corporation's common shares, except for per share earnings and dividend amounts, are expressed in thousands unless otherwise indicated. Unless the context otherwise indicates, all references to "we," "us," "our," or the "Company" mean Nordson Corporation.

Unless otherwise noted, all references to years relate to our fiscal year ending October 31.

Item 1. Business

General Description of Business

Nordson is an innovative precision technology company that leverages a scalable growth framework to deliver top tier growth with leading margins and returns. We engineer, manufacture and market differentiated products and systems used for precision dispensing, applying and controlling of adhesives, coatings, polymers, sealants, biomaterials, and other fluids, to test and inspect for quality, and to treat and cure surfaces and various medical products such as: catheters, cannulas, medical balloons and medical tubing. These products are supported with extensive application expertise and direct global sales and service. We serve a wide variety of consumer non-durable, consumer durable and technology end markets including packaging, electronics, medical, appliances, energy, transportation, precision agriculture, building and construction, and general product assembly and finishing.

Our strategy for long-term growth is based on solving customers' needs globally. We were incorporated in the State of Ohio in 1954 and are headquartered in Westlake, Ohio. Our products are marketed through a network of direct operations in more than 35 countries. Consistent with this global strategy, approximately 67 percent of our revenues were generated outside the United States in 2024.

As of October 31, 2024, we had approximately 8,000 employees worldwide. Our principal manufacturing facilities are located in the United States, the People's Republic of China, Germany, Ireland, Israel, Italy, Mexico, the Netherlands and the United Kingdom.

Corporate Purpose and Goals

We strive to be a vital, self-renewing, worldwide organization that, within the framework of ethical behavior and enlightened citizenship, grows and produces wealth for our customers, employees, shareholders and communities.

We operate for the purpose of creating balanced, long-term benefits for all of our constituencies.

We focus on long-term growth and returns. Each quarter, we may not produce increased sales, net income, or earnings per share, or exceed the comparative prior year's quarter. When short-term swings occur, we do not intend to alter our foundational objectives in efforts to mitigate the impact of these temporary occurrences.

In 2021, we launched the Ascend strategy, which is designed to deliver top tier revenue growth with leading margins and returns. Ascend is driven by three interconnected pillars: the NBS ("Nordson Business System") Next growth framework; Owner Mindset, our division-led organizational structure; and Winning Teams, our talent strategy. These three pillars are built upon the foundation of what makes Nordson special: our culture and our values.

The NBS Next growth framework, the heart of the Ascend strategy, uses data-based segmentation to identify our greatest opportunities for profitable growth and ensure we are investing our resources in those areas. Using data in a consistent and disciplined way, leaders across the Company are defining their strategic business priorities.

We drive organic growth by continually introducing new products and technology, providing high levels of customer service and support, capturing rapidly expanding opportunities in emerging geographies and leveraging existing technology into new applications. Additional growth comes through the acquisition of companies that have differentiated precision technology-based product portfolios, serve attractive high-growth end-markets applications and have a customer-centric business model. The primary goals of our acquisition strategy are to complement our current capabilities, diversify our business into new industry sectors with new customers and expand the scope of the solutions we can offer to our customers.

We strive to provide genuine customer satisfaction – it is the foundation upon which we continue to build our business.

Complementing our business strategy is the objective to provide opportunities for employee self-fulfillment, growth, security, recognition and equitable compensation. This goal is met through the Human Resources department's facilitation of employee training, leadership training and the creation of on-the-job growth opportunities. The result is a highly qualified and

professional global team capable of meeting corporate objectives. For more information, see "Human Capital Resources" below.

We recognize the value of employee participation in the planning process. Strategic and operating plans are developed by all divisions, resulting in a sense of ownership and commitment on the part of employees in accomplishing our objectives.

We are an equal opportunity employer.

At Nordson, we have a long and proud history of investing in the communities where we live and work. We are committed to contributing up to five percent of domestic pretax earnings to education, human welfare services and other charitable activities, particularly in communities where we have significant operations. Through the Nordson Corporation Foundation, we give back by providing grants to nonprofits in communities where we have facilities employing approximately 100 people. In recent years, we have extended our reach internationally through our 2:1 employee Matching Gifts, as well as community giving programs in ten international locations. Since 1989, we have donated more than \$173 million to communities where we live and work. In addition, our employees volunteered more than 113,000 hours through our Time 'N Talent and Dollars for Doers programs.

Principal Products and Uses

We are a diversified precision technology company that engineers, manufactures and markets differentiated products and systems used to dispense, apply and control adhesives, coatings, polymers, sealants, biomaterials, medical components, and other fluids, to test and inspect for quality, and to treat and cure surfaces. Our precision technology can be found in manufacturing facilities around the world producing a wide range of goods for consumer durable, consumer non-durable, medical and technology end markets. Equipment ranges from single-use components to manual, stand-alone units for low-volume operations to microprocessor-based automated systems for high-speed, high-volume production lines.

We market our products globally, primarily through a direct sales force, and also through qualified distributors and sales representatives. We have built a worldwide reputation for creativity and expertise in the design and engineering of high-technology application equipment that meets the specific needs of our customers. We create value for our customers by developing solutions that increase uptime, enable faster line speeds and reduce consumption of materials. We serve a broad customer base, both in terms of industries and geographic regions. In 2024, no single customer accounted for ten percent or more of our sales.

The following is a summary of the product lines and markets served by our operating segments:

Industrial Precision Solutions

This segment delivers proprietary dispensing and material processing technology, as well as measurement, inspection and control solutions to diverse end markets. Product line specific solutions reduce material consumption, increase line efficiency and enhance product quality and appearance. Technologies are used for processing polymers, inspection and measurement of food, tubing and films and dispensing adhesives, coatings, sealants and other materials. This segment primarily serves the consumer durables, non-durables, agriculture and industrial markets.

- *Industrial Coatings* Automated and manual dispensing products and systems for cold materials, container coating, liquid finishing and powder coating, as well as ultraviolet equipment used primarily in curing and drying operations. Key strategic markets include beverage containers and food cans, electric battery, appliances, automotive, building and construction, composites, electronics and medical.
- *Measurement and Control Solutions* In-line measurement sensors, gauges and analyzers using near-infrared, laser, X-ray, optical and nucleonic technologies, as well as proprietary algorithms and software. These precision applications ensure quality and reliability within the customers' manufacturing processes. Key strategic markets include consumer non-durable, film extrusion and converting, cable and tubing and energy storage.
- Nonwovens Dispensing, coating and laminating systems for applying adhesives, lotions, liquids and fibers to
 disposable products and continuous roll goods. Key strategic markets include adult incontinence products, baby
 diapers and child-training pants, hygiene products and surgical drapes, gowns, shoe covers and face masks.
- **Packaging** Automated adhesive dispensing systems used in the rigid packaged goods industries. Key strategic markets include packaging for food and beverage, pharmaceutical and other consumer goods.
- **Polymer Processing** Components and systems used in the thermoplastic and biopolymer melt stream in extrusion, injection molding, compounding, polymerization and recycling processes. Key strategic markets include flexible packaging, electronics, medical, building and construction, transportation and aerospace, and general consumer goods.

- **Precision Agriculture** Precision agriculture spraying solutions, including fluid components, such as nozzles, pumps and filters; smart components that measure and control the flow, quantity and location of dispensed fluid; and control systems that provide a greater variety of input and functionality to the customer. This broad product portfolio is supported by differentiated software and data capabilities.
- **Product Assembly** Dispensing, coating and laminating systems for the assembly of plastic, metal and wood products, for paper and paperboard converting applications and for the manufacturing of continuous roll goods. Key strategic markets include appliances, automotive components, building and construction materials, electronics, furniture, solar energy, and the manufacturing of bags, sacks, books, envelopes and folding cartons.

Medical and Fluid Solutions

This segment includes components and device solutions for medical, life science, high-tech industrial and other diverse end markets.

- *Medical* Components and devices for minimally invasive interventional surgical procedures, including cannulas, catheters and medical balloons. Products also include proprietary single-use plastic components in medical applications, including biopharmaceutical, patient care/surgical and diagnostic systems.
- *Fluid Management* Precision manual and semi-automated dispensers and highly engineered single-use plastic molded syringes, cartridges, tips and fluid connection components. Products are used within critical medical and industrial production processes and for applying and controlling the flow of adhesives, sealants and lubricants. Key strategic markets include electronics, industrial, medical and animal health.

Atrion Acquisition

On August 21, 2024, Nordson acquired Atrion Corporation, a Delaware corporation ("Atrion"), pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), dated as of May 28, 2024, among Nordson, Alpha Medical Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Nordson ("Merger Sub") and Atrion. Headquartered in Allen, Texas, Atrion is a manufacturer of proprietary medical products and generated approximately \$169 million in annual revenue in 2023. Established in 1944, Atrion supports customers globally through three FDA registered U.S. Food and Drug Administration manufacturing facilities located in the United States. Atrion's portfolio is included in the Company's Medical and Fluid Solutions segment. It consists of three key businesses that we believe will significantly expand Nordson's addressable market in infusion and cardiovascular therapies:

- Halkey Roberts is a leader in infusion fluid delivery solutions, including single-use original equipment manufacturer ("OEM") medical components such as swabable needle free and pressure relief valves.
- Atrion Medical is a leading provider of OEM interventional inflation devices for balloon catheterization, stent deployment and fluid delivery in structural heart, ears, nose and throat and gastrointestinal procedures.
- Quest Medical's highly differentiated myocardial protection devices and single-use consumables deliver real-time precise drug administration during cardiovascular surgery.

Advanced Technology Solutions

This segment integrates our proprietary product technologies into the progressive stages of a customer's production processes, such as surface treatment, precisely controlled dispensing of material and pre- and post-dispense test and inspection to ensure quality. This segment predominantly serves customers in the electronics end markets.

- *Electronics Systems* Automated dispensing systems for high-speed, accurate application of a broad range of attachment, protection and coating fluids, and related gas plasma treatment systems for cleaning and conditioning surfaces prior to dispense. Key strategic markets include the breadth of the electronics industry manufacturing supply chain that produces semiconductor, printed circuit board assemblies and electronic components.
- *Test and Inspection* Bond testing and automated optical, acoustic microscopy and x-ray inspection systems used in the semiconductor and printed circuit board industries. Key strategic markets include mobile phones, tablets, personal computers, wearable technology, liquid crystal displays, micro hard drives, microprocessors, printed circuit boards, flexible circuits, micro mechanical systems and semiconductor packaging.

Manufacturing, Raw Materials and Other Resources

Our production operations include machining, molding and assembly. We manufacture specially designed parts and assemble components into finished equipment. Many components are made in standard modules that can be used in more than one product or in combination with other components for a variety of models. We have principal manufacturing operations and

sources of supply in the United States in Ohio, Georgia, California, Colorado, Connecticut, Illinois, Michigan, Minnesota, Pennsylvania, Rhode Island, Tennessee, Florida, Texas, Alabama and Wisconsin; as well as in the People's Republic of China, Germany, Ireland, India, Israel, Italy, Mexico, the Netherlands and the United Kingdom.

Principal materials used to make our products are metals and plastics, typically in sheets, bar stock, castings, forgings, tubing and pellets. We also purchase many electrical and electronic components, fabricated metal parts, high-pressure fluid hoses, packings, seals and other items integral to our products. Suppliers are competitively selected based on cost, quality and service. Most significant raw materials that we use are available through multiple sources. We purchase most raw materials and other components on the open market and rely on third parties to provide certain finished goods. While these items are generally available from multiple sources, the cost of products sold may be affected by changes in the market price of raw materials and tariffs on certain raw materials, particularly imports from China, as well as disruptions in availability of raw materials, components and sourced finished goods.

We monitor and investigate alternative suppliers and materials based on numerous attributes including quality, service, financial stability and price. We currently source raw materials and components from a number of suppliers, but our ongoing efforts to improve service and manage compliance requirements and the cost effectiveness of our products may result in a reduction in the number of our suppliers.

Senior operating management supervises an extensive quality control program for our equipment, machinery and systems, and manufacturing processes.

Natural gas, electricity and other fuels are our primary energy sources. However, standby capacity for alternative sources is available if needed.

We continue to see a stabilization of the global supply chain, improved lead times and lower inflation risk. We enhanced our risk mitigation and sourcing efforts as a result of the COVID-19 pandemic and geopolitical tensions. Logistics flows have improved, and global forwarding rates have returned closer to pre-pandemic levels, except for Asia-origin shipments, which continue to be more volatile. We continue to see moderate rate increases on parcel and domestic trucking activity.

Intellectual Property

We rely on a combination of intellectual property rights, including patents, trademarks, copyrights, trade secrets and contractual provisions to protect our intellectual property. Our worldwide intellectual property portfolio is strengthened through innovation and brand recognition, and our comprehensive approach for protection and enforcement. We enter into confidentiality and intellectual property agreements with our employees that require them to disclose any inventions created in the scope of employment, convey all rights to those inventions to us and restrict the distribution of proprietary information. Risk factors associated with our intellectual property are discussed in Item 1A, "Risk Factors."

We protect and promote our intellectual property portfolio and take those actions we deem appropriate to enforce our intellectual property rights and to defend our rights to sell our products both domestically and internationally. Although in the aggregate, our global portfolio of more than 2,100 granted and pending patents and more than 1,000 trademarks are valuable assets that are important to our operations, we believe that our competitive advantage is also largely attributable to the technical, marketing and sales competence and capabilities of our employees, rather than on any individual patent or trademark. Therefore, we do not consider the expiration or loss of any single patent, trademark or intellectual property right, to be material to our business as a whole.

Seasonal Variation in Business

Historically, the highest volume of sales occurs in the second half of the fiscal year due in large part to the timing of customers' capital spending programs. Accordingly, fiscal first quarter sales volume is typically the lowest of the year due to timing of customers' capital spending programs and customer holiday shutdowns.

Competitive Conditions

We operate in a competitive global marketplace and compete with many large, well-established and highly competitive manufacturers and service providers. Our business is affected by a range of macroeconomic conditions, including industry capacity changes, global competition and economic conditions in the U.S. and abroad, as well as fluctuations in currency exchange rates. Our equipment is sold in competition with a wide variety of alternative bonding, sealing, finishing, coating, processing, testing, inspecting and fluid control techniques. Potential uses for our equipment include any production processes that require preparation, modification or curing of surfaces; dispensing, application, processing or control of fluids and materials; or testing and inspecting for quality.

Many factors influence our competitive position, including pricing, product quality and service. We maintain a leadership position in our business segments by delivering high-quality, innovative products and technologies, as well as global service and technical support. Working with customers to understand their processes and developing the application solutions that help them meet their production requirements also contributes to our leadership position. Our worldwide network of direct sales and technical resources also is a competitive advantage.

Compliance with Governmental Regulations

Our global operations are subject to a variety of federal, state, local and international laws, regulations and compliance obligations relating to the manufacturing, designing and servicing of highly complex products and solutions. Examples of such regulations include, but are not limited to, import and export controls, data privacy, environmental, product safety, corruption, bribery, employment and labor. To support our policy of compliance in every jurisdiction we do business, we have robust internal controls, quality management systems, and management systems of compliance that govern our internal actions and mitigate our risk of non-compliance. We also have safeguards established to identify non-compliance concerns through internal and external audits and risk assessments, as well as an ethics helpline reporting system. The following describes certain significant regulations that may impact our business. For additional information about the risks associated with these laws and regulations, see Part I, Item 1A, "Risk Factors."

We transact with customers and suppliers in numerous geographies around the world and are required to comply with U.S. and non-U.S. import, export and sanctions laws (collectively "Trade Laws"). We have developed compliance programs and training to prevent violations of Trade Laws, and we regularly monitor and adjust our programs and training to reflect changes in Trade Laws or changes in our business. Geopolitical events may result in changes to Trade Laws that may impact our ability to transact business involving certain countries, certain items or certain counterparties, or may impose additional costs or complexity relating to tariffs, taxes, duties or adjustments to our compliance programs, training, or personnel requirements.

We are also required to comply with increasingly complex and changing laws and regulations enacted to protect business and personal data in the United States and other jurisdictions regarding privacy, data protection and data security, including those related to the collection, storage, use, transmission and protection of personal information and other consumer, customer, vendor or employee data. The risk of data privacy breaches cannot be entirely eliminated, creating risks of fines and penalties. Additionally, privacy and data protection laws and regulations, including with respect to the European Union's General Data Protection Regulation ("GDPR"), and the California Consumer Privacy Act of 2018 ("CCPA"), and the interpretation and enforcement of these and similar laws and regulations, are continuously evolving and there is significant uncertainty with respect to how compliance with these laws and regulations may develop and the costs and complexity of future compliance.

We are also subject to federal, state, local and foreign environmental, safety and health laws and regulations concerning, among other things, emissions to the air, discharges to land and water and the generation, handling, treatment and disposal of hazardous waste and other materials. Under certain of these laws, we can be held strictly liable for hazardous substance contamination of any real property we have ever owned, operated or used as a disposal site or for natural resource damages associated with such contamination. We are also required to maintain various related permits and licenses, many of which require periodic modification and renewal. The operation of manufacturing plants unavoidably entails environmental, safety and health risks, and we could incur material unanticipated costs or liabilities in the future if any of these risks were realized in ways or to an extent that we did not anticipate.

We believe that we operate in compliance, in all material respects, with applicable environmental laws and regulations. Compliance with environmental laws and regulations requires continuing management effort and expenditures. We have incurred, and will continue to incur, costs and capital expenditures to comply with these laws and regulations and to obtain and maintain the necessary permits and licenses. We maintain insurance coverage that may cover certain costs or legal claims related to environmental regulations, and we accrue for estimated environmental liabilities with charges to expense and believe our environmental accrual is adequate to provide for our portion of the costs of all such known environmental liabilities. We believe that the cost of complying with environmental laws and regulations will not have a material effect on our earnings, liquidity or competitive position but cannot assure that material compliance-related costs and expenses may not arise in the future. For example, future adoption of new or amended environmental laws, regulations or requirements or newly discovered contamination or other circumstances could require us to incur costs and expenses that may have a material effect, but cannot be presently anticipated.

We believe that policies, practices and procedures have been properly designed to prevent unreasonable risk of material regulation or compliance obligations arising from our operations. Compliance with federal, state, local and foreign regulation and laws during 2024 had no material effect on our capital expenditures, earnings or competitive position. Based upon consideration of currently available information, we believe liabilities for any such matters will not have a material adverse effect on our financial position, operating results or liquidity, but we cannot guarantee that material liabilities may not arise from regulation and compliance obligations in the future.

Human Capital Resources

Employee Profile

As of October 31, 2024, we had approximately 8,000 employees.

Total Rewards

As part of our compensation philosophy, we believe that we must offer and maintain market competitive total rewards programs for our employees in order to attract and retain superior talent. These programs not only include base wages and incentives in support of our pay for performance culture, but also health, welfare and retirement benefits. We focus many programs on employee wellness and have implemented solutions including mental health support access, telemedicine and healthy weight loss programs. We believe that these solutions have helped us successfully manage healthcare and prescription drug costs for our employee population.

In the U.S., we match contributions to a tax-qualified defined contribution retirement savings plan (the "Savings Plan") for all eligible employees, in an amount equal to 50 cents for every dollar contributed by the employee until the employee contributions reach 6% of her or his base compensation. In addition, non-union new hires and re-hires as of July 1, 2021 are eligible for an additional enhanced 401(k) contribution of 3% eligible earnings. All contributions by employees into the Savings Plan are fully vested immediately. Company contributions, both the match and enhanced contribution, have a three-year graded vesting schedule and vest at 33 1/3% each year until fully vested after three years of employment. We also maintain a nonqualified, unfunded and unsecured deferred compensation plan for the benefit of eligible management. In addition, non-union employees hired prior to July 1, 2021 are eligible to participate in a Company-sponsored tax-qualified pension plan for U.S.based employees (the "Salaried Pension Plan"). The Salaried Pension Plan is designed to work together with social security benefits to provide employees with up to 30 years of service retirement income replacement that is approximately 55% of eligible compensation, subject to the Internal Revenue Code maximum monthly benefit. Participants fully vest in the Salaried Pension Plan after five years of service. All eligible union employees hired prior to November 1, 2004 participate in a Company-sponsored tax-qualified pension plan for U.S.-based employees (the "Hourly Pension Plan"). The Hourly Pension Plan provides a multiplier for each year of service to supplement employees' retirement income. We also maintain a supplemental retirement benefit restoration plan ("Excess Defined Benefit Pension Plan"), which is an unfunded, non-qualified plan that is designed to provide retirement benefits to U.S.-based eligible officers hired prior to July 1, 2021, as a replacement for retirement benefits limited by regulations under the Internal Revenue Code.

In 2022, we launched a global recognition program that allows managers and peers to recognize the special achievements of others through both written recognition shared on a company awards feed, as well as monetary recognition that allows a recipient to choose a physical gift, gift card or donate the value of their recognition to charity. We also continue our service award program, which demonstrates appreciation and thanks to longstanding employees with five or more years of service. Service milestones are recognized at each five-year increment by presentation of a digital and/or printed certificate with an invitation to select a recognition award via an online catalog.

Talent

Our key talent philosophy is to develop talent from within and supplement with external hires. This approach has yielded a deep understanding among our employee base of our business, products and customers, while adding new employees and ideas in support of our continuous improvement mindset. Attracting and retaining the best talent relies on our ability to provide a diverse and inclusive workplace, personal and professional growth opportunities, and a rewarding employee experience. We strive to uphold a culture of shared knowledge, appreciation and success. We believe that our average tenure across the globe reflects our positive workplace culture and the strong engagement of our employees. Our talent acquisition team uses internal and external resources to recruit highly skilled and talented workers, and we encourage employee referrals for open positions.

Talent development and succession planning for critical roles is a cornerstone of our talent program. Development plans are created and monitored to ensure progress is made along the established timelines. Development plans also intersect with our mission, particularly as we strive to be responsible to our communities.

One of our core values—Respect for People—reflects the behavior we strive to include in every aspect of the way we conduct business. Our approach encompasses inclusion awareness and skill-building, intentionality with respect to diversity in our hiring and selection process and performance management and succession planning that recognizes the importance of diversity. Nordson's employee resource groups strengthen our commitment to fostering an inclusive, diverse workplace where everyone feels like they belong. Participation in these groups is open to all employees. We regularly reflect on our progress and explore opportunities to improve our inclusion and diversity programs, including at the executive leadership and Board levels.

Available Information

Our annual report, quarterly reports and current reports (Form "8-K") and amendments to those reports filed or furnished with the Securities and Exchange Commission ("SEC") pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge at https://investors.nordson.com as soon as reasonably practical after such material is electronically filed with, or furnished to, the SEC. Copies of these reports may also be obtained free of charge by sending written requests to Corporate Communications, Nordson Corporation, 28601 Clemens Road, Westlake, Ohio 44145. The contents of our website are not incorporated by reference herein and are not deemed to be a part of this annual report.

Item 1A. Risk Factors

In an enterprise as diverse as ours, a wide range of factors could affect future performance. We discuss in this section some of the risk factors that could materially and adversely affect our business, financial condition, value and results of operations. You should consider these risk factors in connection with evaluating the forward-looking statements contained in this annual report because these factors could cause our actual results and financial condition to differ materially from those projected in forward-looking statements. You should not interpret the disclosure of any risk factor to imply that the risk factor has not already materialized. Additional risks factors may exist that are not presently known by the Company or that are currently deemed immaterial may also be present.

Risks Related to Economic Conditions

Changes in United States or international economic conditions, including declines in the industries we serve, could adversely affect the revenue stream and profitability of any of our operations.

In 2024, approximately 33 percent of our revenue was generated in the United States, while approximately 67 percent was generated outside the United States. The COVID-19 pandemic and related preventative and mitigation measures implemented by governments around the world and the conflicts in Europe and the Middle East have negatively impacted the global economy and created significant volatility and disruption of financial markets, and may continue to do so in future periods.

A general sustained slowdown in the global economy or in a particular region or industry or an increase in trade tensions with U.S. trading partners could negatively impact our business, financial condition or liquidity. Our largest markets include consumer non-durable, industrial, medical, electronics, consumer durable and automotive. A slowdown in any of these specific end markets could directly affect our revenue stream and profitability.

A portion of our product sales is attributable to industries and markets, such as the electronics, polymer processing, agriculture, and metal finishing industries, which historically have been cyclical and sensitive to relative changes in supply and demand and general economic conditions. The demand for our products depends, in part, on the general economic conditions of the industries or national economies of our customers. Downward economic cycles in our customers' industries or markets may reduce sales of some of our products. It is not possible to accurately predict the factors that will affect demand for our products in the future.

Any significant downturn in the health of the general economy, or any recession, depression or other sustained adverse market event or conditions, including inflationary pressures, could have an adverse effect on our revenues and financial performance, resulting in impairment of assets. We cannot predict the strength or duration of any economic slowdown and instability or the timing of any recovery.

Our financial results have been, and could continue to be, significantly impacted by uncertainty in U.S. trade policy, including uncertainty surrounding changes in tariffs, trade agreements or other trade restrictions imposed by the U.S. or other governments.

Our ability to conduct business can be significantly impacted by changes in tariffs, changes or repeals of trade agreements, including the impact of the "United States-Mexico-Canada Agreement" with Mexico and Canada, which replaced the North American Free Trade Agreement, or the imposition of other trade restrictions or retaliatory actions imposed by various governments. For example, the incoming U.S. presidential administration has proposed to significantly increase tariffs on foreign imports into the United States, particularly from Canada, China and Mexico. Other effects of these changes, including impacts on the price of raw materials, responsive actions from governments and the opportunity for competitors to establish a presence in markets where we participate, could also have significant impacts on our financial results. We cannot predict what further action may be taken with respect to tariffs or trade relations between the U.S. and other governments, and any further changes in U.S. or international trade policy could have an adverse impact on our business. Further, the conflicts in Europe and the Middle East may have significant adverse effects on international trade policy.

Significant movements in foreign currency exchange rates or change in monetary policy may harm our financial results.

We are exposed to fluctuations in foreign currency exchange rates, particularly with respect to the euro, the yen, the pound sterling and the Chinese yuan. Any significant change in the value of the currencies of the countries in which we do business against the United States dollar could affect our ability to sell products competitively and control our cost structure, which could have a material adverse effect on our business, financial condition and results of operations. For additional detail related to this risk, see Part II, Item 7A, Quantitative and Qualitative Disclosure About Market Risk.

A significant portion of our consolidated revenues in 2024 were generated in currencies other than the United States dollar, which is our reporting currency. We recognize foreign currency transaction gains and losses arising from our operations in the period incurred. As a result, currency fluctuations between the United States dollar and the currencies in which we do business have caused and may continue to cause foreign currency transaction and translation movements, which historically have been material and could continue to be material. We cannot predict the effects of exchange rate fluctuations upon our future operating results because of the number of currencies involved, the variability of currency exposures and the potential volatility of currency exchange rates. We take actions to manage our foreign currency exposure, such as entering into hedging transactions, where applicable, but we cannot assure that our strategies will adequately protect our consolidated operating results from the effects of exchange rate fluctuations. For example, the impact of conflicts in Europe and the Middle East, changes in monetary policies and the effects of the departure of the United Kingdom from the European Union ("Brexit") have caused increased volatility in global currency exchange rates that have resulted in the strengthening of the United States dollar against the foreign currencies in which we conduct business. Future adverse consequences arising from the conflicts in Europe and the Middle East and Brexit may include continued volatility in exchange rates. Any significant fluctuation in exchange rates may be harmful to our financial condition and results of operations. We also face risks arising from the imposition of exchange controls and currency devaluations. Exchange controls may limit our ability to convert foreign currencies into United States dollars or to remit dividends and other payments by our foreign subsidiaries or customers located in or conducting business in a country imposing controls. Currency devaluations diminish the United States dollar value of the currency of the country instituting the devaluation and, if they occur or continue for significant periods, could adversely affect our earnings or cash flow.

Risks Related to Our Business and Operations

Political conditions in and between the United States and foreign countries in which we operate could adversely affect our business.

We conduct our manufacturing, sales and distribution operations on a worldwide basis and are subject to risks associated with doing business both within and outside the United States. We expect that international operations and United States export sales will continue to be important to our business for the foreseeable future. Both sales from international operations and export sales are subject to varying degrees of risks inherent in doing business outside the United States. Such risks include, but are not limited to, the following:

- risks of political or economic instability;
- unanticipated or unfavorable circumstances arising from host country laws or regulations;
- threats of war, terrorism or governmental instability, including the conflicts in Europe and the Middle East;
- changes in tax rates, adoption of new tax laws or other additional tax policies, and other proposals to reform United States and foreign tax laws that impact how United States multinational corporations are taxed on foreign earnings;
- restrictions on the transfer of funds into or out of a country;
- potential negative consequences from changes to taxation policies;
- the disruption of operations from labor and political disturbances;
- the imposition of tariffs, import or export licensing requirements and other potential changes in trade policies and relations arising from policy initiatives implemented by the U.S. presidential administration; and
- exchange controls or other trade restrictions including transfer pricing restrictions when products produced in one country are sold to an affiliated entity in another country.

