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

FORM 10-K

☒ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the fiscal year ended **December 30, 2022**, or
☐ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the transition period from __________ to __________.

Commission File No. 001-09249

Graco Inc.

(Exact name of Registrant as specified in its charter)

Minnesota
(State or other jurisdiction of incorporation or organization)

41-0285640
(I.R.S. Employer Identification No.)

88 - 11th Avenue N.E.
Minneapolis, Minnesota
(Address of principal executive offices)

55413
(Zip Code)

(612) 623-6000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $1.00 per share	GGG	The New York Stock Exchange

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

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

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

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

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

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

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

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

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

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. ☐

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 by Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of 169,133,922 shares of common stock held by non-affiliates of the registrant was $10,063,468,359 as of July 1, 2022.

167,776,564 shares of common stock were outstanding as of January 11, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company’s definitive Proxy Statement for its Annual Meeting of Shareholders to be held on April 28, 2023, are incorporated by reference into Part III, as specifically set forth in said Part III.

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ACCESS TO REPORTS
Investors may obtain access free of charge to the Graco Inc. Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, other reports and amendments to the reports by visiting the Graco website at www.graco.com. These reports will be available as soon as reasonably practicable following electronic filing with, or furnishing to, the Securities and Exchange Commission.

PART I

Item 1. Business

Graco Inc., together with its subsidiaries ("Graco," "us," "we," or "our Company"), is a multi-national manufacturing company. We supply technology and expertise for the management of fluids and coatings in industrial and commercial applications. We design, manufacture and market systems and equipment used to move, measure, mix, control, dispense and spray fluid and powder materials. Our equipment is used in manufacturing, processing, construction and maintenance industries. Graco is a Minnesota corporation and was incorporated in 1926.

We specialize in providing equipment solutions for difficult-to-handle materials with high viscosities, abrasive or corrosive properties, and multiple component materials that require precise ratio control. We aim to serve niche markets, providing high customer value through product differentiation. Our products enable customers to reduce their use of labor, material and energy, improve quality and environmental performance.

We make significant investments in developing innovative, high-quality products. We strive to grow into new geographic markets by strategically adding commercial and technical resources and third-party distribution in growing and emerging markets. We have grown our third-party distribution to have specialized experience in particular end-user applications. We leverage our product technologies for new applications and industries.

We also make targeted acquisitions to broaden our product offering, enhance our capabilities in the end-user markets we serve, expand our manufacturing and distribution base and potentially strengthen our geographic presence. These acquisitions may be integrated into existing Graco operations or may be managed as stand-alone operations. We completed business acquisitions in 2022, 2021 and 2020 that were not material to our consolidated financial statements.

We have particularly strong manufacturing, engineering and customer service capabilities that enhance our ability to provide premium customer experience, produce high-quality and reliable products and drive ongoing cost savings.

Our investment in new products, targeted acquisitions and strong manufacturing, engineering and customer service capabilities comprise our long-term growth strategies, which we coordinate and drive across our geographic regions. Values central to our identity - growth, product innovation, premium customer service, quality and continuous improvement - are leveraged to integrate and expand the capabilities of acquired businesses.

We classify our business into three reportable segments, each with a worldwide focus: Contractor, Industrial and Process.

Each segment sells its products in North, Central and South America (the "Americas"), Europe, Middle East and Africa ("EMEA"), and Asia Pacific. For 2022, sales in the Americas represented approximately 60 percent of our Company's total sales. Sales in EMEA represented approximately 21 percent. Sales in Asia Pacific represented approximately 19 percent. We provide marketing and product design in each of these geographic regions. Our Company also provides application assistance to distributors and employs sales personnel in each of these geographic regions.

Financial information concerning our segments and geographic markets is set forth in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations and Note B (Segment Information) to the Consolidated Financial Statements of this Form 10-K.

For information about our Company and our products, services and solutions, visit our website at www.graco.com. The information on the website is not part of this report nor any other report filed or furnished to the Securities and Exchange Commission ("SEC").

Manufacturing and Distribution

We manufacture a majority of our products in the United States ("U.S."). We also manufacture products in Switzerland (Industrial segment), Italy (Industrial segment), the United Kingdom (Process segment), the People's Republic of China ("P.R.C.") (all segments), Belgium (all segments) and Romania (Industrial segment). Our manufacturing is aligned with our business segments and is co-located with product development to accelerate technology improvements and improve our cost structure. We perform critical machining, assembly and testing in-house for most of our products to control quality, improve response time and maximize cost-effectiveness. We make our products in focused factories and product cells. We source raw materials and components from suppliers around the world.

For all segments, we primarily sell our equipment through third-party distributors worldwide, positioned throughout our geographic regions, and through selected retailers. Our products are sold from our warehouse to our third-party distributors or retailers who sell our products to end users. Certain of our businesses sell their products directly to end-user customers and have direct relationships with customers.

Outside of the U.S., our subsidiaries located in Australia, Belgium, Spain, Japan, Italy, Korea, India, the P.R.C., the United Kingdom and Brazil distribute our Company's products. Operations in Maasmechelen, Belgium; St. Gallen, Switzerland; and Shanghai, P.R.C. reinforce our commitment to their regions.

Our manufacturing capacity is sufficient for current business demand levels. Production requirements in the immediate future are expected to be met through existing facilities, planned facility expansions, the installation of new automatic and semi-automatic machine tools, efficiency and productivity improvements, the use of leased space and available subcontract services. In 2022, we completed a construction project on a new facility in Dayton, Minnesota that contains manufacturing operations for portions of our Contractor segment and Process division. We also began facility construction and expansion projects in our Sioux Falls, South Dakota; St. Gallen, Switzerland; and Sibiu, Romania manufacturing facilities in 2022, as well as the construction of a new worldwide distribution center in Dayton, Minnesota. We are in the planning and design phases of additional projects to expand capacity in other manufacturing and distribution locations in 2023 and beyond. For more details on our facilities, see Item 2, Properties.

Product Development

Our primary product development efforts are carried out in facilities located in Minneapolis, Anoka and Rogers, Minnesota; North Canton, Ohio; St. Gallen, Switzerland; Barcelona, Spain; Suzhou and Shanghai, P.R.C.; Dexter, Michigan; Erie, Pennsylvania; Kamas, Utah; and Coventry, United Kingdom. In 2021, we opened facilities in Dongguan City, P.R.C. and Aachen, Germany, devoted to the support and development of products for electronics assembly, battery and new energy vehicles. The product development and engineering groups focus on new product design, product improvements, and new applications for existing products and technologies for their specific customer base. We continue to enhance our product capabilities with particular emphasis on automation and configurability, easier integration with end-user customer manufacturing and business systems, and increased focus on data and analytics. Our product development efforts focus on bringing new and supplemental return on investment value to end users of our products and enhance their ability to manage products and efficiency and support their sustainability initiatives.

Our Company consistently makes significant investments in new products. Total product development expenditures for all segments were $80 million in 2022, $80 million in 2021 and $72 million in 2020. The amounts invested in product development averaged approximately 4 percent of sales over the last three years. Our product development activities are focused both on upgrades to our current product lines to provide features and benefits that will provide a return on investment to our end-user customers and development of products that will reach into new industries and applications to incrementally grow our sales. Sales of products that refresh and upgrade our product lines are measured and compared with planned results. Sales of products that provide entry into new industries and applications are also measured, with additional focus on commercial resources and activities to build specialized third-party distribution and market acceptance by end users.

Our Company measures the results of acquired businesses as compared to historical results and projections made at the time of acquisition. We will invest in engineering, manufacturing and commercial resources for these businesses based on expected return on investment.

Business Segments

Effective January 1, 2022, our high performance coatings and foam product offerings previously included within the Applied Fluid Technologies division of the Industrial segment were realigned and are now managed under the Contractor segment. This change aligns the types of products offered and markets served within the segments. Prior year segment information has been restated to conform to the current organizational structure.

Contractor Segment

The Contractor segment represented approximately 47 percent of our total sales in 2022. Through this segment, we offer sprayers that apply paint to walls and other structures, with product models for users ranging from do-it-yourself homeowners to professional contractors. Contractor equipment also includes sprayers that apply texture to walls and ceilings, highly viscous coatings to roofs, and markings on roads, parking lots, athletic fields and floors.

This segment also manufactures two-component proportioning systems that are used to spray polyurethane foam (spray foam) and polyurea coatings. Spray foam is commonly used for insulating building walls, roofs, water heaters, refrigerators, hot tubs and other items. Polyurea coatings are applied on storage tanks, pipes, roofs, truck beds, concrete and other items. We offer a complete line of pumps and proportioning equipment that sprays specialty coatings on a variety of surfaces for protection and fireproofing.

End users of this segment are primarily professional painters in the construction and maintenance industries, specialty contractors, tradesmen and do-it-yourselfers. Contractor products are marketed and sold in all major geographic areas. We continue to add distributors throughout the world that specialize in the sale of Contractor products. Globally, we are pursuing a broad strategy of converting contractors accustomed to manually applying paint and other coatings to spray technology.

Our Contractor products are distributed primarily though distributor outlets whose main products are paint and other coatings. Certain sprayers and accessories are distributed globally through the home center channel. Contractor products are also sold through general equipment distributors outside of North America.

Industrial Segment

The Industrial segment represented approximately 30 percent of our total sales in 2022. It includes the Industrial and Powder divisions. The Industrial segment markets equipment and solutions for moving and applying paints, coatings, sealants, adhesives and other fluids. Markets served include automotive and vehicle assembly and components production, wood and metal products, rail, marine, aerospace, farm, construction, bus, recreational vehicles and various other industries. End users often invest in our equipment to gain process efficiencies, improve quality or save on material or energy costs. A majority of this segment's business is outside of North America.

Most Industrial segment equipment is sold worldwide through specialized third-party distributors, integrators, design centers, original equipment manufacturers and material suppliers. Some products are sold directly to end users and may include design and installation to specific customer requirements. We work with material suppliers to develop or adapt our equipment for use with specialized or hard-to-handle materials. Distributors promote and sell the equipment, hold inventory, provide product application expertise and offer on-site service, technical support and integration capabilities. Integrators implement large individual installations in manufacturing plants where products and services from a number of different manufacturers are aggregated into a single system. Design centers engineer systems for their customers using our products. Original equipment manufacturers incorporate our Company’s Industrial segment products into systems and assemblies that they then supply to their customers.

Industrial

The Industrial division makes liquid finishing and advanced fluid dispense equipment primarily for use in industrial applications.

This division’s products include liquid finishing equipment that applies liquids on metals, wood and plastics, with emphasis on solutions that provide easy integration to paint monitoring and control systems. Products include paint circulating and paint supply pumps, paint circulating advanced control systems, plural component coating proportioners, various accessories to filter, transport, agitate and regulate fluid, and spare parts such as spray tips, seals and filter screens. The Industrial division also offers a variety of applicators that use different methods of atomizing and spraying liquid materials, paint or other coatings depending on the viscosity of the fluid, the type of finish desired and the need to maximize transfer efficiency, minimize overspray and minimize the release of volatile organic compounds into the air. Manufacturers in the automotive, automotive feeder, commercial and recreational vehicle, military and utility vehicle, aerospace, farm, construction, wood and general metals industries use our liquid finishing products.

The Industrial division also manufactures equipment for industrial customers that pumps, meters, mixes and dispenses sealant, adhesive and composite materials. Advanced fluid dispense equipment includes gel-coat equipment, chop and wet-out systems, resin transfer molding systems and applicators and precision dispensing solutions. This precision dispense equipment bonds, molds, seals, vacuum encapsulates and laminates parts and devices in a wide variety of industrial applications.

Powder

The Powder division makes powder finishing products and complete powder finishing systems that coat powder on metals. These products are sold under the Gema® and SAT™ brands. Gema powder systems coat window frames, metallic furniture, automotive components and sheet metal. Primary end users of our powder finishing products include manufacturers in the construction, home appliance, automotive component and custom project coater industries. We strive to provide innovative solutions in powder coating for end users in emerging and developed markets.

Process Segment

The Process segment represented approximately 23 percent of our total sales in 2022. It includes the Process and Lubrication divisions. The Process segment markets pumps, valves, meters and accessories to move and dispense chemicals, oil and natural gas, water, wastewater, petroleum, food, lubricants and other fluids. Markets served include food and beverage, dairy, oil and natural gas, pharmaceutical, cosmetics, semiconductor, electronics, wastewater, mining, fast oil change facilities, service garages, fleet service centers, automobile dealerships and industrial lubrication applications.

Most Process segment equipment is sold worldwide through third-party distributors and original equipment manufacturers. Some products are sold directly to end users, particularly in the oil and natural gas and semiconductor industries.

Process

The Process division makes pumps of various technologies that move chemicals, water, wastewater, petroleum, food and other fluids. Manufacturers and processors in the food and beverage, dairy, pharmaceutical, cosmetic, oil and natural gas, semiconductor, electronics, wastewater, mining and ceramics industries use these pumps. This division makes environmental monitoring and remediation equipment that is used to conduct ground water sampling and ground water remediation, and for landfill liquid and gas management.

Lubrication

The Lubrication division primarily designs and sells equipment for use in equipment maintenance and vehicle servicing. We supply pumps, hose reels, meters, valves and accessories for use by fast oil change facilities, service garages, fleet service centers, automobile dealerships, auto parts stores, truck builders and heavy equipment service centers.

This division also offers systems, components and accessories for the automatic lubrication of bearings, gears and generators in industrial and commercial equipment, compressors, turbines and on- and off-road vehicles. Automatic lubrication systems reduce maintenance costs, downtime and extend equipment life. These systems are utilized across a variety of industries including construction, mining, industrial manufacturing, transportation, wind energy and oil and natural gas.

The Lubrication division also manufactures high pressure and ultra-high pressure valves used in the oil and natural gas industry, hydrogen refueling infrastructure, other industrial processes and research facilities. The division also has a line of chemical injection pumping solutions for precise injection of chemicals into producing oil wells and pipelines.

Raw Materials

The primary materials and components in our products are steel of various alloys, sizes and hardness; specialty stainless steel and aluminum bar stock, tubing and castings; tungsten carbide; electric and gas motors; injection molded plastics; sheet metal; forgings; powdered metal; hoses; electronic components and high performance plastics, such as polytetrafluoroethylene (PTFE). The materials and components that we use are generally available through multiple sources of supply. To manage cost, we source significant amounts of materials and components from outside the U.S., primarily in the Asia Pacific region.

In 2022, we continued to experience logistical and production constraints associated with raw materials and purchased components. These constraints were due to limited component availability, reduced freight capacity, shipping delays, and labor shortages. While we were generally able to find alternative suppliers to source raw materials and components for our products as interruptions persisted, these constraints reduced our ability to meet demand and increased lead times across many of our product lines. Additionally, we experienced price inflation related to raw materials and purchased components. The effects of inflation were most pronounced on motors, electronics, and commodity prices for materials, such as aluminum, stainless steel, carbon steel bar stock, plastics and copper. Although pressures from tariffs continued in 2022, we worked with our supplier base on a variety of opportunities to lessen the effect.

We endeavor to address fluctuations in the price and availability of various materials and components through close management of current suppliers, price negotiations and an intensive search for new suppliers. We have performed risk assessments of our key suppliers, and we factor the risks identified into our commodity plans.

Intellectual Property

We own a number of patents across our segments and have patent applications pending in the U.S. and other countries. We also license our patents to others and are a licensee of patents owned by others. In our opinion, our business is not materially dependent upon any one or more of these patents or licenses. Our Company also owns a number of trademarks in the U.S. and foreign countries, including registered trademarks for “GRACO,” “Gema,” several forms of a capital “G,” and various product trademarks that are material to our business, inasmuch as they identify Graco and our products to our customers.

Competition

We encounter a wide variety of competitors that vary by product, industry and geographic area. Each of our segments generally has several competitors. Our competitors are both U.S. and foreign companies and range in size. We believe that our ability to compete depends upon product quality, product reliability, innovation, design, customer support and service, specialized engineering and competitive pricing. Although no competitor duplicates all of our products, some competitors are larger than our Company, both in terms of sales of directly competing products and in terms of total sales and financial resources. We also face competitors with different cost structures and expectations of profitability, and these companies may offer competitive products at lower prices. We refresh our product line and continue development of our distribution channel to stay competitive. We also face competitors who illegally sell counterfeits of our products or otherwise infringe on our intellectual property rights. As this type of unfair competition grows or evolves, we may have to increase our intellectual property and unfair competition enforcement activities.

Environmental Protection

Our compliance with federal, state and local laws and regulations did not have a material effect upon our capital expenditures, earnings or competitive position during the fiscal year ended December 30, 2022.

Human Capital Resources

As of December 30, 2022, we employed approximately 4,000 persons. Of this total, approximately 1,400 were employees based outside of the U.S., and 1,700 were hourly factory workers in the U.S. None of our Company’s U.S. employees are covered by a collective bargaining agreement. Various national industry-wide labor agreements apply to certain employees in various countries outside of the U.S. Compliance with such agreements has no material effect on our Company or our operations.

The location of the majority of our manufacturing operations within the U.S. allows us to flex employee resources as needed to respond to changes in demand of our business. Our manufacturing, product development, warehouse and administrative employees are generally located in the same or adjacent facilities, which we believe contributes to our culture of strong manufacturing, engineering and customer service capabilities.

Health, Wellness & Safety

The personal health and safety of each of our employees is of primary importance. The prevention of occupationally-induced injuries and illnesses is given precedence over operating productivity. Our Health, Wellness and Safety program is designed to increase engagement, reduce absenteeism due to illness or injury, provide healthier lifestyle choices, and reduce health risk factors for our employees.

Total Rewards

Our reward programs connect all employees to the performance and success of the Company. As an employer of choice, we offer pay, benefits and a work environment that attracts and retains high-performing talent. We believe that an effective compensation program must be market competitive as well as fair and equitable. Our compensation program is designed to attract and retain top talent, drive and reward performance and enhance our reputation. Our total rewards program is comprised of various elements, including base pay, variable pay, equity-based compensation for all employees, and health, welfare and retirement benefits.

Talent

To achieve our strategic objectives, it is imperative that we attract, develop and retain qualified personnel. We seek to develop talent from within our organization and supplement our workforce with external hires as necessary. This approach has helped create among our employees an in-depth understanding of our business, products, competition and customers, while also adding new employee ideas and perspectives in support of our continuous improvement initiatives.
As of December 30, 2022, our executive officers responsible for setting overall strategy average nearly 21 years of tenure with us. Tenure of all employees averages nearly 10 years, reflective of our positive workplace culture. Our recruiting team uses internal and external resources to recruit highly skilled and talented workers, and we encourage and reward employee referrals for open positions.

We are committed to maintaining a culture of trust that recognizes the dignity and uniqueness of the individual. We provide equal opportunities for professional growth and advancement based on performance, qualifications, demonstrated skill and achievements. All employees are encouraged, under a continuous improvement program with financial incentives, to submit ideas to improve profitability, quality, safety and environmental practices. New employee orientation and regular ethics training are required for all employees. We complete a biennial survey of our employees to assess our culture, benchmark us against industry leaders, and to make improvements as necessary.

Community

We have a long history of giving back to the communities where we live and work through the volunteer efforts of our employees and the giving efforts of the Graco Foundation. The Graco Foundation’s goal is to help organizations grow their ability to serve community needs through grants focused on capital projects, specific programs and technology needs. The Graco Foundation places emphasis on educational programs, especially STEM (science, technology, engineering and math) programs; human service programs promoting workforce development; and youth development programs. The Graco Foundation also supports several employee-based programs, including dollar-for-dollar gift matching, grants to support volunteerism, scholarships for children of employees, tutoring with a local middle school and an annual Paint-A-Thon that helps low-income seniors and people with permanent disabilities continue to live independently in their own homes.