Any of these events could reduce the demand for our products, limit the prices at which we can sell our products, interrupt our supply chain, or otherwise have an adverse effect on our operating performance.

Our international operations also depend upon favorable trade relations between the U.S. and those foreign countries in which our customers, subcontractors and materials suppliers have operations. A protectionist trade environment in either the U.S. or those foreign countries in which we do business, such as a change in the current tariff structures, export compliance or other

trade policies, may materially and adversely affect our ability to sell our products in foreign markets. The incoming U.S. presidential administration has criticized existing trade agreements, and while it remains unclear what actions the current or future administration may take with respect to existing and proposed trade agreements, or restrictions on trade generally, more stringent export and import controls may be ultimately imposed in the future.

Failure to retain our existing senior management team or the inability to attract and retain qualified personnel could hurt our business and inhibit our ability to operate and grow successfully.

Our success will continue to depend to a significant extent on the continued service of our executive management team and the ability to recruit, hire and retain other key management personnel, including factory production workers and other staff, to support our growth and operational initiatives and replace those who retire or resign. Failure to retain our leadership team and workforce and to attract and retain other important management and technical personnel could place a constraint on our global growth and operational initiatives, possibly resulting in inefficient and ineffective management and operations, which would likely harm our revenues, operations and product development efforts and eventually result in a decrease in profitability.

The Company may be subject to risks relating to organizational changes.

We regularly execute organizational changes such as acquisitions, divestitures and realignments to support our growth and cost management strategies. We also engage in initiatives aimed to increase productivity, efficiencies and cash flow and to reduce costs. The Company commits significant resources to identify, develop and retain key employees to ensure uninterrupted leadership and direction. If we are unable to successfully manage these and other organizational changes, the ability to complete such activities and realize anticipated synergies or cost savings as well as our results of operations and financial condition could be materially adversely affected. We cannot offer assurances that any of these initiatives will be beneficial to the extent anticipated, or that the estimated efficiency improvements, incremental cost savings or cash flow improvements will be realized as anticipated or at all.

Increased information technology threats and cybersecurity incidents and threats could pose a risk to our systems, networks, products, solutions and services and those of our business partners.

We have experienced and expect to continue to experience cybersecurity threats and some cybersecurity incidents to our systems and networks. We do not believe that any risks from cybersecurity threats, including as a result of past cybersecurity incidents, have had, or are reasonably likely to have, a material adverse effect on the company, including our business, strategy, results of operations or financial condition. To conduct our business, we rely extensively on information technology systems, networks and services, some of which are managed, hosted and provided by third-party business partners. Increased global information technology security threats, computer crime and cyberterrorism pose a risk to the security of our systems and networks and those of our third-party service providers and the confidentiality, availability and integrity of our data. Cybersecurity incidents and similar attacks vary in their form and can include the deployment of harmful malware or ransomware, denial-of-services attacks, and other attacks, which may affect business continuity and threaten the availability, confidentiality and integrity of our systems and information. Cybersecurity incidents can also include employee or personnel failures, fraud, phishing or other social engineering attempts or other methods to cause confidential information, payments, account access or access credentials, or other data to be transmitted to an unintended recipient. Cybersecurity threat actors also may attempt to exploit vulnerabilities in software including software commonly used by companies in cloud-based services and bundled software. Depending on their nature and scope, such threats could potentially lead to the compromising of confidential information, including but not limited to confidential information relating to customer or employee data, improper use of our systems and networks, manipulation and destruction of data, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness and results of operations. A cybersecurity incident or failure or disruption relating to our information or systems or that of our third-party business partners, or any failure by us or our third-party business partners to effectively address, enforce and maintain our information technology infrastructure and cybersecurity requirements may result in substantial harm to our business strategy, results of operations and financial condition, including major disruptions to business operations, loss of intellectual property, release of confidential information, alteration or corruption of data or systems, costs related to remediation or the payment of ransom, and litigation including individual claims or consumer class actions, commercial litigation, administrative, and civil or criminal investigations or actions, regulatory intervention and sanctions or fines, investigation and remediation costs and possible prolonged negative publicity.

We have taken steps and incurred costs to further strengthen the security of our computer systems and continue to assess, maintain and enhance the ongoing effectiveness of our information security systems. While we attempt to mitigate these risks by employing a number of measures, including employee training, comprehensive monitoring of our networks and systems, and maintenance of backup and protective systems, our systems, networks, products, solutions and services remain potentially vulnerable to advanced persistent threats. The techniques used by criminals to obtain unauthorized access to sensitive data change frequently and often are not recognizable until launched against a target. Accordingly, we may be unable to anticipate

these techniques or implement adequate preventative measures. It is therefore possible that in the future we may suffer a criminal attack, unauthorized parties may gain access to personal information in our possession and we may not be able to identify any such incident in a timely manner.

The interpretation and application of data protection laws, including federal, state and international laws, relating to the collection, use, retention, disclosure, security and transfer of personally identifiable data in the U.S., Europe and elsewhere (including but not limited to the European Union's GDPR and the CCPA), are uncertain and evolving. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. In addition, as a result of existing or new data protection requirements, we incur and expect to continue to incur significant ongoing operating costs as part of our significant efforts to protect and safeguard our sensitive data and personal information. These efforts also may divert management and employee attention from other business and growth initiatives. A breach in information privacy could result in legal or reputational risks and could have a negative impact on our revenues and results of operations.

We may face particular data protection and privacy risks in connection with the European Union's Global Data Protection Regulation, the California Consumer Privacy Act and other privacy laws and regulations.

The interpretation and application of data protection laws and other regulations, including federal, state and international laws, relating to the collection, use, retention, disclosure, security and transfer of personal information in the U.S., Europe and elsewhere (including but not limited to the European Union's GDPR and the CCPA), are uncertain and evolving. These laws and regulations may grant, among other things, individual rights to access and delete personal information, and the right to opt out of the sale of personal information. These laws and regulations can also impose significant forfeitures and penalties for noncompliance and afford private rights of action to individuals under certain circumstances. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. In addition, as a result of existing or new data protection laws and regulations, we incur and expect to continue to incur significant ongoing operating costs as part of our significant efforts to protect and safeguard our confidential or sensitive data and personal information. These efforts also may divert management and employee attention from other business and growth initiatives. A breach in information privacy could result in legal or reputational risks and could have a negative impact on our revenues and results of operations. Any failure to manage data privacy in compliance with applicable laws and regulations could result in significant regulatory investigations, fines, and sanctions, consumer and class action litigation, commercial litigation, prolonged negative publicity, data breaches, declining customer confidence, loss of key customers, employee liability and other unfavorable consequences.

A disruption in, shortage of, or price increases for, supply of our components and raw materials may adversely impact our business, financial condition, results of operations and cash flows.

While we manufacture certain parts and components used in our products, we require substantial amounts of raw materials and purchase some parts and components from suppliers. The availability and prices for raw materials, parts and components may be subject to curtailment or change due to, among other things, suppliers' allocation to other purchasers, interruptions in production by suppliers and changes in exchange rates and prevailing price levels, including as a result of inflation or the imposition of tariffs, import or export licensing requirements and other potential changes in trade policies. The conflicts in Europe and the Middle East have negatively impacted, and may continue to negatively impact, the availability and prices for raw materials, parts and components. While we generally attempt to pass along higher raw material, part and component costs to our customers in the form of price increases, there historically has been a delay between an increase in our raw material costs and our ability to increase the prices of our products. Additionally, we may not be able to increase the prices of our products due to competitive pricing pressure and other factors. Shortages in raw materials or our inability to pass along price increases could affect the prices we charge, our operating costs and our competitive position, which could adversely affect our business, financial condition, results of operations and cash flows.

In addition, our facilities, supply chains, distribution systems and products may be impacted by natural or man-made disruptions, including armed conflict, demand surges, damaging weather or other acts of nature (including weather or other acts of nature caused by climate change), pandemics or other public health crises. A shutdown of, or inability to utilize, one or more of our facilities, our supply chain, or our distribution system could significantly disrupt our operations, delay production and shipments, impact our relationships and reputation with customers, suppliers, employees and others, result in lost or decreased sales, or result in legal exposure and large remediation or other expenses, which could adversely affect our business, financial condition, results of operations and cash flows.

If our intellectual property protection is inadequate, others may be able to use our technologies and tradenames and thereby reduce our ability to compete, which could have a material adverse effect on our business, financial condition and results of operations.

We regard much of the technology underlying our products and the trademarks under which we market our products as proprietary. The steps we take to protect our proprietary technology may be inadequate to prevent misappropriation of our technology, or third parties may independently develop similar technology. We rely on a combination of patents, trademark, copyright and trade secret laws, employee and third-party non-disclosure agreements and other contracts to establish and protect our technology and other intellectual property rights. The agreements may be breached or terminated, and we may not have adequate remedies for any breach, and existing trade secrets, patent and copyright law afford us limited protection. Policing unauthorized use of our intellectual property is difficult. A third party could copy or otherwise obtain and use our products or technology without authorization. Litigation may be necessary for us to defend against claims of infringement or to protect our intellectual property rights and could result in substantial cost to us and diversion of our efforts. Further, we might not prevail in such litigation, which could harm our business.

Our products could infringe on the intellectual property of others, which may cause us to engage in costly litigation and, if we are not successful, could cause us to pay substantial damages and prohibit us from selling our products.

Third parties may assert infringement or other intellectual property claims against us based on their patents or other intellectual property claims, and we may have to pay substantial damages, possibly including treble damages, if it is ultimately determined our products infringe. We may have to obtain a license to sell our products if it is determined that our products infringe upon another party's intellectual property. We might be prohibited from selling our products before we obtain a license, which, if available at all, may require us to pay substantial royalties. Even if infringement claims against us are without merit, defending these types of lawsuits takes significant time, may be expensive and may divert management attention from other business concerns.

Risks Related to the Execution of Our Strategy

We continually assess the strategic fit of our existing businesses and may divest or otherwise dispose of businesses that are deemed not to fit with our strategic plan or are not achieving the desired return on investment, and we cannot be certain that our business, operating results and financial condition will not be materially and adversely affected.

A successful divestiture depends on various factors, including reaching an agreement with potential buyers on terms we deem attractive, as well as our ability to effectively transfer liabilities, contracts, facilities, and employees to any purchaser, identify and separate the intellectual property to be divested from the intellectual property that we wish to retain, reduce fixed costs previously associated with the divested assets or business, and collect the proceeds from any divestitures. These efforts require varying levels of management resources, which may divert our attention from other business operations. If we do not realize the expected benefits of any divestiture transaction, our consolidated financial position, results of operations and cash flows could be negatively impacted. In addition, divestitures of businesses involve a number of risks, including significant costs and expenses, the loss of customer relationships and a decrease in revenues and earnings associated with the divested business. Furthermore, divestitures potentially involve significant post-closing separation activities, which could involve the expenditure of material financial resources and significant employee resources. Any divestiture may result in a dilutive impact to our future earnings if we are unable to offset the dilutive impact from the loss of revenue associated with the divestiture, as well as significant write-offs, including those related to goodwill and other intangible assets, which could have a material adverse effect on our results of operations and financial condition.

If we fail to develop new products or enhance existing products, or our customers do not accept the new or enhanced products we develop, our financial condition, results of operations, cash flows and liquidity could be adversely affected.

Innovation is critical to our success. We believe that we must continue to enhance our existing products and to develop and manufacture new products with improved capabilities in order to continue to be a leading provider of precision technology solutions. We also believe that we must continue to make improvements in our productivity in order to maintain our competitive position. Difficulties or delays in research, development or production of new or enhanced products or failure to gain market acceptance of new or enhanced products and technologies may reduce future sales and adversely affect our competitive position. We continue to invest in the development and marketing of new or enhanced products. There can be no assurance that we will have sufficient resources to make such investments, that we will be able to make the technological advances necessary to maintain competitive advantages or that we can recover major research and development expenses. If we fail to make innovations, launch products with quality problems or the market does not accept our new products, our financial condition, results of operations, cash flows and liquidity could be adversely affected. In addition, as new or enhanced products are introduced, we must successfully manage the transition from older products to minimize disruption in customers' ordering patterns, avoid excessive levels of older product inventories and ensure that we can deliver sufficient supplies of new products to meet customers' demands.

Our growth strategy includes acquisitions, and we may not be able to execute on our acquisition strategy or integrate acquisitions successfully.

Our recent historical growth has depended, and our future growth is likely to continue to depend, in part on our acquisition strategy and the successful integration of acquired businesses into our existing operations. For example, in August 2024, we completed our acquisition of Atrion. We intend to continue to seek additional acquisition opportunities both to expand into new

markets and to enhance our position in existing markets throughout the world. We cannot assure we will be able to successfully identify suitable acquisition opportunities, prevail against competing potential acquirers, negotiate appropriate acquisition terms, obtain financing that may be needed to consummate such acquisitions, complete proposed acquisitions, successfully integrate acquired businesses into our existing operations or expand into new markets. In addition, we cannot assure that any acquisition, including the recent acquisitions of Atrion, the ARAG Group ("ARAG") and CyberOptics Corporation ("CyberOptics"), once successfully integrated, will perform as planned, be accretive to earnings, or prove to be beneficial to our operations and cash flow.

The success of our acquisition strategy is subject to other risks and uncertainties, including:

- our ability to realize operating efficiencies, synergies or other benefits expected from an acquisition and possible delays in realizing the benefits of the acquired company or products;
- diversion of management's time and attention from other business concerns;
- difficulties in retaining key employees, customers or suppliers of the acquired business;
- difficulties in maintaining uniform standards, controls, procedures and policies throughout acquired companies;
- adverse effects on existing business relationships with suppliers or customers;
- the risks associated with the assumption of product liabilities or contingent or undisclosed liabilities of acquisition targets; and
- the ability to generate future cash flows or the availability of financing.

In addition, an acquisition could adversely impact our operating performance as a result of incurring acquisition-related debt, pre-acquisition potential tax or other liabilities, acquisition expenses, the amortization of acquisition-acquired assets or possible future impairments of goodwill or intangible assets associated with the acquisition.

We may also face liability with respect to acquired businesses for violations of environmental laws occurring prior to the date of our acquisition, and some or all of these liabilities may not be covered by environmental insurance secured to mitigate the risk or by indemnification from the sellers from which we acquired these businesses. We could also incur significant costs, including, but not limited to, remediation costs, natural resources damages, civil or criminal fines and sanctions and third-party claims, as a result of past or future violations of, or liabilities, associated with environmental laws.

Any impairment in the value of our intangible assets, including goodwill, would negatively affect our operating results and total capitalization.

Our total assets reflect substantial intangible assets, primarily goodwill. The goodwill results from our acquisitions and represents the excess of cost over the fair value of the identifiable net assets we acquired. We assess at least annually whether there has been any impairment in the value of our intangible assets. If future operating performance at one or more of our business units were to fall significantly below current levels, if competing or alternative technologies emerge, if market conditions for acquired businesses decline, if significant and prolonged negative industry or economic trends exist, if our stock price and market capitalization declines, or if future cash flow estimates decline, we could incur, under current applicable accounting rules, a non-cash charge to operating earnings for goodwill impairment. In addition, any determination requiring the write-off of a significant portion of unamortized intangible assets would negatively affect our results of operations and equity book value, the effect of which could be material.

Risks Related to Legal, Compliance and Regulatory Matters

Changes in United States and international tax laws may have a material adverse effect on our business, financial condition and results of operations.

We are subject to income taxes in the United States and various foreign jurisdictions. Changes in applicable domestic or foreign tax laws and regulations, or their interpretation and application, including the possibility of retroactive effect, could affect our business, financial condition and profitability by increasing our tax liabilities. Our future results of operations could be adversely affected by changes in our effective tax rate as a result of a change in the mix of earnings in jurisdictions with differing statutory tax rates, changes in our overall profitability, changes in tax legislation and rates, changes in generally accepted accounting principles and changes in the valuation of deferred tax assets and liabilities. The U.S. federal government may adopt changes to international trade agreements, tariffs, taxes and other government rules and regulations. While we cannot predict what changes will actually occur with respect to any of these items, such changes could affect our business and results of operations.

We may be exposed to liabilities under the Foreign Corrupt Practices Act ("FCPA"), which could have a material adverse effect on our business, reputation, financial condition or results of operations.

We are subject to compliance with various laws and regulations, including the FCPA, UK Bribery Act and similar worldwide anti-bribery and anti-corruption laws, which generally prohibit companies and their intermediaries from engaging in bribery or making other improper payments to private or public parties for the purpose of obtaining or retaining business or gaining an unfair business advantage. The FCPA also requires proper record keeping and characterization of such payments in our reports filed with the SEC. Our employees are trained and required to comply with these laws, and we are committed to legal compliance and corporate ethics. Violations of these laws could result in severe criminal or civil sanctions and financial penalties and other consequences that may have a material adverse effect on our business, reputation, financial condition or results of operations.

The level of returns on pension plan assets, changes in the actuarial assumptions used and management of pension liabilities could adversely affect us.

Our operating results may be positively or negatively impacted by the amount of expense we record for our defined benefit pension plans. U.S. GAAP requires that we calculate pension expense using actuarial valuations, which are dependent upon our various assumptions, including estimates of expected long-term rate of return on plan assets, discount rates for future payment obligations, and the expected rate of increase in future compensation levels. Our pension expense and funding requirements may also be affected by our actual return on plan assets and by legislation and other government regulatory actions. Changes in assumptions, laws or regulations and how the Company manages pension liabilities could lead to variability in financial results and could have a material adverse impact on liquidity.

Our global operations are subject to increasingly complex environmental regulatory requirements, and compliance with evolving environmental regulatory requirements could negatively impact our business, capital expenditures, results of operations, financial condition and competitive position.

We are subject to increasingly complex environmental regulations affecting international manufacturers, including those related to air and water emissions, waste management and climate change. Some environmental laws impose strict, retroactive and joint and several liability for the remediation of the release of hazardous substances, even for conduct that was lawful at the time it occurred, or for the conduct of or conditions caused by prior operators, predecessors or third parties. Failure to comply with environmental laws could expose us to penalties or clean-up costs, civil or criminal liability and sanctions on certain of our activities, as well as damage to property or natural resources. These liabilities, sanctions, damages and remediation efforts related to any non-compliance with such laws and regulations could negatively impact our ability to conduct our operations and our financial condition and results of operations. In addition, there can be no assurances that we will not be adversely affected by costs, liabilities or claims with respect to existing or subsequently acquired operations or under present laws and regulations or those that may be adopted or imposed in the future.

Changes in environmental laws or regulations could result in higher expenses and payments, and uncertainty relating to environmental laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights. Changes in environmental and climate change laws or regulations, including laws relating to greenhouse gas emissions, could subject us to additional costs and restrictions, including increased energy and raw material costs. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon us or our products, they could negatively impact our business, capital expenditures, results of operations, financial condition and competitive position.

It is our policy to apply strict standards for environmental protection to all of our operations within and outside of the United States, even when we are not subject to local government regulations. We may incur substantial costs, including cleanup costs, fines and civil or criminal sanctions, liabilities resulting from third-party property damage or personal injury claims, or our products could be prohibited from entering certain jurisdictions, if we were to violate or become liable under environmental laws, if our products become non-compliant with environmental laws or if we were to undertake environmental protection actions voluntarily.

Expectations relating to environmental, social and governance ("ESG") considerations expose us to potential liabilities, increased costs, reputational harm and other adverse effects on our business.

Many governments, regulators, investors, employees, customers and other stakeholders are increasingly focused on ESG considerations relating to businesses, including climate change and greenhouse gas emissions, human capital and diversity, equity and inclusion. We make statements about our ESG goals and initiatives through information provided on our website, press statements and other communications, including through our ESG Report. Responding to these ESG considerations and implementation of these goals and initiatives involves risks and uncertainties, requires investments and are impacted by factors that may be outside our control. In addition, some stakeholders may disagree with our goals and initiatives and the focus of

stakeholders may change and evolve over time. Stakeholders also may have very different views on where ESG focus should be placed, including differing views of regulators in various jurisdictions in which we operate. Any failure, or perceived failure, by us to achieve our goals, further our initiatives, adhere to our public statements, comply with federal, state or international ESG laws and regulations, or meet evolving and varied stakeholder expectations and standards could result in legal and regulatory proceedings against us and materially adversely affect our business, reputation, results of operations, financial condition and stock price.

Risks Related to Our Capital Structure

Our inability to comply with the restrictive covenants included in the agreements governing our debt or to access additional sources of capital could impede our growth or the repayment or refinancing of existing debt.

The limits imposed on us by the restrictive covenants contained in the agreement governing our debt could prevent us from making acquisitions or cause us to lose access to these facilities.

The agreements governing our existing debt contain restrictive covenants that limit our ability to, among other things:

- borrow money or guarantee the debts of others;
- use assets as security in other transactions;
- · make restricted payments or distributions; and
- sell or acquire assets or merge with or into other companies.

In addition, our credit facilities require us to meet certain financial ratios, including a "Leverage Ratio" and an "Interest Coverage Ratio," both as defined in the credit facilities.

These restrictions could limit our ability to plan for or react to market conditions or meet extraordinary capital needs and could otherwise restrict our financing activities.

Our ability to comply with the covenants and other terms of the agreements governing our debt will depend on our future operating performance. If we fail to comply with such covenants and terms, we may be in default and the maturity of the related debt could be accelerated and become immediately due and payable. We may be required to obtain waivers from our lenders in order to maintain compliance under our credit facilities, including waivers with respect to our compliance with certain financial covenants. If we are unable to obtain necessary waivers and the debt under our credit facilities is accelerated, we would be required to obtain replacement financing at prevailing market rates.

We may need to obtain new or additional financing in the future to expand our business or refinance existing debt. If we are unable to access capital on satisfactory terms and conditions, we may not be able to expand our business or meet our payment requirements under our existing debt. Our ability to obtain new or additional financing will depend on a variety of factors, many of which are beyond our control. We may not be able to obtain new or additional financing because we have substantial debt or because we may not have sufficient cash flow to service or repay our existing or future debt. In addition, depending on market conditions and our financial performance, neither debt nor equity financing may be available on satisfactory terms or at all. Finally, if financial market conditions worsen, our credit facility providers may not provide the agreed credit if they become undercapitalized.

Changes in interest rates could adversely affect us.

Any period of interest rate increases may adversely affect our profitability. As of October 31, 2024, we had \$2,223,928 of total debt outstanding, of which \$538,286 was priced at interest rates that float with the market. As of October 31, 2024, a one percentage point increase in the interest rate on the floating rate debt would result in approximately \$5,383 of additional annual interest expense. A higher level of floating rate debt would increase the exposure to changes in interest rates. For additional detail related to this risk, see Part II, Item 7A, Quantitative and Qualitative Disclosures About Market Risk.

General Risk Factors

The insurance that we maintain may not fully cover all potential exposures.

We maintain property, business interruption and casualty insurance but such insurance may not cover all risks associated with the hazards of our business and is subject to limitations, including deductibles and maximum liabilities covered. We are potentially at risk if one or more of our insurance carriers fail or deny our claims. Additionally, severe disruptions in the domestic and global financial markets could adversely impact the ratings and survival of some insurers. In the future, we may not be able to obtain coverage at current levels, and our premiums may increase significantly on coverage that we maintain.

Our business, financial condition and results of operations may be adversely affected by natural disasters or other catastrophic events beyond our control.

While we have taken precautions to prevent production and service interruptions at our global facilities, severe weather conditions, including any that may be caused by global climate change, such as hurricanes or tornadoes, as well as major earthquakes, wildfires and other natural disasters in areas in which we have manufacturing facilities or from which we obtain products may cause physical damage to our properties, closure of one or more of our manufacturing or distribution facilities, lack of an adequate work force in a market, temporary disruption in the supply of inventory, disruption in the transport of products and utilities, and delays in the delivery of products to our customers. Any of these factors may disrupt our operations and adversely affect our business, financial condition and results of operations.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

Nordson Corporation manages cybersecurity risks by implementing processes for assessment, identification, and mitigation of cybersecurity threats. Nordson's cybersecurity program is designed to align with the National Institute of Standards and Technology ("NIST") Cybersecurity Framework, enabling us to develop policies regarding information access, asset protection and personal data security. However, this does not mean that we meet any particular technical standards, specifications or requirements, but rather that we use the NIST Cybersecurity Framework as a guide to help us identify, assess and manage cybersecurity risks and threats relevant to our business. We strive to protect our information assets through key cybersecurity measures, such as the implementation of multifactor authentication and advanced malware defenses, and we collaborate with internal stakeholders to establish layered cybersecurity defenses and restricted access based on business needs. We conduct regular continuous education sessions for our employees on cybersecurity awareness, including confidential information protection and simulated phishing attacks.

We engage with experts to assist with regular third-party penetration testing to evaluate our program against industry standards. We also have standing engagements with incident response experts and external counsel to enhance our cybersecurity resilience. We frequently collaborate with cybersecurity experts to share insights on threats, best practices and emerging trends.

Our cybersecurity risk management is a critical component of our comprehensive business continuity and enterprise risk management programs. Our information security team regularly collaborates with cross-functional subject matter experts and leaders to assess and enhance our cybersecurity risk posture and preparedness. Management employs the following defense mechanisms throughout the enterprise: employee training program to increase cybersecurity awareness, vulnerability management to identify and address potential weaknesses, multifactor authentication for secure access, tabletop exercises to simulate and prepare for potential incidents, and evaluation of third-party service providers, business partners and cloud suppliers, including through assessments of their cybersecurity practices prior to service utilization.

To date, management has not identified any risks from cybersecurity threats, including as a result of previous cybersecurity incidents, that have materially affected or are reasonably likely to materially affect Nordson Corporation, including its business strategy, results of operations or financial condition. See "Item 1A. Risk Factors, Increased information technology threats and cybersecurity incidents and threats could pose a risk to our systems, networks, products, solutions and services and those of our business partners." above for more information. While we are committed to safeguarding our information and the proprietary and confidential information they contain, we note that no security measures can guarantee complete protection against cybersecurity incidents.

Governance

The Board of Directors, as a whole, has overarching responsibility for overseeing our strategic and operational risks. The Audit Committee specifically monitors risk management, including cybersecurity threats. Management, led by the Vice President, Information Systems and Technology, regularly reports to the Board of Directors, primarily through the Audit Committee, providing an annual report on specific risks, mitigation efforts, and a review of Nordson's cybersecurity maturity.

Management is responsible for day-to-day assessment and management of cybersecurity threats and risks. Nordson's Senior Director of Security and Compliance, primarily leads these efforts. The Vice President, Information Systems and Technology is responsible for oversight of Nordson's entire global IT operations, including the cybersecurity program and brings more than 25 years of experience and leadership across various information technology engineering, business and management roles, including direct oversight of strategic direction, program execution and operational excellence of technology initiatives.

The Senior Director of Security and Compliance assesses cybersecurity readiness using a variety of tools, including internal assessment tools as well as third-party control tests, vulnerability assessments, audits and evaluation against industry standards. Our security and compliance organization elevates issues relating to cybersecurity to our Chief Executive Officer and Board of Directors, such as potential threats or vulnerabilities. We also seek to prevent, detect, mitigate and remediate cybersecurity incidents by employing various defensive and continuous monitoring techniques using recognized industry frameworks and cybersecurity standards.

Our Vice President, Information Systems and Technology meets regularly with the Audit Committee to review our information technology systems and discuss key cybersecurity risks. Additionally, the Director, Internal Audit and Chief Financial Officer presents an overview of our global enterprise risk management program, including cybersecurity risks, to the Audit Committee, which is subsequently reported to the Board of Directors.

Item 2. Properties

Our principal owned and leased properties (defined as greater than 20,000 square feet or related to a principal operation) as of October 31, 2024 were as follows:

Location	Description of Property	Approximate Square Feet
United States		
Amherst, Ohio ¹	A manufacturing, laboratory and office complex	521,000
Norwich, Connecticut ²	A manufacturing, laboratory and office building	212,000
Carlsbad, California ³	Three manufacturing and office buildings (leased)	181,000
Duluth, Georgia ¹	A manufacturing, laboratory and office building	176,000
St. Petersburgh, Florida ²	A manufacturing, warehouse and office building	156,000
Chippewa Falls, Wisconsin ¹	A manufacturing, warehouse and office building (leased)	145,000
Swainsboro, Georgia ¹	A manufacturing building	136,000
Arab, Alabama ²	A manufacturing building	116,000
East Providence, Rhode Island ²	A manufacturing, warehouse and office building	116,000
Loveland, Colorado ²	A manufacturing, warehouse and office building	115,000
Allen, Texas ²	A manufacturing, warehouse and office building	106,000
Salem, New Hampshire ²	Two manufacturing, warehouse and office buildings (leased)	83,000
Wixom, Michigan ¹	A manufacturing, warehouse and office building (leased)	64,000
Golden Valley, Minnesota ³	A manufacturing and office building	61,000
Easton, Pennsylvania ²	A manufacturing, warehouse and office building	46,000
Dayton, Ohio ¹	A manufacturing, warehouse and office building	43,000
Hickory, North Carolina ¹	A manufacturing, warehouse and office building (leased)	41,000
Elk Grove, Illinois ³	A manufacturing, warehouse and office building (leased)	40,000
San Jose, California ²	A manufacturing, warehouse and office building (leased)	37,000
Brooklyn Park, Minnesota ²	An office, laboratory and warehouse building (leased)	34,000
Westlake, Ohio	Corporate headquarters	28,000
Lithia Springs, Georgia ¹	A warehouse and office building (leased)	23,000
Chattanooga, Tennessee ²	A manufacturing, warehouse and office building (leased)	25,000
Huntington Beach, California ²	An office, laboratory and warehouse building (leased)	23,000
International	The office, hoof and y and wateriouse burnaning (toused)	21,000
Erkrath, Germany ^{1,2}	An office, laboratory and warehouse building (leased)	324,000
Rubiera, Italy ¹	A manufacturing, five assembly, four warehouse and office buildings	325,000
Shanghai, China ¹	Three manufacturing, warehouse, laboratory and office buildings	179,000
Münster, Germany ¹	Two manufacturing, warehouse and office buildings (leased)	150,000
Lüneburg, Germany ¹	A manufacturing and laboratory building	129,000
Guaymas, Mexico ²	Two manufacturing, warehouse and office buildings (leased)	89,000
Tokyo, Japan ^{1,2}	Four office, laboratory and warehouse buildings (leased)	76,000
Suzhou, China ³	Two manufacturing, warehouse and office buildings (leased)	75,000
Tecate, Mexico ²	A manufacturing, warehouse and office building (leased)	59,000
Bangalore, India ^{1, 3}	A manufacturing, assembly, warehouse and office building	56,000
Rosario, Argentina ¹	An assembly, warehouse and office building	55,000
Shanghai, China ¹	Three manufacturing, warehouse, laboratory and office buildings (leased)	55,000
Maastricht, Netherlands ¹	A manufacturing, warehouse and office building	54,000
Boyle, Ireland ²	A manufacturing, watchouse and office building	
Aylesbury, U.K. ³	A manufacturing, warehouse and office building (leased)	47,000
Galway, Ireland ²	An office, laboratory and warehouse building (leased)	36,000
	An office, laboratory and warehouse building (leased)	36,000
Seongnam-City, South Korea ^{1,2}		35,000
Saitama, Japan ¹	A manufacturing, warehouse, and office building (leased)	32,000
Geleen, Netherlands ¹	A warehouse and office building	30,000
Sao Paulo, Brazil ¹	An office, laboratory and warehouse building (leased)	23,000
El Marques, Mexico ¹	A warehouse and office building	22,000

Business Segment - Property Identification Legend

¹ - Industrial Precision Solutions

- ² Medical and Fluid Solutions
- ³ Advanced Technology Solutions

The facilities listed have adequate, suitable and sufficient capacity (production and non-production) to meet present and foreseeable demand for our products.

Other properties at international subsidiary locations and at branch locations within the United States are leased. Lease terms do not exceed 25 years and generally contain a provision for cancellation with some penalty at an earlier date. Information about leases is reported in Note 9 of Notes to Consolidated Financial Statements that can be found in Part II, Item 8 of this document.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosures

Not applicable.

Information About Our Executive Officers

Name	Age	Officer Since	Position or Office with the Company and Business Experience During the Past Five (5) Year Period
Sundaram Nagarajan	62	2019	President and Chief Executive Officer
Daniel R. Hopgood	52	2024	Executive Vice President, Chief Financial Officer
James E. DeVries	65	2012	Executive Vice President
Stephen P. Lovass	55	2017	Executive Vice President
Jennifer McDonough	53	2021	Executive Vice President, General Counsel and Secretary
Joseph P. Kelley	52	2020	Executive Vice President
Sarah Siddiqui	47	2023	Executive Vice President
Srinivas Subramanian	54	2022	Executive Vice President

Our executive officers as of October 31, 2024, were as follows:

Effective August 1, 2019, Sundaram Nagarajan was appointed President and Chief Executive Officer and as a member of the Board of Directors of the Company. Prior to becoming our President and Chief Executive Officer, Mr. Nagarajan served as Executive Vice President, Automotive OEM Segment, with Illinois Tool Works Inc. (NYSE: ITW), a global manufacturer of a diversified range of industrial products and equipment, since 2015. Prior to that, Mr. Nagarajan served as Executive Vice President, Welding Segment, with Illinois Tool Works Inc. from 2010 to 2015. Mr. Nagarajan joined the Board of Directors of Wesco International, Inc. (NYSE: WCC) in 2022. He previously served as a member of the Board of Directors of Sonoco Products Company (NYSE: SON) from 2015 to 2022.

Effective May 20, 2024, Daniel R. Hopgood was appointed as Executive Vice President and Chief Financial Officer. Prior to joining Nordson, Mr. Hopgood was Controller and Chief Accounting Officer from April 2021 to May 2024 and Senior Vice President, Global Financial Services and Systems from September 2017 to March 2021 of Eaton Corporation (NYSE: ETN), a multinational power management company. Prior to joining Eaton Corporation, Mr. Hopgood served in various roles of increasing responsibility such as Vice President, Aftermarket Americas for Meritor, Inc. (NYSE: MTOR), a Fortune 500 manufacturer of commercial vehicle components and systems, and Manager of Corporate Finance and Reporting for MSX International, Inc., a management consulting company for leading automotive brands.

Effective November 1, 2023, Joseph P. Kelley was appointed as Executive Vice President - Industrial Precision Solutions. Previously, Mr. Kelley served as Executive Vice President and Chief Financial Officer of the Company since July 2020. Prior to joining the Company, Mr. Kelley had previously served as Chief Financial Officer of Materion Corporation, (NYSE: MTRN), an advanced materials company, since 2015. Throughout his career, he served in roles of increasing financial responsibility at Materion, Avient Corporation (formerly known as PolyOne Corporation) (NYSE: AVNT), a specialty chemicals company, and Lincoln Electric Holdings, Inc. (Nasdaq: LECO), a global manufacturer.

Effective August 1, 2022, Stephen P. Lovass was named Executive Vice President - Medical and Fluid Solutions. Previously, Mr. Lovass served as Corporate Vice President since November 2016. Prior to joining the Company, Mr. Lovass served as President for one of the global sensors and controls businesses for Danaher Corporation (NYSE: DHR), an international Fortune 200, diversified science and technology company, from 2012 to 2016. Prior to joining Danaher Corporation, Mr. Lovass served as a Senior Vice President and Corporate Officer for Gerber Scientific, Inc., an automated systems manufacturer for sign-making, specialty graphics and packaging.

Effective November 1, 2021, Jennifer L. McDonough was named Executive Vice President, General Counsel and Secretary and leads the Company's global legal function in ethics and compliance, intellectual property and other general corporate legal matters. Ms. McDonough brings over 20 years of experience advising companies on wide-ranging, critical corporate initiatives and previously served as Vice President, Deputy General Counsel and Assistant Secretary at PPL Corporation (NYSE: PPL), a Fortune 500 utility company, where she was responsible to deliver extensive legal counsel and services, including in the areas of general corporate law, mergers and acquisitions, corporate venture capital and investment transactions, securities and finance. Prior to joining PPL in 2017, Ms. McDonough served as Senior Vice President, General Counsel and Secretary at REX Energy Corporation, an independent condensate and natural gas company, having joined REX Energy ("REX") in April 2011, and before that as Assistant General Counsel and Assistant Secretary at Kennametal Inc. (NYSE: KMT), a global manufacturer and provider of engineered products and solutions, which she joined in May 2005. She began her career as a business and finance attorney with the international law firm Morgan, Lewis and Bockius LLP.

Effective February 20, 2023, Sarah Siddiqui was named Executive Vice President - Chief Human Resources Officer. Prior to joining the Company, Ms. Siddiqui served as Vice President of HR, Operations Engineering, Digital and Corporate Functions from August 2020 to February 2023 and Executive Director of HR, Operations, UTC Aerospace Systems from February 2018 to July 2020 of Collins Aerospace at Raytheon Technologies (NYSE: RTX), an aerospace and defense company. Before joining Collins Aerospace, she had various roles of increasing responsibilities within the HR function at United Technologies and Citigroup.

Effective August 1, 2022, Srinivas Subramanian was named Executive Vice President - Advanced Technology Solutions. Previously, Mr. Subramanian served as Vice President of the Electronics Processing Solutions business, having served in various roles of increasing responsibility since joining the Company in 2006.

PART II

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

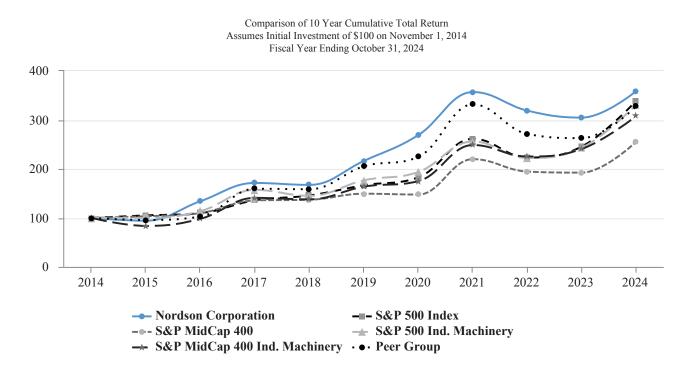
Market Information and Dividends

Our common shares are listed on the Nasdaq Global Select Market under the symbol NDSN. As of November 30, 2024, there were 1,088 record shareholders.

While we have historically paid dividends to holders of our common shares on a quarterly basis, the declaration and payment of future dividends will depend on many factors, including but not limited to, our earnings, financial condition, business development needs and regulatory considerations, and are at the discretion of our board of directors.

Performance Graph

The following graph compares the 10-year cumulative return, calculated on a dividend-reinvested basis, from investing \$100 on November 1, 2014 in Nordson common shares, the S&P 500 Index, the S&P MidCap 400 Index, the S&P 500 Industrial Machinery Index, the S&P MidCap 400 Industrial Machinery Index and our New Peer Group, which includes: AME, B, DCI, ENTG, GGG, GTLS, ICUI, IEX, ITT, KEYS, LECO, MKSI, NATI, TER, TFX, TRMB, VNT, WTS and WWD.



Company/Market/Peer Group	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Nordson Corporation	\$ 100.00	\$ 94.20	\$ 134.16	\$ 171.35	\$ 167.44	\$ 216.45	\$ 269.38	\$ 356.95	\$ 318.97	\$ 304.78	\$ 359.20
S&P 500 Index	\$ 100.00	\$ 105.20	\$ 109.94	\$ 135.93	\$ 145.91	\$ 166.81	\$ 183.01	\$ 261.55	\$ 223.34	\$ 245.99	\$ 339.50
S&P MidCap 400	\$ 100.00	\$ 103.42	\$ 109.89	\$ 135.69	\$ 137.08	\$ 149.44	\$ 147.72	\$ 219.96	\$ 194.58	\$ 192.51	\$ 256.02
S&P 500 Ind. Machinery	\$ 100.00	\$ 99.85	\$ 114.01	\$ 157.18	\$ 145.03	\$ 176.87	\$ 194.00	\$ 256.07	\$ 222.32	\$ 243.45	\$ 331.68
S&P MidCap 400 Ind. Machinery	\$ 100.00	\$ 83.71	\$ 98.24	\$ 140.90	\$ 137.93	\$ 163.91	\$ 175.15	\$ 248.80	\$ 225.40	\$ 241.00	\$ 308.20
Peer Group	\$ 100.00	\$ 95.87	\$ 102.83	\$ 159.58	\$ 158.52	\$ 205.37	\$ 224.76	\$ 331.77	\$ 271.31	\$ 262.88	\$ 328.27

Source: Zack's Investment Research

Common Share Repurchases

(in whole shares)	Total Number of Shares Repurchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Repurchased as Part of Publicly Announced Plans or Programs ⁽²⁾	Maximum Value of Shares That May Yet Be Purchased Under the Plans or Programs ⁽²⁾	
August 1, 2024 to August 31, 2024	30	\$ 243.34	—	\$	523,798
September 1, 2024 to September 30, 2024	208	\$ 260.01	—	\$	523,798
October 1, 2024 to October 31, 2024	215	\$ 260.35		\$	523,798
Total	453	\$ 259.07		\$	523,798

⁽¹⁾ Includes shares tendered for taxes related to stock option exercises and vesting of restricted stock.

⁽²⁾ In December 2014, the board of directors authorized a \$300,000 common share repurchase program. In August 2015, the board of directors authorized the repurchase of up to an additional \$200,000 of the Company's common shares. In August 2018, the board of directors authorized the repurchase of an additional \$500,000 of the Company's common shares. In September 2022, the board of directors authorized the repurchase of up to an additional \$500,000 of the Company's common shares. Approximately \$523,798 of the total \$1,500,000 authorized remained available for share repurchases at October 31, 2024. Uses for repurchased shares include the funding of benefit programs including stock options and restricted stock. Shares purchased are treated as treasury shares until used for such purposes. The repurchase program will be funded using cash from operations and proceeds from borrowings under our credit facilities. The repurchase program does not have an expiration date.

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

NOTE REGARDING AMOUNTS AND FISCAL YEAR REFERENCES

In this annual report, all amounts related to United States dollars and foreign currency and to the number of Nordson Corporation's common shares, except for per share earnings and dividend amounts, are expressed in thousands. Unless the context otherwise indicates, all references to "we," "us," "our," or the "Company" mean Nordson Corporation.

Unless otherwise noted, all references to years relate to our fiscal year ending October 31.

Critical Accounting Policies and Estimates

Our Consolidated Financial Statements and accompanying notes have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates, judgments and assumptions that affect reported amounts of assets, liabilities, revenues and expenses. On an ongoing basis, we evaluate the accounting policies and estimates that are used to prepare financial statements. We base our estimates on historical experience and assumptions believed to be reasonable under current facts and circumstances. Actual amounts and results could differ from these estimates used by management.

Certain accounting policies that require significant management estimates and are deemed critical to our results of operations or financial position are discussed below. On a regular basis, critical accounting policies are reviewed with the Audit Committee of the board of directors.

Revenue recognition - A contract exists when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of the consideration is probable. Revenue is recognized when performance obligations under the terms of the contract with a customer are satisfied. Generally, our revenue results from short-term, fixed-price contracts and is recognized as of a point in time when the product is shipped or at a later point when the control of the product transfers to the customer. Refer to Note 1 to the Consolidated Financial Statements for further discussion regarding the Company's revenue recognition policy.

Business combinations - The acquisitions of our businesses are accounted for under the acquisition method of accounting. The amounts assigned to the identifiable assets acquired and liabilities assumed in connection with acquisitions are based on estimated fair values as of the date of the acquisition, with the remainder, if any, recorded as goodwill. The fair values are determined by management, taking into consideration information supplied by the management of the acquired entities, and other relevant information. Such information typically includes valuations obtained from independent appraisal experts, which management reviews and considers in its estimates of fair values. The valuations are generally based upon future cash flow projections for the acquired assets, discounted to present value. Determining the fair value of assets acquired and liabilities assumed requires management's judgment and often involves the use of significant estimates and assumptions, including assumptions with respect to future revenue growth rates and EBITDA margins, discount rates, customer attrition rates, and asset lives, among other items. This judgment could result in either a higher or lower value assigned to amortizable or depreciable assets. The impact could result in either higher or lower amortization expense.

Goodwill - Goodwill is the excess of purchase price over the fair value of tangible and identifiable intangible net assets acquired in various business combinations. Goodwill is not amortized but is tested for impairment annually at the reporting unit level, or more often if indications of impairment exist.

We test goodwill in accordance with Accounting Standards Codification ("ASC") 350. We did not record any goodwill impairment charges in 2024. We use an independent valuation specialist to assist with refining our assumptions and methods used to determine fair values. To test for goodwill impairment, we estimate the fair value of each of our reporting units using a combination of the discounted cash flow method ("Income Approach") and the Market Approach.

The Income Approach uses assumptions for revenue growth, operating margin and working capital turnover that are based on management's strategic plans tempered by performance trends and reasonable expectations about those trends. Terminal value calculations employ a published formula known as the Gordon Growth Model Method that essentially captures the present value of perpetual cash flows beyond the last projected period assuming a constant Weighted Average Cost of Capital ("WACC") methodology and growth rate. For each reporting unit, a sensitivity analysis is performed to vary the discount and terminal growth rates in order to provide a range of reasonableness for detecting impairment. Discount rates are developed using a WACC methodology.

The WACC represents the blended average required rate of return for equity and debt capital based on observed market return data and company specific risk factors. For 2024, the WACC rates used ranged from 8.0 percent to 9.0 percent depending upon the reporting unit's size, end market volatility and projection risk. See Note 5 to the Consolidated Financial Statements for further details regarding the valuation methodologies used.

In 2024, 2023 and 2022, the results of our annual impairment tests indicated no impairment.

The fair value ("FV") was compared to the carrying value ("CV") for each reporting unit. Based on the results shown in the table below and based on our measurement date of August 1, 2024, our conclusion is that no goodwill was impaired in 2024. Potential events or circumstances, such as a sustained downturn in global economies, could have a negative effect on estimated fair values.

	WACC	Excess of FV over CV	 Goodwill
Industrial Precision Solutions Segment - Adhesives	8.0%	330%	\$ 1,183,342
Industrial Precision Solutions Segment - Industrial Coating Systems	9.0%	3,451%	\$ 24,083
Advanced Technology Solutions Segment - Electronics Systems	8.5%	252%	\$ 27,442
Advanced Technology Solutions Segment - Test & Inspection	8.5%	173%	\$ 375,707
Medical and Fluid Solutions Segment - Fluid Management	8.5%	170%	\$ 1,175,199

Pension plan in the United States - The measurement of the liabilities related to our domestic pension plan is based on management's assumptions related to future factors, including interest rates, return on pension plan assets, compensation increases, mortality and turnover assumptions and health care cost trend rates. The liabilities associated with the Company's international pension plans and OPEB are not as materially sensitive to changes in assumptions as the pension plan in the United States.

The weighted-average discount rate used to determine the present value of our domestic pension plan obligations was 5.27 percent at October 31, 2024 and 6.08 percent at October 31, 2023. The discount rate used was determined by using quality fixed income investments with a duration period approximately equal to the period over which pension obligations are expected to be settled.

In determining the expected return on plan assets, we consider both historical performance and an estimate of future long-term rates of return on assets similar to those in our plans. We consult with and consider the opinions of financial and actuarial experts in developing appropriate return assumptions. The expected rate of return (long-term investment rate) on domestic pension assets used to determine net benefit costs was 6.50 percent and 6.40 percent in 2024 and 2023, respectively.

The assumed rate of compensation increases used to determine the present value of our domestic pension plan obligations was 3.96 percent and 3.92 percent at October 31, 2024 and October 31, 2023, respectively.

Annual expense amounts are determined based on the discount rate used at the end of the prior year. Differences between actual and assumed investment returns on pension plan assets result in actuarial gains or losses that are amortized into expense over a period of years.

Economic assumptions have a significant effect on the amounts reported. The effect of a one percent change in the discount rate, expected return on assets and compensation increase is shown in the table below. Bracketed numbers represent decreases in expense and obligation amounts.

Discount rate:	-	% Point Increase	-	% Point Decrease
Effect on total net periodic pension cost in 2024	\$	(1,234)	\$	3,137
Effect on pension obligation as of October 31, 2024	\$	(46,287)	\$	57,461
Expected return on assets:				
Effect on total net periodic pension cost in 2024	\$	(4,094)	\$	4,094
Compensation increase:				
Effect on total net periodic pension cost in 2024	\$	2,252	\$	(2,006)
Effect on pension obligation as of October 31, 2024	\$	17,371	\$	(15,630)

Income taxes – Income taxes are estimated based on income for financial reporting purposes. Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and certain changes in valuation allowances. We provide valuation allowances against deferred tax assets if, based on available evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Management believes the valuation allowances are adequate after considering future taxable income, allowable carryforward periods and ongoing prudent and feasible tax planning strategies. In the event we were to determine that we would be able to realize the deferred tax assets in the future in excess of the net recorded amount (including the valuation allowance), an adjustment to the valuation allowance would increase income in the period such determination was made. Conversely, should we determine that we would not be able to realize all or part of the net deferred tax asset in the future, an adjustment to the valuation allowance would be expensed in the period such determination was made.

Further, at each interim reporting period, we estimate an effective income tax rate that is expected to be applicable for the full year. Significant judgment is involved regarding the application of global income tax laws and regulations and when projecting the jurisdictional mix of income. Additionally, interpretation of tax laws, court decisions or other guidance provided by taxing authorities influences our estimate of the effective income tax rates. As a result, our actual effective income tax rates and related income tax liabilities may differ materially from our estimated effective tax rates and related income tax liabilities. Any resulting differences are recorded in the period they become known.

Atrion Acquisition

On August 21, 2024, the Company completed the acquisition of Atrion, pursuant to the terms of the Merger Agreement with Merger Sub and Atrion. Pursuant to the Merger Agreement, Merger Sub merged with and into Atrion (the "Merger"), with Atrion surviving the Merger as a wholly owned subsidiary of Nordson. Atrion is a leader in proprietary medical infusion fluid delivery and niche cardiovascular solutions and will operate within our Medical and Fluid Solutions segment. The all-cash acquisition of Atrion of \$789,996, net of cash acquired, was funded using borrowings under our revolving credit facility, and the 364-day term loan agreement with a group of banks for a delayed draw term loan facility in the aggregate principal amount of \$500,000 (the "364-Day Term Loan Agreement") (see Note 8 to the Consolidated Financial Statements for additional details) and cash on hand. Based on the fair value of the assets acquired and the liabilities assumed, a preliminary purchase price allocation resulted in the recognition of \$494,279 of goodwill and \$129,600 of identifiable intangible assets. The identifiable intangible assets consist primarily of \$40,100 of tradenames (amortized over 15 years), \$24,900 of technology (amortized over 15 years), and \$64,600 of customer relationships (amortized over 19 years). The financial results of the Atrion acquisition are not expected to have a material impact on our Consolidated Financial Statements.

Results of Operations

Below is a detailed comparison of our results of operations for the fiscal years ended October 31, 2024 and October 31, 2023. For a discussion of other changes from the fiscal year ended October 31, 2023 to the fiscal year ended October 31, 2022, refer to 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 October 31, 2023.

As used throughout this annual report, geographic regions include the Americas (United States, Canada, Mexico and Central and South America), Asia Pacific and Europe.

Consolidated Financial Results

Consolidated financial results for the years ended October 31, 2024, 2023 and 2022 were as follows:

		Change		Change	
(In thousands except for per-share amounts)	 2024	from 2023	2023	from 2022	 2022
Sales	\$ 2,689,921	2.3 % \$	2,628,632	1.5 %	\$ 2,590,278
Cost of sales	1,203,792	%	1,203,227	3.4 %	1,163,742
Gross margin	1,486,129	4.3 %	1,425,405	(0.1)%	1,426,536
Gross margin %	55.2%	1.0 %	54.2%	(0.9)%	55.1%
Selling and administrative expenses	812,128	7.9 %	752,644	3.9 %	724,176
Operating profit	674,001	0.2 %	672,761	(4.2)%	 702,360
Interest expense	(88,924)	49.4 %	(59,505)	165.5 %	(22,413)
Interest and investment income	4,913	83.3 %	2,680	32.3 %	2,026
Pension settlement charge for U.S. Plans	_				(41,221)
Other - net	(4,509)	655.3 %	(597)	(107.0)%	8,527
Income before income taxes	585,481	(4.9)%	615,339	(5.2)%	 649,279
Income tax expense	118,197	(7.5)%	127,846	(6.1)%	136,176
Net income	\$ 467,284	(4.1)% \$	487,493	(5.0)%	\$ 513,103

Net Sales

Net sales for the Industrial precision solutions (IPS), Medical and Fluid Solutions (MFS) and Advanced technology solutions (ATS) segments were as follows:

	Twelve Months Ended			Variance - Increase (Decrease)				
	Oct 31, 2024	Total	Oct 31, 2023	% of Total	Organic	Acquisitions	Currency	Total
IPS	\$ 1,484,249	55.2%	\$ 1,391,046	52.9%	0.1 %	6.6 %	<u> %</u>	6.7 %
MFS	695,452	25.9%	660,316	25.1%	(0.2)%	5.4 %	0.1 %	5.3 %
ATS	510,220	19.0%	577,270	22.0%	(11.4)%	%	(0.2)%	(11.6)%
Total	\$ 2,689,921		\$ 2,628,632	-	(2.5)%	4.8 %	<u> %</u>	2.3 %

The IPS organic sales increase of 0.1 percent was driven by increases in packaging, nonwovens, and industrial coatings product lines, principally offset by declines in measurements and controls and polymer processing. The MFS organic sales decrease of 0.2% was driven by a decrease in the medical fluid components product line, partially offset by an increase in the fluid solutions product line. The ATS organic sales decrease of 11.4 percent was driven by lower demand in electronics dispense product lines as well as test and inspection product lines.

Net Sales by region were as follows:

	Twelve Months Ended					 Variance - Increase (Decrease)				
	0	ct 31, 2024	Total	0	ct 31, 2023	% of Total	Organic	Acquisitions	Currency	Total
Americas	\$	1,178,626	43.8%	\$	1,149,760	43.7%	 (1.9)%	4.3 %	0.1 %	2.5 %
Europe		726,100	27.0%		682,676	26.0%	(5.1)%	10.2 %	1.3 %	6.4 %
Asia Pacific		785,195	29.2%		796,196	30.3%	 (1.0)%	1.0 %	(1.4)%	(1.4)%
Total	\$	2,689,921		\$	2,628,632	-	(2.5)%	4.8 %	%	2.3 %

Sales outside the United States accounted for 66.6 percent of total sales in 2024, as compared to 66.2 percent in 2023.

Operating Profit

Operating profit for the IPS, MFS and ATS segments were as follows:

		Twelve Months Ended								
	Oc	t 31, 2024	% of Sales	(Oct 31, 2023	% of Sales	% of Sales Change	Increase (Decrease)		rease)
IPS	\$	470,559	31.7%	\$	460,889	33.1%	(1.4)%	\$	9,670	2.1 %
MFS		187,731	27.0%		189,367	28.7%	(1.7)%		(1,636)	(0.9)%
ATS		94,231	18.5%		101,662	17.6%	0.9%		(7,431)	(7.3)%
Corporate		(78,520)	_		(79,157)	_			637	(0.8)%
Total	\$	674,001	25.1%	\$	672,761	25.6%	(0.5)%	\$	1,240	0.2 %

Consolidated operating margin decreased by 50 basis points primarily driven by costs related to the first-year effect of acquisitions, which more than offset favorable product mix. Gross margins improved 1.0 percentage point reflecting the impact of favorable product mix and lower incremental inventory step-up amortization related to acquisitions of \$7,703 in 2024 versus \$8,862 in 2023, while the increase in selling and administrative expenses was primarily driven by acquisitions. IPS operating profit declined 140 basis points due to an unfavorable acquisition impact and severance costs. MFS operating margin declined 170 basis points due to \$10,761 in fees, severance, and non-cash inventory charges associated with the Atrion acquisition which offset improvements in operating efficiencies. ATS operating margin improved by 90 basis points on lower sales volumes due to cost reduction actions and favorable mix.

Interest and Other expenses

Interest expense in 2024 was \$88,924, an increase of \$29,419, or 49.4 percent, from 2023. The increase reflects higher average debt levels compared to the prior year due to funding of acquisitions. Other expense in 2024 was \$4,509 compared to other expense of \$597 in 2023. Included in other expense in 2024 were \$5,499 in net foreign currency losses, which were partially offset by pension gains. Included in the prior year's other expense were \$7,742 in foreign currency losses, which were largely offset by pension gains.