Item 1A. Risk Factors

As a global manufacturer of systems and equipment designed to move, measure, control, dispense and spray fluid and powder materials, our business is subject to various risks and uncertainties. Below are risk factors that could materially and adversely affect our business, financial condition and results of operations.

Economic, Financial and Political Risks

Economic Environment - Demand for our products depends on the level of commercial and industrial activity worldwide.

An economic downturn, recession, depression, sustained inflationary pressures or financial market turmoil may depress demand for our equipment in all major geographies and markets. Economic uncertainty and volatility in various geographies and industries in which we conduct business may adversely affect our net sales and earnings. If our distributors and original equipment manufacturers are unable to purchase our products because of unavailable credit or unfavorable credit terms, depressed end-user demand, or are simply unwilling to purchase our products, our net sales and earnings will be adversely affected. An economic downturn may have an adverse effect on our results of operations and financial condition and affect our ability to satisfy the financial covenants in the terms of our financing arrangements.

Currency - Changes in currency translation rates could adversely impact our revenue, earnings and the valuation of assets denominated in foreign currencies.

A significant number of routine transactions are conducted in foreign currencies. Changes in exchange rates have impacted, and in the future may impact, our reported sales and earnings and the valuation of assets denominated in foreign currencies. A majority of our manufacturing and cost structure is based in the U.S. In addition, decreased value of local currency may make it difficult for some of our distributors and end users to purchase products.

Russian Invasion of Ukraine – Russia’s invasion of Ukraine, and the sanctions and actions taken against Russia and Belarus in response to the invasion, could adversely impact our business.

While our sales into Russia and Belarus were not material to our overall business, and we did not have any physical operations in Russia or Belarus or source raw materials or components directly from either country, the Russian invasion of Ukraine and the resulting sanctions and actions taken against Russia and Belarus by the United States, the United Kingdom, the European Union, Switzerland and others considerably restricted our ability to sell certain products in Russia and Belarus. As a result, in April 2022 we suspended sales into Russia and Belarus indefinitely. We expect our ability to sell certain products in Russia and Belarus to continue to be restricted for the foreseeable future. A significant escalation or expansion of the conflict beyond its current geographic, political and economic scope and scale could have a material adverse effect on our business, results of operations and financial condition, and could exacerbate other risks discussed in this report. Such risks include, but are not limited to: an increase in the frequency and severity of cybersecurity threats against us and the parties with whom we do business; unfavorable changes in exchange rates; further shortages, delivery delays and price inflation in a wide variety of raw materials and components; widespread reductions in end-user demand; and increased logistical challenges.

Political Instability - Uncertainty surrounding political leadership may limit our growth opportunities.

Domestic political instability, including government shut downs, may limit our ability to grow our business. International political instability (including tensions between the U.S. and the countries in which we conduct business, threats of war, terrorism and other hostilities, and governmental instability) may prevent us or our customers from expanding our business into certain geographies and may also limit our ability to grow our business. Civil disturbances may harm our business.

Pension Plan – Declines in interest rates, asset values and investment returns could significantly increase our pension costs and required pension contributions.

The Company sponsors a qualified defined benefit pension plan for certain U.S. employees and retirees of the Company. The pension plan is funded with trust assets invested in a diversified portfolio of equity, fixed income and other investments. Declines in interest rates, the market value of plan assets, and investment returns could significantly increase our net periodic pension costs and our future pension contribution requirements and adversely affect our results of operations and financial condition.

Operational Risks

Global Sourcing - Risks associated with foreign sourcing, supply interruption, delays in raw material or component delivery, supply shortages and counterfeit components may adversely affect our production or profitability.

We source certain of our materials and components from suppliers outside the U.S., and from suppliers within the U.S. who engage in foreign sourcing. Long lead times or supply interruptions associated with a global supply base may reduce our flexibility and make it more difficult to respond promptly to fluctuations in demand or respond quickly to product quality problems. Changes in exchange rates between the U.S. dollar and other currencies and fluctuations in the price of raw materials and components have impacted and may continue to impact the manufacturing costs of our products and affect our profitability. Protective tariffs, unpredictable changes in duty rates, and changes in trade policies, agreements, relations and regulations have made and may continue to make certain foreign-sourced parts no longer competitively priced. Long supply chains may be disrupted by environmental events, public health crises (such as the COVID-19 pandemic), political or other factors. Raw materials may become limited in availability from certain regions. Port labor issues may delay shipments. We source a large volume and a variety of electronic components, which exposes us to an increased risk of counterfeit components entering our supply chain. If counterfeit components unknowingly become part of our products, we may need to stop delivery and rework our products. We may be subject to warranty claims and may need to recall products. Shortages, delivery delays and price inflation in a wide variety of raw materials and components (including but not limited to electronic components, castings, engines and motors) and logistical challenges (including but not limited to increased freight costs, shipping container shortages, trucking shortages, ocean, railway and air freight capacity constraints, labor shortages and port delays) have adversely affected production and profitability and may continue to adversely affect production and profitability.

Information Systems - Interruption of or intrusion into information systems may impact our business.

We rely on information systems and networks, including the internet, to conduct and support our business. Some of these systems and networks are managed, hosted and provided by third parties. We use these systems and networks to record, process, summarize, transmit and store electronic information, and to manage or support our business processes and activities. We have implemented measures intended to secure our information systems and networks and prevent unauthorized access to or loss of sensitive data. However, these measures may not be effective against all eventualities, and our information systems and networks and those of our third party service providers may be vulnerable to hacking, human error, fraud or other misconduct, system error, faulty password management or other irregularities. Cybersecurity threats are increasing in frequency, sophistication and severity. We have experienced and expect to continue to experience cybersecurity threats and attacks on our systems and networks and those of our third party service providers. To date, none of the cybersecurity threats and attacks we have experienced have had a material adverse impact on our operations, business or financial condition. Security breaches or intrusion into our information systems or networks or the information systems or networks of the third parties with whom we do business pose a risk to the confidentiality, availability and integrity of our data, and could lead to any one or more of the following: the compromising of confidential information; manipulation, unauthorized use, theft or destruction of data; product defects or malfunctions; production downtimes and operations disruptions; litigation; regulatory action; fines; and other costs and adverse consequences. The occurrence of a security breach or an intrusion into an information system or a network, or the breakdown, interruption in or inadequate upgrading or maintenance of our information processing software, hardware or networks or the internet, may adversely affect our business, reputation, results of operations and financial condition.

Intellectual Property - Demand for our products may be affected by new entrants who copy our products or infringe on our intellectual property. Competitors may allege that our products infringe the intellectual property of others.

From time to time, we have been faced with instances where competitors have infringed or unfairly used our intellectual property or taken advantage of our design and development efforts. The ability to protect and enforce intellectual property rights varies across jurisdictions. Competitors who copy our products are prevalent in Asia. If we are unable to effectively meet these challenges, they could adversely affect our revenues and profits and hamper our ability to grow. Competitors and others may also initiate litigation to challenge the validity of our intellectual property or allege that we infringe their intellectual property. We may be required to pay substantial damages if it is determined our products infringe their intellectual property. We may also be required to develop an alternative, non-infringing product that could be costly and time-consuming, or acquire a license (if available) on terms that are not favorable to us. Regardless of whether infringement claims against us are successful, defending against such claims could significantly increase our costs, divert management's time and attention away from other business matters, and otherwise adversely affect our results of operations and financial condition.

Foreign Operations - Conducting business internationally exposes our Company to risks that could harm our business.

In 2022, approximately 48 percent of our sales were generated by customers located outside the U.S. Operating and selling outside of the U.S. exposes us to certain risks that could adversely impact our sales volume, rate of growth or profitability. These risks include: complying with foreign legal and regulatory requirements; international trade factors (export controls, customs clearance, trade policy, trade sanctions, trade agreements, duties, tariff barriers and other restrictions); protection of our proprietary technology in certain countries; potentially burdensome taxes; potential difficulties staffing and managing local operations; and changes in exchange rates.

Catastrophic Events - Our operations are at risk of damage, destruction or disruption by natural disasters and other unexpected events.

The loss of, or substantial damage to, one of our facilities, our information system infrastructure or the facilities of our suppliers could make it difficult to manufacture product, fulfill customer orders and provide our employees with work. Flooding, tornadoes, hurricanes, unusually heavy precipitation or other severe weather events, earthquakes, tsunamis, fires, explosions, acts of war, terrorism, civil unrest or outbreaks, epidemics or pandemics of infectious diseases (such as the COVID-19 pandemic) could adversely impact our operations.

Personnel - Our success may be affected if we are not able to attract, develop and retain qualified personnel.

Our success depends in large part on our ability to identify, recruit, develop and retain qualified personnel. If we are unable to successfully identify, recruit, develop and retain qualified personnel or adapt to changing worker expectations and working arrangements, it may be difficult for us to meet our strategic objectives and grow our business, which could adversely affect our results of operations and financial condition.

Pandemic Risks

A pandemic, including the COVID-19 pandemic, could have a material and adverse effect on our business, results of operations and financial condition.

The COVID-19 pandemic and related governmental, business and societal responses to the pandemic had an adverse effect on our operations, employees, supply chains, distribution channels, and end-user customers. These effects included: employees being infected by, or exposed to, the virus; adverse impacts on the efficiency and productivity of our workforce and our operations; adverse impacts on our ability to manufacture products and provide related services in a timely manner; supply chain disruptions, including increased costs of raw materials and components, and delays, shortages and difficulties in sourcing raw materials and components; volatility in demand for certain of our products; inability to meet end-user customer demand; distribution and logistics challenges, including increased freight costs, reduced freight capacity, and shipping delays; restrictions on our employees' ability to meet customers in person and the cancellation, postponement and reformatting of trade shows, industry events and product demonstrations, which impacted our selling activities and our ability to convert those activities into actual sales; and a significant investment of time, energy and resources by management in mitigating the effects of the pandemic on our employees and our business and complying with existing, new or modified governmental rules, regulations, standards and mandates. We may experience similar or additional adverse impacts to our business, results of operations and financial condition in the future as a result of a pandemic, including the COVID-19 pandemic. The extent to which a pandemic, including the COVID-19 pandemic, impacts us will depend on numerous factors and future developments that are uncertain and that we are not able to predict, including: the severity of the virus and new variants of the virus; the duration and scope of the pandemic; the efficacy, distribution and adoption rate of vaccines and therapeutic treatments; infection rates in the areas in which we or our suppliers, distributors or end-user customers operate; governmental, business, societal, individual and other actions taken in response to the pandemic; the effect on our suppliers and distributors, and disruptions to the global supply chain; the impact on economic activity; the effect on our end-user customers and their demand and buying patterns for our products and services; the effect of any closures or other changes in operations of our and our suppliers', distributors' and end-user customers' facilities; the health of and the effect on our employees and our ability to meet staffing needs; our ability to sell our products and services and provide product support; restrictions or disruptions to transportation, including reduced availability of ground, sea or air transport; and the effect on our ability to access capital on favorable terms and continue to meet our liquidity needs, all of which are highly uncertain and cannot be predicted. Even after the pandemic subsides, we may continue to experience adverse effects to our business as a result of ongoing or new economic impacts. A pandemic, including the COVID-19 pandemic, could also exacerbate or trigger other risks discussed in this report, any of which could have a material and adverse effect on our business, results of operations and financial condition.

Strategic Risks

Growth Strategies and Acquisitions - Our growth strategies may not provide the return on investment desired if we are not successful in implementation of these strategies.

Making acquisitions, investing in new products, expanding geographically and targeting new industries are among our growth strategies. We may not obtain the return on investment desired if we are not successful in implementing these growth strategies. The success of our acquisition strategy depends on our ability to successfully identify and properly value suitable acquisition candidates, negotiate appropriate acquisition terms, obtain financing at a reasonable cost, prevail against competing acquirers, complete the acquisitions and integrate or add the acquired businesses into our existing businesses or corporate structure. Once successfully integrated into our existing businesses or added to our corporate structure, the acquired businesses may not perform as planned, be accretive to earnings, generate positive cash flows, provide an acceptable return on investment or otherwise be beneficial to us. We may not realize projected efficiencies and cost-savings from the businesses we acquire. We cannot predict how customers, competitors, suppliers, distributors and employees will react to the acquisitions that we make. Acquisitions may result in the assumption of undisclosed or contingent liabilities, the incurrence of increased indebtedness and expenses, and the diversion of management's time and attention away from other business matters, any of which may have an adverse effect on our business, results of operations and financial condition. We make significant investments in developing products that have innovative features and differentiated technology in their industries and in niche markets. We are adding to the geographies in which we do business with third-party distributors. We cannot predict whether and when we will be able to realize the expected financial results and accretive effect of the acquisitions that we close, the new products that we develop and the channel expansions that we make.

Competition - Our success depends upon our ability to develop, market and sell new products that meet our customers' needs and desires, and anticipate industry changes.

Our profitability will be affected if we do not develop new products and technologies that meet our customers' needs and desires. Our ability to develop, market and sell products that meet our customers' needs and desires depends upon a number of factors, including anticipating the features and products that our customers will need or want in the future, identifying and entering into new markets, training our distributors, and anticipating market trends. Changes in industries that we serve, including consolidation of competitors, distributors and customers, could affect our success. Changes in the competitive landscape, increases in the market reach of competitors, and improvements in the quality of competitive products could also affect our success. Price competition and competitor strategies could negatively impact our growth and have an adverse impact on our results of operations.

Impairment - If acquired businesses do not meet performance expectations, acquired assets could be subject to impairment.

Our total assets reflect goodwill from acquisitions, representing the excess cost over the fair value of the identifiable net assets acquired. We test annually whether goodwill has been impaired, or more frequently if events or changes in circumstances indicate the goodwill may be impaired. If future operating performance at one or more of our operating units were to fall significantly below forecast levels or if market conditions for one or more of our acquired businesses were to decline, we could be required to incur a non-cash charge to operating income for impairment. Any impairment in the value of our goodwill would have an adverse non-cash impact on our results of operations and reduce our net worth.

Major Customers - Our Contractor segment depends on a few large customers for a significant portion of its sales. Significant declines in the level of purchases by these customers could reduce our sales and impact segment profitability.

Our Contractor segment derives a significant amount of revenue from a few large customers. Substantial decreases in purchases by these customers, difficulty in collecting amounts due or the loss of their business would adversely affect the profitability of this segment. The business of these customers is dependent upon the economic vitality of the construction and home improvement markets. If these markets decline, the business of our customers could be adversely affected and their purchases of our equipment could decrease which could have an adverse impact on our results of operations.

Cyclical Industries - Our success may be affected by variations in the construction, automotive, electronics, aerospace, semiconductor, and agriculture and construction equipment industries.

Our business may be affected by fluctuations in residential, commercial and institutional building and remodeling activity. Changes in construction materials and techniques may also impact our business. Our business may also be affected by fluctuations of activity in the automotive, electronics, aerospace, semiconductor, and agriculture and construction equipment industries.

Legal, Regulatory and Compliance Risks

Laws and Regulations - Changes in laws and regulations, and the imposition of new or additional laws and regulations, may impact how we can do business and the cost of doing business around the world.

We are subject to many laws and regulations in the jurisdictions where we operate, and as our business grows and expands geographically, we may become subject to additional laws and regulations previously inapplicable to our business. Changes to laws and regulations to which we are currently subject, exposure to additional laws and regulations previously inapplicable to our business, and the imposition of new laws and regulations increase our cost of doing business, may affect the manner in which our products will be produced or delivered, may affect the locations and facilities from which we conduct business, and may impact our long-term ability to provide returns to our shareholders.

Climate-Related Laws, Regulations and Accords – Climate-related laws, regulations and accords may adversely impact our operations, the industries in which we operate, and increase our cost of doing business.

Growing concerns over climate change has resulted in, and may continue to result in, new laws, regulations and accords intended to reduce emissions of certain greenhouse gases and to require reporting on such emissions and other climate-related matters. Existing and new laws, regulations and accords relating to emissions of certain greenhouse gases and the reporting of such emissions and other climate-related matters may be difficult and costly to comply with, may adversely impact certain aspects of our operations (including but not limited to the manufacture and distribution of our products), may adversely impact certain industries in which we operate, may result in increased energy, input, compliance and other costs, and may decrease demand for certain of our products.

ESG Expectations – Expectations relating to environmental, social and governance (ESG) matters may increase our cost of doing business and expose us to reputational harm and potential liability.

Many regulators, investors, employees, vendors, customers, community members and other stakeholders are increasingly focused on ESG matters such as climate change, greenhouse gas emissions, human capital, and diversity, equity and inclusion. We may make public statements about various ESG-related matters and initiatives from time to time, including on our website, in our press releases, in our ESG report, and in other communications. Addressing stakeholder expectations relating to ESG matters requires an investment of time, money and other resources, any or all of which may increase our cost of doing business. In addition, as investor and other stakeholder expectations relating to ESG matters change and evolve over time, any failure or perceived failure by us to adequately address those expectations may damage our reputation and adversely affect our business and results of operations. Similarly, any public statements we make about ESG-related matters and initiatives may result in legal and regulatory proceedings against us which could adversely affect our business and results of operations.

Anti-Corruption and Trade Laws - We may incur costs and suffer damages if our employees, agents, distributors or suppliers violate anti-bribery, anti-corruption or trade laws and regulations.

As a global manufacturer, we are subject to a variety of complex and stringent laws and regulations related to bribery, corruption and trade. The continued geographic expansion of our business increases our exposure to, and cost of complying with, these laws and regulations. If our internal controls and compliance program do not adequately prevent or deter our employees, agents, distributors, suppliers and other third parties with whom we do business from violating anti-bribery, anti-corruption or trade laws and regulations, we may incur defense costs, fines, penalties, reputational damage and business disruptions.

Tax Rates and New Tax Legislation - Changes in tax rates or the adoption of new tax legislation may affect our results of operations, cash flows and financial condition.

The Company is subject to taxes in the U.S. and a number of foreign jurisdictions where it conducts business. The Company's effective tax rate has been and may continue to be affected by changes in the mix of earnings in jurisdictions with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, and changes in tax laws or their interpretation. If the Company's effective tax rate were to increase, or if the ultimate determination of the Company's taxes owed is for an amount in excess of amounts previously accrued, the Company's results of operations, cash flows and financial condition could be adversely affected.

Legal Proceedings - Costs associated with claims, litigation, administrative proceedings and regulatory reviews, and potentially adverse outcomes, may affect our profitability.

As our Company grows, we are at an increased risk of being a target in matters related to the assertion of claims and demands, litigation, administrative proceedings and regulatory reviews. We may also need to pursue claims or litigation to protect our interests. The cost of pursuing, defending and insuring against such matters is increasing, particularly in the U.S. Such costs may adversely affect our Company's profitability. Further, due to adverse changes in costs to insure against such matters, we have increased our self-insured retention and deductibles and procured lower coverage limits under certain policies, which may increase our risk exposure for certain types of claims and adversely affect our profitability if we are ultimately held responsible for such claims. Our businesses expose us to potential toxic tort, product liability, commercial and employment claims. Successful claims against the Company and settlements may adversely affect our results.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our facilities are in satisfactory condition, suitable for their respective uses, and are generally adequate to meet current needs. A description of our principal facilities as of February 21, 2023, is set forth in the chart below.

Facility	Owned or Leased	Square Footage	Facility Activities	Operating Segment
		North America		
Rogers, Minnesota, United States	Owned	782,000	Manufacturing, warehouse, office and product development	Contractor
Dayton, Minnesota, United States	Owned	538,000	Manufacturing, warehouse, office and product development	Contractor and Process
Minneapolis, Minnesota, United States	Owned	390,000	Manufacturing and office	Industrial
Rogers, Minnesota, United States	Leased	268,000	Distribution center and office	All segments
Anoka, Minnesota, United States	Owned	208,000	Manufacturing, warehouse, office and product development	Process
Sioux Falls, South Dakota, United States	Owned	203,000	Manufacturing, warehouse and office	Industrial and Contractor

Minneapolis, Minnesota, United States	Owned	141,000	Worldwide headquarters; office and product development	Corporate and Industrial
North Canton, Ohio, United States	Owned	131,000	Manufacturing, warehouse, office and application laboratory	Industrial
Pompano Beach, Florida, United States	Leased	109,000	Office, assembly and warehouse	Contractor
Erie, Pennsylvania, United States	Owned	89,000	Manufacturing, warehouse, office and product development	Process
Minneapolis, Minnesota, United States	Owned	87,000	Assembly	Industrial
Kamas, Utah, United States	Owned	74,000	Manufacturing, warehouse, office, product development and test laboratory	Process
Dexter, Michigan, United States	Owned	65,000	Manufacturing, warehouse, office and product development	Process
Indianapolis, Indiana, United States	Owned	64,000	Warehouse, office, product development and application laboratory	Industrial
Minneapolis, Minnesota, United States	Owned	42,000	Corporate administrative office	All segments
Irvine, California, United States	Leased	21,000	Office, assembly and warehouse	Process
			Europe	
Maasmechelen, Belgium	Owned	210,000	EMEA headquarters, warehouse and assembly	All segments
Verona, Italy	Leased	164,000	Manufacturing and warehouse	Industrial
St. Gallen, Switzerland	Owned	82,000	Manufacturing, warehouse, office, product development and application laboratory	Industrial
Sibiu, Romania	Leased	77,000	Manufacturing	Industrial
Coventry, United Kingdom	Owned	38,000	Office and assembly	Process
Rödermark, Germany	Leased	32,000	Office and warehouse	Industrial
Verona, Italy	Owned	31,000	Office and warehouse	Industrial
St. Gallen, Switzerland	Leased	26,000	Manufacturing	Industrial
Maasmechelen, Belgium	Leased	25,000	Office and assembly	All segments
Aachen, Germany	Leased	22,000	Office and warehouse	All segments
			Asia Pacific	
Shanghai, P.R.C.	Leased	80,000	Asia Pacific headquarters	All segments
Suzhou, P.R.C.	Owned	80,000	Manufacturing, warehouse, office and product development	All segments
Gyeonggi-do, South Korea	Leased	33,000	Office	All segments
Shanghai, P.R.C.	Leased	27,000	Office and warehouse	Industrial
Derrimut, Australia	Leased	22,000	Warehouse	All segments

Item 3. Legal Proceedings

Our Company is engaged in routine litigation, administrative proceedings and regulatory reviews incident to our business. It is not possible to predict with certainty the outcome of these unresolved matters, but management believes that they will not have a material effect upon our operations or consolidated financial position.

Item 4. Mine Safety Disclosures

Not applicable.

Information About Our Executive Officers

The following are all the executive officers of Graco Inc. as of February 21, 2023:

Mark W. Sheahan, 58, became President and Chief Executive Officer in June 2021. From June 2018 to June 2021, he served as Chief Financial Officer and Treasurer. He was Vice President and General Manager, Applied Fluid Technologies Division from February 2008 until June 2018. He served as Chief Administrative Officer from September 2005 until February 2008, and was Vice President and Treasurer from December 1998 to September 2005. Prior to becoming Treasurer in December 1996, he was Manager, Treasury Services. Mr. Sheahan joined the Company in 1995.

David M. Ahlers, 64, became Executive Vice President, Human Resources and Corporate Communications in June 2018. From April 2010 to June 2018, he was Vice President, Human Resources and Corporate Communications. From September 2008 through March 2010, he served as the Company's Vice President, Human Resources. Prior to joining Graco, Mr. Ahlers held various human resources positions, including, most recently, Chief Human Resources Officer and Senior Managing Director of GMAC Residential Capital from August 2003 to August 2008. Mr. Ahlers joined the Company in 2008.

Caroline M. Chambers, 58, became President, EMEA, in August 2020. From August 2020 to January 2022, she also held the additional role of Executive Vice President, Information Systems. From June 2018 to August 2020, she served as Executive Vice President, Corporate Controller and Information Systems. She also served as the Company's principal accounting officer from September 2007 to August 2020. She was Vice President, Corporate Controller and Information Systems from December 2013 to June 2018. From April 2009 to December 2013, she was Vice President and Corporate Controller. She served as Vice President and Controller from December 2006 to April 2009. She was Corporate Controller from October 2005 to December 2006 and Director of Information Systems from July 2003 through September 2005. Prior to becoming Director of Information Systems, she held various management positions in the internal audit and accounting departments. Prior to joining Graco, she was an auditor with Deloitte & Touche in Minneapolis, Minnesota and Paris, France. Ms. Chambers joined the Company in 1992.

Laura L. Evanson, 42, became Executive Vice President, Marketing in January 2023. From September 2021 to December 2022, she served as Vice President of Marketing for the Lubrication Equipment Division and Vice President of Marketing for South and Central America. From 2017 to 2021, she served as the Director of Marketing for the Lubrication Equipment Division. From 2015 to 2017 she served as a Senior Global Marketing Manager for the Lubrication Equipment Division. From 2010 to 2015, she was a Senior Global Product Marketing Manager for the Lubrication Equipment Division. Prior to that, she worked in various Product Marketing and Channel Marketing roles for the Lubrication Equipment Division and Industrial Products Division. Ms. Evanson joined the Company in 2008.

Anthony J. Gargano, 52, became President, Asia Pacific in July 2021. From October 2020 to July 2021, he was Vice President of Sales and Marketing for the Advanced Fluid Dispense business segment in Asia Pacific. He served as Vice President of Sales and Marketing for the global High Performance Coatings and Foams business segment from September 2018 until October 2020. From January 2017 to December 2018, he served as President of Global Automotive. He served as Director of Sales and Marketing for the Applied Fluid Technologies Division in Asia Pacific from February 2012 to January 2017. From June 2008 to February 2012, he was Director of Sales and Marketing for the PMG business in the Lubrication Equipment Division. Prior to becoming Director of Sales and Marketing for the PMG business in the Lubrication Equipment Division, he held various product and sales management positions. Mr. Gargano joined the Company in 2005.

Inge Grasdal, 52, became Executive Vice President, Corporate Development in January 2022. Prior to joining Graco, he was Vice President Corporate Development at Ecolab Inc., a global provider of water, hygiene and infection prevention solutions and services, from November 2018 to January 2022. Prior to joining Ecolab, he was Senior Director Corporate Development at 3M Company, a diversified global technology company, from 2012 to October 2018. From 2007 to 2012, he was Vice President Investment Banking at Piper Jaffray & Co. Prior to joining Piper Jaffray, he held various roles in finance, consulting and engineering, including most recently as Director of Finance – Analytics at United Health Group from 2003 to 2007. Mr. Grasdal joined the Company in January 2022.

Joseph J. Humke, 52, became Executive Vice President, General Counsel and Corporate Secretary in July 2021. Before joining Graco, he was an equity partner in the Mergers & Acquisitions and Private Equity practice groups at Ballard Spahr LLP and Lindquist & Vennum LLP (which combined in January 2018) from 2004 to June 2021, and an associate from 2001 to 2003. Prior to joining Lindquist & Vennum, he worked as an associate in the Corporate & Securities practice group of Mayer Brown LLP in Chicago from 1998 to 2001, and served as a law clerk to the Honorable John L. Coffey on the United States Court of Appeals for the Seventh Circuit from 1997 to 1998. Mr. Humke joined the Company in July 2021.

Dale D. Johnson, 68, became President, Worldwide Contractor Equipment Division in February 2017. From April 2001 through January 2017, he served as Vice President and General Manager, Contractor Equipment Division. From January 2000 through March 2001, he served as President and Chief Operating Officer. From December 1996 to January 2000, he was Vice President, Contractor Equipment Division. Prior to becoming Director of Marketing, Contractor Equipment Division in June 1996, he held various marketing and sales positions in the Contractor Equipment Division and the Industrial Equipment Division. Mr. Johnson joined the Company in 1976.

Jeffrey P. Johnson, 63, became President, Electric Motor Division in April 2020. From December 2018 to April 2020, he was President, New Ventures. From June 2018 to December 2018, he was President, EMEA. He served as Vice President and General Manager, EMEA from January 2013 to June 2018. From February 2008 to December 2012, he was Vice President and General Manager, Asia Pacific. He served as Director of Sales and Marketing, Applied Fluid Technologies Division, from June 2006 until February 2008. Prior to joining Graco, he held various sales and marketing positions, including, most recently, President of Johnson Krumwiede Roads, a full-service advertising agency, and European sales manager at General Motors Corp. Mr. Johnson joined the Company in 2006.

David M. Lowe, 67, became Chief Financial Officer and Treasurer in June 2021. From April 2020 until June 2021, he served as President, Worldwide Process Division. He was President, Worldwide Industrial Products Division from June 2018 to April 2020. From April 2012 to June 2018, he was Executive Vice President, Industrial Products Division. From February 2005 to April 2012, he was Vice President and General Manager, Industrial Products Division. He was Vice President and General Manager, European Operations from September 1999 to February 2005. Prior to becoming Vice President, Lubrication Equipment Division in December 1996, he was Treasurer. Mr. Lowe joined the Company in 1995.

Claudio Merengo, 53, became President, Worldwide Gema in 2007. During this time, he also served as Group President, ITW Finishing from 2010 to 2012 and Group President, ITW Dynatec from 2008 to 2009. From 2004 to 2007, he was President, Gema Europe. From 1999 to 2004, he was Managing Director, Gema Italy. From 1994 to 1999, he held different positions in R&D, Sales and After Sales for Gema. He joined Gema in 1994. Gema has been part of Graco since the acquisition of the ITW Finishing Group in 2012. Mr. Merengo became an executive officer of Graco in 2023.

Peter J. O'Shea, 58, became President, Worldwide Lubrication Equipment Division, and President, South and Central America in January 2022. From July 2021 to January 2022, he was President, Worldwide Industrial Products Division, and President, South and Central America. From April 2020 to January 2022, he was President, Worldwide Lubrication Equipment Division. He was Vice President and General Manager, Lubrication Equipment Division from January 2016 to June 2018. From January 2013 to December 2015, he was Vice President and General Manager, Asia Pacific. From January 2012 until December 2012, he was Director of Sales and Marketing, Industrial Products Division, and from 2008 to 2012, he was Director of Sales and Marketing, Industrial Products Division and Applied Fluid Technologies Division. He was Country Manager, Australia - New Zealand from 2005 to 2008, and from 2002 to 2005 he served as Business Development Manager, Australia - New Zealand. Prior to becoming Business Development Manager, Australia - New Zealand, he worked in various Graco sales management positions. Mr. O'Shea joined the Company in 1995.

Christian E. Rothe, 49, became President, Worldwide Industrial Division in January 2022. From June 2018 to January 2022, he was President, Worldwide Applied Fluid Technologies Division. He was Chief Financial Officer and Treasurer from September 2015 to June 2018. From June 2011 through August 2015, he was Vice President and Treasurer. Prior to joining Graco, he held various positions in business development, accounting and finance, including, most recently, at Gardner Denver, Inc. as Vice President, Treasurer from January 2011 to June 2011, Vice President - Finance, Industrial Products Group from October 2008 to January 2011, and Director, Strategic Planning and Development from October 2006 to October 2008. Mr. Rothe joined the Company in 2011.

Kathryn L. Schoenrock, 45, became Executive Vice President, Corporate Controller and Information Systems in January 2022. From August 2020 to January 2022, she was Executive Vice President, Corporate Controller. She has served as the Company's principal accounting officer since August 2020. From December 2018 to August 2020, she served as Director of Corporate Finance. She served as Director of Financial Reporting from August 2012 to December 2018. Prior to joining Graco, she served as a Senior Manager in the audit practice of Deloitte & Touche LLP from 2008 to 2012, and held various positions in the audit practice of Deloitte & Touche LLP from 2002 to 2008 and in the audit practice of Arthur Andersen LLP from 2000 to 2002. Ms. Schoenrock joined the Company in 2012.

Timothy R. White, 53, became President, Worldwide Process Division in June 2021. From August 2020 to June 2021, he served as President, White Knight and QED Environmental Systems. From December 2018 to August 2020, he served as President, EMEA. From August 2015 to December 2018, he was President of Q.E.D. Environmental Systems, Inc., a Graco subsidiary. He served as Director of Sales and Marketing, Applied Fluid Technologies Division, from April 2012 to August 2015. From May 2011 to April 2012, he was North American Sales Manager, Applied Fluid Technologies Division.

From January 2008 until April 2011, he was Operations Director, Contractor Equipment Division. Prior to January 2008, he held various manufacturing management positions. Mr. White joined the Company in 1992.

Angela F. Wordell, 51, became Executive Vice President, Operations in January 2022. From April 2020 to January 2022, she was Executive Vice President, Operations, and President, Worldwide Oil & Natural Gas Division. From December 2018 to April 2020, she was Executive Vice President, Operations. From April 2017 to December 2018, she was Purchasing Director. From January 2017 to April 2017, she served as Strategic Sourcing Director. From March 2010 until January 2017, she was Operations Director, Industrial Products Division and China Factory. From February 2008 until March 2010, she was Operations Manager, Industrial Products Division. Prior to February 2008, she held various manufacturing management and engineering positions. Ms. Wordell joined the Company in 1993.

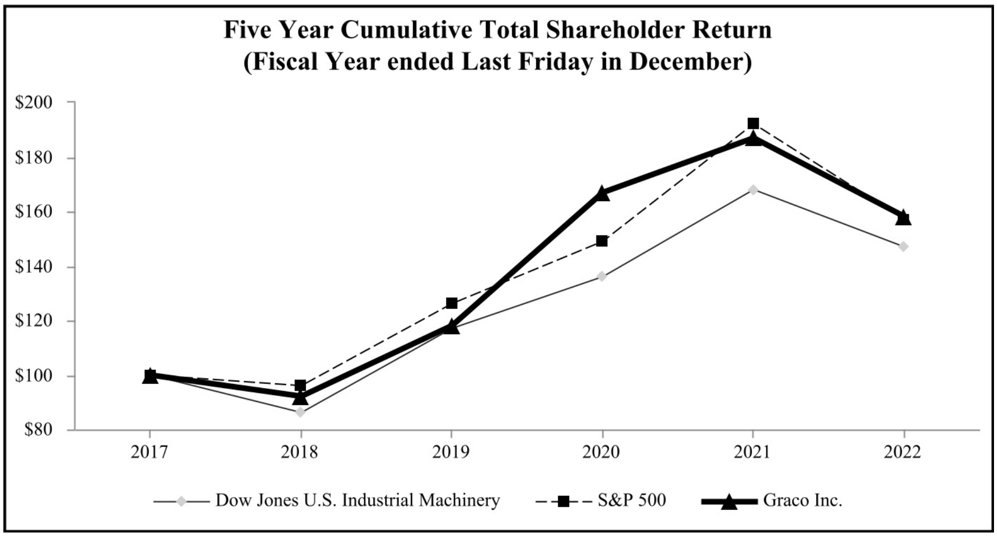
PART II

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

Graco Common Stock

Graco common stock is traded on the New York Stock Exchange under the ticker symbol "GGG." As of January 11, 2023, the share price was $70.36 and there were 167,776,564 shares outstanding and 1,686 common shareholders of record, which includes nominees or broker dealers holding stock on behalf of an estimated 128,202 beneficial owners.

The graph below compares the cumulative total shareholder return on the common stock of the Company for the last five fiscal years with the cumulative total return of the S&P 500 Index and the Dow Jones U.S. Industrial Machinery Index over the same period (assuming the value of the investment in Graco common stock and each index was $100 on December 31, 2017, and all dividends were reinvested).



	2017	2018	2019	2020	2021	2022
Dow Jones U.S. Industrial Machinery	100	86	117	136	168	147
S&P 500	100	96	126	149	192	157
Graco Inc.	100	92	118	167	187	158

Issuer Purchases of Equity Securities

On April 24, 2015, the Board of Directors authorized the Company to purchase up to 18 million shares of its outstanding common stock, primarily through open-market transactions. There were approximately 3.3 million shares remaining under the authorization on December 7, 2018, when the Board of Directors authorized the purchase of up to an additional 18 million shares. The authorizations are for an indefinite period of time or until terminated by the Board. Shares available for purchase under the April 2015 authorization were exhausted in the first quarter of 2022. Therefore, all remaining purchases during 2022 were made under the December 2018 authorization.

In addition to shares purchased under the Board authorization, the Company purchases shares of common stock held by employees who wish to tender owned shares to satisfy the exercise price or tax due upon exercise of stock options or vesting of restricted stock.

Information on issuer purchases of equity securities follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (at end of period)
Oct 01, 2022 - Oct 28, 2022	1,078,199	$ 61.34	—	14,971,377
Oct 29, 2022 - Nov 25, 2022	—	$ —	—	14,971,377
Nov 26, 2022 - Dec 30, 2022	—	$ —	—	14,971,377

Item 6. [Reserved]

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

The following Management's Discussion and Analysis reviews significant factors affecting the Company's consolidated results of operations, financial condition and liquidity. This discussion should be read in conjunction with our financial statements and the accompanying notes to the financial statements. A discussion of changes in our financial condition and the results of operations from the year ended December 31, 2021 to December 25, 2020 can be found in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations of our Annual Report on Form 10-K for the year ended December 31, 2021. Certain prior year disclosures have been revised to conform with current year reporting. The discussion is organized in the following sections:

Overview

Graco designs, manufactures and markets systems and equipment used to move, measure, control, dispense and spray fluid and powder materials. The Company specializes in equipment for applications that involve difficult-to-handle materials with high viscosities, materials with abrasive or corrosive properties and multiple-component materials that require precise ratio control. Graco sells primarily through independent third-party distributors worldwide to industrial and contractor end users. Graco's business is classified by management into three reportable segments: Industrial, Process and Contractor. Each segment is responsible for product development, manufacturing, marketing and sales of their products.

Graco's key strategies include developing and marketing new products, leveraging products and technologies into additional, growing end-user markets, expanding distribution globally and completing strategic acquisitions that provide additional channel and technologies. Long-term financial growth targets accompany these strategies, including our objectives of 10 percent revenue growth and 12 percent consolidated net earnings growth per annum. We continue to develop new products in each operating division that are expected to drive incremental sales growth, as well as continued refreshes and upgrades of existing product lines. Graco has made a number of strategic acquisitions that expand and complement organically developed products and provide new market and channel opportunities.

Manufacturing is a key competency of the Company. Our management team in Minneapolis provides strategic manufacturing expertise, and is also responsible for factories not fully aligned with a single division. Our largest manufacturing facilities are in the U.S. We also manufacture some of our products in Switzerland (Industrial segment), Italy (Industrial segment), the United Kingdom (Process segment), the People's Republic of China ("P.R.C.") (all segments), Belgium (all segments) and Romania (Industrial segment). Our primary distribution facilities are located in the U.S., Belgium, Switzerland, United Kingdom, P.R.C., Japan, Italy, Korea, India, Australia and Brazil.

Russia's Invasion of Ukraine

The Company has historically sold products to customers located in or associated with Russia and Belarus. In response to Russia's invasion of Ukraine, the United States, the United Kingdom, the European Union, Switzerland and others have implemented sanctions and export controls targeting Russia and Belarus and entities associated with those countries, which significantly limits our ability to sell certain products, serve certain customers and collect on our outstanding receivables in those countries. In April of 2022, we decided to suspend sales into Russia and Belarus indefinitely. Sales to Russia and Belarus accounted for approximately 1.5% of our 2021 net sales and were not material for 2022. In connection with the effect of these sanctions and export controls, we recognized $3 million of allowances for credit losses on customer receivables in Russia in 2022. The duration and extent to which trade sanctions against Russia and Belarus affect the Company's business will depend on future developments, which still remain uncertain.