Income tax expense

Income tax expense in 2024 was \$118,197, or 20.2 percent of pre-tax income, as compared to \$127,846, or 20.8 percent of pretax income in 2023. The effective tax rate decreased 60 basis points primarily due to a decline in the impact of foreign tax rate variances. The income tax provision for 2024 included a tax benefit of \$4,037 due to our share-based payment transactions. Our income tax provision for 2023 included a tax benefit of \$4,286 due to our share-based payment transactions.

Net Income

Net income was \$467,284, or \$8.11 per diluted share, in 2024, compared to net income of \$487,493, or \$8.46 per diluted share, in 2023. This represented a 4.1 percent decrease in net income and a 4.1 percent decrease in diluted earnings per share. The decrease of \$0.35 per diluted share was primarily driven by higher interest expense in 2024 compared to 2023.

Liquidity and Capital Resources

Cash and cash equivalents increased \$273 in 2024 to \$115,952 as of October 31, 2024 compared to \$115,679 as of October 31, 2023. Approximately 81 percent of our consolidated cash and cash equivalents were held at various foreign subsidiaries as of October 31, 2024.

A comparison of cash flow changes from 2024 to 2023 as follows:

		Twelve Mo		
	Octo	ber 31, 2024	October 31, 2023	Increase (Decrease)
Net Income and non-cash items	\$	609,342	\$ 615,496	\$ (6,154)
Changes in operating assets and liabilities		(53,149)	25,786	(78,935)
Net cash provided by operating activities		556,193	641,282	(85,089)
Additions to property, plant and equipment		(64,410)	(34,583)	(29,827)
Acquisitions of businesses, net of cash acquired		(789,996)	(1,422,780)	632,784
Other - net		10,008	20,484	(10,476)
Net cash used in investing activities		(844,398)	(1,436,879)	592,481
Issuance of long-term debt		464,353	976,043	(511,690)
Repayment of finance lease obligations		(6,148)	(6,840)	692
Dividends paid		(161,438)	(150,356)	(11,082)
Issuance of common shares		31,067	21,373	9,694
Purchase of treasury shares		(33,339)	(89,708)	56,369
Net cash provided by financing activities	\$	294,495	\$ 750,512	\$ (456,017)

The changes in operating assets and liabilities were principally driven by decreases in customer advance payments and income taxes payable. Additions to property, plant and equipment were largely driven by productivity and growth projects, including a new manufacturing facility.

We have a \$1,150,000 unsecured multi-currency credit facility with a group of banks that provides for a term loan facility in the aggregate principal amount of \$300,000, maturing in June 2026, and a multicurrency revolving credit facility in the aggregate principal amount of \$850,000, maturing in June 2028. In anticipation of the ARAG acquisition, the Company entered into a 6760,000 senior unsecured term loan facility with a group of banks in August 2023 (the "364-Day Term Loan Facility"). On September 13, 2023, the Company completed an underwritten public offering of \$350,000 aggregate principal amount of the Company's 5.600% Notes due 2028 (the "2028 Notes") and \$500,000 aggregate principal amount of the Company's 5.800% Notes due 2033 (together with the 2028 Notes, the "Notes"). The Company used the net proceeds from the sale of the Notes to repay its borrowings under the 364-Day Term Loan Facility. At October 31, 2024, we had \$280,000 outstanding on the term loan facility and \$240,000 outstanding on the revolving credit facility.

In anticipation of the Atrion acquisition, the Company entered into a 364-Day Term Loan Agreement with Morgan Stanley Senior Funding for \$500,000 on June 21, 2024, with a maturity date of August 20, 2025. In September 2024, the Company completed an underwritten public offering of \$600,000 aggregate principal amount of 4.500% Notes due 2029 (the "2029 Notes"). The Company used a portion of the net proceeds from the sale of the 2029 Notes to repay all of the outstanding borrowings under the 364-Day Term Loan Agreement plus accrued and unpaid interest.

Our operating performance, balance sheet position and financial ratios for 2024 remained strong. The Company is wellpositioned to manage liquidity needs that arise from working capital requirements, capital expenditures and contributions related to pension and postretirement obligations, as well as principal and interest payments on our outstanding debt. Primary sources of capital to meet these needs, as well as other opportunistic investments, are a combination of cash on hand, which was \$115,952 as of October 31, 2024, cash provided by operations, which was \$556,193 in 2024, and available borrowings under our loan agreements and unused bank lines of credit which totaled \$785,880 as of October 31, 2024. Cash from operations, which when combined with our available borrowing capacity and ready access to capital markets, is expected to be more than adequate to fund our liquidity needs over the twelve months and the foreseeable future thereafter. The Company believes it has the ability to generate and obtain adequate amounts of cash to meet its long-term needs for cash.

Contractual and Other Material Cash Obligations

The following table summarizes contractual and other material cash obligations as of October 31, 2024:

	Payments Due by Period									
	Total	Less than 1 Year	1-3 Years	4-5 Years	After 5 Years					
Debt ⁽¹⁾	\$2,223,928	\$103,928	\$ 970,000	\$ 650,000	\$ 500,000					
Interest payments on long-term debt ⁽¹⁾	507,213	77,925	240,462	101,826	87,000					
Finance lease obligations ⁽²⁾	19,015	5,713	7,273	1,854	4,175					
Operating leases ⁽²⁾	106,686	18,784	31,815	21,441	34,646					
Contributions related to pension and postretirement benefits ⁽³⁾	6,622	6,622			—					
Purchase obligations ⁽⁴⁾	178,684	174,321	4,357	6	_					
Total obligations	\$3,042,148	\$387,293	\$1,253,907	\$ 775,127	\$ 625,821					

- (1) Refer to Note 8 to the Consolidated Financial Statements for further discussion.
- (2) Refer to Note 9 to the Consolidated Financial Statements for further discussion.
- (3) Pension and postretirement plan funding amounts reflect known amounts over the next twelve months. Future amounts will be determined based on the future funded status of the plans and therefore cannot be estimated at this time. Refer to Note 6 to the Consolidated Financial Statements for further discussion.
- (4) Purchase obligations primarily represent commitments for materials used in our manufacturing processes that are not recorded on our Consolidated Balance Sheet.

We believe that the combination of present capital resources, cash from operations and unused financing sources such as our credit facilities, including our revolving credit facility, are more than adequate to meet cash requirements for the twelve months and the foreseeable future thereafter. There are no significant restrictions limiting the transfer of funds from international subsidiaries to the parent company.

New Accounting Standards

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*. ASU 2023-07 requires enhanced disclosures about significant segment expenses and enhanced disclosures in interim periods. The guidance in ASU 2023-07 will be applied retrospectively and is effective for annual reporting periods in fiscal years beginning after December 15, 2023 and interim reporting periods in fiscal years beginning after December 31, 2024, with early adoption permitted. The Company is currently evaluating the impact that the adoption of ASU 2023-07 will have on its consolidated financial statements and disclosures and anticipates adoption in 2025.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. ASU 2023-09 is intended to improve income tax disclosure requirements by requiring specific disclosure in the rate reconciliation and additional information for reconciling items that meet a quantitative threshold. The guidance in ASU 2023-09 will be effective for annual reporting periods in fiscal years beginning after December 15, 2024. The Company is currently evaluating the impact that the adoption of ASU 2023-09 will have on its consolidated financial statements and disclosures and anticipates adoption in fiscal 2026.

In November 2024, the FASB issued ASU 2024-03, *Income Statement (Topic 220): Reporting Comprehensive Income*. ASU 2024-03 does not change or remove current expense presentation requirements within the Consolidated Statements of Income. However, the amendments require disclosure, on an annual and interim basis, disaggregated information about certain income statement expense line items within the notes to the consolidated financial statements. The amendments in this update are

effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. The Company is currently evaluating the impact that the adoption of ASU 2024-03 will have on its consolidated financial statements and disclosures and anticipates adoption in fiscal 2028.

Effects of Foreign Currency

The impact of changes in foreign currency exchange rates on sales and operating results cannot be precisely measured due to fluctuating selling prices, sales volume, product mix and cost structures in each country where we operate. As a general rule, a weakening of the United States dollar relative to foreign currencies has a favorable effect on sales and net income, while a strengthening of the dollar has a detrimental effect.

In 2024, as compared with 2023, the United States dollar was slightly stronger against foreign currencies. If 2023 exchange rates had been in effect during 2024, sales would have been approximately \$3,352 higher and third-party costs would have been approximately \$903 higher. In 2023, as compared with 2022, the United States dollar was generally stronger against foreign currencies. If 2022 exchange rates had been in effect during 2023, sales would have been approximately \$23,153 higher and third-party costs would have been approximately \$15,210 higher. These effects on reported sales do not include the impact of local price adjustments made in response to changes in currency exchange rates.

Trends

Our solid historical performance is attributed to our diverse geographic and end market participation and our long-term commitment to develop and provide quality products and worldwide service to meet our customers' changing needs.

Safe Harbor Statements Under the Private Securities Litigation Reform Act of 1995

This annual report, particularly "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements within the meaning of the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. Such statements relate to, among other things, income, earnings, cash flows, changes in operations, operating improvements, businesses in which we operate and the United States and global economies. Statements in this annual report that are not historical are hereby identified as "forward-looking statements" and may be indicated by words or phrases such as "anticipates," "supports," "plans," "projects," "expects," "believes," "should," "would," "could," "hope," "forecast," "management is of the opinion," use of the future tense and similar words or phrases. These forward-looking statements reflect management's current expectations and involve a number of risks and uncertainties. These risks and uncertainties include, but are not limited to, U.S. and international economic and political conditions; financial and market conditions; currency exchange rates and devaluations; possible acquisitions including the Company's ability to complete and successfully integrate acquisitions, including the integration of Atrion and ARAG; the Company's ability to successfully divest or dispose of businesses that are deemed not to fit with its strategic plan; the effects of changes in U.S. trade policy and trade agreements; the effects of changes in tax law; and the possible effects of events beyond our control, such as political unrest, including the conflicts in Europe and the Middle East, acts of terror, natural disasters and pandemics.

In light of these risks and uncertainties, actual events and results may vary significantly from those included in or contemplated or implied by such forward-looking statements. Readers are cautioned not to place undue reliance on such forward-looking statements. These forward-looking statements speak only as of the date made. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Factors that could cause our actual results to differ materially from the expected results are discussed in Part 1, Item 1A, Risk Factors of this annual report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We operate internationally and enter into intercompany transactions denominated in foreign currencies. Consequently, we are subject to market risk arising from exchange rate movements between the dates foreign currencies are recorded and the dates they are settled. We regularly use foreign exchange contracts to reduce our risks related to most of these transactions. These contracts, primarily associated with the euro, yen and pound sterling, typically have maturities of 90 days or less, and generally require the exchange of foreign currencies for United States dollars at rates stated in the contracts. Gains and losses from changes in the market value of these contracts offset foreign exchange losses and gains, respectively, on the underlying transactions. We use foreign exchange contracts on a routine basis to help mitigate the risks related to transactions denominated in foreign currencies.

Refer to Note 11 to the Consolidated Financial Statements for further discussion about our foreign currency transactions and the methods and assumptions used to record these transactions.

A portion of our operations is financed with short-term and long-term borrowings and is subject to market risk arising from changes in interest rates.

The tables that follow present principal repayments and weighted-average interest rates on outstanding borrowings of fixed-rate debt.

At October 31, 2024	2025	2026	2027	2028	2029	Thereafter	Total Value	Fair Value
Annual repayments of long-term debt	\$85,643	\$50,000	\$10,000	\$390,000	\$620,000	\$530,000	\$1,685,643	\$1,690,395
Average interest rate on total borrowings outstanding during the year	3.7%	3.8%	3.2%	5.4%	4.5%	5.7%	5.0%	
At October 31, 2023	2024	2025	2026	2027	2028	Thereafter	Total Value	Fair Value
At October 31, 2023 Annual repayments of	2024	2025	2026	2027	2028	Thereafter	Value	Value
	2024 \$110,643	2025 \$85,642	2026 \$50,000	2027 \$10,000	2028 \$390,000	Thereafter \$550,000		

We also have variable-rate long-term debt. The weighted average interest rate of this variable-rate debt was 5.66 percent at October 31, 2024 and 6.26 percent at October 31, 2023. As of October 31, 2024, a one percent increase in interest rates would result in additional annual interest expense of approximately \$5,383 on the variable rate long-term debt.

Consolidated Statements of Income

Years ended October 31, 2024, 2023 and 2022

(In thousands except for per-share amounts)	 2024	 2023	 2022
Sales	\$ 2,689,921	\$ 2,628,632	\$ 2,590,278
Operating costs and expenses:			
Cost of sales	1,203,792	1,203,227	1,163,742
Selling and administrative expenses	 812,128	 752,644	 724,176
	 2,015,920	1,955,871	1,887,918
Operating profit	674,001	672,761	702,360
Other income (expense):			
Interest expense	(88,924)	(59,505)	(22,413)
Interest and investment income	4,913	2,680	2,026
Pension settlement charge for U.S. Plans			(41,221)
Other - net	 (4,509)	 (597)	 8,527
	(88,520)	(57,422)	(53,081)
Income before income taxes	585,481	615,339	649,279
Income tax expense	 118,197	 127,846	 136,176
Net income	\$ 467,284	\$ 487,493	\$ 513,103
Average common shares	 57,176	57,090	57,629
Incremental common shares attributable to equity compensation	 440	 541	 620
Average common shares and common share equivalents	57,616	57,631	 58,249
Basic earnings per share	\$ 8.17	\$ 8.54	\$ 8.90
Diluted earnings per share	\$ 8.11	\$ 8.46	\$ 8.81
Dividends declared per common share	\$ 2.82	\$ 2.63	\$ 2.18

Consolidated Statements of Comprehensive Income

chucu October 51, 202 i, 2020 unu 2022			
rands)	2024	2023	2022
come	\$ 467,284	\$ 487,493	\$ 513,103
onents of other comprehensive income (loss), net of tax:			
ign currency translation adjustments	16,390	26,766	(126,657)
sion and postretirement benefit plans:			
Net actuarial gain (loss) arising during the year	(4,387)	(15,106)	54,065
Amortization of prior service cost	(7)	(34)	(201)
Amortization of actuarial (gain) loss	(502)	(24)	7,575
Curtailment gain (loss)	—	(2)	1,052
Settlement (gain) loss recognized	107	(259)	32,219
Total pension and postretirement benefit plans	(4,789)	(15,425)	94,710
ther comprehensive income (loss)	11,601	11,341	(31,947)
comprehensive income	\$ 478,885	\$ 498,834	\$ 481,156
• • • •		,	

Years ended October 31, 2024, 2023 and 2022

Consolidated Balance Sheets

October 31, 2024 and 2023

(In thousands)

Assets

Current assets:	2024	2023
Cash and cash equivalents	\$ 115,952	\$ 115,679
Receivables - net	594,663	590,886
Inventories - net	476,935	454,775
Prepaid expenses and other current assets	87,482	67,970
Total current assets	 1,275,032	 1,229,310
Goodwill	3,280,819	2,784,201
Property, plant and equipment - net	544,607	392,846
Intangible assets - net	740,846	672,744
Operating right of use lease assets	93,620	106,176
Deferred income taxes	11,196	16,022
Other assets	54,846	50,471
	\$ 6,000,966	\$ 5,251,770
Liabilities and shareholders' equity		
Current liabilities:		
Current maturities of long-term debt and notes payable	\$ 103,928	\$ 115,662
Accrued liabilities	225,231	199,588
Accounts payable	97,839	106,320
Customer advance payments	46,400	93,389
Income taxes payable	32,754	45,359
Operating lease liability - current	17,063	16,853
Finance lease liability	5,262	4,918
Total current liabilities	 528,477	 582,089
Long-term debt	2,101,197	1,621,394
Operating lease liability - noncurrent	80,818	92,412
Deferred income taxes	205,687	210,637
Postretirement obligations	51,544	50,862
Pension obligations	46,893	40,425
Finance lease liability - noncurrent	12,083	11,670
Other long-term liabilities	42,075	44,221
Shareholders' equity:		
Preferred shares, no par value; 10,000 shares authorized; none issued	_	_
Common shares, no par value; 160,000 shares authorized;		
98,023 shares issued at October 31, 2024 and 2023	12,253	12,253
Capital in excess of stated value	714,091	668,097
Retained earnings	4,295,199	3,989,353
Accumulated other comprehensive loss	(184,840)	(196,441)
Common shares in treasury, at cost	(1,904,511)	(1,875,202)
Total shareholders' equity	2,932,192	 2,598,060
	\$ 6,000,966	\$ 5,251,770

Consolidated Statements of Shareholders' Equity

Years ended October 31, 2024, 2023 and 2022

(In thousands, except for per share data)	ommon Shares]	dditional Paid-in- Capital	Retained Earnings	0	Accumulated Other Comprehensive Income (Loss)	Common Shares in Treasury, at cost	TOTAL
October 31, 2021	\$ 12,253	\$	585,334	\$ 3,265,027	\$	(175,835)	\$ (1,527,649)	\$ 2,159,130
Shares issued under company stock and employee benefit plans	_		10,615	_		_	1,509	12,124
Stock-based compensation			30,748			—		30,748
Purchase of treasury shares			_	_			(262,869)	(262,869)
Dividends declared (\$2.18 per share)			—	(125,914)		_		(125,914)
Net income			_	513,103			_	513,103
Other comprehensive income (loss):								
Foreign currency translation adjustments	_		_	_		(126,657)	_	(126,657)
Pension plan settlement adjustment						33,271		33,271
Defined benefit pension and post- retirement plans adjustment			_			61,439		61,439
October 31, 2022	\$ 12,253	\$	626,697	\$ 3,652,216	\$	(207,782)	\$ (1,789,009)	\$ 2,294,375
Shares issued under company stock and employee benefit plans	_		17,858	_		_	3,515	21,373
Stock-based compensation			23,542			_		23,542
Purchase of treasury shares			_				(89,708)	(89,708)
Dividends declared (\$2.63 per share)				(150,356)		—	—	(150,356)
Net income	—		—	487,493			—	487,493
Other comprehensive income (loss):								
Foreign currency translation adjustments			_	—		26,766	—	26,766
Defined benefit pension and post- retirement plans adjustment	 			 		(15,425)		(15,425)
October 31, 2023	\$ 12,253	\$	668,097	\$ 3,989,353	\$	(196,441)	\$ (1,875,202)	\$ 2,598,060
Shares issued under company stock and employee benefit plans	_		27,037				4,030	31,067
Stock-based compensation			18,957	_		_	_	18,957
Purchase of treasury shares	—		—	—		—	(33,339)	(33,339)
Dividends declared (\$2.82 per share)	—		—	(161,438)			—	(161,438)
Net income	—		—	467,284		—	—	467,284
Other comprehensive income (loss):								
Foreign currency translation adjustments	_		_			16,390		16,390
Defined benefit pension and post- retirement plans adjustment						(4,789)		(4,789)
October 31, 2024	\$ 12,253	\$	714,091	\$ 4,295,199	\$	(184,840)	\$ (1,904,511)	\$ 2,932,192

Consolidated Statements of Cash Flows

Years ended October 31, 2024, 2023 and 2022

(In	thousands)
-----	------------

Cash flows from operating activities:		2024		2023		2022
Net income	\$	467,284	\$	487,493	\$	513,103
Adjustments to reconcile net income to net cash provided by operating activities:	Ψ	107,201	Ψ	107,195	Ψ	515,105
Depreciation		59,203		52,179		49,098
Amortization		76,972		59,719		50,825
Provision for losses on receivables		619		283		1,259
Deferred income taxes		(18,557)		(16,116)		(10,732)
Non-cash stock compensation		18,957		22,710		30,748
Loss (gain) on sale of property, plant and equipment		1,468		1,092		(581)
Pension settlement charge for U.S. Plans				_		41,221
Other non-cash		3,396		8,136		1,259
Changes in operating assets and liabilities:						
Receivables		13,988		18,185		(72,907)
Inventories		46,615		22,418		(69,132)
Prepaid expenses		(4,543)		(14,677)		(1,708)
Accounts payable		(38,591)		(15,820)		10,671
Income taxes payable		(19,385)		17,722		6,155
Accrued liabilities		8,187		(28,620)		925
Customer advance payments		(48,425)		(2,779)		18,682
Other		(10,995)		29,357		(55,755)
Net cash provided by operating activities		556,193		641,282		513,131
Cash flows from investing activities:						
Additions to property, plant and equipment		(64,410)		(34,583)		(51,428)
Proceeds from sale of property, plant and equipment		75		101		280
Acquisition of businesses, net of cash acquired		(789,996)		(1,422,780)		(171,613)
Other		9,933		20,383		_
Net cash used in investing activities		(844,398)		(1,436,879)		(222,761)
Cash flows from financing activities:						
Proceeds from issuance of debt		783,039		2,178,596		63,067
Repayment of debt		(318,686)		(1,202,553)		(96,975)
Repayment of capital lease obligations		(6,148)		(6,840)		(5,439)
Issuance of common shares		31,067		21,373		12,124
Purchase of treasury shares		(33,339)		(89,708)		(262,869)
Dividends paid		(161,438)		(150,356)		(125,914)
Net cash provided (used) in financing activities		294,495		750,512		(416,006)
Effect of exchange rate changes on cash		(6,017)		(2,693)		(10,879)
Increase (decrease) in cash and cash equivalents		273		(47,778)		(136,515)
Cash and cash equivalents at beginning of year		115,679		163,457		299,972
Cash and cash equivalents at end of year	\$	115,952	\$	115,679	\$	163,457

Notes to Consolidated Financial Statements

NOTE REGARDING AMOUNTS AND FISCAL YEAR REFERENCES

In this annual report, all amounts related to United States dollars and foreign currency and to the number of Nordson Corporation's common shares, except for per share earnings and dividend amounts, are expressed in thousands. Unless the context otherwise indicates, all references to "we" or the "Company" mean Nordson Corporation.

Unless otherwise noted, all references to years relate to our fiscal year.

Note 1 — Significant accounting policies

Consolidation — The consolidated financial statements include the accounts of Nordson Corporation and its 100%-owned and controlled subsidiaries. Investments in affiliates and joint ventures in which our ownership is 50 percent or less or in which we do not have control but have the ability to exercise significant influence, are accounted for under the equity method. All significant intercompany accounts and transactions have been eliminated in consolidation.

Use of estimates — The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the amounts reported in the Consolidated Financial Statements and notes. Actual amounts could differ from these estimates.

Fiscal year — Our fiscal year is November 1 through October 31.

Revenue recognition — A contract exists when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of the consideration is probable. Revenue is recognized when performance obligations under the terms of the contract with a customer are satisfied. Generally, our revenue results from short-term, fixed-price contracts and primarily is recognized as of a point in time when the product is shipped or at a later point when the control of the product transfers to the customer. For products in which control transfers upon delivery, revenue is deferred for undelivered items and included within Accrued liabilities in our Consolidated Balance Sheets. Revenues deferred as of October 31, 2024 and 2023 were not material.

However, for certain contracts related to the sale of customer-specific products within our Medical and Fluid Solutions segment, revenue is recognized over time as we satisfy performance obligations because of the continuous transfer of control to the customer occurs as we enhance assets that are customer controlled, and we are contractually entitled to payment for work performed to date plus a reasonable margin.

As control transfers over time for these products or services, revenue is recognized based on progress toward completion of the performance obligations. The selection method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. We have elected to use the input method – costs incurred for these contracts because it best depicts the transfer of products or services to the customer based on incurring costs on the contract. Under this method, revenues are recorded proportionally as costs are incurred. Contract assets recognized are recorded in Prepaid expenses and other current assets and contract liabilities are recorded in Accrued liabilities in our Consolidated Balance Sheets and were not material at October 31, 2024 or 2023. Revenue recognized over time represented approximately less than ten percent of our overall consolidated revenues for October 31, 2024 and 2023.

Revenue is measured as the amount of consideration we expect to be entitled to in exchange for transferring products or services. Taxes, including sales and value add, that we collect concurrently with revenue-producing activities are excluded from revenue. As a practical expedient, we may exclude the assessment of whether goods or services are performance obligations, if they are immaterial in the context of the contract and combine these with other performance obligations. While payment terms and conditions vary by contract type, we have determined that our contracts generally do not include a significant financing component. We have elected to apply the practical expedient to treat all shipping and handling costs as fulfillment costs, as a significant portion of these costs are incurred prior to transfer of control to the customer. We have also elected to apply the practical expedient to expense sales commissions as they are incurred, as the amortization period resulting from capitalizing the costs is one year or less. These costs are recorded within Selling and administrative expenses in our Consolidated Statements of Income.

We offer assurance-type warranties on our products as well as separately sold warranty contracts. Revenue related to warranty contracts that are sold separately is recognized over the life of the warranty term and is not material. Certain arrangements may include installation, installation supervision, training and spare parts, which tend to be completed in a short period of time, at an insignificant cost, and utilizing skills not unique to us, therefore, these items are typically regarded as inconsequential or not material.

We disclose disaggregated revenues by operating segment and geography in accordance with the revenue standard and on the same basis used internally by the chief operating decision maker for evaluating performance of operating segments and for allocating resources. Refer to Note 14 for details on our operating segments.

Shipping and handling costs — Amounts billed to customers for shipping and handling are recorded as revenue. Shipping and handling expenses are included in cost of sales.

Advertising costs — Advertising costs are expensed as incurred and were \$8,923, \$7,635 and \$7,028 in 2024, 2023 and 2022, respectively.

Research and development — Investments in research and development are important to our long-term growth, enabling us to keep pace with changing customer and marketplace needs through the development of new products and new applications for existing products. We place strong emphasis on technology developments and improvements through internal engineering and research teams. Research and development costs are expensed as incurred and were \$64,992, \$71,400 and \$52,531 in 2024, 2023 and 2022, respectively.

Earnings per share — Basic earnings per share are computed based on the weighted-average number of common shares outstanding during each year, while diluted earnings per share are based on the weighted-average number of common shares and common share equivalents outstanding. Common share equivalents consist of shares issuable upon exercise of stock options computed using the treasury stock method, as well as restricted stock and deferred stock-based compensation. Options whose exercise price is higher than the average market price are excluded from the calculation of diluted earnings per share calculation in 2024 and 140 and 78 options were excluded from the calculation of diluted earnings per share in 2023 and 2022, respectively, because their effect would have been anti-dilutive. Under the 2021 Stock Incentive and Award Plan, executive officers and selected other key employees receive common share awards based on corporate performance measures over three-year performance periods. Awards for which performance measures have not been met were excluded from the calculation of diluted earnings per share.

Cash and cash equivalents — Highly liquid instruments with maturities of 90 days or less at date of purchase are considered to be cash equivalents.

Allowance for doubtful accounts — An allowance for doubtful accounts is maintained for estimated losses resulting from the inability of customers to make required payments. The amount of the allowance is determined principally on the basis of past collection experience and known factors regarding specific customers. Accounts are written off against the allowance when it becomes evident that collection will not occur. Credit is extended to customers satisfying pre-defined credit criteria. We believe we have limited concentration of credit risk due to the diversity of our customer base.

Our primary allowance for credit losses is the allowance for doubtful accounts, which is principally determined based on aging of receivables. Receivables are exposed to credit risk based on the customers' ability to pay which is influenced by, among other factors, their financial liquidity. We perform ongoing customer credit evaluation to maintain sufficient allowances for potential credit losses. Our segments perform credit evaluation and monitoring to estimate and manage credit risk through the review of customer information, credit ratings, approval and monitoring of customer credit limits and assessment of market conditions. We may also require prepayments or bank guarantees from customers to mitigate credit risk. Our receivables are generally short-term in nature with a majority of receivables outstanding less than 90 days. Accounts receivable balances are written-off against the allowance if deemed uncollectible.

Accounts receivable are net of an allowance for credit losses of \$9,769 and \$10,015 at October 31, 2024 and October 31, 2023, respectively. The provision for losses on receivables was \$619 for the twelve months ended October 31, 2024 compared to \$283 for the same period a year ago. The remaining change in the allowance for credit losses is principally related to increases due to acquisitions and the write-off of uncollectible accounts.