Supply Chain and Inflation

In 2022, the Company experienced logistical and production constraints due to limited raw material and component availability, reduced freight capacity, shipping delays, labor shortages and other supply chain disruptions. These supply chain disruptions have increased the Company's product costs and extended lead times. The Company has undertaken steps to mitigate these impacts, including implementing interim price increases, maintaining higher inventory levels, qualifying additional suppliers and making strategic component purchases. While freight capacity and shipping delays improved by the end of 2022, we expect these other challenges to continue into 2023.

In connection with the supply chain disruptions described above, the Company has also experienced the effects of inflation related to raw materials, components and other expenses, including freight, labor and energy. In 2022, the cost of raw materials and components was significantly higher compared to the cost of raw materials and components in 2021. We expect cost increases from purchases of raw materials and components to moderate in 2023.

The supply chain disruptions and associated effects of inflation have adversely impacted profitability in the near-term and limited our ability to satisfy customer demand. To the extent our pricing actions are unable to offset these supply chain disruptions and effects of inflation, our profitability could continue to be adversely impacted in 2023.

Results of Operations

A summary of financial results follows (in millions except per share amounts):

	2022	2021
Net Sales	$ 2,143.5	$ 1,987.6
Operating Earnings	572.7	531.3
Net Earnings	460.6	439.9
Diluted Net Earnings per Common Share	$ 2.66	$ 2.52
Adjusted (non-GAAP)[1]:		
Net Earnings, adjusted	455.5	425.7
Diluted Net Earnings per Common Share, adjusted	$ 2.63	$ 2.44

(1) Excludes impacts of excess tax benefits from stock option exercises, prior year non-recurring tax provision adjustments and a prior year pension settlement loss. See Financial Results Adjusted for Comparability below for a reconciliation of adjusted non-GAAP financial measures to GAAP.

Multiple events in the last two years caused fluctuations in financial results. Excess tax benefits related to stock option exercises reduced income taxes by $5 million in 2022 and $12 million in 2021. Other expense for 2021 included a $12 million non-cash pension settlement loss. Other benefits from tax planning activities further reduced income taxes in 2021. Excluding the impacts of those items presents a more consistent basis for comparison of financial results. A calculation of the non-GAAP measurements of earnings before income taxes, income taxes, effective income tax rates, net earnings and diluted earnings per share follows (in millions except per share amounts):

	2022	2021
Earnings before income taxes, as reported	$ 565.7	$ 508.5
Pension settlement loss	—	12.0
Earnings before income taxes, adjusted	$ 565.7	$ 520.5
Income taxes, as reported	$ 105.1	$ 68.6
Pension settlement tax effect	—	2.5
Excess tax benefit from option exercises	5.1	11.5
Other non-recurring tax benefit	—	12.2
Income taxes, adjusted	$ 110.2	$ 94.8
Effective income tax rate		
As reported	18.6 %	13.5 %
Adjusted	19.5 %	18.2 %
Net Earnings, as reported	$ 460.6	$ 439.9
Pension settlement loss, net	—	9.5
Excess tax benefit from option exercises	(5.1)	(11.5)
Other non-recurring tax benefit	—	(12.2)
Net Earnings, adjusted	$ 455.5	$ 425.7
Weighted Average Diluted Shares	172.9	174.5
Diluted Net Earnings per Share		
As reported	$ 2.66	$ 2.52
Adjusted	$ 2.63	$ 2.44

Components of Net Earnings as a Percentage of Sales:

The following table presents an overview of components of net earnings as a percentage of net sales:

	2022	2021
Net Sales	100.0 %	100.0 %
Cost of products sold	50.7	48.0
Gross profit	49.3	52.0
Product development	3.7	4.0
Selling, marketing and distribution	11.7	13.7
General and administrative	7.2	7.6
Operating earnings	26.7	26.7
Interest expense	0.4	0.5
Other expense, net	(0.1)	0.6
Earnings before income taxes	26.4	25.6
Income taxes	4.9	3.5
Net Earnings	21.5 %	22.1 %
Net Earnings, adjusted (see non-GAAP measurements above)	21.3 %	21.4 %

Net Sales

The following table presents net sales by geographic region (in millions):

	2022	2021
Americas[1]	$ 1,281.9	$ 1,150.2
EMEA[2]	451.8	464.1
Asia Pacific	409.8	373.3
Consolidated	$ 2,143.5	$ 1,987.6

(1) North, Central and South America, including the U.S. Sales in the U.S. were $1,116 million in 2022 and $1,004 million in 2021.
(2) Europe, Middle East and Africa

The following table presents the components of net sales change by geographic region:

	2022				2021			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions/Divestitures	Currency	Total
Americas	11%	1%	(1)%	11%	15%	0%	0%	15%
EMEA	7%	0%	(10)%	(3)%	21%	0%	4%	25%
Asia Pacific	16%	0%	(6)%	10%	30%	(3)%	6%	33%
Consolidated	11%	1%	(4)%	8%	19%	0%	1%	20%

Sales in the Americas were up solidly again in 2022, as economic conditions in North America remained broadly favorable. Sales growth in EMEA varied between products and countries in 2022, as the region experienced unfavorable geopolitical conditions. Solid sales growth to customers in Western Europe and emerging countries was partially offset by fewer sales to customers in Russia and Belarus. Sales growth in Asia Pacific was more broadly based across products and countries, as pandemic-related restrictions eased in 2022 compared to 2021.

There were 52 weeks in 2022, compared to 53 weeks in 2021.

Gross Profit

Gross profit margin rate for 2022 decreased approximately 3 percentage points compared to 2021, as realized pricing was unable to offset higher product costs and the adverse impacts of changes in currency translation rates.

Operating Expenses

Total operating expenses for 2022 decreased $18 million compared to 2021. Reductions of $16 million from lower sales and earnings-based expenses and $14 million from the impact of currency translation were partially offset by $3 million of allowances for credit losses on customer receivables in Russia and volume and rate related increases. Investment in new product development in 2022 was $80 million, approximately 4 percent of sales.

Operating Earnings

Sales growth led to an 8 percent increase in operating earnings. Operating earnings as a percentage of sales in 2022 was flat compared to 2021 as higher product costs and unfavorable changes in currency translation rates were offset by lower sales and earnings-based costs and the effects of expense leverage.

Other Expense

Other expense decreased $16 million for 2022. Other expense in 2021 included a non-cash pension settlement loss of $12 million in connection with the transfer of certain pension obligations to an insurance company. Increased investment income in 2022 further reduced other expense by $4 million.

Income Taxes

The effective income tax rate for 2022 was 19 percent, up 6 percentage points from 2021. The increase was due to non-recurring foreign-related tax benefits in 2021, a decrease in excess tax benefits from stock option exercises and the unfavorable effects of foreign earnings taxed at higher rates than the U.S.

Segment Results

The Company has five operating segments which are aggregated into three reportable segments: Contractor, Industrial and Process. Refer to Part I Item 1. Business, for a description of the Company's three reportable segments. Management assesses performance of segments by reference to operating earnings excluding unallocated corporate expenses and asset impairments.

The following table presents net sales and operating earnings by reporting segment (in millions):

	2022	2021
Sales		
Contractor	$ 999.1	$ 987.6
Industrial	649.3	602.4
Process	495.1	397.6
Total	$ 2,143.5	$ 1,987.6
Operating Earnings		
Contractor	$ 249.9	$ 266.2
Industrial	231.3	199.8
Process	122.3	91.0
Unallocated corporate (expense) [1]	(30.8)	(25.7)
Total	$ 572.7	$ 531.3

(1) Unallocated corporate (expense) includes such items as stock compensation, certain acquisition transaction items, bad debt expense, charitable contributions, and certain facility expenses.

Contractor Segment

The following table presents net sales and operating earnings as a percentage of sales for the Contractor segment (dollars in millions):

	2022	2021
Sales		
Americas	$ 739.1	$ 694.1
EMEA	176.8	204.6
Asia Pacific	83.2	88.9
Total	$ 999.1	$ 987.6
Operating Earnings as a Percentage of Sales	25 %	27 %

The following table presents the components of net sales change by geographic region for the Contractor segment:

	2022				2021			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	7%	0%	(1)%	6%	12%	0%	0%	12%
EMEA	(6)%	1%	(9)%	(14)%	26%	3%	4%	33%
Asia Pacific	0%	0%	(6)%	(6)%	23%	0%	5%	28%
Segment Total	4%	0%	(3)%	1%	15%	1%	1%	17%

Contractor segment sales growth slowed in 2022, as the on-going favorable construction market environment in North America moderated due to increases in interest rates and lower levels of new construction activity. The operating margin rate decreased 2 percentage points in 2022 primarily due to higher product costs and the adverse impacts of currency translation.

Sales in the Americas represents the substantial majority of sales for the Contractor segment. Management regularly reviews economic and financial indicators in North America, including levels of residential, commercial and institutional construction, remodeling rates and interest rates. Management also reviews gross domestic product for the regions and the level of the U.S. dollar versus the euro and other currencies.

Industrial Segment

The following table presents net sales and operating earnings as a percentage of sales for the Industrial segment (dollars in millions):

	2022	2021
Sales		
Americas	$ 239.3	$ 213.4
EMEA	205.7	199.4
Asia Pacific	204.3	189.6
Total	$ 649.3	$ 602.4
Operating Earnings as a Percentage of Sales	36 %	33 %

The following table presents the components of net sales change by geographic region for the Industrial segment:

	2022				2021			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	13%	0%	(1)%	12%	24%	0%	1%	25%
EMEA	15%	0%	(12)%	3%	18%	0%	3%	21%
Asia Pacific	14%	0%	(6)%	8%	25%	0%	5%	30%
Segment Total	14%	0%	(6)%	8%	22%	0%	3%	25%

The Industrial segment experienced solid sales growth in all regions for the year. Generally favorable economic activity across many end markets, including general industry, automotive, electrical equipment and alternative energy drove demand in all regions. Finishing system sales contributed to sales growth in the Americas and EMEA, while improvement in automotive end markets contributed to sales growth in Asia Pacific. The operating margin rate increased for the year as strong realized pricing and expense leverage more than offset higher product costs and the adverse impacts of currency translation.

In this segment, sales in each geographic region are significant and management looks at economic and financial indicators in each region, including gross domestic product, industrial production, capital investment rates, automobile production, building construction and the level of the U.S. dollar versus the euro, the Swiss franc, the Canadian dollar, the Chinese renminbi and various other Asian currencies.

Process Segment

The following table presents net sales and operating earnings as a percentage of sales for the Process segment (dollars in millions):

	2022	2021
Sales		
Americas	$ 303.5	$ 242.7
EMEA	69.3	60.1
Asia Pacific	122.3	94.8
Total	$ 495.1	$ 397.6
Operating Earnings as a Percentage of Sales	25 %	23 %

The following table presents the components of net sales change by geographic region for the Process segment:

	2022				2021			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions/Divestitures	Currency	Total
Americas	22%	3%	0%	25%	17%	0%	1%	18%
EMEA	22%	1%	(8)%	15%	14%	(5)%	4%	13%
Asia Pacific	34%	0%	(5)%	29%	48%	(11)%	6%	43%
Segment Total	25%	2%	(2)%	25%	23%	(3)%	2%	22%

The Process segment had double-digit sales growth in all product applications in 2022, reflecting favorable conditions in many end markets, such as vehicle services, industrial pumps, oil and gas, mining, industrial lubrication and semi-conductors. Sales from acquired operations contributed approximately $9 million of growth in the Process segment. The operating margin rate for this segment increased 2 percentage points for the year as increased volume and expense leverage offset higher product costs and the adverse impacts of currency translation.

Although the Americas represent the substantial majority of sales for the Process segment, and indicators in that region are the most significant, management monitors indicators such as levels of gross domestic product, capital investment, industrial production, oil and natural gas markets and mining activity worldwide.

Financial Condition and Cash Flow

Working Capital. The following table highlights several key measures of asset performance (dollars in millions):

	2022	2021
Working capital	$ 805.7	$ 856.8
Current ratio	3.0	2.7
Days of sales in receivables outstanding	57	60
Inventory turnover (LIFO)	2.5	2.8

Lower cash and cash equivalent balances primarily drove decreases in working capital in 2022. Changes in receivables were consistent with higher sales levels. Inventories increased to meet higher demand and service levels and to accommodate for disruptions in the supply chain. The current ratio increased in 2022 due to increases in receivables and inventories as well as lower sales and earnings based accruals. The repayment of a current debt obligation in 2022 partially offset the increase in the current ratio.

Capital Structure. At December 30, 2022, the Company's capital structure included current notes payable of $21 million, long-term debt of $75 million and shareholders' equity of $1,860 million. At December 31, 2021, the Company's capital structure included current notes payable of $43 million, long-term debt, including current portion, of $150 million and shareholders' equity of $1,709 million.

Shareholders' equity increased by $150 million in 2022. The increase from current year earnings of $461 million was offset by share repurchases of $233 million and dividends of $146 million. Increases related to shares issued, stock compensation and other comprehensive income totaled $69 million.

Liquidity and Capital Resources. The Company evaluates liquidity as its ability to generate cash to fund its operating, investing and financing activities. Historically the Company has funded cash requirements for working capital, capital expenditures, businesses acquisitions, repayment of debt obligations, retirement plans, dividends, and common stock repurchases, all as applicable, through cash provided by its operations. The Company's other primary source of liquidity includes funds available through various debt financing arrangements.

As of December 30, 2022, the Company had available liquidity of $884 million, including cash held in deposit accounts of $339 million, of which $111 million was held outside of the U.S., and available credit under existing committed credit facilities of $545 million.

Internally generated funds and unused financing sources are expected to provide the Company with the flexibility to meet its liquidity needs in 2023, including its capital expenditure plan of approximately $200 million, including $130 million for building projects to expand production capacity, planned dividends estimated at $158 million, share repurchases and acquisitions. If acquisition opportunities increase, the Company believes that reasonable financing alternatives are available for the Company to execute on those opportunities. The Company has no significant off-balance sheet debt or other unrecorded obligations. The Company believes it has the ability to meet its long-term cash requirements by using available cash and internally generated funds and to borrow under its committed and uncommitted credit facilities.

In December 2022, the Board of Directors increased the Company's regular quarterly dividend to $0.235 from $0.21 per share, an increase of 12 percent.

Cash Flow. A summary of cash flow follows (in millions):

	2022	2021
Operating activities	$ 377.4	$ 456.9
Investing activities	(226.8)	(153.3)
Financing activities	(434.4)	(57.1)
Effect of exchange rates on cash	(1.3)	(1.1)
Net cash provided	(285.1)	245.4
Cash and cash equivalents at end of year	$ 339.2	$ 624.3

Cash Flows From Operating Activities. Net cash provided by operating activities was $377 million in 2022, down $80 million compared to 2021. The impact of the increase in net earnings in 2022 was offset by increases in working capital that reflect growth in business activity.
Cash Flows Used in Investing Activities. Cash flows used in investing activities totaled $227 million in 2022, including $201 million for capital additions and $25 million for business acquisitions. Cash flows used in investing activities totaled $153 million in 2021 including $134 million for capital additions and $19 million for business acquisitions.

Cash Flows Used in Financing Activities. Cash flows used in financing activities totaled $434 million in 2022 and included share repurchases of $233 million (partially offset by net proceeds from share issuances of $36 million), dividends of $142 million, and net payments on long-term debt and outstanding lines of credit of $93 million.

Cash flows used in financing activities totaled $57 million in 2021 and included dividends of $127 million and net proceeds from share issuances totaling $51 million.

On December 7, 2018, the Board of Directors authorized the purchase of up to 18 million shares of common stock, primarily through open market transactions. The authorization is for an indefinite period of time or until terminated by the Board. As of December 30, 2022, approximately 15 million shares remain available for purchase under the authorization.

The Company repurchased and retired 3.6 million shares in 2022. The Company did not repurchase and retire shares in 2021, and repurchased and retired 2.3 million shares in 2020. The Company has made and may continue to make opportunistic share repurchases in 2023 via open market transactions or short-dated accelerated share repurchase ("ASR") programs.

Critical Accounting Estimates

The Company prepares its consolidated financial statements in conformity with generally accepted accounting principles in the United States of America (“U.S. GAAP”). The Company’s most significant accounting policies are disclosed in Note A (Summary of Significant Accounting Policies) to the consolidated financial statements. The preparation of the consolidated financial statements, in conformity with U.S. GAAP, requires management to make estimates and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual amounts will differ from those estimates. The Company considers the following policies to involve the most judgment in the preparation of the Company’s consolidated financial statements.

Retirement Benefits. The measurements of the Company’s pension and postretirement medical obligations are dependent on a number of assumptions including estimates of the present value of projected future payments, taking into consideration future events such as salary increases and demographic experience. These assumptions may have an impact on the expense and timing of future contributions.

The assumptions used in developing the required estimates for pension obligations include discount rate, inflation, salary increases, retirement rates, expected return on plan assets and mortality rates. The assumptions used in developing the required estimates for postretirement medical obligations include discount rates, rate of future increase in medical costs and participation rates.

For U.S. plans, the Company establishes its discount rate assumption by reference to a yield curve published by an actuary and projected plan cash flows. For plans outside the U.S., the Company establishes a rate by country by reference to highly rated corporate bonds. These reference points have been determined to adequately match expected plan cash flows. The Company bases its inflation assumption on an evaluation of external market indicators. The salary assumptions are based on actual historical experience, the near-term outlook and assumed inflation. Retirement rates are based on experience. The investment return assumption is based on the expected long-term performance of plan assets. In setting this number, the Company considers the input of actuaries and investment advisers, its long-term historical returns, the allocation of plan assets and projected returns on plan assets. For 2023, the Company will use an investment return assumption of 7.60 percent for the funded U.S. plan, up 1.35 percentage points from the rate assumed for 2022. Mortality rates are based on current common group mortality tables for males and females.

At December 30, 2022, a one-half percentage point decrease in the indicated assumptions would have the following effects (in millions):

Assumption	Funded Status	Expense
Discount rate	$ (18.4)	$ 3.3
Expected return on assets	—	1.6

Goodwill and Other Intangible Assets. The Company performs impairment testing for goodwill annually in the fourth quarter or more frequently if events or changes in circumstances indicate that the asset might be impaired. The Company estimates the fair value of the reporting units using a present value of future cash flows calculation cross-checked by an allocation of market capitalization approach. The impairment test is performed using a two-step process. In the first step, the fair value of each reporting unit is compared with the carrying amount of the reporting unit. If the estimated fair value exceeds its carrying value, step two of the impairment analysis is not required. If the estimated fair value is less than its carrying amount, impairment is indicated and the second step must be completed in order to determine the amount, if any, of the impairment. In the second step, an impairment loss is recognized for the difference between the implied value of goodwill and the carrying value.

The Company’s primary identifiable intangible assets include customer relationships, trademarks, trade names, proprietary technology and patents. Finite lived intangibles are amortized and are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Indefinite lived intangibles are reviewed for impairment annually in the fourth quarter, or more frequently if events or changes in circumstances indicate the asset might be impaired.

A considerable amount of management judgment and assumptions are required in performing the impairment tests. Management makes several assumptions, including earnings and cash flow projections, discount rate, product offerings and market strategies, customer attrition, and royalty rates, each of which have a significant impact on the estimated fair values. Though management considers its judgments and assumptions to be reasonable, changes in these assumptions could impact the estimated fair value.

In 2022, we completed our annual impairment testing of goodwill and other intangible assets in the fourth quarter. No impairment charges were recorded as a result of that test.

Income Taxes. In the preparation of the Company's consolidated financial statements, management calculates income taxes. This includes estimating current tax liability as well as assessing temporary differences resulting from different treatment of items for tax and financial statement purposes. These differences result in deferred tax assets and liabilities, which are recorded on the balance sheet using statutory rates in effect for the year in which the differences are expected to reverse. These assets and liabilities are analyzed regularly, and management assesses the likelihood that deferred tax assets will be recoverable from future taxable income. A valuation allowance is established to the extent that management believes that recovery is not likely. Liabilities for uncertain tax positions are also established for potential and ongoing audits of federal, state and international issues. The Company routinely monitors the potential impact of such situations and believes that liabilities are properly stated. Valuations related to amounts owed and tax rates could be impacted by changes to tax codes and the Company's interpretation thereof, changes in statutory rates, the Company's future taxable income levels and the results of tax audits.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company sells and purchases products and services in currencies other than the U.S. dollar and pays variable interest rates on borrowings under certain credit facilities. Consequently, the Company is subject to profitability risk arising from exchange and interest rate movements. The Company may use a variety of financial and derivative instruments to manage foreign currency and interest rate risks. The Company does not enter into any of these instruments for trading purposes to generate revenue. Rather, the Company's objective in managing these risks is to reduce fluctuations in earnings and cash flows associated with changes in foreign currency exchange and interest rates.

The Company may use forward exchange contracts, options and other hedging activities to hedge the U.S. dollar value resulting from anticipated currency transactions and net monetary asset and liability positions. At December 30, 2022, the currencies to which the Company had the most significant balance sheet exchange rate exposure were the euro, Swiss franc, Canadian dollar, British pound, Japanese yen, Australian dollar, Chinese renminbi, South Korean won and Indian rupee. It is not possible to determine the true impact of currency rate changes; however, the direct translation effect on net sales and net earnings can be estimated. In 2022, changes in currency translation rates reduced sales by approximately $66 million and reduced net earnings by approximately $31 million. In 2021, changes in currency translation rates increased sales by approximately $26 million and increased net earnings by approximately $12 million.

2023 Outlook

The Company expects its core growth strategies of developing new products, expanding distribution, seeking adjacent markets and pursuing strategic acquisitions will help growth prospects in the future. As a result, the Company's outlook for 2023 is low single-digit revenue growth on an organic, constant currency basis.

At January 31, 2023 exchange rates, assuming the same volumes, mix of products and mix of business by currency as in 2022, the movement in foreign currencies would have a favorable impact of approximately 1 percent on sales and 1 percent on net earnings in 2023.

The Company's backlog is not a good indicator of future long-term business levels. In addition to economic growth, the successful launch of new products and expanded distribution coverage, the sales outlook is dependent on many factors, including realization of price increases and stable foreign currency exchange rates.

Forward-Looking Statements

The Company desires to take advantage of the “safe harbor” provisions regarding forward-looking statements of the Private Securities Litigation Reform Act of 1995 and is filing this Cautionary Statement in order to do so. From time to time various forms filed by our Company with the Securities and Exchange Commission, including this Annual Report on Form 10-K and our Form 10-Qs and Form 8-Ks, and other disclosures, including our overview report, press releases, earnings releases, analyst briefings, conference calls and other written documents or oral statements released by our Company, may contain forward-looking statements. Forward-looking statements generally use words such as “expect,” “foresee,” “anticipate,” “believe,” “project,” “should,” “estimate,” “will,” and similar expressions, and reflect our Company’s expectations concerning the future. All forecasts and projections are forward-looking statements. Forward-looking statements are based upon currently available information, but various risks and uncertainties may cause our Company’s actual results to differ materially from those expressed in these statements. The Company undertakes no obligation to update these statements in light of new information or future events.

Future results could differ materially from those expressed, due to the impact of changes in various factors. These risk factors include, but are not limited to, the factors discussed in Item 1A of this Annual Report on Form 10-K. Shareholders, potential investors and other readers are urged to consider these factors in evaluating forward-looking statements and are cautioned not to place undue reliance on such forward-looking statements.

Investors should realize that factors other than those identified in Item 1A might prove important to the Company’s future results. It is not possible for management to identify each and every factor that may have an impact on the Company’s operations in the future as new factors can develop from time to time.

Item 8. Financial Statements and Supplementary Data

Management’s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The internal control system was designed to provide reasonable assurance to management and the board of directors regarding the reliability of financial reporting and preparation of financial statements in accordance with generally accepted accounting principles.

Management assessed the effectiveness of the Company’s internal control over financial reporting as of December 30, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework* (2013).

Based on our assessment and those criteria, management believes the Company’s internal control over financial reporting is effective as of December 30, 2022.

The Company’s independent auditors have issued an attestation report on the Company’s internal control over financial reporting. That report appears in this Annual Report on Form 10-K.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Graco Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Graco Inc. and subsidiaries (the “Company”) as of December 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 30, 2022, of the Company and our report dated February 21, 2023, expressed an unqualified opinion on those financial statements.

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/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 21, 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Graco Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Graco Inc. and subsidiaries (the "Company") as of December 30, 2022 and December 31, 2021, the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended December 30, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 30, 2022 and December 31, 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 30, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 December 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 21, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

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 critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Retirement Benefits – U.S. Pension Benefit Obligation – Refer to Note J to the financial statements

Critical Audit Matter Description

The Company has both funded and unfunded defined benefit pension plans. As of December 30, 2022, the pension benefit obligation balance was $315.8 million. The actuarial determination of the present value of the pension obligation on an annual basis requires management to make significant assumptions related to the selection of the discount rates used in the calculation of the net present value of future pension benefits. The Company establishes the discount rate assumptions for the U.S. pension plans by reference to a yield curve published by an actuary based on yields of highly rated corporate bonds and projected plan cash flows.

Given the significance of the U.S. pension obligation and the requirement of management to make significant assumptions related to the selection of the discount rates, performing audit procedures to evaluate the reasonableness of the discount rates selected for the U.S. pension plans required a high degree of auditor judgment and an increased extent of effort, including the need to involve our actuarial specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to selection of the discount rates for the U.S. pension obligation included the following, among others:

a. We tested the effectiveness of internal controls over the valuation of the pension obligation, including management’s controls over selection of the discount rates.

b. With the assistance of our actuarial specialists, we evaluated the reasonableness of the discount rates by:

- Evaluating the methodology utilized to select the discount rates for conformity with applicable accounting guidance.
- Testing the source information underlying the determination of the discount rates, including the methodology used to construct the yield curve, the characteristics of the bonds underlying the yield curve analysis, and the mathematical accuracy of the calculation.
- Developing independent estimates using external published yield curves and comparing them to the discount rates selected by management.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 21, 2023

We have served as the Company’s auditor since at least 1969, however, an earlier year could not be readily determined.

GRACO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF EARNINGS
(In thousands, except per share amounts)

	Years Ended		
	December 30, 2022	December 31, 2021	December 25, 2020
Net Sales	$ 2,143,521	$ 1,987,608	$ 1,650,115
Cost of products sold	1,086,082	953,659	795,178
Gross Profit	1,057,439	1,033,949	854,937
Product development	80,008	79,651	72,194
Selling, marketing and distribution	250,948	271,526	220,271
General and administrative	153,783	151,449	135,525
Impairment	—	—	35,229
Operating Earnings	572,700	531,323	391,718
Interest expense	9,897	10,215	11,280
Other expense (income), net	(2,921)	12,643	5,787
Earnings Before Income Taxes	565,724	508,465	374,651
Income taxes	105,079	68,599	44,195
Net Earnings	$ 460,645	$ 439,866	$ 330,456
Basic Net Earnings per Common Share	$ 2.73	$ 2.59	$ 1.97
Diluted Net Earnings per Common Share	$ 2.66	$ 2.52	$ 1.92

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)

	Years Ended		
	December 30, 2022	December 31, 2021	December 25, 2020
Net Earnings	$ 460,645	$ 439,866	$ 330,456
Components of other comprehensive income (loss)			
Cumulative translation adjustment	(9,582)	(10,026)	46,030
Pension and postretirement medical liability adjustment	25,630	68,669	(645)
Income taxes - pension and postretirement medical liability	(5,257)	(14,647)	237
Other comprehensive income	10,791	43,996	45,622
Comprehensive Income	$ 471,436	$ 483,862	$ 376,078

See notes to consolidated financial statements.

GRACO INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	December 30, 2022	December 31, 2021
ASSETS		
Current Assets		
Cash and cash equivalents	$ 339,196	$ 624,302
Accounts receivable, less allowances of $7,000 and $3,900	346,010	325,132
Inventories	476,790	382,301
Other current assets	43,624	31,886
Total current assets	1,205,620	1,363,621
Property, Plant and Equipment, net	607,609	451,061
Goodwill	368,171	356,255
Other Intangible Assets, net	137,507	149,740
Operating Lease Assets	29,785	30,046
Deferred Income Taxes	57,090	55,786
Other Assets	33,118	36,689
Total Assets	$ 2,438,900	$ 2,443,198
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Notes payable to banks	$ 20,974	$ 43,489
Current portion of long term debt	—	75,000
Trade accounts payable	84,218	78,432
Salaries and incentives	63,969	82,941
Dividends payable	39,963	35,771
Other current liabilities	190,793	191,159
Total current liabilities	399,917	506,792
Long-term Debt	75,000	75,000
Retirement Benefits and Deferred Compensation	61,672	106,897
Operating Lease Liabilities	21,057	23,527
Deferred Income Taxes	9,443	10,661
Other Non-current Liabilities	12,159	10,978
Commitments and Contingencies (Note K)		
Shareholders' Equity		
Common stock, $1 par value; 291,000,000 shares authorized; 167,702,130 and 170,307,412 shares outstanding in 2022 and 2021	167,702	170,308
Additional paid-in-capital	784,477	742,288
Retained earnings	976,851	876,916
Accumulated other comprehensive income (loss)	(69,378)	(80,169)
Total shareholders' equity	1,859,652	1,709,343
Total Liabilities and Shareholders' Equity	$ 2,438,900	$ 2,443,198

See notes to consolidated financial statements.

GRACO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended		
	December 30, 2022	December 31, 2021	December 25, 2020
Cash Flows From Operating Activities			
Net Earnings	$ 460,645	$ 439,866	$ 330,456
Adjustments to reconcile net earnings to net cash provided by operating activities			
Depreciation and amortization	65,997	59,325	55,329
Deferred income taxes	(9,997)	(46,572)	10,747
Share-based compensation	24,695	24,931	25,153
Impairment	—	—	35,229
Change in			
Accounts receivable	(29,944)	(13,801)	(43,122)
Inventories	(95,691)	(97,780)	(13,086)
Trade accounts payable	4,195	12,397	6,820
Salaries and incentives	(18,442)	29,089	(2,622)
Retirement benefits and deferred compensation	(18,674)	1,219	(6,703)
Other accrued liabilities	(4,191)	51,342	(3,772)
Other	(1,199)	(3,120)	(394)
Net cash provided by operating activities	377,394	456,896	394,035
Cash Flows From Investing Activities			
Property, plant and equipment additions	(201,161)	(133,566)	(71,338)
Acquisition of businesses, net of cash acquired	(25,296)	(19,386)	(27,557)
Other	(362)	(347)	(143)
Net cash used in investing activities	(226,819)	(153,299)	(99,038)
Cash Flows From Financing Activities			
Borrowings on short-term lines of credit, net	(18,252)	20,497	(1,986)
Borrowings on long-term lines of credit	—	—	250,000
Payments on long-term debt	(75,000)	(70)	(250,000)
Payments of debt issuance costs	—	(1,422)	—
Common stock issued	35,619	50,963	83,438
Common stock repurchased	(233,426)	—	(102,143)
Taxes paid related to net share settlement of equity awards	(1,219)	—	(1,797)
Cash dividends paid	(142,125)	(127,110)	(116,983)
Net cash used in financing activities	(434,403)	(57,142)	(139,471)
Effect of exchange rate changes on cash	(1,278)	(1,062)	2,410
Net increase (decrease) in cash and cash equivalents	(285,106)	245,393	157,936
Cash and Cash Equivalents			
Beginning of year	624,302	378,909	220,973
End of year	$ 339,196	$ 624,302	$ 378,909

See notes to consolidated financial statements.

GRACO INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In thousands)

	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
Balance December 27, 2019	$ 167,287	$ 578,440	$ 448,991	$ (169,787)	$ 1,024,931
Shares issued	3,608	78,789	—	—	82,397
Shares repurchased	(2,327)	(8,047)	(91,768)	—	(102,142)
Stock compensation cost	—	22,024	—	—	22,024
Net earnings	—	—	330,456	—	330,456
Dividends declared ($0.7125 per share)	—	—	(119,384)	—	(119,384)
Other comprehensive income (loss)	—	—	—	45,622	45,622
Balance December 25, 2020	168,568	671,206	568,295	(124,165)	1,283,904
Shares issued	1,740	51,560	—	—	53,300
Stock compensation cost	—	21,859	—	—	21,859
Restricted stock canceled (issued)	—	(2,337)	—	—	(2,337)
Net earnings	—	—	439,866	—	439,866
Dividends declared $0.7725 per share)	—	—	(131,245)	—	(131,245)
Other comprehensive income (loss)	—	—	—	43,996	43,996
Balance December 31, 2021	170,308	742,288	876,916	(80,169)	1,709,343
Shares issued	946	33,454	—	—	34,400
Shares repurchased	(3,552)	(15,481)	(214,393)	—	(233,426)
Stock compensation cost	—	24,216	—	—	24,216
Net earnings	—	—	460,645	—	460,645
Dividends declared ($0.8650 per share)	—	—	(146,317)	—	(146,317)
Other comprehensive income (loss)	—	—	—	10,791	10,791
Balance December 30, 2022	$ 167,702	$ 784,477	$ 976,851	$ (69,378)	$ 1,859,652

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Graco Inc. and Subsidiaries
Years Ended December 30, 2022, December 31, 2021 and December 25, 2020

A. Summary of Significant Accounting Policies

Fiscal Year. The fiscal year of Graco Inc. and Subsidiaries (the "Company") is 52 or 53 weeks, ending on the last Friday in December. The year ended December 31, 2021 was a 53-week year whereas the years ended December 30, 2022 and December 25, 2020 were 52-week years.

Basis of Statement Presentation. The consolidated financial statements include the accounts of the parent company and its subsidiaries after elimination of intercompany balances and transactions. As of December 30, 2022, all subsidiaries are 100 percent controlled by the Company.

Foreign Currency Translation. The functional currency of certain subsidiaries is the local currency. Accordingly, adjustments resulting from the translation of those subsidiaries' financial statements into U.S. dollars are charged or credited to accumulated other comprehensive income (loss). The U.S. dollar is the functional currency for all other foreign subsidiaries. Accordingly, gains and losses from the translation of foreign currency balances and transactions of those subsidiaries are included in other expense, net.

Accounting Estimates. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Such estimates and assumptions also affect the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value Measurements. The three levels of inputs in the fair value measurement hierarchy are as follows:

Level 1 – based on quoted prices in active markets for identical assets
Level 2 – based on significant observable inputs
Level 3 – based on significant unobservable inputs

Assets and liabilities measured at fair value on a recurring basis and fair value measurement level were as follows (in thousands):

	Level	2022	2021
Assets			
Cash surrender value of life insurance	2	$ 19,192	$ 23,147
Liabilities			
Contingent consideration	3	$ 14,914	$ 12,274
Deferred compensation	2	5,842	5,962
Forward exchange contracts	2	520	111
Total liabilities at fair value		$ 21,276	$ 18,347

Contracts insuring the lives of certain employees who are eligible to participate in certain non-qualified pension and deferred compensation plans are held in trust. Cash surrender value of the contracts is based on performance measurement funds that shadow the deferral investment allocations made by participants in certain deferred compensation plans. The deferred compensation liability balances are valued based on amounts allocated by participants to the underlying performance measurement funds.

The Company's policy and accounting for forward exchange contracts are described below, in Derivative Instruments and Hedging Activities.

Contingent consideration liability represents the estimated value (using a probability-weighted expected return approach) of future payments to be made to previous owners of certain acquired businesses based on future revenues.

Disclosures related to other fair value measurements are included below in Impairment of Long-Lived Assets, in Note F (Debt) and in Note J (Retirement Benefits).

Cash Equivalents. All highly liquid investments with a maturity of three months or less at the date of purchase are considered to be cash equivalents.

Accounts Receivable. Accounts receivable includes trade receivables of $334 million in 2022 and $315 million in 2021. Other receivables totaled $12 million in 2022 and $10 million in 2021.

Allowance for Credit Losses. Receivables reflected in the financial statements represent the net amount expected to be collected. An allowance for credit losses is established based on expected losses. Expected losses are estimated by reviewing individual accounts, considering aging, financial condition of the debtor, recent payment history, current and forecast economic conditions and other relevant factors.

Following is a summary of activity in the allowance for credit losses (in thousands):

	2022	2021	2020
Balance, beginning	$ 3,254	$ 3,745	$ 4,828
Additions (reversals) charged to costs and expenses	3,567	(27)	647
Deductions from reserves [1]	(633)	(676)	(2,732)
Other additions (deductions) [2]	(58)	212	1,002
Balance, ending	$ 6,130	$ 3,254	$ 3,745

(1) Represents amounts determined to be uncollectible and charged against reserves, net of collections on accounts previously charged against reserves.
(2) Includes effects of foreign currency translation.

Inventory Valuation. Inventories are stated at the lower of cost or net realizable value. The last-in, first-out (LIFO) cost method is used for valuing most U.S. inventories. Inventories of foreign subsidiaries are valued using the first-in, first-out (FIFO) cost method.

Other Current Assets. Amounts included in other current assets were (in thousands):

	2022	2021
Prepaid income taxes	$ 18,702	$ 10,485
Prepaid expenses and other	24,922	21,401
Total	$ 43,624	$ 31,886

Impairment of Long-Lived Assets. The Company evaluates long-lived assets (including property and equipment, goodwill and other intangible assets) for impairment annually in the fourth quarter, or whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

We completed our annual impairment test of all long-lived assets in the fourth quarter of 2022. No impairment charges were recorded as a result of that review. In connection with the Company's sale of its U.K.-based valve business in 2020, impairment charges of $35 million were recorded. There were no additional impairment charges in 2021 or 2020.

Property, Plant and Equipment. For financial reporting purposes, plant and equipment are depreciated over their estimated useful lives, primarily by using the straight-line method as follows:

Buildings and improvements	10 to 30 years
Leasehold improvements	lesser of 5 to 10 years or life of lease
Manufacturing equipment	lesser of 5 to 10 years or life of equipment
Office, warehouse and automotive equipment	3 to 10 years

Goodwill and Other Intangible Assets. Goodwill has been assigned to reporting units. Changes in the carrying amounts of goodwill for each reportable segment were (in thousands):

	Industrial	Process	Contractor	Total
Balance, December 25, 2020	$ 140,997	$ 141,513	$ 65,093	$ 347,603
Additions, adjustments from business acquisitions	—	—	13,321	13,321
Foreign currency translation	(3,842)	(209)	(618)	(4,669)
Balance, December 31, 2021	137,155	141,304	77,796	356,255
Additions, adjustments from business acquisitions	—	16,994	—	16,994
Foreign currency translation	(2,384)	(1,932)	(762)	(5,078)
Balance, December 30, 2022	$ 134,771	$ 156,366	$ 77,034	$ 368,171

Components of other intangible assets were (dollars in thousands):

	Finite Life			Indefinite Life	
	Customer Relationships	Patents and Proprietary Technology	Trademarks, Trade Names and Other	Trade Names	Total
As of December 30, 2022					
Cost	$ 202,103	$ 26,374	$ 1,300	$ 62,633	$ 292,410
Accumulated amortization	(123,603)	(18,027)	(330)	—	(141,960)
Foreign currency translation	(10,060)	(894)	—	(1,989)	(12,943)
Book value	$ 68,440	$ 7,453	$ 970	$ 60,644	$ 137,507
Weighted average life in years	13	10	6	N/A	
As of December 31, 2021					
Cost	$ 194,505	$ 26,074	$ 900	$ 62,633	$ 284,112
Accumulated amortization	(108,657)	(15,734)	(452)	—	(124,843)
Foreign currency translation	(7,710)	(707)	—	(1,112)	(9,529)
Book value	$ 78,138	$ 9,633	$ 448	$ 61,521	$ 149,740
Weighted average life in years	13	10	5	N/A	

Amortization of intangibles was $18.9 million in 2022, $17.9 million in 2021 and $16.7 million in 2020. Estimated future annual amortization expense based on the current carrying amount of other intangible assets is as follows (in thousands):

	2023	2024	2025	2026	2027	Thereafter
Estimated Amortization Expense	$ 17,397	$ 16,169	$ 15,704	$ 8,972	$ 6,291	$ 12,330

The Company completed business acquisitions in 2022, 2021 and 2020 that were not material to the consolidated financial statements.