Inventories — Inventories are valued at the lower of cost or net realizable value. Effective in the third quarter of 2022, we changed our accounting method for certain U.S. inventories from a last-in, first-out basis ("LIFO") to a first-in, first-out basis. Previously, the LIFO method was used to determine the cost of a portion of our inventories in the U.S. We believe this change in accounting method is preferable as it is consistent with how we manage our business, results in a uniform method to value our inventory across all regions of our business, improves comparability with our peers and is expected to better reflect the current value of inventory on the consolidated balance sheets. We applied this accounting change as a cumulative effect adjustment to cost of sales in the third quarter of 2022 and did not restate prior period financial statements because the impact was not material.

Derivatives — The Company does not enter into derivative financial instruments for trading purposes. Derivative instruments are used to manage risks associated with foreign exchange rates. We operate internationally and enter into intercompany transactions denominated in foreign currencies. Consequently, we are subject to market risk arising from exchange rate movements between the dates foreign currency transactions occur and the dates they are settled. We regularly use foreign currency forward contracts to reduce our risks related to most of these transactions. These contracts usually have maturities of

90 days or less and generally require us to exchange foreign currencies for U.S. dollars at maturity, at rates stated in the contracts. These contracts are not designated as hedging instruments under U.S. GAAP. Accordingly, the changes in the fair value of the foreign currency forward contracts are recognized in each accounting period in "Other – net" on the Consolidated Statements of Income together with the transaction gain or loss from the related balance sheet position. The settlement of these contracts is recorded in operating activities on the Consolidated Statements of Cash Flows.

We utilize net investment hedges to offset the translation adjustment arising from re-measuring our investment in foreign subsidiaries. These hedges are included on the balance sheet at fair value. Changes in the fair value of derivative assets or liabilities (i.e., gains or losses) are recognized depending upon the type of hedging relationship and whether a hedge has been designated. For derivative instruments that qualify for hedge accounting and are used to hedge net assets of certain foreign subsidiaries, we designate the hedging instrument as a hedge of a net investment in a foreign operation with the effective portion of the derivative's gain or loss reported in Accumulated other comprehensive loss as part of the cumulative translation adjustment and amounts reclassified out of accumulated other comprehensive loss into earnings when the hedged net investment is either sold or substantially liquidated. The settlement of these hedges is recorded in investing activities on the Consolidated Statement of Cash Flows. Changes in fair value of derivative instruments that do not qualify for hedge accounting are recognized immediately in current net earnings in "Other-net" on the Consolidated Statements of Income.

The Company has entered into treasury locks to fix the interest rate related to notes issued. The derivative positions are closed when the debt is priced with a cash settlement net payment that offsets changes in the benchmark treasury rate between execution of the treasury rate locks and the debt pricing date. The treasury locks are designed as cash flow hedges and the deferred amounts are reported in Accumulated Other Comprehensive Income (loss) ("AOCI") and subsequently reclassed to interest expense as payments are made on the notes through the maturity date.

Property, plant and equipment and depreciation — Property, plant and equipment are carried at cost. Additions and improvements that extend the lives of assets are capitalized, while expenditures for repairs and maintenance are expensed as incurred. Plant and equipment are depreciated for financial reporting purposes using the straight-line method over the estimated useful lives of the assets or, in the case of property under finance leases, over the terms of the leases. Leasehold improvements are depreciated over the shorter of the lease term or their useful lives.

Useful lives are as follows:

Land improvements	15-25 years
Buildings	20-40 years
Machinery and equipment	3-18 years
Enterprise management systems	5-13 years

Depreciation expense is included in Cost of sales and Selling and administrative expenses on the Consolidated Statements of Income. Internal use software costs are expensed or capitalized depending on whether they are incurred in the preliminary project stage, application development stage or the post-implementation stage. Amounts capitalized are amortized over the estimated useful lives of the software beginning with the project's completion. All re-engineering costs are expensed as incurred. Interest costs on significant capital projects are capitalized. No interest was capitalized in 2024, 2023 or 2022.

Goodwill and intangible assets — Goodwill is the excess of cost of an acquired entity over the amounts assigned to assets acquired and liabilities assumed in a business combination. Goodwill relates to and is assigned directly to specific reporting units. Goodwill is not amortized but is subject to annual impairment testing. Our annual impairment testing is performed as of August 1. Testing is done more frequently if an event occurs or circumstances change that would indicate the fair value of a reporting unit is less than the carrying amount of those assets.

The acquisitions of our businesses are accounted for under the acquisition method of accounting. The amounts assigned to the identifiable assets acquired and liabilities assumed in connection with acquisitions are based on estimated fair values as of the date of the acquisition, with the remainder, if any, recorded as goodwill. The fair values are determined by management, taking into consideration information supplied by the management of the acquired entities, and other relevant information. Such information typically includes valuations obtained from independent appraisal experts, which management reviews and considers in its estimates of fair value. The valuations are generally based upon future cash flow projections for the acquired assets, discounted to present value. Determining the fair value of assets acquired and liabilities assumed requires management's judgment and often involves the use of significant estimates and assumptions, including assumptions with respect to future revenue growth rates and EBITDA margins, discount rates, customer attrition rates, and asset lives, among other items. This judgment could result in either a higher or lower value assigned to amortizable or depreciable assets. The impact could result in either higher or lower amortization expense.

Other amortizable intangible assets, which consist primarily of patent/technology costs, customer relationships, non-compete agreements and trade names, are amortized over their useful lives on a straight-line basis.

At October 31, 2024, the weighted-average useful lives for each major category of amortizable intangible assets were:

Patent/technology costs	11 years
Customer relationships	17 years
Noncompete agreements	4 years
Trade names	10 years

Foreign currency translation — The financial statements of subsidiaries outside the United States are generally measured using the local currency as the functional currency. Assets and liabilities of these subsidiaries are translated at the rates of exchange at the balance sheet dates. Income and expense items are translated at average monthly rates of exchange. The resulting translation adjustments are included in AOCI, a separate component of Shareholders' equity. Generally, gains and losses from foreign currency transactions, including forward contracts, of these subsidiaries and the United States parent are included in net income. Gains and losses from intercompany foreign currency transactions of a long-term investment nature are included in AOCI.

Accumulated other comprehensive loss — Accumulated other comprehensive loss at October 31, 2024 and 2023 consisted of:

 Cumulative translation adjustments	postret	tirement benefit	0	Accumulated ther comprehensive loss
\$ (133,280)	\$	(63,161)	\$	(196,441)
		(4,789)		(4,789)
16,390				16,390
\$ (116,890)	\$	(67,950)	\$	(184,840)
\$ \$	translation adjustments \$ (133,280) 16,390	translation adjustments postrei \$ (133,280) - - - - - - - - - - - - - - - - - - -	translation adjustmentspostretirement benefit plan adjustments\$ (133,280)\$ (63,161)-(4,789)16,390-	translation adjustmentspostretirement benefit plan adjustmentso\$ (133,280)\$ (63,161)\$-(4,789)16,390-

Warranties — We offer warranties to our customers depending on the specific product and terms of the customer purchase agreement. A typical warranty program requires that we repair or replace defective products within a specified time period (generally one year) measured from the date of delivery or first use. We record an estimate for future warranty-related costs based on actual historical return rates. Based on analysis of return rates and other factors, the adequacy of our warranty provisions is adjusted as necessary. The liability for warranty costs is included in Accrued liabilities in the Consolidated Balance Sheets.

Following is a reconciliation of the product warranty liability as of October 31, 2024 and 2023:

	2024		2023
Balance at beginning of year	\$ 14,401	\$	11,723
Accruals for warranties	14,965		20,910
Warranty payments	(15,717)	(16,171)
Currency adjustments	(111)	(2,061)
Balance at end of year	\$ 13,538	\$	14,401

Note 2 — Recently issued accounting standards

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures.* ASU 2023-07 requires enhanced disclosures about significant segment expenses and enhanced disclosures in interim periods. The guidance in ASU 2023-07 will be applied retrospectively and is effective for annual reporting periods in fiscal years beginning after December 15, 2023 and interim reporting periods in fiscal years beginning after December 31, 2024, with early adoption permitted. The Company is currently evaluating the impact that the adoption of ASU 2023-07 will have on its consolidated financial statements and disclosures and anticipates adoption in 2025.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. ASU 2023-09 is intended to improve income tax disclosure requirements by requiring specific disclosure in the rate reconciliation and additional information for reconciling items that meet a quantitative threshold. The guidance in ASU 2023-09 will be effective for annual reporting periods in fiscal years beginning after December 15, 2024. The Company is currently evaluating

the impact that the adoption of ASU 2023-09 will have on its consolidated financial statements and disclosures and anticipates adoption in fiscal 2026.

In November 2024, the FASB issued ASU 2024-03, *Income Statement (Topic 220): Reporting Comprehensive Income.* ASU 2024-03 does not change or remove current expense presentation requirements within the Consolidated Statements of Income. However, the amendments require disclosure, on an annual and interim basis, disaggregated information about certain income statement expense line items within the notes to the consolidated financial statements. The amendments in this update are effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. The Company is currently evaluating the impact that the adoption of ASU 2024-03 will have on its consolidated financial statements and disclosures and anticipates adoption in fiscal 2028.

Note 3 — Acquisitions

Business acquisitions have been accounted for using the acquisition method, with the acquired assets and liabilities recorded at estimated fair value on the dates of acquisition. The cost in excess of the net assets of the business acquired is included in goodwill. Operating results since the respective dates of acquisitions are included in the Consolidated Statements of Income.

2024 Acquisition

On August 21, 2024, the Company completed the acquisition of Atrion Corporation, a Delaware corporation ("Atrion"), pursuant to the terms of the Agreement and Plan of Merger (the "Merger Agreement"), dated May 28, 2024, with Alpha Medical Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Nordson ("Merger Sub"), and Atrion. Pursuant to the Merger Agreement, Merger Sub merged with and into Atrion (the "Merger"), with Atrion surviving the Merger as a wholly owned subsidiary of Nordson. Atrion is a leader in proprietary medical infusion fluid delivery and niche cardiovascular solutions and will operate within our Medical and Fluid Solutions segment. The all-cash acquisition of Atrion of \$789,996, net of cash acquired, was funded using borrowings under our revolving credit facility and the 364-day term loan agreement with a group of banks for a delayed draw term loan facility in the aggregate principal amount of \$500,000 (the "364-Day Term Loan Agreement") (see Note 8 to the Consolidated Financial Statements for additional details) and cash on hand. Based on the fair value of the assets acquired and the liabilities assumed, a preliminary purchase price allocation resulted in the recognition of \$494,279 of goodwill and \$129,600 of identifiable intangible assets. The identifiable intangible assets consist primarily of \$40,100 of tradenames (amortized over 15 years), \$24,900 of technology (amortized over 15 years), and \$64,600 of customer relationships (amortized over 19 years). Goodwill associated with the acquisition was not tax deductible. As of October 31, 2024, the purchase price allocation remains preliminary as we complete our assessment, principally related to income taxes. The financial results of the Atrion acquisition are not expected to have a material impact on our Consolidated Financial Statements.

The assets and liabilities acquired were as follows:

	August 21, 2024
Cash	\$ 24,42
Receivables - net	20,883
Inventories - net	64,80
Goodwill	494,27
Intangibles	129,60
Other assets	158,059
Total Assets	\$ 892,050
Accounts payable	\$ 25,58'
Deferred income taxes	31,22
Other liabilities	20,813
Total Liabilities	\$ 77,620

2023 Acquisitions

On August 24, 2023, the Company completed the acquisition of the ARAG Group and its subsidiaries ("ARAG Group" or "ARAG") pursuant to the terms of the Sale and Purchase Agreement, dated as of June 25, 2023, by and among the Company, its Italian subsidiary, Capvis Equity V LP, DRIP Co-Investment, and certain individuals. ARAG is a global market and innovation leader in the development, production and supply of precision control systems and smart fluid components for agricultural spraying. ARAG operates as a division of our Industrial Precision Solutions segment. In anticipation of the acquisition, the Company entered into a €760,000 senior unsecured term loan facility with a group of banks in August 2023 (the "364-Day

Term Loan Facility"). The all-cash ARAG acquisition of approximately \notin 957,000, net of the repayment of approximately \notin 30,300 of debt of the acquired companies, was funded using borrowings under the 364-Day Term Loan Facility and the Company's revolving credit facility. The 364-Day Term Loan Facility was subsequentially paid off in September 2023 with the net proceeds of a senior notes offering (see Note 8 to the Consolidated Financial Statements for additional details). Based on the fair value of the assets acquired and the liabilities assumed, goodwill of \$684,938 and identifiable intangible assets of \$353,500 were recorded. The identifiable intangible assets consist primarily of \$27,500 of tradenames (amortized over 9 years), \$31,000 of technology (amortized over 5 years), and \$295,000 of customer relationships (amortized over 22 years). Goodwill associated with the acquisition was not tax deductible. As of October 31, 2024, the purchase price allocation is final. The financial results of the ARAG Group acquisition are not expected to have a material impact on our Consolidated Financial Statements.

The assets and liabilities acquired were as follows:

	Aug	ıst 24, 2023	
Cash	\$	32,966	
Receivables - net		31,081	
Inventories - net		54,252	
Goodwill		684,938	
Intangibles		353,500	
Other assets		55,963	
Total Assets	\$	1,212,700	
Accounts payable	\$	18,915	
Deferred income taxes		100,097	
Other liabilities		15,785	
Total Liabilities	\$	134,797	

On November 3, 2022, we acquired 100% of CyberOptics Corporation ("CyberOptics"). CyberOptics is a leading global developer and manufacturer of high-precision 3D optical sensing technology solutions. The CyberOptics acquisition expanded our test and inspection platform, providing differentiated technology that expands our product offering in the semiconductor and electronics industries and is reported in our Advanced Technology Solutions segment. We acquired CyberOptics for an aggregate purchase price of \$377,843, net of cash of approximately \$40,890, funded using borrowings under our revolving credit facility and cash on hand. Based on the fair value of the assets acquired and the liabilities assumed, goodwill of \$285,330 and identifiable intangible assets of \$58,600 were recorded. The identifiable intangible assets consist primarily of \$15,200 of tradenames (amortized over 15 years), \$14,600 of technology (amortized over 7 years), and \$28,800 of customer relationships (amortized over 12 years). Goodwill associated with the acquisition was not tax deductible. As of October 31, 2024, the purchase price allocation was final. The financial results of CyberOptics are not material to our Consolidated Financial Statements.

The assets and liabilities acquired were as follows:

	Nover	nber 3, 2022
Cash	\$	40,890
Receivables - net		21,364
Inventories - net		33,639
Goodwill		285,330
Intangibles		58,600
Other assets		13,768
Total Assets	\$	453,591
Accounts payable	\$	8,109
Deferred income taxes		14,826
Other liabilities		11,923
Total Liabilities	\$	34,858

2022 Acquisition

On November 1, 2021, we acquired 100% of NDC Technologies ("NDC"), a leading global provider of precision measurement solutions for in-line manufacturing process control. NDC's technology portfolio includes in-line measurement sensors, gauges and analyzers using near-infrared, laser, X-ray, optical and nucleonic technologies, as well as proprietary algorithms and software. We acquired NDC for an aggregate purchase price of \$171,613, net of cash of approximately \$7,533 and other working capital adjustments of \$2,763, utilizing cash on hand. Based on the fair value of the assets acquired and the liabilities assumed, goodwill of \$131,129 and identifiable intangible assets of \$31,130 were recorded. The identifiable intangible assets consist primarily of \$10,800 of tradenames (amortized over 13 years), \$10,000 of technology (amortized over 7 years), \$9,500 of customer relationships (amortized over 4 years) and \$830 of non-compete agreements (amortized over 3 years). Goodwill associated with this acquisition of \$72,018 is tax deductible. This acquisition is being reported in our Industrial Precision Solutions segment and the financial results of NDC are not material to our Consolidated Financial Statements.

Note 4 — Details of Consolidated Balance Sheet	 2024		2023	
Receivables:				
Accounts	\$ 571,381	\$	558,393	
Notes	595		662	
Other	32,456		41,845	
	 604,432	_	600,901	
Allowance for doubtful accounts	(9,769)		(10,015)	
	\$ 594,663	\$	590,886	
Inventories:	 <u> </u>		<u> </u>	
Finished goods	\$ 256,465	\$	233,552	
Raw materials and component parts	250,477		211,874	
Work-in-process	55,790		86,474	
•	562,732		531,900	
Obsolescence and other reserves	(85,797)		(77,125)	
	\$ 476,935	\$	454,775	
Property, plant and equipment:	 			
Land	\$ 32,018	\$	15,792	
Land improvements	4,822		5,019	
Buildings	354,854		294,267	
Machinery and equipment	649,510		549,291	
Enterprise management system	53,401		52,939	
Construction-in-progress	58,362		24,916	
Leased property under finance leases	29,404		28,406	
	 1,182,371		970,630	
Accumulated depreciation	(637,764)		(577,784)	
	\$ 544,607	\$	392,846	
Accrued liabilities:	 			
Salaries and other compensation	\$ 77,799	\$	63,130	
Interest	13,800		11,240	
Taxes other than income taxes	13,560		14,894	
Warranty	13,538		14,401	
Net Investment Contracts	10,675		_	
Pension and other employee benefits	8,919		8,686	
Commissions and rebates	6,844		8,823	
Foreign currency forward contracts	5,508		10,425	
Other	74,588		67,989	
	\$ 225,231	\$	199,588	

Note 5 — Goodwill and intangible assets

We account for goodwill and other intangible assets in accordance with the provisions of ASC 350 and account for business combinations using the acquisition method of accounting and accordingly, the assets and liabilities of the entities acquired are recorded at their estimated fair values at the acquisition date. Goodwill is the excess of purchase price over the fair value of tangible and identifiable intangible net assets acquired in various business combinations. Goodwill is not amortized but is subject to annual impairment testing. Our annual impairment testing is performed as of August 1. Testing is done more frequently if an event occurs or circumstances change that would indicate the fair value of a reporting unit is less than the carrying amount of those assets. We assess the fair value of reporting units on a non-recurring basis using a quantitative analysis that uses a combination of the Income Approach and the guideline public company method of the Market Approach, and compare the result against the reporting unit's carrying value of net assets. The implied fair value of our reporting units is determined based on significant unobservable inputs, as discussed below; accordingly, these inputs fall within Level 3 of the fair value hierarchy. The Income Approach uses assumptions for revenue growth, operating margin and working capital turnover that are based on management's strategic plans tempered by performance trends and reasonable expectations about those trends. Terminal value calculations employ a published formula known as the Gordon Growth Model Method that essentially captures the present value of perpetual cash flows beyond the last projected period assuming a constant Weighted Average Cost of Capital ("WACC") methodology and growth rate. For each reporting unit, a sensitivity analysis is performed to vary the discount and terminal growth rates in order to provide a range of reasonableness for detecting impairment. Discount rates are developed using a WACC methodology. The WACC represents the blended average required rate of return for equity and debt capital based on observed market return data and company specific risk factors.

In the application of the guideline public company method, fair value is determined using transactional evidence for similar publicly traded equity. The comparable company guideline group is determined based on relative similarities to each reporting unit since exact correlations are not available. An indication of fair value for each reporting unit is based on the placement of each reporting unit within a range of multiples determined for its comparable guideline company group. Valuation multiples are derived by dividing latest twelve-month performance for revenues and Earnings Before Interest, Taxes, Depreciation and Amortization ("EBITDA") into total invested capital, which is the sum of traded equity plus interest bearing debt less cash. These multiples are applied against the revenue and EBITDA of each reporting unit. While the implied indications of fair value using the guideline public company method yield meaningful results, the discounted cash flow method of the Income Approach includes management's thoughtful projections and insights as to what the reporting units will accomplish in the near future. Accordingly, the reasonable, implied fair value of each reporting unit is a blend based on the consideration of both the Income and Market approaches.

An impairment charge is recorded for the amount by which the carrying value of the reporting unit exceeds the fair value of the reporting unit, as calculated in the quantitative analysis described above. Based on our annual impairment tests in 2024, 2023 and 2022, the fair value of each reporting unit exceeded its carrying value, and accordingly, we did not record any goodwill impairment charges in 2024, 2023 or 2022.

Our reporting units include components of the Industrial Precision Solutions, Medical and Fluid Solutions, and the Advanced Technology Solutions segments. Changes in the carrying amount of goodwill during 2024 by operating segment:

	ndustrial sion Solutions	Medical and Fluid Solutions		Advanced Technology Systems	Total
Balance at October 31, 2023	\$ 1,208,996	\$	1,173,858	\$ 401,347	\$ 2,784,201
Acquisitions	(9,962)		494,279	—	484,317
Currency effect	 8,597		1,611	2,093	 12,301
Balance at October 31, 2024	\$ 1,207,631	\$	1,669,748	\$ 403,440	\$ 3,280,819

The increase in goodwill for 2024 was due to the acquisition of Atrion. See Note 3 to the Consolidated Financial Statements for additional details.

Changes in the carrying amount of goodwill during 2023 by operating segment:

	Industrial sion Solutions	M	edical and Fluid Solutions	Advanced Technology Systems	Total
Balance at October 31, 2022	\$ 520,236	\$	1,172,069	\$ 112,388	\$ 1,804,693
Acquisitions	694,900		—	285,330	980,230
Currency effect	 (6,140)		1,789	 3,629	 (722)
Balance at October 31, 2023	\$ 1,208,996	\$	1,173,858	\$ 401,347	\$ 2,784,201

The increase in goodwill for 2023 was due to the acquisition of CyberOptics and the ARAG Group. See Note 3 to the Consolidated Financial Statements for additional details.

Information regarding intangible assets subject to amortization:

	October 31, 2024						
		Carrying Amount		0		Net Book Value	
Customer relationships	\$	878,071	\$	339,756	\$	538,315	
Patent/technology costs		232,371		134,187		98,184	
Trade names		167,144		62,887		104,257	
Noncompete agreements		8,502		8,412		90	
Other		500		500		—	
Total	\$	1,286,588	\$	545,742	\$	740,846	

	October 31, 2023						
		CarryingAccumulatedNAmountAmortization				Net Book Value	
Customer relationships	\$	794,706	\$	287,585	\$	507,121	
Patent/technology costs		204,905		112,994		91,911	
Trade names		125,692		52,488		73,204	
Noncompete agreements		10,028		9,521		507	
Other		182		181		1	
Total	\$	1,135,513	\$	462,769	\$	672,744	

Amortization expense for 2024, 2023 and 2022 was \$76,972, \$59,719 and \$50,825, respectively. See Note 3 for details regarding intangibles recorded due to acquisitions.

Estimated amortization expense for each of the five succeeding years:

Year 2025	 Amounts
2025	\$ 77,220
2026	\$ 73,639
2027	\$ 70,807
2028	\$ 68,239
2029	\$ 62,334

Note 6 — Retirement, pension and other postretirement plans

Retirement plans — We have funded contributory retirement plans covering certain employees. Our contributions are primarily determined by the terms of the plans, subject to the limitation that they shall not exceed the amounts deductible for income tax purposes. We also sponsor unfunded contributory supplemental retirement plans for certain employees. Generally, benefits under these plans vest gradually over a period of approximately three years from date of employment and are based on the employee's contribution. The expense applicable to retirement plans for 2024, 2023 and 2022 was approximately \$30,564, \$29,511 and \$26,635, respectively.

Pension plans — We have various pension plans covering a portion of our United States and international employees. Pension plan benefits are generally based on years of employment and, for salaried employees, the level of compensation. Actuarially determined amounts are contributed to United States plans to provide sufficient assets to meet future benefit payment requirements. We also sponsor an unfunded supplemental pension plan for certain employees. International subsidiaries fund their pension plans according to local requirements.

During the second quarter of 2022, we completed a partial plan settlement transaction in regard to two of our U.S. pension plans in which plan assets amounting to \$171,181 were used to purchase a group annuity contract from The Prudential Insurance Company of America ("Prudential"). The settlement resulted in a loss of \$41,221, which is included in Pension settlement charge for U.S. Plans on the Consolidated Statements of Income. This transaction relieved the Company of its responsibility for the pension obligation related to certain retired employees and transferred the obligation and payment responsibility to Prudential for retirement benefits owed to approximately 1,500 retirees and other beneficiaries. The annuity contract covered retirees who commenced receiving benefits on or before November 1, 2021. The monthly retirement benefit payment amounts currently received by retirees and their beneficiaries did not change as a result of this transaction. Plan participants not included in the transaction remain in the plans and responsibility for payment of the retirement benefits remains with the Company.

A reconciliation of the benefit obligations, plan assets, accrued benefit cost and the amount recognized in financial statements for pension plans is as follows:

	Unite	d States	International			
	2024	2023	2024	2023		
Change in benefit obligation:						
Benefit obligation at beginning of year	\$ 319,186	\$ 303,520	\$ 62,813	\$ 60,880		
Service cost	10,043	10,973	942	1,096		
Interest cost	18,975	16,699	2,766	2,513		
Participant contributions		_	82	79		
Settlements	(1,659)	(1,499)	(805)	(607)		
Curtailments	_			(2)		
Foreign currency exchange rate change	_	—	2,320	3,566		
Actuarial (gain) loss	30,709	(4,120)	4,086	(2,361)		
Benefits paid	(8,906)	(6,387)	(2,841)	(2,351)		
Benefit obligation at end of year	\$ 368,348	\$ 319,186	\$ 69,363	\$ 62,813		
Change in plan assets:						
Beginning fair value of plan assets	\$ 321,676	\$ 333,851	\$ 39,863	\$ 38,316		
Actual return on plan assets	52,744	(6,307)	4,460	117		
Company contributions	2,187	2,018	2,104	2,429		
Participant contributions		_	82	79		
Settlements	(1,659)	(1,499)	(805)	(607)		
Foreign currency exchange rate change	_		1,966	1,880		
Benefits paid	(8,906)	(6,387)	(2,841)	(2,351)		
Ending fair value of plan assets	\$ 366,042	\$ 321,676	\$ 44,829	\$ 39,863		
Funded status at end of year	\$ (2,306)	\$ 2,490	\$ (24,534)	\$ (22,950)		
Amounts recognized in financial statements:						
Noncurrent asset	\$ 7,320	\$ 11,473	\$ 13,716	\$ 9,991		
Accrued benefit liability	(977)	(1,494)		(5)		
Long-term pension obligations	(8,649)	(7,489)	(38,244)	(32,936)		
Total amount recognized in financial statements	\$ (2,306)	\$ 2,490	\$ (24,534)	\$ (22,950)		

The net actuarial loss included in the projected benefit obligation for the United States and international pension plans for 2024 was primarily due to lower discount rates partially offset by gains due to demographic experience. The actuarial gain included in the projected benefit obligation for the United States pension plans for 2023 was primarily due to higher discount rates partially offset by losses due to demographic experience.

Amounts recognized in accumulated other comprehensive loss (income):

	United	l States	Intern	ational
	2024	2023	2024	2023
Net actuarial loss (gain)	\$ 107,027	\$ 102,506	\$ (2,312)	\$ (3,122)
Prior service cost (credit)			(88)	(91)
Accumulated other comprehensive loss (income)	\$ 107,027	\$ 102,506	\$ (2,400)	\$ (3,213)

The following table summarizes the changes in accumulated other comprehensive loss (income):

	United	l States	Interna	ational	
	2024	2023	2024	2023	
Balance at beginning of year	\$ 102,506	\$ 74,293	\$ (3,213)	\$ (2,413)	
Net loss (gain) arising during the year	4,577	28,303	1,197	(943)	
Net (gain) recognized during the year		_	(29)	(79)	
Prior service adjustment recognized during the year			8	50	
Settlement (gain) loss	(56)	(90)	(95)	425	
Curtailment (gain) loss		_	_	2	
Exchange rate effect during the year		—	(268)	(255)	
Balance at end of year	\$ 107,027	\$ 102,506	\$ (2,400)	\$ (3,213)	

Information regarding the funded status of the Company's plans is as follows:

	United States			tates Intern		national		
		2024		2023		2024		2023
For plans with accumulated benefit obligation in excess of plan assets:								
Accumulated benefit obligation	\$	10,121	\$	8,703	\$	41,647	\$	36,413
Fair value of plan assets						5,323		5,115
For plans with projected benefit obligation in excess of plan assets:								
Projected benefit obligation		9,626		8,983		43,574		38,039
Fair value of plan assets						5,323		5,115

Net periodic pension costs include the following components:

	United States]	Inte	rnational		
	_	2024		2023	2022	2024		2023	2022
Service cost	\$	10,043	\$	10,973	\$ 16,820	\$ 942	\$	1,096	\$ 1,693
Interest cost		18,975		16,699	14,486	2,766		2,513	1,105
Expected return on plan assets		(26,611)		(26,116)	(27,776)	(1,626)		(1,532)	(1,430)
Amortization of prior service credit		_			48	(8)		(50)	(104)
Amortization of net actuarial loss		—			7,504	29		79	2,278
Settlement loss (gain)		56		90	41,548	95		(425)	(29)
Curtailment gain				—		—		(2)	(2,112)
Total benefit cost	\$	2,463	\$	1,646	\$ 52,630	\$ 2,198	\$	1,679	\$ 1,401

Net periodic pension cost for 2024 included a settlement loss of \$151 due to lump sum retirement payments. Net periodic pension cost for 2023 included a settlement gain of \$335 due to lump sum retirement payments. Net periodic pension cost for 2022 included a settlement loss of \$298 due to lump sum retirement payments. Net periodic pension cost for 2022 included a curtailment gain of \$2,112 due to the freeze of an international defined benefit plan.

The components of net periodic pension cost other than service cost are included in Pension settlement charge for U.S. Plans and Other – net in our Consolidated Statements of Income.

The weighted average assumptions used in the valuation of pension benefits were as follows:

	United States			In	ternational	
	2024	2023	2022	2024	2023	2022
Assumptions used to determine benefit obligations at October 31:						
Discount rate	5.27 %	6.08 %	5.70 %	3.80 %	4.35 %	3.78 %
Rate of compensation increase	3.96	3.92	4.30	3.08	2.96	3.44
Assumptions used to determine net benefit costs for the years ended October 31:						
Discount rate - benefit obligation	6.08	5.70	3.02	4.35	3.78	1.30
Discount rate - service cost	6.18	5.89	3.42	3.48	2.88	1.14
Discount rate - interest cost	5.84	5.37	2.35	4.28	3.85	1.37
Expected return on plan assets	6.50	6.40	5.75	4.04	3.75	3.29
Rate of compensation increase	3.92	3.87	4.00	2.96	3.44	2.90

The amortization of prior service cost is determined using a straight-line amortization of the cost over the average remaining service period of employees expected to receive benefits under the plans.

The discount rate reflects the current rate at which pension liabilities could be effectively settled at the end of the year. The discount rate used considers a yield derived from matching projected pension payments with maturities of a portfolio of available bonds that receive the highest rating given from a recognized investments ratings agency. The changes in the discount rates in 2024, 2023 and 2022 are due to changes in yields for these types of investments as a result of the economic environment.

In determining the expected return on plan assets using the calculated value of plan assets, we consider both historical performance and an estimate of future long-term rates of return on assets similar to those in our plans. We consult with and consider the opinions of financial and other professionals in developing appropriate return assumptions. The rate of compensation increase is based on management's estimates using historical experience and expected increases in rates.

The international plans include a cash balance plan with promised interest crediting rates. The weighted average crediting rates were 1.10%, 0.70% and 0.60% for 2024, 2023 and 2022, respectively.

Net actuarial gains or losses are amortized to expense on a plan-by-plan basis when exceeding the accounting corridor, which is set at 10 percent of the greater of the plan assets or benefit obligations. Gains or losses within the corridor remain in other comprehensive income and are retested in subsequent measurements. Gains or losses outside of the corridor are subject to amortization over an average employee future service period that differs by plan. If substantially all of the plan's participants are no longer actively accruing benefits, the average life expectancy is used.

The allocation of pension plan assets as of October 31, 2024 and 2023 is as follows:

	United S	States	International		
	2024	2023	2024	2023	
Asset Category					
Equity securities	3 %	3 %	— %	%	
Debt securities	45	43	_	_	
Insurance contracts	_	—	17	31	
Pooled investment funds	51	53	82	67	
Other	1	1	1	2	
Total	100 %	100 %	100 %	100 %	

Our investment objective for defined benefit plan assets is to meet the plans' benefit obligations, while minimizing the potential for future required plan contributions.

Our United States plans comprise 89 percent of the Company's worldwide pension assets. In general, the investment strategies focus on asset class diversification, liquidity to meet benefit payments, and an appropriate balance of long-term investment return and risk. Target ranges for asset allocations are determined by dynamically matching the actuarial projections of the plans' future liabilities and benefit payments with expected long-term rates of return on the assets, taking into account investment return volatility and correlations across asset classes. For 2024, the target in "return-seeking assets" is 30 percent and 70 percent in longer duration fixed income assets. Plan assets are diversified across multiple investment managers and are invested in liquid funds that are selected to track broad market indices. Investment risk is carefully controlled with plan assets rebalanced to target allocations on a periodic basis and continual monitoring of investment managers' performance relative to the guidelines established with each investment manager.

Our international plans comprise 11 percent of the Company's worldwide pension assets. Asset allocations are developed on a country-specific basis. Our investment strategy is to cover pension obligations with insurance contracts or to employ independent managers to invest the assets.

		United	States			Interna	ational	
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Cash	\$	\$	\$	\$ —	\$ 442	\$ 442	<u></u>	\$
Equity securities:								
Basic materials	683	683	_	_	_	—	—	
Consumer goods	1,788	1,788					_	
Financial	2,461	2,461	_	_	_	_	_	—
Healthcare	1,811	1,811	_		_		_	_
Industrial goods	2,021	2,021			_		—	
Technology	2,104	2,104					_	
Fixed income securities:								
U.S. Government	58,000	—	58,000	—	_		_	
Corporate	100,909	—	100,909		_		_	
Other	5,879	—	5,879	—	_		_	
Other types of investments:								
Insurance contracts					7,390		_	7,390
Other	1,524	1,524			_		—	—
Total investments in the fair value hierarchy	\$177,180	\$12,392	\$164,788	\$ —	\$ 7,832	\$ 442	<u>\$ </u>	\$ 7,390
Investments measured at Net Asset	Value:							
Real estate collective funds	33,270				_			
Pooled investment funds	155,592				36,997			
Total Investments at Fair Value	\$366,042				\$ 44,829			

The fair values of our pension plan assets at October 31, 2024 by asset category are in the table below:

United States				Interna	tional		
Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
\$ 355	\$ 355	\$ —	\$ —	\$ 777	\$ 777	\$ —	\$ —
251	251		—	—		—	—
632	632						
1,614	1,614	_	_	—	—	_	
1,787	1,787		_				
1,368	1,368	_	_	—	—	_	_
1,403	1,403		_			_	
1,732	1,732	—	—	—	—	—	
42,269		42,269	—	—	—	—	
94,650	_	94,650	_			_	_
2,640		2,640	_	—	—	_	_
			_	12,224		_	12,224
2,092	2,092	_	_	_	_	_	_
\$150,793	\$11,234	\$139,559	\$ —	\$ 13,001	\$ 777	\$ —	\$12,224
	\$ 355 251 632 1,614 1,787 1,368 1,403 1,732 42,269 94,650 2,640 2,092	Total Level 1 \$ 355 \$ 355 251 251 632 632 1,614 1,614 1,787 1,787 1,368 1,368 1,403 1,403 1,732 1,732 42,269 — 94,650 — 2,640 — 2,092 2,092	$\begin{tabular}{ c c c c c c c } \hline Total & Level 1 & Level 2 \\ \hline $ 355 $ $ 355 $ $ \\ 251 $ 251 $ \\$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Total Level 1 Level 2 Level 3 Total Level 1 Level 2 S S Total Level 1 Level 2 S S Total S S Total S S Total Level 1 Level 2 S S Total S Total S S Total S S S Total S S Total S S S Total S S S S S S S S S S S

The fair values of our pension plan assets at October 31, 2023 by asset category are in the table below:

Investments measured at Net Asset Value:

Real estate collective funds	42,780	
Pooled investment funds	128,103	26,862
Total Investments at Fair Value	\$321,676	\$ 39,863

These investment funds did not own a significant number of Nordson Corporation common shares for any year presented.

The inputs and methodology used to measure fair value of plan assets are consistent with those described in Note 10. Following are the valuation methodologies used to measure these assets:

- **Money market funds** Money market funds are public investment vehicles that are valued with a net asset value of one dollar. This value is a quoted price in an active market and is classified as Level 1.
- **Equity securities** Common stocks and mutual funds are valued at the closing price reported on the active market on which the individual securities are traded and are classified as Level 1.
- **Fixed income securities** U.S. government securities are valued using bid evaluations and are classified as Level 2. Corporate fixed income securities are valued using evaluated prices, such as dealer quotes, bids and offers and are therefore classified as Level 2.
- **Insurance contracts** Insurance contracts are investments with various insurance companies. The contract value represents the best estimate of fair value. These contracts do not hold any specific assets. These investments are classified as Level 3.
- **Real estate collective funds** These funds are valued using the net asset value of the underlying properties. Net asset value is calculated using a combination of key inputs, such as revenue and expense growth rates, terminal capitalization rates and discount rates.
- **Pooled investment funds** These are public investment vehicles valued using the net asset value. The net asset value is based on the value of the assets owned by the plan, less liabilities. These investments are not quoted on an active exchange.

The following tables present an analysis of changes during the years ended October 31, 2024 and 2023 in Level 3 plan assets, by plan asset class, for U.S. and international pension plans using significant unobservable inputs to measure fair value:

	Using Signifi	e Measurements cant Unobservable ts (Level 3)
		surance ontracts
Beginning balance at October 31, 2023	\$	12,224
Actual return on plan assets:		
Purchases		1,428
Sales		(7,010)
Settlements		(214)
Unrealized gains		440
Foreign currency translation		522
Ending balance at October 31, 2024	\$	7,390

	Measurements ant Unobservable 5 (Level 3)
	urance ntracts
Beginning balance at October 31, 2022	\$ 18,066
Actual return on plan assets:	
Purchases	1,320
Sales	(8,007)
Settlements	(607)
Unrealized gains	266
Foreign currency translation	1,186
Ending balance at October 31, 2023	\$ 12,224

Contributions to pension plans in 2025 are estimated to be approximately \$3,726.

Retiree pension benefit payments, which include expected future service, are anticipated to be paid as follows:

Year	Unit	United States		ternational
2025	\$	10,851	\$	2,988
2026	\$	12,667	\$	5,076
2027	\$	14,587	\$	3,955
2028	\$	16,470	\$	3,637
2029	\$	18,297	\$	3,934
2030-2034	\$	117,167	\$	20,033

Other postretirement plans - We sponsor an unfunded postretirement health care benefit plan covering certain of our United States employees. Employees hired after January 1, 2002, are not eligible to participate in this plan. For eligible retirees under the age of 65 who enroll in the plan, the plan is contributory in nature, with retiree contributions in the form of premiums that are adjusted annually. For eligible retirees age 65 and older who enroll in the plan, the plan delivers a benefit in the form of a Health Reimbursement Account ("HRA"), which retirees use for eligible reimbursable expenses, including premiums paid for purchase of a Medicare supplement plan or other out-of-pocket medical expenses such as deductibles or co-pays.

A reconciliation of the benefit obligations, accrued benefit cost and the amount recognized in financial statements for other postretirement plans in the United States is as follows:

	2024	2023
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 53,433	\$ 59,851
Service cost	281	399
Interest cost	3,018	3,063
Participant contributions	580	614
Actuarial (gain) loss	623	(7,301)
Benefits paid	(3,683)	(3,193)
Benefit obligation at end of year	\$ 54,252	\$ 53,433
Change in plan assets:		
Beginning fair value of plan assets	\$ —	\$
Company contributions	3,103	2,579
Participant contributions	580	614
Benefits paid	(3,683)	(3,193)
Ending fair value of plan assets	\$ —	\$ —
Funded status at end of year	\$ (54,252)	\$ (53,433)
Amounts recognized in financial statements:		
Accrued benefit liability	\$ (2,890)	\$ (2,800)
Long-term postretirement obligations	(51,362)	(50,633)
Total amount recognized in financial statements	\$ (54,252)	\$ (53,433)

The following table summarizes the changes in accumulated other comprehensive (gain) loss:

	2024	2023
Balance at beginning of year	\$ (12,336)	\$ (5,035)
Net (gain) loss arising during the year	623	(7,301)
Net gain (loss) recognized during the year	591	
Balance at end of year	\$ (11,122)	\$ (12,336)

Net postretirement benefit costs include the following components:

	2024		2023		 2022
Service cost	\$	281	\$	399	\$ 687
Interest cost		3,018		3,063	1,923
Amortization of net actuarial (gain) loss		(591)			978
Total benefit cost (credit)	\$	2,708	\$	3,462	\$ 3,588

The components of net postretirement benefit cost other than service cost are included in Other – net in our Consolidated Statements of Income.

	2024	2023	2022
Assumptions used to determine benefit obligations at October 31:			
Discount rate	5.18 %	6.02 %	5.59 %
Health care cost trend rate	2.25	3.40	3.50
Rate to which health care cost trend rate is assumed to incline/decline (ultimate trend rate)	1.80	3.16	3.19
Year the rate reaches the ultimate trend rate	2033	2032	2032
Assumption used to determine net benefit costs for the years ended October 31:			
Discount rate benefit obligation	6.02 %	5.59 %	2.98 %
Discount rate service cost	6.26	6.00	3.55
Discount rate interest cost	5.76	5.22	2.30

The weighted average assumptions used in the valuation of postretirement benefits were as follows:

The weighted average health care trend rates reflect expected increases in the Company's portion of the obligation. The decrease in the health care cost trend rates in 2024 for the U.S. postretirement plan is due to a reduction in the long-term increase assumption for the HRA benefit.

Net actuarial gains or losses are amortized to expense on a plan-by-plan basis when exceeding the accounting corridor, which is set at 10 percent of the greater of the plan assets or benefit obligations. Gains or losses outside of the corridor are subject to amortization over an average employee future service period that differs by plan. If substantially all of the plan's participants are no longer actively accruing benefits, the average life expectancy is used.

Contributions to postretirement plans in 2025 are estimated to be approximately \$2,896.

Retiree postretirement benefit payments are anticipated to be paid as follows:

Year	
2025	\$ 2,890
2026	\$ 3,021
2027	\$ 3,203
2028	\$ 3,331
2029	\$ 3,455
2030-2034	\$ 18,876

Note 7 — Income taxes

Income before income taxes and income tax expense (benefit) are comprised of the following:

	2024		2023		2022
Income before income taxes:					
Domestic	\$	314,263	\$	269,934	\$ 302,549
Foreign		271,218		345,405	 346,730
Total income before income taxes	\$	585,481	\$	615,339	\$ 649,279
Current:					
U.S. federal	\$	65,085	\$	54,157	\$ 59,639
State and local		2,017		285	7,535
Foreign		69,652		89,520	79,734
Total current		136,754		143,962	146,908
Deferred:					
U.S. federal		(11,622)		(9,119)	(9,408)
State and local		(1,387)		(1,279)	(596)
Foreign		(5,548)		(5,718)	(728)
Total deferred		(18,557)		(16,116)	(10,732)
	\$	118,197	\$	127,846	\$ 136,176

A reconciliation of the U.S. statutory federal rate to the worldwide consolidated effective tax rate follows:

	2024	2023	2022
Statutory federal income tax rate	21.00 %	21.00 %	21.00 %
Share-based and other compensation	(0.02)	(0.25)	0.26
Foreign tax rate variances	1.22	1.83	0.95
State and local taxes, net of federal income tax benefit	0.08	(0.13)	0.84
Foreign-Derived Intangible Income Deduction	(2.54)	(2.24)	(1.59)
Global Intangible Low-Taxed Income net of foreign tax credits	0.40	0.71	0.23
Other – net	0.05	(0.14)	(0.72)
Effective tax rate	20.19 %	20.78 %	20.97 %

Deferred income taxes are not provided on undistributed earnings of international subsidiaries that are intended to be permanently invested in their operations. These undistributed earnings represent the post-income tax earnings under U.S. GAAP not adjusted for previously taxed income which aggregated approximately \$1,433,106 and \$1,533,889 at October 31, 2024 and 2023, respectively. Should these earnings be distributed, applicable foreign tax credits, distributions of previously taxed income and utilization of other attributes would substantially offset taxes due upon the distribution. It is not practical to estimate the amount of additional taxes that might be payable on these basis differences because of the multiple methods by which these differences could reverse and the impact of withholding, U.S. state and local taxes and currency translation considerations.

At October 31, 2024 and 2023, total unrecognized tax benefits were \$7,481 and \$8,002, respectively. The amounts that, if recognized, would impact the effective tax rate were \$6,670 and \$4,497 at October 31, 2024 and 2023, respectively. During 2024, unrecognized tax benefits related primarily to domestic positions and, as recognized, a substantial portion of the gross unrecognized tax benefits were offset against assets recorded in the Consolidated Balance Sheets.

A reconciliation of the beginning and ending amount of unrecognized tax benefits for 2024, 2023 and 2022 is as follows:

	 2024	 2023	 2022
Gross balance at beginning of year	\$ 8,002	\$ 2,872	\$ 3,720
Additions based on tax positions related to the current year	300	410	310
Additions for tax positions of prior years	—	10	
Increases related to acquired businesses	_	6,602	_
Reductions for tax positions of prior years	(418)		(70)
Lapse of statute of limitations	(403)	(1,892)	(1,088)
Gross balance at end of year	\$ 7,481	\$ 8,002	\$ 2,872

At October 31, 2024 and 2023, we had accrued interest and penalty expense related to unrecognized tax benefits of \$800 and \$401, respectively. We include interest accrued related to unrecognized tax benefits in interest expense. Penalties, if incurred, would be recognized as other income (expense).

We are subject to United States Federal income tax as well as income taxes in numerous state and foreign jurisdictions. We are subject to examination in the U.S. by the Internal Revenue Service ("IRS") for the years 2021 through 2024; years prior to 2021 year are closed to further examination by the IRS. Generally, major state and foreign jurisdiction tax years remain open to examination for years after 2018. Within the next twelve months, it is reasonably possible that certain statute of limitations periods would expire, which could result in a minimal decrease in our unrecognized tax benefits.

Significant components of deferred tax assets and liabilities are as follows:

	2024		2023
Deferred tax assets:			
Lease Liabilities	\$	25,254	\$ 26,678
Employee benefits		29,291	26,680
Tax credit and loss carryforwards		35,258	28,667
Other accruals not currently deductible for taxes		9,190	8,944
Inventory adjustments		16,634	5,932
Total deferred tax assets		115,627	96,901
Valuation allowance		(33,596)	(23,732)
Total deferred tax assets		82,031	73,169
Deferred tax liabilities:			
Depreciation and amortization		256,183	238,210
Lease right-of-use assets		24,204	25,925
Other - net		(3,865)	3,649
Total deferred tax liabilities		276,522	267,784
Net deferred tax liabilities	\$	(194,491)	\$ (194,615)

At October 31, 2024, we had \$20,367 of tax credit carryforwards, \$15,116 of which expires in 2026-2038 and \$5,251 of which has an indefinite carryforward period. We also had \$30,897 of state operating loss carryforwards, \$47,966 of foreign operating loss carryforwards, and a \$4,459 capital loss carryforward, of which \$58,426 will expire in 2025 through 2043, and \$24,897 of which has an indefinite carryforward period. The net change in the valuation allowance was an increase of \$9,864 in 2024 and an increase of \$13,602 in 2023. The valuation allowance of \$33,596 at October 31, 2024, related primarily to tax credits and loss carryforwards that may expire before being realized. We continue to assess the need for valuation allowances against deferred tax assets based on determinations of whether it is more likely than not that deferred tax benefits will be realized.

Note 8 — Long-term debt

A summary of long-term debt is as follows:

	2024	2023
Notes Payable	\$ 18,285	\$ 5,019
Revolving credit agreement, due 2028	240,000	248,000
Term loan, due 2026	280,000	300,000
Senior notes, due 2025	8,500	32,000
Senior notes, due 2025-2027	37,143	54,286
Senior notes, due 2025-2030	190,000	260,000
5.600% Notes due 2028	350,000	350,000
5.800% Notes due 2033	500,000	500,000
4.500% Notes due 2029	600,000	—
	2,223,928	1,749,305
Less current maturities	103,928	115,662
Less unamortized debt issuance costs	16,359	10,773
Less bond discounts	2,444	1,476
Long-term maturities	\$ 2,101,197	\$ 1,621,394

Revolving credit agreement — In April 2019, we entered into a \$850,000 unsecured multi-currency credit facility with a group of banks, which amended, restated and extended our then existing syndicated revolving credit agreement. This facility had a five-year term expiring in April 2024 and included a \$75,000 sub-facility for swing-line loans. On April 17, 2023, we entered into an amendment to, among other things, replace London Interbank Offered Rate with the Secured Overnight Financing Rate ("SOFR"), the Euro Interbank Offered Rate, the Sterling Overnight Index Average and the Tokyo Interbank Offered Rate for U.S. Dollar, Euro, British Pound Sterling and Japanese Yen borrowings, respectively. On June 6, 2023, this credit agreement was terminated and replaced by the New Credit Agreement (as defined below).

In June 2023, we entered into a \$1,150,000 unsecured multi-currency credit facility with a group of banks, which provides for a term loan facility in the aggregate principal amount of \$300,000 (the "Term Loan Facility"), maturing in June 2026, and a multicurrency revolving credit facility in the aggregate principal amount of \$850,000 (the "Revolving Facility"), maturing in June 2028 (the "New Credit Agreement"). In June 2024, the Revolving Facility was amended to increase the aggregate principal amount to \$922,500. The Company borrowed and has outstanding \$280,000 on the Term Loan Facility and \$240,000 on the Revolving Facility as of October 31, 2024. The Revolving Facility permits borrowing in U.S. Dollars, Euros, Sterling, Swiss Francs, Singapore Dollars, Yen, and each other currency approved by a Revolving Facility lender. The New Credit Agreement provides that the applicable margin for (i) Risk-Free Rate ("RFR"), as defined in the New Credit Agreement, and Eurodollar Loans will range from 0.85% to 1.20% and (ii) Base Rate Loans will range from 0.00% to 0.20%, in each case, based on the Company's Leverage Ratio (as defined in the Credit Agreement and calculated on a consolidated net debt basis). Borrowings under the New Credit Agreement bear interest at (i) either a base rate or a SOFR rate, with respect to borrowings in U.S. dollars, (ii) a eurocurrency rate, with respect to borrowings in Euros and Yen, or (iii) Daily Simple RFR, with respect to borrowings in Sterling, Swiss Francs or Singapore Dollars, plus, in each case, an applicable margin (and, solely in the case of Singapore Dollars, a spread adjustment). The applicable margin is based on the Company's Leverage Ratio. The weighted-average interest rate at October 31, 2024 was 5.66%.

Senior notes, due 2025 — These unsecured fixed-rate notes entered into in 2012 with a group of insurance companies have a remaining weighted-average life of 0.73 years. The weighted-average interest rate at October 31, 2024 was 3.07 percent.

Senior notes, due 2025-2027 — These unsecured fixed-rate notes entered into in 2015 with a group of insurance companies have a remaining weighted-average life of 1.55 years. The weighted-average interest rate at October 31, 2024 was 3.13 percent.

Senior notes, due 2025-2030 — These unsecured fixed-rate notes entered in 2018 with a group of insurance companies have a remaining weighted-average life of 2.70 years. The weighted-average interest rate at October 31, 2024 was 4.03 percent.

5.600% Notes due 2028 and 5.800% Notes due 2033 — In September 2023, we completed an underwritten public offering of \$350,000 aggregate principal amount of 5.600% Notes due 2028 and \$500,000 aggregate principal amount of 5.800% Notes due 2033.

4.500% Notes due 2029 - In September 2024, we completed an underwritten public offering of \$600,000 aggregate principal amount of 4.500% Notes due 2029 (the "2029 Notes").

We were in compliance with all covenants at October 31, 2024 and the amount we could borrow would not have been limited by any debt covenants.

Annual maturities — The annual maturities of long-term debt for the five years subsequent to October 31, 2024, are as follows: \$103,928 in 2025; \$330,000 in 2026; \$10,000 in 2027; \$630,000 in 2028 and \$620,000 in 2029.

Bank lines of credit are summarized as follows:

	 2024	 2023
Maximum borrowings available under bank lines of credit (all foreign banks)	\$ 123,983	\$ 114,464
Outstanding borrowings / notes payable (all foreign bank debt)	 (18,285)	 (5,019)
Unused bank lines of credit	\$ 105,698	\$ 109,445

Note 9 — Leases

We review new contracts to determine if the contracts include a lease. To the extent a lease agreement includes an extension option that is reasonably certain to be exercised, we have recognized those amounts as part of the right-of-use assets and lease liabilities. We combine lease and non-lease components, such as common area maintenance, in the calculation of the lease assets and related liabilities. As most lease agreements do not provide an implicit rate, we use an incremental borrowing rate ("IBR") based on information available at the lease commencement date in determining the present value of lease payments and to help classify the lease as operating or financing. We calculate the IBR based on a bond yield curve which considers secured borrowing rates based on our credit rating and current economic environment, as well as other publicly available data.

We lease certain manufacturing facilities, warehouse space, machinery and equipment, and vehicles. We often have options to renew lease terms for buildings and other assets. We evaluate renewal and termination options at the lease commencement date to determine if we are reasonably certain to exercise the option on the basis of economic factors. Leases with an initial term of 12 months or less (short-term leases) are not recorded on the Consolidated Balance Sheets. Lease expense for operating leases is recognized on a straight-line basis over the lease term, with variable lease payments recognized in the period those payments occur. Variable payments for leases primarily relate to future rates or amounts, miles, or other quantifiable usage factors which are not determinable at the time the lease agreement commences. Finance lease assets are recorded in Property, plant and equipment – net on the Consolidated Balance Sheets with related amortization recorded in depreciation expense on the Consolidated Statement of Cash Flows. As of October 31, 2024, we had no material leases that had yet to commence.

Additional lease information is summarized below for the twelve months ended October 31:

	October 31, 2024					October 31, 2023				
	Finance Leases			perating Leases	g Finance Leases				(Dperating Leases
Amortization of right of use assets	\$	5,978			\$	5,926				
Interest		505				357				
Lease cost ⁽¹⁾		6,483	\$	20,133		6,283	\$	19,662		
Short-term and variable lease cost ⁽¹⁾		3,019		2,908		2,338		1,989		
Total lease cost	\$	9,502	\$	23,041	\$	8,621	\$	21,651		

⁽¹⁾ Lease costs are recorded in both Cost of sales and Selling and administrative expenses on the Consolidated Statements of Income.

Supplemental cash flow information is summarized below for the twelve months ended October 31, 2024:

	Finance Leases		perating Leases
Cash outflows for leases	\$ 6,148	\$	20,754
Weighted average remaining lease term (years)	6.70		8.06
Weighted average discount rate	3.08%		2.09%

The following table reconciles the undiscounted cash flows for five years and thereafter to the operating and finance lease liabilities recognized on the Consolidated Balance Sheet as of October 31, 2024. The reconciliation excludes short-term leases that are not recognized on the Consolidated Balance Sheet.

Year:	Finance Leases	Operating Leases
2025	\$ 5,713	\$ 18,784
2026	4,316	17,651
2027	2,957	14,164
2028	1,385	11,379
2029	469	10,062
Later years	4,175	34,646
Total minimum lease payments	19,015	106,686
Amounts representing interest	1,670	8,805
Present value of minimum lease payments	\$ 17,345	\$ 97,881

Rental expense for operating leases during the fiscal years ended October 31, 2024, 2023 and 2022 was \$21,184, \$22,095 and \$20,479, respectively.

Capitalized net finance leases included in property, plant and equipment during the fiscal years ended October 31, 2024 and October 31, 2023 was \$16,364 and \$16,310, respectively.

Note 10 — Fair value measurements

The inputs to the valuation techniques used to measure fair value are classified into the following categories:

Level 1: Quoted market prices in active markets for identical assets or liabilities.

Level 2: Observable market-based inputs or unobservable inputs that are corroborated by market data.

Level 3: Unobservable inputs that are not corroborated by market data.