Other Assets. Components of other assets were (in thousands):

	2022	2021
Cash surrender value of life insurance	$ 19,192	$ 23,147
Capitalized software	2,189	2,394
Equity method investment	8,767	7,541
Deposits and other	2,970	3,607
Total	$ 33,118	$ 36,689

The Company has entered into contracts insuring the lives of certain employees who are eligible to participate in certain non-qualified pension and deferred compensation plans. These insurance contracts are used to fund the non-qualified pension and deferred compensation arrangements. The insurance contracts are held in a trust and are available to general creditors in the event of the Company's insolvency. Changes in cash surrender value are recorded in other expense, net. The cash surrender value decreased $4.0 million in 2022, and increased $3.3 million in 2021 and $2.2 million in 2020.

Capitalized software is amortized over its estimated useful life (generally 2 to 5 years) beginning at date of implementation.

Other Current Liabilities. Components of other current liabilities were (in thousands):

	2022	2021
Accrued self-insurance retentions	$ 9,338	$ 9,303
Accrued warranty and service liabilities	14,674	14,463
Accrued trade promotions	13,799	15,872
Payable for employee stock purchases	16,497	15,746
Customer advances and deferred revenue	50,747	60,554
Income taxes payable	15,987	5,200
Tax payable, other	9,614	8,295
Operating lease liabilities, current	9,555	9,096
Right of return refund liability	18,449	18,614
Other	32,133	34,016
Total	$ 190,793	$ 191,159

Self-Insurance. The Company is self-insured for certain losses and costs relating to product liability, workers' compensation, and employee medical benefit claims. The Company has stop-loss coverage in order to limit its exposure to significant claims. Accrued self-insurance retentions are based on claims filed, estimates of claims incurred but not reported, and other actuarial assumptions. Self-insured reserves totaled $9.3 million as of December 30, 2022 and December 31, 2021.

Product Warranties. A liability is established for estimated future warranty and service claims that relate to current and prior period sales. The Company estimates warranty costs based on historical claim experience and other factors including evaluating specific product warranty issues. Following is a summary of activity in accrued warranty and service liabilities (in thousands):

	2022	2021
Balance, beginning of year	$ 14,463	$ 13,082
Assumed in business acquisition	38	23
Charged to expense	8,946	10,764
Margin on parts sales reversed	3,292	3,475
Reductions for claims settled	(12,065)	(12,881)
Balance, end of year	$ 14,674	$ 14,463

Revenue Recognition. Revenue is recognized at a single point in time upon the satisfaction of performance obligations, which occurs when control of the good or service transfers to the customer. This is generally on the date of shipment; however certain sales have terms requiring recognition when received by the customer. In cases where there are specific customer acceptance provisions, revenue is recognized at the later of customer acceptance or shipment (subject to shipping terms). Payment terms are established based on the type of product, distributor capabilities and competitive market conditions, and do not exceed one year. Standalone selling prices are determined based on the prices charged to customers for all material performance obligations.

Variable consideration is accounted for as a price adjustment (sales adjustment). Following are examples of variable consideration that affect the Company's reported revenue. Early payment discounts are provided to certain customers and within certain regions. Rights of return are typically contractually limited and amounts are estimable. The Company records a refund liability and establishes a recovery asset for the value of product expected to be returned at the time revenue is recognized. This includes promotions when, from time to time, the Company may promote the sale of new products by agreeing to accept returns of superseded products. Provisions for sales returns are recorded as a reduction of net sales, and provisions for warranty claims are recorded in selling, marketing and distribution expenses. Historically, sales returns have been approximately 3 percent of sales. Trade promotions are offered to distributors and end users through various programs, generally with terms of one year or less. Such promotions include rebates based on annual purchases and sales growth, coupons and reimbursement for competitive products. Payment of incentives may take the form of cash, trade credit, promotional merchandise or free product. Rebates are accrued based on the program rates and progress toward the probability weighted estimate of annual sales amount and sales growth.

Additional promotions include cooperative advertising arrangements. Under cooperative advertising arrangements, the Company reimburses the distributor for a portion of its advertising costs related to the Company's products. Estimated costs are accrued at the time of sale and classified as selling, marketing and distribution expense. The estimated costs related to coupon programs are accrued at the time of sale and classified as selling, marketing and distribution expense or cost of products sold, depending on the type of incentive offered. The considerations payable to customers are deemed as broad based and are not recorded against net sales.

Shipping and handling costs incurred for the delivery of goods to customers are included in cost of goods sold. Amounts billed to customers for shipping and handling are included in net sales.

Revenue is deferred when cash payments are received or due in advance of performance, including amounts which are refundable. This is also the case for services associated with certain product sales. The balance in the deferred revenue and customer advances was $50.7 million as of December 30, 2022 and $60.6 million as of December 31, 2021. Net sales for 2022 included $60.4 million that was in deferred revenue and customer advances as of December 31, 2021. Net sales for 2021 included $40.9 million that was in deferred revenue and customer advances as of December 25, 2020.

Shipping and handling activities that occur after control of the related good transfers are accounted for as fulfillment activities instead of assessing such activities as performance obligations.

Sales taxes related to revenue producing transactions collected from the customer for a governmental authority are excluded from the transaction price.

Revenue standard requirements are applied to a portfolio of contracts (or performance obligations) with similar characteristics for transactions where it is expected that the effects on the financial statements of applying the revenue recognition guidance to the portfolio would not differ materially from applying this guidance to the individual contracts (or performance obligations) within that portfolio.

Promised goods or services are not assessed as performance obligations if they are immaterial in the context of the contract with the customer. If the revenue related to a performance obligation that includes goods or services that are immaterial in the context of the contract is recognized before those immaterial goods or services are transferred to the customer, then the related costs to transfer those goods or services are accrued.

Incremental costs of obtaining a contract are generally expensed when incurred because the amortization period would be less than one year. Such costs primarily relate to sales commissions and are recorded in selling, marketing and distribution expense.

Earnings Per Common Share. Basic net earnings per share is computed by dividing earnings available to common shareholders by the weighted average number of shares outstanding during the year. Diluted net earnings per share is computed after giving effect to the exercise of all dilutive outstanding option grants.

Comprehensive Income. Comprehensive income is a measure of all changes in shareholders’ equity except those resulting from investments by and distributions to owners, and includes such items as net earnings, certain foreign currency translation items, changes in the value of qualifying hedges and pension liability adjustments.

Derivative Instruments and Hedging Activities. The Company accounts for all derivatives, including those embedded in other contracts, as either assets or liabilities and measures those financial instruments at fair value. The accounting for changes in the fair value of derivatives depends on their intended use and designation.

As part of its risk management program, the Company may periodically use forward exchange contracts to manage known market exposures. Terms of derivative instruments are structured to match the terms of the risk being managed and are generally held to maturity. The Company does not hold or issue derivative financial instruments for trading purposes. All other contracts that contain provisions meeting the definition of a derivative also meet the requirements of, and have been designated as, normal purchases or sales. The Company’s policy is to not enter into contracts with terms that cannot be designated as normal purchases or sales.

The Company periodically evaluates its monetary asset and liability positions denominated in foreign currencies. The Company enters into forward contracts or options, or borrows in various currencies, in order to hedge its net monetary positions. These instruments are recorded at fair value and the gains and losses are included in other expense, net. The notional amounts of contracts outstanding as of December 30, 2022, totaled $48 million. The Company believes it uses strong financial counterparties in these transactions and that the resulting credit risk under these hedging strategies is not significant.

The Company uses significant other observable inputs (level 2 in the fair value hierarchy) to value the derivative instruments used to hedge net monetary positions, including reference to market prices and financial models that incorporate relevant market assumptions. Net derivative assets are reported on the balance sheet in accounts receivable and net derivative liabilities are reported as other current liabilities. The fair market value of such instruments follows (in thousands):

	2022	2021
Foreign Currency Contracts		
Assets	$ 157	$ 239
Liabilities	(677)	(350)
Net Assets (Liabilities)	$ (520)	$ (111)

B. Segment Information

The Company has five operating segments which are aggregated into three reportable segments: Contractor, Industrial and Process.

Beginning with the first quarter of 2022, our high performance coatings and foam product offerings previously included within the Applied Fluid Technologies division of the Industrial segment were realigned and are now managed under the Contractor segment. This change aligns the types of products offered and markets served within the segments. Prior year segment information has been restated to conform to the current organizational structure.

The Contractor segment markets sprayers and equipment that apply paint to walls and other structures, texture to walls and ceilings, insulation to building walls and other items, highly viscous coatings to roofs, and markings on roads, parking lots, athletic fields and floors.

The Industrial segment includes our Industrial and Powder divisions. The Industrial segment markets equipment and solutions for moving and applying paints, coatings, sealants, adhesives and other fluids. Markets served include automotive and vehicle assembly and components production, wood and metal products, rail, marine, aerospace, farm, construction, bus, recreational vehicles and various other industries.

The Process segment includes our Process and Lubrication divisions. The Process segment markets pumps, valves, meters and accessories to move and dispense chemicals, oil and natural gas, water, wastewater, petroleum, food,

lubricants and other fluids. Markets served include food and beverage, dairy, oil and natural gas, pharmaceutical, cosmetics, electronics, semiconductor fabrication, wastewater, mining, fast oil change facilities, service garages, fleet service centers, automobile dealerships and industrial lubrication applications.
The accounting policies of the segments are the same as those described in the summary of significant accounting policies. The cost of manufacturing for each segment is based on product cost, and expenses are based on actual costs incurred along with cost allocations of shared and centralized functions based on activities performed, sales or space utilization. Depreciation expense is charged to the manufacturing or operating cost center that utilizes the asset, and is then allocated to segments on the same basis as other expenses within that cost center. Reportable segments are defined by product. Segments are responsible for development, manufacturing, marketing and sales of their products. This allows for focused marketing and efficient product development. The segments share common purchasing, certain manufacturing, distribution and administration functions.

Segment information follows (in thousands):

	2022	2021	2020
Net Sales			
Contractor	$ 999,060	$ 987,606	$ 842,525
Industrial	649,347	602,376	481,485
Process	495,114	397,626	326,105
Total	$ 2,143,521	$ 1,987,608	$ 1,650,115
Operating Earnings			
Contractor	$ 249,833	$ 266,204	$ 243,185
Industrial	231,298	199,856	147,939
Process	122,344	91,037	64,498
Unallocated corporate (expense)	(30,775)	(25,774)	(28,675)
Impairment	—	—	(35,229)
Total	$ 572,700	$ 531,323	$ 391,718
Assets			
Contractor	$ 752,729	$ 656,998	
Industrial	578,302	544,585	
Process	564,539	436,189	
Unallocated corporate	543,330	805,426	
Total	$ 2,438,900	$ 2,443,198	

Management assesses performance of segments by reference to operating earnings excluding unallocated corporate expenses and asset impairments. Unallocated corporate (expense) includes such items as stock compensation, certain acquisition transaction costs, bad debt expense, charitable contributions and certain facility expenses. Unallocated assets include cash, allowances and valuation reserves, deferred income taxes, certain capital and other assets.

Geographic information follows (in thousands):

	2022	2021	2020
Net Sales (based on customer location)			
United States	$ 1,116,012	$ 1,004,318	$ 883,451
Other countries	1,027,509	983,290	766,664
Total	$ 2,143,521	$ 1,987,608	$ 1,650,115
Long-lived Assets			
United States	$ 532,401	$ 388,835	
Other countries	75,208	62,226	
Total	$ 607,609	$ 451,061	

Sales to Major Customers. Worldwide sales to one customer in the Contractor and Industrial segments individually represented over 10 percent of the Company's consolidated sales in 2022, 2021 and 2020.

C. Inventories

Major components of inventories were as follows (in thousands):

	2022	2021
Finished products and components	$ 222,326	$ 166,922
Products and components in various stages of completion	138,957	117,063
Raw materials and purchased components	248,636	185,291
Subtotal	609,919	469,276
Reduction to LIFO cost	(133,129)	(86,975)
Total	$ 476,790	$ 382,301

Inventories valued under the LIFO method were $253.6 million in 2022 and $211.1 million in 2021. All other inventory was valued on the FIFO method.

D. Property, Plant and Equipment

Property, plant and equipment were as follows (in thousands):

	2022	2021
Land and improvements	$ 65,066	$ 42,195
Buildings and improvements	376,115	280,947
Manufacturing equipment	439,109	384,617
Office, warehouse and automotive equipment	59,988	61,994
Additions in progress	126,198	105,520
Total property, plant and equipment	1,066,476	875,273
Accumulated depreciation	(458,867)	(424,212)
Net property, plant and equipment	$ 607,609	$ 451,061

Depreciation expense was $46.0 million in 2022, $40.0 million in 2021 and $38.0 million in 2020.

E. Income Taxes

Earnings before income tax expense consist of (in thousands):

	2022	2021	2020
Domestic	$ 401,405	$ 370,903	$ 289,708
Foreign	164,319	137,562	84,943
Total	$ 565,724	$ 508,465	$ 374,651

Income tax expense consists of (in thousands):

	2022	2021	2020
Current			
Federal	$ 70,976	$ 77,703	$ 11,509
State and local	5,948	7,493	3,217
Foreign	38,152	29,975	18,722
Current income tax expense	115,076	115,171	33,448
Deferred			
Domestic	(8,733)	(42,413)	12,856
Foreign	(1,264)	(4,159)	(2,109)
Deferred income tax expense (benefit)	(9,997)	(46,572)	10,747
Total	$ 105,079	$ 68,599	$ 44,195

Income taxes paid were $112.3 million in 2022, $111.8 million in 2021 and $44.0 million in 2020.

A reconciliation between the U.S. federal statutory tax rate and the effective tax rate follows:

	2022	2021	2020
Statutory tax rate	21 %	21 %	21 %
Tax effect of international operations	1	(1)	(2)
State taxes, net of federal effect	1	1	1
U.S. general business tax credits	(1)	(1)	(1)
Loss on sale of business	—	—	2
Stock compensation excess tax benefit	(1)	(2)	(6)
Foreign Derived Intangible Income (FDII)	(2)	(5)	(3)
Effective tax rate	19 %	13 %	12 %

Deferred income taxes are provided for temporary differences between the financial reporting and the tax basis of assets and liabilities. The deferred tax assets (liabilities) resulting from these differences were as follows (in thousands):

	2022	2021
Inventory valuations	$ 678	$ 1,181
Accrued self-insurance retentions	1,626	1,534
Accrued warranty and service liabilities	2,279	2,285
Vacation accruals	3,409	3,261
Customer allowances	4,143	4,028
Excess of tax over book depreciation and amortization	(42,322)	(39,785)
Pension benefit obligation	6,375	16,022
Postretirement medical benefit obligation	5,072	5,028
Stock compensation	12,390	11,442
Deferred compensation	2,283	2,595
Deferred revenue	2,160	2,427
Research and Development	11,370	—
Prepayments from foreign subsidiaries	36,070	32,969
Other	2,114	2,138
Net deferred tax assets	$ 47,647	$ 45,125

Total deferred tax assets were $57.1 million and $55.8 million, and total deferred tax liabilities were $9.4 million and $10.7 million on December 30, 2022 and December 31, 2021, respectively. The difference between the deferred income tax provision and the change in net deferred income taxes is due to the changes in other comprehensive income (loss) items and acquisition purchase accounting.

The Company files income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2016.

The Company continues to assert that it will indefinitely reinvest earnings of foreign subsidiaries to support expansion of its international business. No additional income or withholding taxes have been provided for any remaining undistributed foreign earnings, as these amounts continue to be indefinitely reinvested in foreign operations. As of December 30, 2022, the amount of cash held outside the U.S. was not significant to the Company's liquidity and was available to fund investments abroad.

The Company records penalties and accrued interest related to uncertain tax positions in income tax expense. Total reserves for uncertain tax positions were not material.

F. Debt

A summary of debt follows (dollars in thousands):

	Average Interest Rate December 30, 2022	Maturity	2022	2021
Private placement unsecured fixed-rate notes				
Series B	5.01%	January 2022	—	75,000
Series D	5.35%	July 2026	75,000	75,000
Unsecured revolving credit facility	N/A	March 2026	—	—
Unsecured revolving credit facility - offshore renminbi denominated	3.34%	N/A	14,327	39,222
Notes payable to banks	2.80%	2023	6,647	4,267
Total debt			$ 95,974	$ 193,489

The estimated fair value of the fixed interest rate private placement debt was $75 million on December 30, 2022 and $165 million on December 31, 2021. The fair value of variable rate borrowings approximates carrying value. The Company uses significant other observable inputs to estimate fair value (level 2 of the fair value hierarchy) based on the present value of future cash flows and rates that would be available for issuance of debt with similar terms and remaining maturities.

On March 25, 2021, the Company entered into an amended and restated credit agreement that amends, supersedes and restates in its entirety the Company's prior credit agreement with U.S. Bank National Association, as administrative agent (the "Agent") and a lender, and the other lenders that are parties thereto. The amended and restated credit agreement extends the maturity of the Company's $500 million unsecured revolving credit facility from December 15, 2021 to March 25, 2026; includes a $250 million accordion feature; and provides mechanisms for two further one-year extensions of the maturity, subject to the consent of the extending banks.

Borrowings under the amended and restated credit agreement may be denominated in U.S. dollars or certain other currencies. Outstanding loans in currencies other than U.S. dollars cannot exceed $200 million in the aggregate. The amended and restated credit agreement contains customary provisions for the replacement of the LIBOR-based rate as that rate is expected to be phased out by July 1, 2023. Currently, loans denominated in U.S. dollars may bear interest, at the Company's option, at either a base rate or a LIBOR-based rate. Loans denominated in currencies other than U.S. dollars will bear interest at a LIBOR-based rate. The base rate is an annual rate equal to a margin ranging from 0.00% to 0.75%, depending on the Company's cash flow leverage ratio, plus the highest of (i) the rate of interest from time to time announced by the Agent as its prime rate, (ii) the federal funds effective rate plus 0.50%, or (iii) one-month LIBOR plus 1.50%. In general, LIBOR-based loans bear interest at a rate per annum equal to LIBOR, plus a margin ranging from 1.00% to 1.75%, depending on the Company's cash flow leverage ratio. In addition to paying interest on the outstanding loans, the Company is required to pay a facility fee on the unused amount of the loan commitments at a rate per annum ranging from 0.125% to 0.25%, depending on the Company's cash flow leverage ratio.

The amended and restated credit agreement contains customary representations, warranties, covenants and events of default, including but not limited to covenants restricting the Company's and its subsidiaries' ability to (i) merge or consolidate with another entity, (ii) sell, transfer, lease or convey their assets, (iii) make any material change in the nature of the core business of the Company, (iv) make certain investments, or (v) incur secured indebtedness. The amended and restated credit agreement also requires the Company to maintain a cash flow leverage ratio of not more than 3.50 to 1.00 (unless a significant acquisition has been consummated, in which case, not more than 4.00 to 1.00 during the four fiscal quarter period beginning with the quarter in which such acquisition occurs) and an interest coverage ratio of not less than 3.00 to 1.00 (unless a significant acquisition has been consummated, in which case, not less than 2.50 to 1.00 during the four fiscal quarter period beginning with the quarter in which such acquisition occurs). A change in control of the Company will constitute an event of default under the amended and restated credit agreement.

The Company maintains a revolving credit agreement with a sole lender that provides up to $50 million of committed credit, available for general corporate purposes, working capital needs, share repurchases and acquisitions. Under the terms of the agreement, loans may be denominated in U.S. dollars or Chinese renminbi (offshore). Loans denominated in U.S. dollars bear interest, at the Company's option, at either a base rate or a LIBOR-based rate. Loans denominated in Chinese renminbi (offshore) bear interest at a LIBOR-based rate based on the Chinese offshore rate. Other terms of this revolving credit agreement are substantially similar to those of the Company's amended and restated credit agreement that expires in March 2026.

On December 16, 2022, the Company entered into an amendment to its master note agreement that extends the period in which the Company may issue, and affiliates of the lender may purchase, the Company's senior notes from January 29, 2023 to December 16, 2027. The amendment also increases the maximum aggregate principal amount of senior notes the Company may issue under the master note agreement from $200 million to $250 million, although the maximum aggregate amount of senior notes bearing interest at a floating rate that may be outstanding at any one time will continue to be $100 million. The amendment also extends the maturity and average life of each senior note bearing interest at a fixed rate that may be issued under the master note agreement from no more than 12 years after the date of issuance to no more than 15 years after the date of issuance, and includes customary provisions for the replacement of LIBOR with SOFR and customary benchmark replacement provisions with respect to senior notes bearing interest at a floating rate. All other material items of the master note agreement remain unchanged. Under the terms of the master note agreement, the Company is required to maintain certain financial ratios as to cash flow leverage and interest coverage similar to the requirements of its other debt agreements.

On December 30, 2022, the Company had $591 million in lines of credit, including the $550 million in committed credit facilities described above and $41 million with foreign banks. The unused portion of committed credit lines was $545 million as of December 30, 2022. In addition, the Company has unused, uncommitted lines of credit with foreign banks totaling $17 million. Borrowing rates under these credit lines vary with the prime rate, rates on domestic certificates of deposit and the London Interbank market. The Company pays facility fees at an annual rate of up to 0.15 on certain of these lines. No compensating balances are required.

Various debt agreements require the Company to maintain certain financial ratios as to cash flow leverage and interest coverage. The Company is in compliance with all financial covenants of its debt agreements as of December 30, 2022.

Annual maturities of debt are as follows (in thousands):

	2023	2024	2025	2026	2027	Thereafter
Maturities of debt	$ 20,974	$ —	$ —	$ 75,000	$ —	$ —

Interest paid on debt was $10.0 million in 2022, $9.8 million in 2021 and $11.3 million in 2020.

In January 2022, we repaid $75 million of our Series B private placement note in addition to a $3.5 million prepayment fee, which was recognized as interest expense.

G. Shareholders' Equity

At December 30, 2022, the Company had 22,549 authorized, but not issued, cumulative preferred shares, $100 par value. The Company also has authorized, but not issued, a separate class of 3 million shares of preferred stock, $1 par value.

Changes in components of accumulated other comprehensive income (loss), net of tax were (in thousands):

	Pension and Postretirement Medical	Cumulative Translation Adjustment	Total
Balance, December 27, 2019	$ (113,721)	$ (56,066)	$ (169,787)
Other comprehensive income (loss) before reclassifications	(7,852)	46,030	38,178
Amounts reclassified from accumulated other comprehensive income	7,444	—	7,444
Balance, December 25, 2020	(114,129)	(10,036)	(124,165)
Other comprehensive income (loss) before reclassifications	34,953	(10,026)	24,927
Amounts reclassified from accumulated other comprehensive income	19,069	—	19,069
Balance, December 31, 2021	(60,107)	(20,062)	(80,169)
Other comprehensive income (loss) before reclassifications	16,083	(9,582)	6,501
Amounts reclassified from accumulated other comprehensive income	4,290	—	4,290
Balance, December 30, 2022	$ (39,734)	$ (29,644)	$ (69,378)

In connection with the Company's sale of its U.K.-based valve business in 2020, $24 million of unrealized foreign currency translation losses recorded in accumulated other comprehensive income were reclassified to net earnings.

Amounts related to pension and postretirement medical adjustments are classified to non-service components of pension cost that are included within other non-operating expenses. Included in the 2021 reclassification is $12 million related to a pension settlement loss. See Note J for additional details regarding pension and postretirement medical plans.

H. Share-Based Awards, Purchase Plans and Compensation Cost

Stock Option and Award Plan. The Company has a stock incentive plan under which it grants stock options and share awards to directors, officers and other employees. Option price is the market price on the date of grant. Options become exercisable at such time, generally over 3 years or 4 years, and in such installments as set by the Company, and expire 10 years from the date of grant.

Restricted share awards have been made to certain key employees under the plan. The market value of restricted stock at the date of grant is charged to operations over the vesting period. Compensation cost related to restricted shares is not significant.

The Company has a stock appreciation plan that provides for payments of cash to eligible foreign employees based on the change in the market price of the Company's common stock over a period of time. Compensation cost related to the stock appreciation plan was a benefit of $0.2 million in 2022, and expense of $3.1 million in 2021 and $2.4 million in 2020.

Individual nonemployee directors of the Company may elect to receive, either currently or deferred, all or part of their retainer in the form of shares of the Company's common stock instead of cash. Under this arrangement, the Company issued 12,055 shares in 2022, 12,070 shares in 2021 and 15,243 shares in 2020. The expense related to this arrangement is not significant.

Options on common shares granted and outstanding, as well as the weighted average exercise price, are shown below (in thousands, except exercise prices):

	Option Shares	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price
Outstanding, December 27, 2019	12,112	$ 28.91	8,231	$ 23.75
Granted	1,400	55.26		
Exercised	(3,238)	20.81		
Canceled	(66)	41.24		
Outstanding, December 25, 2020	10,208	35.02	6,553	28.02
Granted	843	72.22		
Exercised	(1,309)	24.91		
Canceled	(167)	55.59		
Outstanding, December 31, 2021	9,575	39.31	7,296	33.75
Granted	1,381	71.03		
Exercised	(645)	25.58		
Canceled	(46)	49.42		
Outstanding, December 30, 2022	10,265	$ 44.40	7,793	$ 37.22

The following table summarizes information for options outstanding and exercisable at December 30, 2022 (in thousands, except exercise prices and contractual term amounts):

	Options Outstanding			Options Exercisable	
Range of Prices	Options Outstanding	Weighted Average Remaining Contractual Term in Years	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price
$10 - $30	2,971	2.4	$ 24.76	2,971	$ 24.76
$30 - $45	2,317	4.7	36.88	2,255	36.67
$45 - $60	2,813	6.6	50.50	2,325	50.02
$60 - $75	2,164	9.0	71.47	242	72.15
$10 - $75	10,265	5.5	$ 44.40	7,793	$ 37.22

The aggregate intrinsic value of exercisable option shares was $235.3 million as of December 30, 2022, with a weighted average contractual term of 4.5 years. There were approximately 10.3 million vested share options and share options expected to vest as of December 30, 2022, with an aggregate intrinsic value of $243.8 million, a weighted average exercise price of $44.40 and a weighted average contractual term of 5.5 years.

Information related to options exercised follows (in thousands):

	2022	2021	2020
Cash received	$ 15,739	$ 32,610	$ 66,625
Aggregate intrinsic value	28,193	65,319	120,395
Tax benefit realized	6,020	13,329	25,000

Employee Stock Purchase Plan. Under the Company’s Employee Stock Purchase Plan, the purchase price of the shares is the lesser of 85 percent of the fair market value on the first day or the last day of the plan year. Under this plan, the Company issued 316,250 shares in 2022, 415,995 shares in 2021 and 399,567 shares in 2020.

Authorized Shares. In April 2019, shareholders of the Company approved the Graco Inc. 2019 Stock Incentive Plan. The Plan provides for issuance of up to 10 million shares of Graco common stock. Shares authorized for issuance under the stock option and purchase plans are shown below (in thousands):

	Total Shares Authorized	Available for Future Issuance as of December 30, 2022
Stock Incentive Plan (2019)	10,000	5,790
Employee Stock Purchase Plan (2006)	21,000	11,763
Total	31,000	17,553

Amounts available for future issuance exclude outstanding options. Options outstanding as of December 30, 2022, include options granted under two plans that were replaced by subsequent plans. No shares are available for future grants under those plans.

Share-based Compensation. The Company recognized share-based compensation cost as follows (in thousands):

	2022	2021	2020
Share-based compensation	$ 24,695	$ 24,931	$ 25,153
Tax benefit	2,319	1,705	1,700
Share-based compensation, net of tax	$ 22,376	$ 23,226	$ 23,453

As of December 30, 2022, there was $17.4 million of unrecognized compensation cost related to unvested options, expected to be recognized over a weighted average period of approximately 2.7 years.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions and results:

	2022	2021	2020
Expected life in years	6.4	7.5	7.5
Interest rate	2.7 %	0.9 %	1.4 %
Volatility	26.2 %	25.2 %	22.0 %
Dividend yield	1.2 %	1.0 %	1.3 %
Weighted average fair value per share	$ 19.10	$ 17.87	$ 12.18

Expected life is estimated based on vesting terms and exercise and termination history. Interest rate is based on the U.S. Treasury rate on zero-coupon issues with a remaining term equal to the expected life of the option. Expected volatility is based on historical volatility over a period commensurate with the expected life of options.

The fair value of employees' purchase rights under the Employee Stock Purchase Plan was estimated on the date of grant. The benefit of the 15 percent discount from the lesser of the fair market value per common share on the first day and the last day of the plan year was added to the fair value of the employees' purchase rights determined using the Black-Scholes option-pricing model with the following assumptions and results:

	2022	2021	2020
Expected life in years	1.0	1.0	1.0
Interest rate	0.9 %	0.1 %	1.5 %
Volatility	20.5 %	40.1 %	21.9 %
Dividend yield	1.2 %	1.1 %	1.4 %
Weighted average fair value per share	$ 16.01	$ 21.50	$ 11.55

I. Earnings per Share

The following table sets forth the computation of basic and diluted earnings per share (in thousands, except per share amounts):

	2022	2021	2020
Net earnings available to common shareholders	$ 460,645	$ 439,866	$ 330,456
Weighted average shares outstanding for basic earnings per share	168,952	169,635	167,462
Dilutive effect of stock options computed based on the treasury stock method using the average market price	3,941	4,891	4,546
Weighted average shares outstanding for diluted earnings per share	172,893	174,526	172,008
Basic earnings per share	$ 2.73	$ 2.59	$ 1.97
Diluted earnings per share	$ 2.66	$ 2.52	$ 1.92

Anti-dilutive stock options excluded from computations of diluted earnings per share totaled 2.2 million shares in 2022, 0.4 million shares in 2021 and 0.3 million 2020.

J. Retirement Benefits

The Company has a defined contribution plan, under Section 401(k) of the Internal Revenue Code, which provides retirement benefits to most U.S. employees. For all employees who choose to participate, the Company matches employee contributions at a 100 percent rate, up to 3 percent of the employee's compensation. For employees not covered by a defined benefit plan, the Company contributed an amount equal to 2 percent of the employee's compensation. Employer contributions totaled $11.0 million in 2022, $10.0 million in 2021 and $8.7 million in 2020.

The Company's postretirement medical plan provides certain medical benefits for retired U.S. employees. Employees hired before January 1, 2005, are eligible for these benefits upon retirement and fulfillment of other eligibility requirements as specified by the plan.

The Company has both funded and unfunded noncontributory defined benefit pension plans that together cover most U.S. employees hired before January 1, 2006, certain directors and some of the employees of the Company's non-U.S. subsidiaries. The Company restructured one of its U.S. qualified defined benefit plans in 2021. Under the restructuring, the plan transferred $63 million of liabilities and assets associated with certain plan participants to an insurance company via the purchase of a group annuity contract, and the Company recognized a $12 million settlement loss, included in 2021 other expense, net. This charge represents the acceleration of deferred charges previously accrued in accumulated other comprehensive income. Subsequent to the transfer of pension obligations, the smaller of the two pension plans was merged into the larger plan in December of 2021, with the larger plan being the surviving funded pension plan. The benefits offered to the plans' participants were unchanged.

For U.S. plans, benefits are based on years of service and the highest 5 consecutive years' earnings in the 10 years preceding retirement. Plans are funded annually in amounts consistent with minimum funding levels and maximum tax deduction limits, although the Company may make additional voluntary contributions from time to time to improve the funded status of its plans.

Investment policies and strategies of the U.S. funded pension plan are based on participant demographics. As the plan covers active participants and retirees with higher benefit amounts, investments are based on a long-term view of economic growth and weighted toward equity securities. The primary goal of the plan's investments is to ensure that the plan's liabilities are met over time. In developing strategic asset allocation guidelines, an emphasis is placed on the long-term characteristics of individual asset classes, and the benefits of diversification among multiple asset classes. The plan invests primarily in domestic and international equities, fixed income securities, which include treasuries, highly-rated corporate bonds and high-yield bonds and real estate. Strategic target allocations for plan assets are 53 percent equity securities, 42 percent fixed income securities and 5 percent real estate and alternative investments.

Plan assets are held in a trust for the benefit of plan participants and are invested in various commingled funds, most of which are sponsored by the trustee. The fair values for commingled equity, fixed-income and real estate investments are measured using net asset values, which take into consideration the value of underlying fund investments, as well as the other accrued assets and liabilities of a fund, in order to determine a per share market value. Certain trustee-sponsored funds allow redemptions monthly or quarterly, with 10 days or 60 days advance notice, while most of the funds allow redemptions daily. The plan had unfunded commitments to make additional investments in certain funds totaling $2.3 million as of December 30, 2022 and $2.4 million as of December 31, 2021.

The Company maintains a defined contribution plan covering employees of a Swiss subsidiary, funded by Company and employee contributions. Responsibility for pension coverage under Swiss law has been transferred to a Swiss insurance company. Plan assets are invested in an insurance contract that guarantees a federally mandated annual rate of return. The value of the plan assets is effectively the value of the insurance contract. The performance of the underlying assets held by the insurance company has no direct impact on the surrender value of the insurance contract. The insurance backed assets have no active market and are classified as level 3 in the fair value hierarchy.

Assets of all plans by category and fair value measurement level were as follows (in thousands):

	Level	2022	2021
Cash and cash equivalents	1	$ 351	$ 303
Insurance contract	3	32,163	30,926
Investments categorized in fair value hierarchy		32,514	31,229
Equity			
U.S. Large Cap	N/A	74,838	110,569
U.S. Small/Mid Cap	N/A	5,191	11,338
International	N/A	37,862	56,128
Total equity		117,891	178,035
Fixed income	N/A	93,262	130,774
Real estate and other	N/A	37,508	7,862
Investments measured at net asset value		248,661	316,671
Total		$ 281,175	$ 347,900

The following table is a reconciliation of pension assets measured at fair value using level 3 inputs (in thousands):

	2022	2021
Balance, beginning of year	$ 30,926	$ 31,877
Purchases	2,431	2,430
Redemptions	(669)	(2,556)
Unrealized losses	(525)	(825)
Balance, end of year	$ 32,163	$ 30,926

The following provides a reconciliation of the changes in the plans' benefit obligations and fair value of assets over the periods ending December 30, 2022, and December 31, 2021, and a statement of the funded status as of the same dates (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2022	2021	2022	2021
Change in benefit obligation				
Obligation, beginning of year	$ 418,051	$ 510,652	$ 32,122	$ 34,458
Service cost	8,242	9,355	516	670
Interest cost	10,996	11,409	839	832
Actuarial (gain) loss	(110,467)	(31,093)	(9,044)	(2,391)
Benefit payments	(9,122)	(13,360)	(1,503)	(1,447)
Plan amendments	(267)	(1,458)	—	—
Settlements	—	(64,886)	—	—
Exchange rate changes	(1,626)	(2,568)	—	—
Obligation, end of year	$ 315,807	$ 418,051	$ 22,930	$ 32,122
Change in plan assets				
Fair value, beginning of year	$ 347,900	$ 373,565	$ —	$ —
Actual return on assets	(80,078)	30,984	—	—
Employer contributions	22,756	22,493	1,503	1,447
Benefit payments	(9,122)	(13,360)	(1,503)	(1,447)
Settlements	—	(64,886)	—	—
Exchange rate changes	(281)	(896)	—	—
Fair value, end of year	$ 281,175	$ 347,900	$ —	$ —
Unfunded status	$ (34,632)	$ (70,151)	$ (22,930)	$ (32,122)
Amounts recognized in consolidated balance sheets				
Non-current assets	$ 5,398	$ —	$ —	$ —
Current liabilities	1,860	1,769	1,763	1,768
Non-current liabilities	38,170	68,382	21,167	30,354
Net	$ 34,632	$ 70,151	$ 22,930	$ 32,122

Changes in discount rates used to value pension obligations were the main drivers of actuarial gains in 2022 and 2021. In 2022 and 2021, the Company made a $20 million voluntary contribution each year to one of its U.S. qualified defined benefit plans.

The accumulated benefit obligation as of year-end for all defined benefit pension plans was $297 million for 2022 and $388 million for 2021. Information for plans with an accumulated benefit obligation in excess of plan assets follows (in thousands):

	2022	2021
Projected benefit obligation	$ 72,190	$ 91,678
Accumulated benefit obligation	69,395	88,927
Fair value of plan assets	32,164	30,926

The components of net periodic benefit cost for the plans for 2022, 2021 and 2020 were as follows (in thousands):

	Pension Benefits			Postretirement Medical Benefits		
	2022	2021	2020	2022	2021	2020
Service cost-benefits earned during the period	$ 8,242	$ 9,355	$ 9,361	$ 516	$ 670	$ 609
Interest cost on projected benefit obligation	10,996	11,409	13,313	839	832	1,016
Expected return on assets	(19,754)	(20,767)	(18,814)	—	—	—
Amortization of prior service cost	84	246	294	—	—	—
Amortization of net loss	4,701	9,248	10,243	345	1,002	733
Settlement loss	—	12,285	—	—	—	—
Cost of pension plans which are not significant and have not adopted ASC 715	284	368	168	N/A	N/A	N/A
Net periodic benefit cost	$ 4,553	$ 22,144	$ 14,565	$ 1,700	$ 2,504	$ 2,358

Net periodic benefit cost is disaggregated between service cost presented as operating expense and other components of pension cost presented as non-operating expense. Other components of pension cost and changes in cash surrender value of insurance contracts intended to fund certain non-qualified pension and deferred compensation arrangements included in non-operating expenses totaled $1 million in 2022, $12 million in 2021 and $5 million in 2020.