The following tables present the classification of our assets and liabilities measured at fair value on a recurring basis:

October 31, 2024		Total		Level 1		Level 2		Level 3
Assets:								
Foreign currency forward contracts ^(a)	\$	3,332	\$	—	\$	3,332	\$	
Net investment contracts ^(b)		6,049		—		6,049		
Total assets at fair value	\$	9,381	\$		\$	9,381	\$	
Liabilities:							_	
Deferred compensation plans ^(c)	\$	9,615	\$	—	\$	9,615	\$	—
Net investment contracts ^(b)		20,261				20,261		
Foreign currency forward contracts ^(a)		5,508		—		5,508		—
Total liabilities at fair value	\$	35,384	\$	_	\$	35,384	\$	_
					-			
October 31, 2023		Total		Level 1		Level 2		Level 3
October 31, 2023 Assets:		Total		Level 1		Level 2		Level 3
	\$	Total 696	\$	Level 1	\$	Level 2 696	\$	Level 3
Assets:	\$		_	Level 1 	\$		\$	Level 3
Assets: Foreign currency forward contracts ^(a)	\$	696	_	Level 1 — —	\$	696	\$	Level 3 — — —
Assets: Foreign currency forward contracts ^(a) Net investment contracts ^(b)	\$ <u></u> \$	696 13,713	_	Level 1 — — —	\$ \$	696 13,713		Level 3
Assets: Foreign currency forward contracts ^(a) Net investment contracts ^(b) Total assets at fair value	\$ \$ \$	696 13,713	_	Level 1 — — —	\$ \$ \$	696 13,713		Level 3
Assets: Foreign currency forward contracts ^(a) Net investment contracts ^(b) Total assets at fair value Liabilities:	\$	696 13,713 14,409	\$ \$	Level 1 	\$	696 13,713 14,409	\$	Level 3
Assets: Foreign currency forward contracts ^(a) Net investment contracts ^(b) Total assets at fair value Liabilities: Deferred compensation plans ^(c)	\$	696 13,713 14,409 9,637	\$ \$	Level 1	\$	696 13,713 14,409 9,637	\$	Level 3

- (a) We enter into foreign currency forward contracts to reduce the risk of foreign currency exposures resulting from receivables, payables, intercompany receivables, intercompany payables and loans denominated in foreign currencies. Foreign exchange contracts are valued using market exchange rates. These foreign exchange contracts are not designated as hedges.
- (b) Net assets of our foreign subsidiaries are exposed to volatility in foreign currency exchange rates. We utilize net investment hedges to offset the translation adjustment arising from re-measuring our investment in foreign subsidiaries. The fair value of these hedges is primarily based on the exchange rate between the currency pair of the hedge upon which settlement is based and includes an adjustment for the counterparty's or Company's credit risk. The notional amount of our net investment hedge contracts as of October 31, 2024 was \$845,333.
- (c) Executive officers and other highly compensated employees may defer up to 100 percent of their salary and annual cash incentive compensation and for executive officers, up to 90 percent of their long-term incentive compensation, into various non-qualified deferred compensation plans. Deferrals can be allocated to various market performance measurement funds. Changes in the value of compensation deferred under these plans are recognized each period based on the fair value of the underlying measurement funds.

The carrying amounts and fair values of financial instruments, other than cash and cash equivalents, receivables and accounts payable, are shown in the table below. The carrying values of cash and cash equivalents, receivables and accounts payable approximate fair value due to the short-term nature of these instruments.

	2024			2023				
	Carrying Amount Fair V		air Value		Carrying Amount	ŀ	air Value	
Long-term debt (including current portion)	\$	2,186,840	\$	2,219,414	\$	1,732,037	\$	1,699,187

Long-term debt is valued by discounting future cash flows at currently available rates for borrowing arrangements with similar terms and conditions, which are considered to be Level 2 inputs under the fair value hierarchy. The carrying amount of long-term debt is shown net of unamortized debt issuance costs and bond discounts as described in the Long-term debt Note.

Note 11 — Derivative financial instruments

We operate internationally and enter into intercompany transactions denominated in foreign currencies. Consequently, we are subject to market risk arising from exchange rate movements between the dates foreign currency transactions occur and the dates they are settled. We regularly use foreign currency forward contracts to reduce our risks related to most of these transactions. These contracts usually have maturities of 90 days or less and generally require us to exchange foreign currencies for U.S. dollars at maturity, at rates stated in the contracts. These contracts are not designated as hedging instruments under U.S. GAAP. Accordingly, the changes in the fair value of the foreign currency forward contracts are recognized in each accounting period in "Other – net" on the Consolidated Statement of Income together with the transaction gain or loss from the related balance sheet position. The settlement of these contracts is recorded in operating activities on the Consolidated Statement of Cash Flows.

In 2024, we recognized net gains of \$7,553 on foreign currency forward contracts and net loss of \$13,052 from the change in fair value of balance sheet positions. In 2023, we recognized net losses of \$3,041 on foreign currency forward contracts and net loss of \$4,701 from the change in fair value of balance sheet positions. In 2022, we recognized net losses of \$4,937 on foreign currency forward contracts and net gains of \$11,207 from the change in fair value of balance sheet positions. The fair values of our foreign currency forward contract assets and liabilities are included in Receivables-net and Accrued liabilities, respectively in the Consolidated Balance Sheets.

The following table summarizes, by currency, the contracts outstanding at October 31, 2024 and 2023:

	Notional Amounts			ounts
		Sell		Buy
October 31, 2024 contract amounts:				
Euro	\$	156,836	\$	171,840
Pound sterling		22,043		168,763
Japanese yen		24,559		29,943
Mexican peso		1,732		27,996
Hong Kong dollar		1,946		1,961
Singapore dollar		73		21,472
Australian dollar				10,167
Taiwan dollar				8,000
Other		8,389		75,686
Total	\$	215,578	\$	515,828
October 31, 2023 contract amounts:				
Euro	\$	107,056	\$	53,919
Pound sterling		17,449		163,116
Japanese yen		18,858		22,088
Mexican peso		45		26,063
Hong Kong dollar		1,509		8,943
Singapore dollar		448		20,126
Australian dollar				9,112
Taiwan Dollar				8,000
Other		14,518		79,814
Total	\$	159,883		391,181

We are exposed to credit-related losses in the event of nonperformance by counterparties to financial instruments. These financial instruments include cash deposits and foreign currency forward contracts. We periodically monitor the credit ratings of these counterparties in order to minimize our exposure. Our customers represent a wide variety of industries and geographic regions. As of October 31, 2024 and 2023, there were no significant concentrations of credit risk.

Treasury Locks

During the fourth quarter of 2024, the Company entered into treasury locks to fix the interest rate related to \$250,000 of the \$600,000 of 2029 Notes issued on September 4, 2024. The derivative positions were closed when the debt was priced on September 4, 2024 with a cash settlement net payment of \$2,306 that offset changes in the benchmark treasury rate between execution of the treasury rate locks and the debt pricing date. These derivatives were designed as cash flow hedges and the deferred amount reported in AOCI is being reclassed to interest expense as payments are made on the notes through the maturity date.

Net Investment Hedges

Net assets of our foreign subsidiaries are exposed to volatility in foreign currency exchange rates. We may utilize net investment hedges to offset the translation adjustment arising from re-measuring our investment in foreign subsidiaries.

During 2024, the Company was party to various cross currency swaps between the U.S. Dollar and Euro, Japanese Yen, Taiwan Dollar, Singapore Dollar and Chinese Yuan, which were designated as hedges of our net investments in certain foreign subsidiaries to mitigate the foreign exchange risk associated with certain investments in these subsidiaries. Any increases or decreases related to the remeasurement of the hedges are recorded in the currency translation component of Accumulated other comprehensive income (loss) within Shareholders' Equity in the Consolidated Balance Sheets until the sale or substantial liquidation of the underlying investments. A net gain of \$16,214, net of tax of \$5,366, was recorded in 2024 related to all net investment hedges, which is included in foreign currency translation adjustments in the Consolidated Statements of Shareholders' Equity.

Changes in fair value of derivative instruments that do not qualify for hedge accounting are recognized immediately in current net earnings. The settlement of net investment hedges is recorded in investing activities on the Consolidated Statements of Cash Flows.

The following table summarizes the fair values of our net investment contracts designated as net investment hedges in the Company's Consolidated Balance Sheet as of October 31, 2024:

	Prepaid expenses and other current assets	Other assets	A	Accrued liabilities	 Other long-term liabilities
Net investment contracts	\$ 5,976	\$ 73	\$	10,675	\$ 9,586

Note 12 — Capital shares

Preferred — We have authorized 10,000 Series A convertible preferred shares without par value. No preferred shares were outstanding in 2024, 2023 or 2022.

Common — We have 160,000 authorized common shares without par value. At October 31, 2024 and 2023, there were 98,023 common shares issued. At October 31, 2024 and 2023, the number of outstanding common shares, net of treasury shares, was 57,197 and 57,007, respectively.

Common shares repurchased as part of publicly announced programs during 2024, 2023 and 2022 were as follows:

Year	Number of Shares	Total Amount	Average per Share
2024	123	\$ 28,198	\$ 228.60
2023	373	79,786	213.62
2022	1,190	260,288	218.69

These amounts exclude share repurchases associated with employee equity award exercises and vesting.

Note 13 — Stock-based compensation

During the 2021 Annual Meeting of Shareholders, our shareholders approved the Nordson Corporation 2021 Stock Incentive and Award Plan (the "2021 Plan") as the successor to the Amended and Restated 2012 Stock Incentive and Award Plan (the "2012 Plan"). The 2021 Plan provides for the granting of stock options, stock appreciation rights, restricted shares, restricted share units, performance shares, cash awards and other stock or performance-based incentives. A maximum of 900 common shares were authorized for grant under the 2021 Plan plus the number of shares that were available to be granted under the 2012 Plan, as well as issuable under the CyberOptics equity plan. As of October 31, 2024, a total of 1,875 common shares were available to be granted under the 2021 Plan.

Stock options — Nonqualified or incentive stock options may be granted to our employees and directors. Generally, options granted to employees may be exercised beginning one year from the date of grant at a rate not exceeding 25 percent per year and expire 10 years from the date of grant. Vesting accelerates upon a qualified termination in connection with a change in control. In the event of termination of employment due to early retirement or normal retirement at age 65, options granted within 12 months prior to termination are forfeited, and vesting continues post-retirement for all other unvested options granted. In the event of disability or death, all unvested stock options granted within 12 months prior to termination fully vest. Termination for any other reason results in forfeiture of unvested options and vested options in certain circumstances. The amortized cost of options is accelerated if the retirement eligibility date occurs before the normal vesting date. Option exercises are satisfied through the issuance of treasury shares on a first-in, first-out basis. We recognized compensation expense related to stock options of \$4,616, \$6,655 and \$7,265 for 2024, 2023 and 2022, respectively.

The following table summarizes activity related to stock options during 2024:

	Number of Options	Weighted-Average Exercise Price Per Share		Aggregate Intrinsic Value	Weighted-Average Remaining Term
Outstanding at October 31, 2023	1,062	\$ 152.41			
Granted	61	\$ 238.35			
Exercised	(261)	\$ 121.80			
Forfeited or expired	(7)	\$ 229.54			
Outstanding at October 31, 2024	855	\$ 167.26	\$	70,409	4.7 years
Expected to vest	164	\$ 239.44	\$	2,110	7.8 years
Exercisable at October 31, 2024	690	\$ 149.97	\$	68,283	4.0 years

Summarized information on currently outstanding options follows:

		Range of Exercise Price					
	\$6	7 - \$125	\$191 - \$268				
Number outstanding		261	314	280			
Weighted-average remaining contractual life, in years		3.0	4.5	7.4			
Weighted-average exercise price	\$	110.17	\$ 154.44	\$ 235.04			
Number exercisable		261	313	116			
Weighted-average exercise price	\$	110.15	\$ 154.36	\$ 227.51			

As of October 31, 2024, there was \$4,981 of total unrecognized compensation cost related to unvested stock options. That cost is expected to be amortized over a weighted average period of approximately 2.8 years.

The fair value of each option grant was estimated at the date of the grant using the Black-Scholes option-pricing model with the following assumptions:

	2024	2023	2022
Expected volatility	30.3%-31.7%	30.4%-31.8%	30.6%-30.8%
Expected dividend yield	1.15%-1.20%	1.12%-1.27%	0.76%-0.89%
Risk-free interest rate	4.22%-4.52%	3.79%-4.21%	1.36%-2.65%
Expected life of the option (in years)	5.0-6.2	5.0-6.2	5.3-6.2

The weighted-average expected volatility used to value options granted in 2024, 2023 and 2022 was 30.7 percent, 30.6 percent and 30.6 percent, respectively.

Historical information was the primary basis for the selection of the expected volatility, expected dividend yield and the expected lives of the options. The risk-free interest rate was selected based upon yields of United States Treasury issues with terms equal to the expected life of the option being valued.

The weighted average grant date fair value of stock options granted during 2024, 2023 and 2022 was \$79.84, \$77.99 and \$78.88, respectively.

The total intrinsic value of options exercised during 2024, 2023 and 2022 was \$35,620, \$23,706 and \$15,376, respectively.

Cash received from the exercise of stock options for 2024, 2023 and 2022 was \$31,067, \$21,373 and \$12,124, respectively.

Restricted shares and restricted share units — We may grant restricted shares and/or restricted share units to our employees and directors. These shares or units may not be transferred for a designated period of time (generally one to three years) defined at the date of grant. We may also grant continuation awards in the form of restricted share units with cliff vesting and a performance measure that must be achieved for the restricted share units to vest.

For employee recipients, in the event of termination of employment due to early retirement, with consent of the Company, restricted shares and units granted within 12 months prior to termination are forfeited, and other restricted shares and units vest on a pro-rata basis, subject to the consent of the Compensation Committee. In the event of termination of employment due to normal retirement at age 65, restricted shares and units granted within 12 months prior to termination are forfeited, and, for other restricted shares and units, the restriction period applicable to restricted shares will lapse and the shares will vest and be transferable and all unvested units will become vested in full, subject to the consent of the Compensation Committee. In the event of a recipient's disability or death, all restricted shares and units granted within 12 months prior to termination fully vest.

Termination for any other reason prior to the lapse of any restrictions or vesting of units results in forfeiture of the shares or units.

For non-employee directors, all restrictions lapse in the event of disability or death of the non-employee director. Termination of service as a director for any other reason within one year of date of grant results in a pro-rata vesting of shares or units.

As shares or units are issued, stock-based compensation equivalent to the fair market value on the date of grant is expensed over the vesting period.

As of October 31, 2024, there was no unrecognized compensation cost related to restricted shares. The amount charged to expense related to restricted shares was \$0, \$336 and \$1,096 in 2024, 2023 and 2022, respectively. These amounts included common share dividends of \$0, \$5 and \$19 in 2024, 2023 and 2022, respectively.

The following table summarizes activity related to restricted share units in 2024:

	Number of Units	Weighted-Average Grant Date Fair Value
Restricted share units at October 31, 2023	69	\$ 236.28
Granted	41	\$ 235.53
Forfeited	(6)	\$ 241.89
Vested	(37)	\$ 229.72
Restricted share units at October 31, 2024	67	\$ 238.83

As of October 31, 2024, there was \$8,883 of remaining expense to be recognized related to outstanding restricted share units, which is expected to be recognized over a weighted average period of 1.8 years. The amounts charged to expense related to restricted share units in 2024, 2023 and 2022 were \$8,853, \$8,765 and \$8,403, respectively. Restricted share unit expense increased beginning in 2021 compared to prior years as the granting of restricted share units has generally replaced the granting of stock options for key employees.

Performance share incentive awards — Executive officers and selected other key employees are eligible to receive common share-based incentive awards. Payouts, in the form of unrestricted common shares, vary based on the degree to which corporate financial performance exceeds predetermined threshold, target and maximum performance goals over three-year performance periods. No payout will occur unless threshold performance is achieved.

The amount of compensation expense is based upon current performance projections and the percentage of the requisite service that has been rendered. The calculations are based upon the grant date fair value which is principally driven by the stock price on the date of grant or a Monte Carlo valuation for awards with market conditions. The per share values were \$229.58 and \$225.14 for 2024; \$231.34, \$211.25 and \$214.51 for 2023; and \$260.60, \$273.50 and \$221.94 for 2022. The amount charged to expense for executive officers and selected other key employees in 2024, 2023 and 2022 were \$5,070, \$6,543 and \$13,626, respectively. As of October 31, 2024, there was \$6,529 of unrecognized compensation cost related to performance share incentive awards.

Deferred compensation — Our executive officers and other highly compensated employees may elect to defer up to 100 percent of their base pay and cash incentive compensation and, for executive officers, up to 90 percent of their share-based performance incentive award payout each year. Additional share units are credited for quarterly dividends paid on our common shares. Expense related to dividends paid under this plan was \$97, \$107 and \$72 for 2024, 2023 and 2022, respectively.

Deferred directors' compensation — Non-employee directors may defer all or part of their cash and equity-based compensation until retirement. Cash compensation may be deferred as cash or as share equivalent units. Deferred cash amounts are recorded as liabilities, and share equivalent units are recorded as equity. Additional share equivalent units are earned when common share dividends are declared.

The following table summarizes activity related to director deferred compensation share equivalent units during 2024:

	Number of Shares	Weighted- Grant Da Value Per	te Fair
Outstanding at October 31, 2023	78	\$	93.11
Restricted stock units vested	5	\$	215.81
Dividend equivalents	1	\$	249.07
Distributions	(19)	\$	54.54
Outstanding at October 31, 2024	65	\$	115.66

The amount charged to expense related to director deferred compensation was \$321, \$309 and \$305 in 2024, 2023 and 2022, respectively.

Shares reserved for future issuance — At October 31, 2024, there were 1,139 of common shares reserved for future issuance through the exercise of outstanding options or rights.

Note 14 — Operating segments and geographic area data

We conduct business in three primary operating segments: Industrial Precision Solutions, Medical and Fluid Solutions, and Advanced Technology Solutions. The composition of segments and measure of segment profitability is consistent with that used by our chief operating decision maker. The primary measure used by the chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing performance is operating profit, which equals sales less cost of sales and certain operating expenses. Items below the operating profit line of the Consolidated Statement of Income (interest and investment income, interest expense and other income/expense) are excluded from the measure of segment profitability reviewed by our chief operating decision maker and are not presented by operating segment. The accounting policies of the segments are the same as those described in Note 1.

Industrial Precision Solutions: This segment focuses on delivering proprietary dispensing and processing technology, both standard and highly customized equipment, to diverse end markets. Product lines commonly reduce material consumption, increase line efficiency through precision dispense and measurement and control, and enhance product brand and appearance. Components are used for dispensing adhesives, coatings, paint, finishes, sealants and other materials. This segment primarily serves the industrial, agricultural, consumer durables and non-durables markets.

Medical and Fluid Solutions: This segment includes the Company's fluid management solutions for medical, high-tech industrial and other diverse end markets. Related plastic tubing, balloons, catheters, syringes, cartridges, tips and fluid connection components are used to dispense or control fluids within customers' medical devices or products, as well as production processes.

Advanced Technology Solutions: This segment focuses on products serving electronics end markets. Advanced Technology Solutions products integrate our proprietary product technologies found in progressive stages of an electronics customer's production processes, such as surface treatment, precisely controlled dispensing of material and test and inspection to ensure quality and reliability. Applications include, but are not limited to, semiconductors, printed circuit boards, electronic components and automotive electronics.

No single customer accounted for 10 percent or more of sales in 2024, 2023 or 2022.

Notes to Consolidated Financial Statements — (Continued)

The following table presents information about our reportable segments:

	Industrial Precision Solutions	 edical and Fluid Solutions	Te	dvanced echnology folutions	(Corporate	Total
Year ended October 31, 2024							
Net external sales	\$ 1,484,249	\$ 695,452	\$	510,220	\$	_	\$ 2,689,921
Depreciation and amortization	56,856	58,061		13,433		7,825	136,175
Operating profit (loss)	470,559	187,731		94,231		(78,520)	674,001
Identifiable assets ^(a)	1,926,426	2,267,239		697,224		1,184,222	6,075,111
Property, plant and equipment expenditures	16,892	19,533		4,269		23,716	64,410
Year ended October 31, 2023							
Net external sales	\$ 1,391,046	\$ 660,316	\$	577,270	\$	_	\$ 2,628,632
Depreciation and amortization	33,228	54,988		15,185		8,497	111,898
Operating profit (loss)	460,889	189,367		101,662		(79,157)	672,761
Identifiable assets ^(a)	1,932,527	1,544,456		730,192		1,105,471	5,312,646
Property, plant and equipment expenditures	9,257	15,716		4,209		5,401	34,583
Year ended October 31, 2022							
Net external sales	\$ 1,337,242	\$ 690,177	\$	562,859	\$		\$ 2,590,278
Depreciation and amortization	27,891	54,674		8,780		8,578	99,923
Operating profit (loss)	434,476	217,199		133,253		(82,568)	702,360
Identifiable assets ^(a)	1,112,825	1,558,861		397,250		812,964	3,881,900
Property, plant and equipment expenditures	9,490	31,009		2,383		8,546	51,428

(a) Operating segment identifiable assets include notes and accounts receivable net of allowance for doubtful accounts, inventories net of reserves, property, plant and equipment net of accumulated depreciation and goodwill. Corporate assets are principally cash and cash equivalents, deferred income taxes, leases, headquarter facilities and intangible assets.

We have significant sales and long-lived assets in the following geographic areas:

	2024	2023	2022
Net external sales			
Americas	\$ 1,178,626	\$ 1,149,760	\$ 1,096,596
Europe	726,100	682,676	645,603
Asia Pacific	785,195	796,196	848,079
Total net external sales	\$ 2,689,921	\$ 2,628,632	\$ 2,590,278
Long-lived assets			
Americas	\$ 465,521	\$ 328,312	\$ 332,709
Europe	113,274	109,428	62,039
Asia Pacific	59,432	61,282	60,973
Total long-lived assets	\$ 638,227	\$ 499,022	\$ 455,721

Long-lived assets include property, plant and equipment - net and operating right of use lease assets.

A reconciliation of total assets for reportable segments to total consolidated assets is as follows:

	 2024	 2023	 2022
Total identifiable assets for reportable segments	\$ 6,075,111	\$ 5,312,646	\$ 3,881,900
Eliminations	 (74,145)	 (60,876)	 (61,525)
Total consolidated assets	\$ 6,000,966	\$ 5,251,770	\$ 3,820,375

Notes to Consolidated Financial Statements — (Continued)

Note 15 — Supplemental information for the statement of cash flows

	 2024	 2023	 2022
Cash operating activities:			
Interest paid	\$ 85,966	\$ 54,710	\$ 22,975
Income taxes paid	160,122	112,912	141,212

Note 16 — Contingencies

We are involved in pending or potential litigation regarding environmental, product liability, patent, contract, employee and other matters arising from the normal course of business. Including the environmental matter discussed below, after consultation with legal counsel, we do not believe that losses in excess of the amounts we have accrued would have a material adverse effect on our financial condition, quarterly or annual operating results or cash flows.

We have voluntarily agreed with the City of New Richmond, Wisconsin and other Potentially Responsible Parties to share costs associated with the remediation of the City of New Richmond municipal landfill (the "Site") and the construction of a potable water delivery system serving the impacted area down gradient of the Site. At October 31, 2024 and October 31, 2023, our accrual for the ongoing operation, maintenance and monitoring obligation at the Site was \$181 and \$231, respectively. The liability for environmental remediation represents management's best estimate of the probable and reasonably estimable undiscounted costs related to known remediation obligations. The accuracy of our estimate of environmental liability is affected by several uncertainties such as additional requirements that may be identified in connection with remedial activities, the complexity and evolution of environmental laws and regulations, and the identification of presently unknown remediation requirements. Consequently, our liability could be greater than our current estimate. However, we do not expect that the costs associated with remediation will have a material adverse effect on our financial condition or results of operations.

Management's Report on Internal Control Over Financial Reporting

The management of Nordson Corporation is responsible for establishing and maintaining adequate internal control over financial reporting.

Using criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control-Integrated Framework ("2013 framework"), Nordson's management assessed the effectiveness of our internal control over financial reporting as of October 31, 2024.

We completed the acquisition of Atrion Corporation and its subsidiaries ("Atrion") on August 21, 2024. As permitted by SEC guidance, the scope of our evaluation of internal control over financial reporting as of October 31, 2024 did not include the internal control over financial reporting of Atrion. The results of Atrion are included in our consolidated financial statements from the date the business was acquired. The total assets of the Atrion represented 14% of our total assets at October 31, 2024. The net revenues represented 1% of consolidated revenues for the year ended October 31, 2024 and the net income for the year ended October 31, 2024 did not have a material impact on the Company's operations.

Based on our assessment, management concluded that our internal control over financial reporting was effective as of October 31, 2024.

The independent registered public accounting firm, Ernst & Young LLP, has also audited the effectiveness of our internal control over financial reporting as of October 31, 2024. Ernst & Young LLP's report on Nordson's internal control over financial reporting is included herein.

/s/ Sundaram Nagarajan

President and Chief Executive Officer

December 18, 2024

/s/ Daniel R. Hopgood

Executive Vice President and Chief Financial Officer

December 18, 2024

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Nordson Corporation

Opinion on Internal Control Over Financial Reporting

We have audited Nordson Corporation's internal control over financial reporting as of October 31, 2024, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Nordson Corporation (the Company) maintained, in all material respects, effective internal control over financial reporting as of October 31, 2024, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Atrion Corporation and its subsidiaries (Atrion), which is included in the 2024 consolidated financial statements of the Company and constituted 14% of total assets as of October 31, 2024 and 1% of total revenues for the year then ended. Net income for the year then ended did not have a material impact on the Company's operations. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Atrion.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of October 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended October 31, 2024, and the related notes and schedule listed in the Index at Item 15(a) and our report dated December 18, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible 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 Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

/s/ Ernst & Young LLP

Cleveland, Ohio December 18, 2024

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Nordson Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Nordson Corporation (the Company) as of October 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended October 31, 2024, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at October 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended October 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of October 31, 2024, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated December 18, 2024 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the 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 financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the 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 account or disclosure to which it relates.

	Valuation of Goodwill
Description of the Matter	At October 31, 2024, the Company had \$3,280,819 thousand of goodwill. As discussed in Note 5 to the consolidated financial statements, the Company evaluates the carrying amount of goodwill for impairment annually as of August 1, and between annual evaluations if an event occurs or circumstances change that would indicate the fair value of a reporting unit is less than the carrying amount of those assets. The Company performed a quantitative impairment test for all reporting units in fiscal 2024. As part of the quantitative impairment tests, the Company estimated the fair value of each reporting unit using a combination of valuation techniques including the discounted cash flow method, a form of the income approach, and the guideline public company method, a form of the market approach.
	Auditing management's annual goodwill impairment assessment relating to goodwill was complex due to the use of valuation methodologies in the determination of the estimated fair values of the reporting units. These fair value estimates are impacted by assumptions such as discount rates, revenue growth rates, and operating margins which are affected by expectations about future market or economic conditions.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment process whereby the Company develops assumptions that are used as inputs to the annual goodwill impairment tests. This included controls over management's review of the valuation models and the assumptions, described above.
	To test the implied fair value of the Company's reporting units, we performed audit procedures that included, among others, assessing the valuation methodologies, testing the assumptions, and testing the completeness and accuracy of the underlying data. We involved our internal valuation specialists in assessing the fair value methodologies applied and evaluating the reasonableness of certain assumptions selected by management. We assessed the historical accuracy of management's estimates and performed sensitivity analyses of assumptions to evaluate the changes in the fair value of the reporting units that would result from changes in the assumptions. We tested management's reconciliation of the fair value of the reporting units to the market capitalization of the Company. We also assessed the appropriateness of the disclosures in the consolidated financial statements.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1956.

Cleveland, Ohio December 18, 2024

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

None.

Item 9A. Controls and Procedures

- (a) Evaluation of disclosure controls and procedures. Our management, with the participation of the principal executive officer (president and chief executive officer) and the principal financial officer (executive vice president and chief financial officer), has reviewed and evaluated our disclosure controls and procedures (as defined in the Securities Exchange Act Rule 13a-15e) as of October 31, 2024. Based on that evaluation, our management, including the principal executive and financial officers, has concluded that our disclosure controls and procedures were effective as of October 31, 2024 in ensuring that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and is accumulated and communicated to our management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.
- (b) <u>Management's report on internal control over financial reporting</u>. The Report of Management on Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm (Ernst & Young LLP, PCAOB ID: 42) thereon are set forth in Part II, Item 8 of this annual report and are incorporated by reference.
- (c) <u>Changes in internal control over reporting</u>. There were no changes in our internal control over financial reporting that occurred during the fourth quarter of 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

During the quarter ended October 31, 2024, no director or officer (as defined in Rule 16a-1(f) promulgated under the Exchange Act) of the Company adopted or terminated any "Rule 10b5-1 trading arrangement" or any "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408 of Regulation S-K.

Item 9C. Disclosures Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding the Audit Committee and Audit Committee financial experts is incorporated by reference to the caption "Committees of the Board of Directors" of our definitive Proxy Statement for the 2025 Annual Meeting of Shareholders.

Our executive officers serve for a term of one year from date of election to the next organizational meeting of the board of directors and until their respective successors are elected and qualified, except in the case of death, resignation or removal. Information concerning executive officers is contained in Part I of this annual report under the caption "Information about Our Executive Officers."

The information required by this item regarding our insider trading policy and procedures is incorporated by reference to the information contained under the caption "Insider Trading, Anti-Hedging and Anti-Pledging Policies" in our definitive proxy statement for the 2024 Annual Meeting of Stockholders.

We have adopted a Code of Ethics and Business Conduct (the "Code") for all employees and directors, including the principal executive officer, principal financial officer, principal accounting officer, other executive officers and other finance personnel. A copy of the Code is available free of charge on our website at https://www.nordson.com/en/about-us/corporate-responsibility/ code-of-ethics. We intend to satisfy our disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to or waiver of a provision of our code of ethics and business conduct that applies to our principal executive officer, principal financial officer or controller or persons performing similar functions and that relates to any element of the code of ethics definition enumerated in Item 406(b) of Regulation S-K by posting such information on our website.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to the "Executive Compensation Discussion and Analysis" section of the definitive Proxy Statement for the 2025 Annual Meeting of Shareholders, along with the sections captioned "Directors Compensation," "Summary Compensation for Fiscal Year 2024," "Grants of Plan-Based Awards," "Outstanding Equity Awards at October 31, 2024," "Stock Option Exercises and Stock Vested Tables," "Pension Benefits," "Nonqualified Deferred Compensation," "Potential Benefits Upon Termination or Change of Control," "CEO Pay Ratio," "Risks Related to Executive Compensation Policies and Practices" and "Compensation Committee Report" in our definitive Proxy Statement for the 2025 Annual Meeting of Shareholders.

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

The information required by this Item is incorporated by reference to the caption "Security Ownership of Nordson Common Shares by Certain Beneficial Owners and Management" in our definitive Proxy Statement for the 2025 Annual Meeting of Shareholders.

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted-average exercise price of outstanding options, warrants and rights (2)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first reporting column) (3)
Equity compensation plans approved by security holders	1,182,642	\$ 167.26	1,874,912
Equity compensation plans not approved by security holders			
Total	1,182,642	\$ 167.26	1,874,912

The following table sets forth (in whole shares) information regarding equity compensation plans in effect as of October 31, 2024:

(1) The number of shares reported may overstate dilution due to the inclusion of performance-based awards at their maximum payout level.

- (2) Full value equity awards such as performance share incentive awards are not taken into account in the weighted-average price, as such awards have no exercise price.
- (3) As of October 31, 2024, includes shares available for future issuance under the 2021 Plan, including for awards other than options, warrants and rights.

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

The information required by this Item is incorporated by reference to the captions "Corporate Governance—Director Independence" and "Corporate Governance—Review and Approval of Transactions with Related Persons" in our definitive Proxy Statement for the 2025 Annual Meeting of Shareholders.

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated by reference to the caption "Proposal 2: Ratify the Appointment of Ernst & Young LLP as our independent registered public accounting firm for the year ending October 31, 2024—Fees Paid to Ernst & Young LLP" and the caption "Proposal 2: Ratify the Appointment of Independent Registered Public Accounting Firm—Pre-Approval of Audit and Non-Audit Services" in our definitive Proxy Statement for the 2025 Annual Meeting of Shareholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following are filed as part of this annual report:

(a) 1. Financial Statements

The following financial statements are included in Part II, Item 8:

Consolidated Statements of Income for each of the three years in the period ended October 31, 2024

Consolidated Statements of Comprehensive Income for each of the three years in the period ended October 31, 2024

Consolidated Balance Sheets as of October 31, 2024 and October 31, 2023

Consolidated Statements of Shareholders' Equity for each of the three years in the period ended October 31, 2024

Consolidated Statements of Cash Flows for each of the three years in the period ended October 31, 2024

Notes to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm (Ernst & Young LLP, PCAOB ID: 42)

(a) 2. Financial Statement Schedule

Schedule II Valuation and Qualifying Accounts and Reserves for each of the three years in the period ended October 31, 2024.

No other consolidated financial statement schedules are presented because the schedules are not required, because the required information is not present or not present in amounts sufficient to require submission of the schedule, or because the information required is included in the financial statements, including the notes thereto.

(a) **3.** Exhibits

The exhibits listed on the accompanying index to exhibits are filed as part of this annual report.

Exhibit <u>Number</u>	Description
(2)	Plan of Acquisition, Reorganization or Arrangement
2-a	Agreement and Plan of Merger, dated as of August 7, 2022, by and among Nordson Corporation, Meta Merger Company and CyberOptics Corporation (incorporated herein by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K dated August 10, 2022)**
2-b	Agreement and Plan of Merger, dated as of May 28, 2024, by and among Nordson Corporation, Alpha Medical Merger Sub, Inc. and Atrion Corporation (incorporated herein by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K dated May 28, 2024)**
2-с	Voting and Support Agreement, dated as of May 28, 2024, by and among Nordson Corporation, Montclair Harbour LLC, David A. Battat and Emile A. Battat (incorporated herein by reference to Exhibit 2.2 to Registrant's Current Report on Form 8-K dated May 28, 2024)
2-d	Voting and Support Agreement, dated as of May 28, 2024, by and among Nordson Corporation, Stupp Bros., Inc. and John P. Stupp Jr. (incorporated herein by reference to Exhibit 2.3 to Registrant's Current Report on Form 8-K dated May 28, 2024)
(3)	Articles of Incorporation and By-Laws
3-а	1989 Amended Articles of Incorporation (incorporated herein by reference to Exhibit 3-a to Registrant's Annual Report on Form 10-K for the year ended October 31, 2017)
3-a-1	Certificate of Amendment to 1989 Amended Articles of Incorporation (incorporated herein by reference to Exhibit 3-a-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2017)
3-b	2023 Amended Regulations (incorporated herein by reference to Exhibit 3-b to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)
(4)	Instruments Defining the Rights of Security Holders, including indentures
4-a	Description of Nordson Corporation's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (incorporated herein by reference to Exhibit 4-a to Registrant's Annual Report on Form 10-K for the year ended October 31, 2019)
4-е	Master Note Purchase Agreement dated July 26, 2012 between Nordson Corporation and the purchasers listed therein (incorporated herein by reference to Exhibit 4-e to Registrant's Annual Report on Form 10-K for the year ended October 31, 2018)
4-j	Master Note Purchase Agreement dated July 28, 2015 between Nordson Corporation and the purchasers listed therein (incorporated herein by reference to Exhibit 4.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended July 31, 2015)
4-k	Master Note Purchase Agreement, dated as of June 22, 2018, by and among Nordson Corporation and the purchasers named therein (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated June 28, 2018)
4-1	Indenture, dated September 13, 2023, by and between the Company and U.S. Bank Trust Company, National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated September 13, 2023).
4-m	First Supplemental Indenture, dated September 13, 2023, by and between the Company and U.S. Bank Trust Company, National Association, as trustee, to the Indenture dated September 13, 2023 (incorporated herein by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated September 13, 2023).
4-n	Second Supplemental Indenture, dated September 9, 2024, by and between the Company and U.S. Bank Trust Company, National Association, as trustee, to the Indenture dated September 13, 2023 (incorporated herein by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated September 9, 2024).
4-o	364-Day Term Loan Agreement, dated as of June 21, 2024, by and among Nordson Corporation, as Borrower, Morgan Stanley Senior Funding, Inc., as Administrative Agent, Sole Lead Arranger and Sole Bookrunner, and various financial institutions named therein as lenders (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated June 24, 2024)
4-p	Incremental Amendment to Credit Agreement, dated as of June 21, 2024, by and among Nordson Corporation as Borrower, Nordson Engineering GmbH as German Borrower, Wells Fargo Bank, National Association, as Administrative Agent, and various financial institutions named therein as lenders (incorporated herein by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated June 24, 2024)
(10)	Material Contracts
10-b-2	Nordson Corporation 2005 Deferred Compensation Plan (as Amended and Restated Effective January 1, 2009) (incorporated herein by reference to Exhibit 10-b-2 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-b-3	First Amendment to the Nordson Corporation 2005 Deferred Compensation Plan (as Amended and Restated Effective January 1, 2009) (incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2016)*

Exhibit <u>Number</u>	Description
10-c-1	Form of Indemnity Agreement between the Registrant and Directors, effective November 1, 2016 (incorporated herein by reference to Exhibit 10-c-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2016)
10-c-2	Form of Indemnity Agreement between the Registrant and Executive Officers, effective November 1, 2016 (incorporated herein by reference to Exhibit 10-c-2 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2016)
10 - d	Restated Nordson Corporation Excess Defined Contribution Retirement Plan (incorporated herein by reference to Exhibit 10-d to Registrant's Annual Report on Form 10-K for the year ended October 31, 2009)*
10-d-1	First Amendment to Restated Nordson Corporation Excess Defined Contribution Retirement Plan (incorporated herein by reference to Exhibit 10-d-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2018)*
10-d-3	Nordson Corporation 2005 Excess Defined Contribution Retirement Plan (as Amended and Restated Effective January 1, 2009) (incorporated herein by reference to Exhibit 10-d-3 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-е	Nordson Corporation Excess Defined Benefit Pension Plan (incorporated herein by reference to Exhibit 10-e to Registrant's Annual Report on Form 10-K for the year ended October 31, 2009)*
10-e-1	First Amendment to Nordson Corporation Excess Defined Benefit Pension Plan (incorporated herein by reference to Exhibit 10-f-1 to Registrant's Annual Report on Form 10-K for the year ended October 29, 2000)*
10-e-2	Second Amendment to Nordson Corporation Excess Defined Benefit Pension Plan (incorporated herein by reference to Exhibit 10-e-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2018)*
10-e-3	Nordson Corporation 2005 Excess Defined Benefit Pension Plan (as Amended and Restated Effective January 1, 2009) (incorporated herein by reference to Exhibit 10-e-3 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-е-4	Nordson Corporation 2005 Excess Defined Benefit Pension Plan (First Amendment Effective July 9, 2009) (incorporated by reference to Exhibit 10-e-4 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2021)*
10-е-5	Nordson Corporation 2005 Excess Defined Benefit Pension Plan (Second Amendment Effective July 1, 2021) (incorporated by reference to Exhibit 10-e-5 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2021)*
10-g-1	Amended and Restated Nordson Corporation 2004 Long-Term Performance Plan (incorporated herein by reference to Exhibit 10-g-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2013)*
10-g-2	Nordson Corporation Amended and Restated 2012 Stock Incentive and Award Plan (incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated March 2, 2018)*
10-g-3	Nordson Corporation 2012 Stock Incentive and Award Plan, Form of Notice of Award - Key Employees (as amended November 24, 2014) (incorporated herein by reference to Exhibit 10-g-3 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-g-4	Nordson Corporation 2012 Stock Incentive and Award Plan, Form of Notice of Award - Executive Officers (as amended November 24, 2014) (incorporated herein by reference to Exhibit 10-g-4 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-g-5	Nordson Corporation 2012 Stock Incentive and Award Plan, Directors' Deferred Compensation Sub-Plan (incorporated herein by reference to Exhibit 10-g-5 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2013)*
10-g-6	Nordson Corporation 2012 Stock Incentive and Award Plan, Directors' Deferred Compensation Sub-Plan, Form of Notice of Award (incorporated herein by reference to Exhibit 10-g-6 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2013)*
10-g-7	Amended and Restated Nordson Corporation Directors' Deferred Compensation Sub-Plan (incorporated herein by reference to Exhibit 10-g-7 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2017)*
10-g-8	Nordson Corporation 2021 Stock Incentive and Award Plan (incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated March 2, 2021)*
10-g-9	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Award - Key Employees (incorporated herein by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated April 19, 2021)*
10-g-10	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Award - Executive Officers (incorporated herein by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated April 19, 2021)*
10-h	Assurance Trust Agreement between Nordson Corporation and Key Trust Company of Ohio, N.A. amended and restated as of January 22, 2014 (incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended January 31, 2014)*

Exhibit <u>Number</u>	Description
10-i	Form of Change in Control Retention Agreement between the Registrant and Executive Officers (incorporated herein by reference to Exhibit 10-h-1 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2014)*
10-ј	Compensation Committee Rules of the Nordson Corporation Amended and Restated Nordson Corporation 2004 Long Term Performance Plan governing directors' deferred compensation (incorporated herein by reference to Exhibit 10-j to Registrant's Annual Report on Form 10-K for the year ended October 31, 2016)*
10-k	Amended and Restated Term Loan Agreement, dated April 30, 2019, among Nordson Corporation, various financial institutions named therein, and PNC Bank, National Association, as administrative agent (incorporated herein by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K dated May 6, 2019)**
10-1	Employment Agreement, effective as of August 1, 2019, between Nordson Corporation and Sundaram Nagarajan (incorporated herein by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated June 14, 2019)*
10-m	Change-in-Control Retention Agreement between Nordson Corporation and Sundaram Nagarajan (incorporated herein by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K dated June 14, 2019)*
10-n	Separation agreement between Gregory P. Merk and Nordson Corporation, effective January 27, 2022 (incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q dated February 25, 2022)
10-о	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Stock Options Award (incorporated herein by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q dated February 23, 2023)*
10-р	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Restricted Share Units Award (incorporated herein by reference to Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q dated February 23, 2023)*
10-q	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Performance Share Units Award (incorporated herein by reference to Exhibit 10.3 to Registrant's Quarterly Report on Form 10-Q dated February 23, 2023)*
10-r	Term Loan Agreement, dated as of January 18, 2023, by and among Nordson Corporation and Nordson Engineering GmbH, as Borrowers, and the Lenders party thereto and PNC Bank, as Administrative Agent, and PNC Capital Markets LLC, as Sole Lead Arranger and Sole Bookrunner (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated January 23, 2023)
10-s	Credit Agreement, dated as of June 6, 2023, by and among Nordson Corporation and Nordson Engineering GmbH, as Borrowers, Wells Fargo Bank, National Association, as Agent, and Wells Fargo Securities, LLC, BofA Securities, Inc., JPMorgan Chase Bank, N.A., PNC Capital Markets LLC, and U.S. Bank National Association, as Joint Lead Arrangers and Bookrunners, and various financial institutions named therein as lenders. (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated June 6, 2023)
10-t	364-Day Term Loan Credit Agreement, dated as of August 23, 2023, by and among Nordson Corporation, as Borrower, JPMorgan Chase Bank, N.A., as Administrative Agent, Sole Lead Arranger and Sole Bookrunner, and various financial institutions named therein as lenders (incorporated herein by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated August 24, 2023).
10 - u	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Stock Option Award (incorporated by reference to Exhibit 10-u to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)*
10-v	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Restricted Share Unit Award (incorporated by reference to Exhibit 10-v to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)*
10-w	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Performance Share Unit Award (incorporated by reference to Exhibit 10-w to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)*
10-x	Nordson Corporation 2021 Stock Incentive and Award Plan, Form of Notice of Restricted Share Unit Award with cliff vesting (incorporated by reference to Exhibit 10-x to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)*
(19)	Nordson Corporation Insider Trading Policy
(21)	Subsidiaries of the Registrant
(23)	Consent of Independent Registered Public Accounting Firm
(24)	Power of Attorney (included on the signature page to this Annual Report on Form 10-K)
31.1	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 by the Chief Executive Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934 by the Chief Financial Officer, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

Exhibit Number Description

- 32.1 Certification of CEO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
- 32.2 Certification of CFO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith)
- 97 Nordson Corporation Compensation Clawback Policy (incorporated by reference to Exhibit 97 to Registrant's Annual Report on Form 10-K for the year ended October 31, 2023)
- 99-a Form S-8 Undertakings (incorporated herein by reference to Exhibit 99-a to Registrant's Annual Report on Form 10-K for the year ended October 31, 2016)
- 101 The following financial information from Nordson Corporation's Annual Report on Form 10-K for the year ended October 31, 2024, formatted in inline Extensible Business Reporting Language (iXBRL): (i) the Consolidated Statements of Income for the years ended October 31, 2024, 2023 and 2022, (ii) the Consolidated Statements of Comprehensive Income for the years ended October 31, 2024, 2023 and 2022, (iii) the Consolidated Balance Sheets at October 31, 2024, and 2023, (iv) the Consolidated Statements of Changes in Shareholders' Equity for the years ended October 31, 2024, 2023 and 2022, (v) the Consolidated Statements of Cash Flows for the years ended October 31, 2024, 2023 and 2022, (v) the Consolidated Statements of Cash Flows for the years ended October 31, 2024, 2023 and 2022, (v) the Notes to Consolidated Financial Statements.
- 104 The cover page from Nordson Corporation's Annual Report on Form 10-K for the year ended October 31, 2024, formatted in inline Extensible Business Reporting Language (iXBRL) (included in Exhibit 101).
- * Indicates management contract or compensatory plan, contract or arrangement in which one or more directors and/or executive officers of Nordson Corporation may be participants.
- ** Schedules and attachments to this exhibit have been omitted pursuant to Regulation S-K, Item 601(a)(5). The Registrant will provide a copy of any omitted schedule to the SEC or its staff upon request.

Item 16. Form 10-K Summary

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NORDSON CORPORATION

Date: December 18, 2024

By: /s/ Stephen Shamrock

Stephen Shamrock Chief Accounting Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Daniel R. Hopgood as his or her true and lawful attorney-in-fact and agent with full power to act alone, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, may lawfully do or cause to be done by virtue hereof.

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

<u>Signatures</u>	Title	Date
/s/ Sundaram Nagarajan Sundaram Nagarajan	Director, President and Chief Executive Officer (Principal Executive Officer)	December 18, 2024
/s/ Daniel R. Hopgood Daniel R. Hopgood	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	December 18, 2024
/s/ Stephen Shamrock Stephen Shamrock	Vice President and Chief Accounting Officer (Principal Accounting Officer)	December 18, 2024
/s/ Victor L. Richey, Jr. Victor L. Richey, Jr.	Chair of the Board	December 18, 2024
/s/ Annette Clayton Annette Clayton	Director	December 18, 2024
/s/ Dr. John A. DeFord Dr. John A. DeFord	Director	December 18, 2024
/s/ Frank M. Jaehnert Frank M. Jaehnert	Director	December 18, 2024
/s/ Ginger M. Jones Ginger M. Jones	Director	December 18, 2024
/s/ Christopher L. Mapes Christopher L. Mapes	Director	December 18, 2024
/s/ Michael J. Merriman, Jr. Michael J. Merriman, Jr.	Director	December 18, 2024
/s/ Milton M. Morris Milton M. Morris	Director	December 18, 2024
/s/ Jennifer A. Parmentier Jennifer A. Parmentier	Director	December 18, 2024

Schedule II – Valuation and Qualifying Accounts and Reserves

Allowance for Doubtful Accounts	Be	lance at ginning f Year	Charged to Expense	Additions (Deductions)	Currency Effects	Balance at End of Year
2022	\$	7,552	1,259	(1,336)	743	\$ 8,218
2023	\$	8,218	283	1,469	45	\$ 10,015
2024	\$	10,015	619	(347)	(518)	\$ 9,769
Inventory Obsolescence and Other Reserves						
2022	\$	45,863	18,694	(18,372)	(450)	\$ 45,735
2023	\$	45,735	24,925	6,617	(152)	\$ 77,125
2024	\$	77,125	28,563	(20,063)	172	\$ 85,797

Exhibit 21 NORDSON CORPORATION Subsidiaries of the Registrant

The following table sets forth the subsidiaries of the Registrant (each of which is included in the Registrant's consolidated financial statements), and the jurisdiction under the laws of which each subsidiary was organized:

Jurisdiction of Incorporation Name **UNITED STATES:** Atrion Leasing Company, LLC Alabama Alatenn Pipeline Company Alabama Nordson Test and Inspection Americas, Inc. California Value Plastics, Inc. dba Nordson MEDICAL Colorado Delaware Arag Group NA Inc. Atrion Corporation Delaware Atrion Medical Products, Inc. Delaware EDI Holdings, Inc. Delaware Halkey-Roberts Corporation Delaware Nordson BKG, Inc. Delaware Nordson Extrusion Dies Industries, LLC Delaware Nordson MEDICAL (CA), LLC Delaware Nordson MEDICAL Design and Development, Inc. Delaware Nordson MEDICAL, Inc. Delaware NDC Technologies, Inc. Delaware Vention Medical Acquisition Co. Delaware Arag Precision Technology, Inc. Georgia **CyberOptics** Corporation Minnesota Micromedics, Inc. dba Nordson MEDICAL Minnesota Nordson Medical (NH), Inc. New Hampshire Fluortek, LLC New Jersey Nordson Advanced Technology LLC Ohio Nordson Atlantic LLC Ohio Nordson England L.L.C. Ohio Nordson Medical Corporation Ohio Nordson Pacific, Inc. Ohio Nordson U.S. Trading Company Ohio Realty Land Conservancy III LLC Ohio Nordson EFD LLC Rhode Island Quest Medical, Inc. Texas

Nordson MEDICAL Israel Ltd.

Agritech Holdings S.à r.l.

AM Torneria S.r.l. ARAG S.à r.l.

Arinvex S.r.l.

ASJ S.r.l.

<u>poration</u>

Israel

Italy Italy

Italy

Italy Italy

Name	Jurisdiction of Incorpo
INTERNATIONAL:	
Arag Argentina S.A.	Argentina
Arag Australia PTY Ltd	Australia
Nordson Australia Pty. Limited	Australia
Nordson Osterreich GmbH	Austria
Nordson Benelux S.A./N.V.	Belgium
NDC Technologies S.A.	Belgium
Arag do Brasil S.A.	Brazil
Nordson do Brasil Industria e Comercio Ltda.	Brazil
Arag Bulgaria Ltd.	Bulgaria
Nordson Canada Limited	Canada
Dage Test Systems (Suzhou) Co. Ltd.	China
Hanshitong (Shanghai) Enterprise Management Consultin	g Co. Ltd. China
Nordson (China) Co., Ltd.	China
Nordson (Shanghai) Business Consulting Co., Ltd.	China
Nordson China Business Trust	China
Nordson PPS (Shanghai) Co. Ltd.	China
PDMC Branch Company of Nordson (China) Ltd.	China
Suzhou Nordson Electronics Equipment., Co., Ltd.	China
Nordson Andina Limitada	Colombia
Nordson CS, spol.s.r.o.	Czech Republic
Nordson Danmark A/S	Denmark
Nordson Finland Oy	Finland
Dosage 2000 S.A.R.L	France
Nordson France S.A.S.	France
Dage Deutschland GmbH	Germany
Matrix Technologies GmbH	Germany
Nordson BKG GmbH	Germany
Nordson Deutschland GmbH	Germany
Nordson Engineering GmbH	Germany
Nordson Germania Ltd. & Co. KG	Germany
Nordson Holdings S.à r.l. & Co. KG	Germany
Ligonia Limited	Hong Kong
Macaria Limited	Hong Kong
Nordson Advanced Technology (Hong Kong) Ltd.	Hong Kong
Nordson Asia Pacific, Limited	Hong Kong
Nordson Hungary Kft	Hungary
Nordson India Private Limited	India
Nordson S.E. Asia (Pte.) Limited, Indonesia Representativ	ve Office Indonesia
Chartview Investments Limited	Ireland
Nordson MEDICAL Ireland Limited	Ireland
Nordson MEDICAL Israel AC Ltd.	Israel
	T

<u>Name</u>

Jurisdiction of Incorporation

INTERNATIONAL:	
Nordson Italia Agriculture S.r.l.	Italy
Nordson Italia S.p.A.	Italy
Polyusus Lux XX S.à. r.l.	Italy
Nordson Advanced Technology (Japan) K.K.	Japan
Nordson K.K.	Japan
Nordson Luxembourg S.à r.l.	Luxembourg
Nordson S.à r.l.	Luxembourg
Cybe Malaysia Sdn. Bhd.	Malaysia
Nordson (Malaysia) Sdn. Bhd.	Malaysia
Nordson de Mexico, S.A. de C.V.	Mexico
Nordson de Mexico Trading, S.A. de C.V.	Mexico
Nordson MEDICAL S.A. de C.V. (Mexico)	Mexico
Nordson Benelux B.V.	The Netherlands
Nordson B.V.	The Netherlands
Nordson New Zealand	New Zealand
Nordson Norge A/S	Norway
Nordson Polska Sp.z.o.o.	Poland
Nordson Portugal Equipamento Industrial, Lda.	Portugal
CyberOptics (Singapore) Pte. Ltd.	Singapore
Nordson Advanced Technology (Singapore) Pte. Ltd.	Singapore
Nordson Advanced Technology International Pte. Ltd.	Singapore
Nordson S.E. Asia (Pte.) Ltd.	Singapore
Nordson SG Pte. Ltd.	Singapore
Primount Singapore Pte. Ltd.	Singapore
Nordson SA (Pty) Limited	South Africa
Nordson Korea Ltd.	South Korea
Nordson Iberica, S.A.	Spain
Nordson AB	Sweden
Nordson (Schweiz) A.G.	Switzerland
CyberOptics Corporation (Taiwan Branch)	Taiwan
Nordson Advanced Technology LLC (Taiwan Branch)	Taiwan
Nordson (Thailand) Ltd.	Thailand
Dage Holdings Limited	United Kingdom
Dage Pension Trustees Limited	United Kingdom
Dage Precision Industries Limited	United Kingdom
Majority Kingdom Investment Limited	United Kingdom
Minority Kingdom Investment Limited	United Kingdom
NDC Technologies Limited	United Kingdom
Nordson (U.K.) Limited	United Kingdom
Nordson London Limited	United Kingdom
Primount LLP	United Kingdom
Representative Office of Nordson S.E. Asia (Pte.) Limited in Hanoi City	Vietnam
Representative Office of Nordson S.E. Asia (Pte.) Limited in Ho Chi Minh City	Vietnam

Exhibit 23

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- 1. Registration Statement (Form S-8 No. 333-167406) pertaining to the Nordson Employees' Savings Trust Plan and Nordson Hourly-Rated Employees' Savings Trust Plan,
- 2. Registration Statement (Form S-8 No. 33-18309) pertaining to the Nordson Employees' Savings Trust Plan,
- 3. Registration Statement (Form S-8 No. 33-33481) pertaining to the Nordson Hourly-Rated Employees' Savings Trust Plan,
- 4. Registration Statement (Form S-8 No. 333-119399) pertaining to the Nordson Corporation 2004 Long-Term Performance Plan,
- 5. Registration Statement (Form S-8 No. 333-188980) pertaining to the Nordson Corporation 2012 Stock Incentive and Award Plan,
- 6. Registration Statement (Form S-8 No. 333-225378) pertaining to the Amended and Restated Nordson Corporation 2012 Stock Incentive and Award Plan,
- 7. Registration Statement (Form S-8 No. 333-254753) pertaining to the Nordson Corporation 2021 Stock Incentive and Award Plan,
- 8. Registration Statement (Form S-8 No. 333-268305) pertaining to the CyberOptics Corporation 1998 Stock Incentive Plan, as amended, and
- 9. Registration Statement (Form S-3 No. 333-274340) pertaining to debt securities;

of our reports dated December 18, 2024, with respect to the consolidated financial statements and schedule of Nordson Corporation and the effectiveness of internal control over financial reporting of Nordson Corporation included in this Annual Report (Form 10-K) of Nordson Corporation for the year ended October 31, 2024.

/s/ Ernst & Young LLP

Ernst & Young LLP

Cleveland, Ohio December 18, 2024

Exhibit 31.1

CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sundaram Nagarajan, certify that:

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

Date: December 18, 2024

/s/ Sundaram Nagarajan

Sundaram Nagarajan President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Daniel R. Hopgood, certify that:

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

Date: December 18, 2024

/s/ Daniel R. Hopgood

Daniel R. Hopgood Executive Vice President and Chief Financial Officer

Exhibit 32.1

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

In connection with the Annual Report of Nordson Corporation (the "Company") on Form 10-K for the year ended October 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sundaram Nagarajan, president and chief executive officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: December 18, 2024

/s/ Sundaram Nagarajan

Sundaram Nagarajan President and Chief Executive Officer

Exhibit 32.2

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

In connection with the Annual Report of Nordson Corporation (the "Company") on Form 10-K for the year ended October 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel R. Hopgood, executive vice president and chief financial officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: December 18, 2024

/s/ Daniel R. Hopgood

Daniel R. Hopgood Executive Vice President and Chief Financial Officer [THIS PAGE INTENTIONALLY LEFT BLANK]



Nordson Corporation 28601 Clemens Road Westlake, Ohio 44145-4551 USA +1.440.892.1580 nordson.com Nasdaq: NDSN