Amounts recognized in other comprehensive income (loss) in 2022 and 2021 were as follows (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2022	2021	2022	2021
Net gain (loss) arising during the period	$ 11,189	$ 42,039	$ 9,044	$ 2,391
Amortization of net (gain) loss	4,701	9,248	345	1,002
Prior service credit (cost) arising during the period	267	1,458	—	—
Settlement (gain) loss	—	12,285	—	—
Amortization of prior service (credit) cost	84	246	—	—
Total	$ 16,241	$ 65,276	$ 9,389	$ 3,393

Amounts included in accumulated other comprehensive income (loss) as of December 30, 2022 and December 31, 2021, that had not yet been recognized as components of net periodic benefit cost, were as follows (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2022	2021	2022	2021
Prior service cost	$ 1,668	$ 1,293	$ —	$ —
Net gain (loss)	(55,084)	(70,995)	1,891	(7,498)
Net gain (loss) before income taxes	(53,416)	(69,702)	1,891	(7,498)
Income taxes	12,207	15,443	(416)	1,650
Net	$ (41,209)	$ (54,259)	$ 1,475	$ (5,848)

Assumptions used to determine the Company's benefit obligations are shown below:

	Pension Benefits		Postretirement Medical Benefits	
Weighted average assumptions	2022	2021	2022	2021
U.S. Plans				
Discount rate	5.6 %	3.0 %	5.6 %	2.9 %
Rate of compensation increase	2.7 %	2.7 %	N/A	N/A
Non-U.S. Plans				
Discount rate	2.4 %	0.4 %	N/A	N/A
Rate of compensation increase	1.8 %	1.3 %	N/A	N/A

Assumptions used to determine the Company's net periodic benefit cost are shown below:

	Pension Benefits			Postretirement Medical Benefits		
Weighted average assumptions	2022	2021	2020	2022	2021	2020
U.S. Plans						
Discount rate	3.0 %	2.6 %	3.5 %	2.9 %	2.6 %	3.4 %
Rate of compensation increase	2.7 %	2.7 %	2.8 %	N/A	N/A	N/A
Expected return on assets	6.3 %	6.3 %	6.8 %	N/A	N/A	N/A
Non-U.S. Plans						
Discount rate	0.4 %	0.4 %	0.4 %	N/A	N/A	N/A
Rate of compensation increase	1.3 %	1.3 %	1.3 %	N/A	N/A	N/A
Expected return on assets	1.0 %	1.0 %	1.5 %	N/A	N/A	N/A

Several sources of information are considered in determining the expected rate of return assumption, including the allocation of plan assets, the input of actuaries and professional investment advisers, and historical long-term returns. In setting the return assumption, the Company recognizes that historical returns are not always indicative of future returns and also considers the long-term nature of its pension obligations.

The Company's U.S. retirement medical plan limits the annual cost increase that will be paid by the Company to 3 percent. In measuring the accumulated postretirement benefit obligation (APBO), the annual trend rate for health care costs was assumed to be 8.5 percent for 2023, decreasing each year to a constant rate of 4.5 percent for 2038 and thereafter, subject to the plan's annual increase limitation.

The Company expects to contribute $1.9 million to its unfunded pension plans and $1.8 million to the postretirement medical plan in 2023. The Company will not be required to make contributions to the funded pension plan under minimum funding requirements for 2023. Estimated future benefit payments are as follows (in thousands):

	Pension Benefits	Postretirement Medical Benefits
2023	$ 15,583	$ 1,763
2024	17,035	1,748
2025	16,406	1,735
2026	18,585	1,715
2027	20,116	1,699
Years 2028-2032	107,755	8,136

K. Commitments and Contingencies

Operating Lease Liabilities and Assets

The Company owns most of the assets used in its operations, but leases certain buildings and land, vehicles, office equipment and other rental assets. The Company determines if an arrangement is a lease at inception. All of the Company's current lease arrangements are classified as operating leases. The Company historically has not entered into financing leases. Operating lease assets and obligations are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease expense is recognized by amortizing the amount recorded as an asset on a straight-line basis over the lease term.

In determining lease asset value, the Company considers fixed or variable payment terms, prepayments, incentives, and options to extend, terminate or purchase. Renewal, termination or purchase options affect the lease term used for determining lease asset value only if the option is reasonably certain to be exercised. The Company generally uses its incremental borrowing rate based on information available at the lease commencement date in determining the present value of lease payments.
Supplemental information related to the Company's lease activities is as follows (in thousands):

	2022	2021
Operating lease expense	$ 12,307	$ 11,641
Operating lease payments	11,886	11,564
Non-cash additions to operating lease assets	8,859	1,631

Additional information related to operating leases is as follows:

	2022	2021
Weighted average remaining lease term (years)	3.0	5.0
Weighted average discount rate	3.00 %	2.24 %

Variable lease costs and short term lease costs were not significant for the twelve months ended December 30, 2022 and December 31, 2021.

As of December 30, 2022, future maturities of operating lease liabilities were as follows (in thousands):

2023	$ 9,555
2024	7,931
2025	5,462
2026	4,118
2027	2,514
Thereafter	2,928
Total lease payments	$ 32,508
Present value adjustment	(1,896)
Operating lease liabilities	$ 30,612

Other Commitments. The Company is committed to pay suppliers under the terms of open purchase orders issued in the normal course of business totaling approximately $230 million at December 30, 2022. The Company also has commitments with certain suppliers to purchase minimum quantities, and under the terms of certain agreements, the Company is committed for certain portions of the supplier's inventory. The Company does not purchase, or commit to purchase, quantities in excess of normal usage or amounts that cannot be used within one year. The Company estimates that the maximum commitment amount under such agreements does not exceed $59 million.

The Company enters into contracts with vendors to receive services. Commitments under these service contracts with non-cancelable terms of more than one year totaled $4 million in 2023, $3 million in 2024, $3 million in 2025 and $2 million thereafter.

In addition, the Company could be obligated to perform under standby letters of credit totaling $6 million at December 30, 2022. The Company has also guaranteed the debt of its subsidiaries for up to $8 million. All debt of subsidiaries is reflected in the consolidated balance sheets.

Contingencies. The Company is party to various legal proceedings arising in the normal course of business. The Company is actively pursuing and defending these matters and has recorded an estimate of the probable costs where appropriate. Management does not expect that resolution of these matters will have a material adverse effect on the Company, although the ultimate outcome cannot be determined based on available information.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the fiscal year covered by this Annual Report, the Company carried out an evaluation of the effectiveness of the design and operation of its disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended. This evaluation was done under the supervision and with the participation of the Company's President and Chief Executive Officer, the Chief Financial Officer and Treasurer, and the Executive Vice President, Corporate Controller and Information Systems. Based upon that evaluation, they concluded that the Company's disclosure controls and procedures are effective.

Management's Annual Report on Internal Control Over Financial Reporting

The information under the heading "Management's Report on Internal Control Over Financial Reporting" in Part II, Item 8, of this 2022 Annual Report on Form 10-K is incorporated herein by reference.

Reports of Independent Registered Public Accounting Firm

The information under the headings "Reports of Independent Registered Public Accounting Firm" and "Opinion on Internal Control Over Financial Reporting" in Part II, Item 8, of this 2022 Annual Report on Form 10-K is incorporated herein by reference.

Changes in Internal Control Over Financial Reporting

During the fourth quarter, there was no change in the Company's internal control over financial reporting that has materially affected or is reasonably likely to materially affect the Company's internal control over financial reporting.

Item 9B. Other Information

On February 17, 2023, upon recommendation of the Governance Committee, the Board of Directors (the "Board") of our Company approved an amendment and restatement of our Company's Restated Bylaws (the "Bylaws"), effective immediately, to implement proxy access, make changes in connection with the new Securities and Exchange Commission rules regarding universal proxy cards (the "Universal Proxy Rules"), and to make certain other changes.

The amendments include the following, among others: (i) adding provisions to allow a shareholder, or a group of up to 20 shareholders, owning 3% or more of the Company's outstanding common stock continuously for at least three years to nominate and include in the Company's proxy materials director-nominees constituting up to two individuals or 20% of the Board (whichever is greater), provided that the shareholder(s) and the director-nominee(s) satisfy the requirements specified in the Bylaws; (ii) adding a requirement that any director nominee proposed by a shareholder furnish to the Company, if requested, a completed and signed questionnaire required of the Company's directors; (iii) adding a requirement that any shareholder who intends to solicit proxies in support of a director nominee certify to the Company that such shareholder has complied with or will comply with the requirements of the Universal Proxy Rules and, if requested by the Company, will provide reasonable evidence of such compliance no later than five business days prior to the date of the applicable meeting of shareholders; (iv) clarifying that the Company is allowed to consider certain shareholder nominations of director candidates to be null and void where any shareholder fails to comply with the Universal Proxy Rules; (v) adding a provision that any shareholder soliciting proxies from other shareholders must use a proxy card color other than white, which is reserved for exclusive use by the Board; (vi) clarifying that any meeting of shareholders may be adjourned exclusively by the chairperson of the meeting; and (vii) clarifying that each meeting of shareholders will be presided over by a chairperson, who will be the Chair of the Board, the Chief Executive Officer or such other officer of the Company as the Board designates as chairperson of the meeting, and clarifying certain other procedural aspects of the conduct of shareholder meetings. Additional minor amendments and conforming changes were made that do not materially affect the substance of the Bylaws.

The foregoing description of the amendments to the Bylaws does not purport to be complete and is qualified in its entirety by reference to the full text of the Bylaws, a copy of which is filed as Exhibit 3.2 hereto and is incorporated by reference in this Annual Report on Form 10-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information under the heading “Information About Our Executive Officers” in Part I of this 2022 Annual Report on Form 10-K and the information under the heading “Board of Directors” in our Company’s Proxy Statement for its 2023 Annual Meeting of Shareholders to be held on April 28, 2023 (the “Proxy Statement”), is incorporated herein by reference.

Audit Committee Members and Audit Committee Financial Expert

The information under the heading “Committees of the Board of Directors” in our Company’s Proxy Statement is incorporated herein by reference.

Corporate Governance Guidelines, Committee Charters and Code of Ethics

Our Company has adopted Corporate Governance Guidelines and Charters for each of the Audit, Governance, and Management Organization and Compensation Committees of the Board of Directors. We have also issued a Code of Ethics and Business Conduct (“Code of Ethics”) that applies to our principal executive officer, principal financial officer, principal accounting officer, all officers, directors, and employees of Graco Inc. and all of its subsidiaries, representative offices and branches worldwide. The Corporate Governance Guidelines, Committee Charters, and Code of Ethics, with any amendments or waivers thereto, may be accessed free of charge by visiting the Graco website at www.graco.com.

Our Company intends to post on the Graco website any amendment to, or waiver from, a provision of the Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer, controller and other persons performing similar functions within four business days following the date of such amendment or waiver.

Delinquent Section 16(a) Reports

The information under the heading “Delinquent Section 16(a) Reports” in our Company’s Proxy Statement is incorporated herein by reference.

Item 11. Executive Compensation

The information contained under the headings “Director Compensation,” “Executive Compensation” (other than under the subheading "Pay Versus Performance"); “Compensation Committee Interlocks and Insider Participation” and “Report of the Management Organization and Compensation Committee” in the Proxy Statement is incorporated herein by reference.

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

The information contained under the headings “Equity Compensation Plan Information” and “Beneficial Ownership of Shares” in the Proxy Statement is incorporated herein by reference.

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

The information under the headings “Related Person Transaction Approval Policy” and “Director Independence” in the Proxy Statement is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The information under the headings “Independent Registered Public Accounting Firm Fees and Services” and “Pre-Approval Policies” in the Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

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

Exhibit Index

Exhibit Number	Description
3.1	Restated Articles of Incorporation as amended December 8, 2017. (Incorporated by reference to Exhibit 3.1 to the Company's Report on Form 8-K filed December 8, 2017.)
3.2	Restated Bylaws as amended February 17, 2023.
4.1	Description of Our Securities. (Incorporated by reference to Exhibit 4.1 to the Company's 2019 Annual Report on Form 10-K.)
*10.1	Graco Inc. Incentive Bonus Plan. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed September 19, 2019.)
*10.2	Graco Inc. 2010 Stock Incentive Plan. (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed March 11, 2010.)
*10.3	Graco Inc. 2015 Stock Incentive Plan. (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed March 11, 2015.)
*10.4	Graco Inc. 2019 Stock Incentive Plan. (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed March 13, 2019.)
*10.5	Deferred Compensation Plan (2005 Statement) as amended and restated on April 4, 2005. (Incorporated by reference to Exhibit 10.1 of the Company's Report on Form 10-Q for the thirteen weeks ended July 1, 2005.) Second Amendment dated November 1, 2005. (Incorporated by reference to Exhibit 10.8 to the Company's 2005 Annual Report on Form 10-K.) Third Amendment adopted on December 29, 2008. (Incorporated by reference to Exhibit 10.8 to the Company's 2008 Annual Report on Form 10-K.) Second Amendment dated October 25, 2012. (Incorporated by reference to Exhibit 10.9 to the Company's 2012 Annual Report on Form 10-K.)
*10.6	Graco Restoration Plan (2005 Statement). (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended September 29, 2006.) First Amendment adopted December 8, 2006. (Incorporated by reference to Exhibit 10.12 to the Company's 2006 Annual Report on Form 10-K.) Second Amendment adopted August 15, 2007. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended September 28, 2007.) Third Amendment adopted March 27, 2008. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended March 28, 2008.) Fourth Amendment adopted December 29, 2008. (Incorporated by reference to Exhibit 10.11 to the Company's 2008 Annual Report on Form 10-K.) Fifth Amendment adopted September 16, 2010. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended September 24, 2010.) Sixth Amendment adopted February 15, 2018 (Incorporated by reference to Exhibit 10.7 to the Company's 2017 Annual Report on Form 10-K.) Seventh Amendment adopted December 6, 2018. (Incorporated by reference to Exhibit 10.6 to the Company's 2018 Annual Report on Form 10-K.)
*10.7	Graco Inc. Retirement Plan for Non-Employee Directors. (Incorporated by reference to Exhibit 10.7 to the Company's 2018 Annual Report on Form 10-K.) (Initially filed by the Company in paper form as Attachment C to Item 5 to the Company's Report on Form 10-Q for the thirteen weeks ended March 29, 1991.) First Amendment adopted on December 29, 2008. (Incorporated by reference to Exhibit 10.10 to the Company's 2008 Annual Report on Form 10-K.)
*10.8	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to nonemployee directors under the Graco Inc. 2010 Stock Incentive Plan in 2011. (Incorporated by reference to Exhibit 10.16 to the Company's 2010 Annual Report on Form 10-K.) Amended form of agreement for awards made to nonemployee directors commencing in 2012 (and subsequently used for awards made to nonemployee directors under the Graco Inc. 2015 Stock Incentive Plan in 2015). (Incorporated by reference to Exhibit 10.4 of the Company's Report on Form 10-Q for the thirteen weeks ended March 30, 2012.)
*10.9	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to executive officers under the Graco Inc. 2010 Stock Incentive Plan in 2011. (Incorporated by reference to Exhibit 10.4 to the Company's Report on Form 10-Q for the thirteen weeks ended April 1, 2011.) Amended form of agreement for awards made to executive officers commencing in 2012. (Incorporated by reference to Exhibit 10.3 of the Company's Report on Form 10-Q for the thirteen weeks ended March 30, 2012.)

*10.10	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to Chief Executive Officer under the Graco Inc. 2010 Stock Incentive Plan in 2011. (Incorporated by reference to Exhibit 10.3 to the Company's Report on Form 10-Q for the thirteen weeks ended April 1, 2011.) Amended form of agreement for awards made to Chief Executive Officer commencing in 2012. (Incorporated by reference to Exhibit 10.2 of the Company's Report on Form 10-Q for the thirteen weeks ended March 30, 2012.)
*10.11	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to nonemployee directors under the Graco Inc. 2015 Stock Incentive Plan commencing in 2016. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended June 24, 2016.)
*10.12	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to executive officers under the Graco Inc. 2015 Stock Incentive Plan commencing in 2016. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended March 25, 2016.)
*10.13	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to Chief Executive Officer under the Graco Inc. 2015 Stock Incentive Plan commencing in 2016. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended March 25, 2016.)
*10.14	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to nonemployee directors under the Graco Inc. 2019 Stock Incentive Plan commencing in 2019. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended June 28, 2019.)
*10.15	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to executive officers under the Graco Inc. 2019 Stock Incentive Plan commencing in 2020. (Incorporated by reference to Exhibit 10.22 to the Company's 2019 Annual Report on Form 10-K.)
*10.16	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to Chief Executive Officer under the Graco Inc. 2019 Stock Incentive Plan commencing in 2020. (Incorporated by reference to Exhibit 10.21 to the Company's 2019 Annual Report on Form 10-K.)
*10.17	Executive Officer Restricted Stock Unit Agreement. Form of agreement used to award restricted stock units to Dale D. Johnson under the Graco Inc. 2019 Stock Incentive Plan. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed February 26, 2021.)
*10.18	Nonemployee Director Stock and Deferred Stock Program (2019 Restatement). (Incorporated by reference to Exhibit 10.3 to the Company's Report on Form 10-Q for the thirteen weeks ended June 28, 2019.)
*10.19	Key Employee Agreement. Form of agreement used with Chief Executive Officer and other executive officers. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed April 27, 2021.)
*10.20	Executive Group Long-Term Disability Policy as revised in 1995. (Incorporated by reference to Exhibit 10.23 to the Company's 2004 Annual Report on Form 10-K.) Enhanced by Supplemental Income Protection Plan in 2004. (Incorporated by reference to Exhibit 10.28 to the Company's 2007 Annual Report on Form 10-K.)
10.21	Amended and Restated Credit Agreement, dated March 25, 2021, among Graco Inc., the borrowing subsidiaries from time to time party thereto, the banks from time to time party thereto and U.S. Bank National Association, as administrative agent. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed March 26, 2021.)

10.22	Note Agreement, dated March 11, 2011, between Graco Inc. and the Purchasers listed on the Purchaser Schedule attached thereto, which includes as exhibits the form of Senior Notes. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed March 16, 2011.) Amendment No. 1 dated May 23, 2011. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended July 1, 2011.) Amendment and Restatement No. 1 to Note Agreement dated as of March 27, 2012. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 8-K filed April 2, 2012.) Amendment No. 2 dated as of June 26, 2014 to Note Agreement dated as of March 11, 2011. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended June 27, 2014.) Amendment No. 3 dated as of December 15, 2016 to Note Agreement dated as of March 11, 2011. (Incorporated by reference to Exhibit 10.28 to the Company's 2016 Annual Report on Form 10-K.) Amendment No. 4 dated May 23, 2017 to Note Agreement dated as of March 11, 2011. (Incorporated by reference to Exhibit 10.1 to the Company's 10-Q for the thirteen weeks ended June 30, 2017.) Amendment No. 5 dated April 17, 2020 to Note Agreement dated as of March 11, 2011. (Incorporated by reference to Exhibit 10.4 to the Company's 10-Q for the thirteen weeks ended March 27, 2020.)
10.23	Master Note Agreement, dated January 29, 2020, between Graco Inc. and NYL Investors LLC. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed February 3, 2020.) First Amendment to Master Note Agreement, dated December 16, 2022. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 8-K filed December 16, 2022.)
11	Statement of Computation of Earnings per share included in Note I on page 54
21	Subsidiaries of the Company
23	Independent Registered Public Accounting Firm's Consent
24	Power of Attorney
31.1	Certification of President and Chief Executive Officer pursuant to Rule 13a-14(a)
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)
32	Certification of President and Chief Executive Officer and Chief Financial Officer pursuant to Section 1350 of Title 18, U.S.C.
101	Interactive data files pursuant to Rule 405 of Regulation S-T formatted in iXBRL (Inline eXtensible Business Reporting Language).
104	Cover Page Interactive Data File (formatted as iXBRL and contained in Exhibit 101).

* Management Contracts, Compensatory Plans or Arrangements.

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of certain instruments defining the rights of holders of certain long-term debt of the Company and its subsidiaries are not filed as exhibits because the amount of debt authorized under any such instrument does not exceed 10 percent of the total assets of the Company and its subsidiaries. The Company agrees to furnish copies thereof to the Securities and Exchange Commission 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.

Graco Inc.

/s/ Mark W. Sheahan	February 21, 2023
Mark W. Sheahan President and Chief Executive Officer	

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

/s/ Mark W. Sheahan	February 21, 2023
Mark W. Sheahan President and Chief Executive Officer *(Principal Executive Officer)*	
/s/ David M. Lowe	February 21, 2023
David M. Lowe Chief Financial Officer and Treasurer *(Principal Financial Officer)*	
/s/ Kathryn L. Schoenrock	February 21, 2023
Kathryn L. Schoenrock Executive Vice President, Corporate Controller and Information Systems *(Principal Accounting Officer)*	

Lee R. Mitau	Director, Chairman of the Board
Brett C. Carter	Director
Eric P. Etchart	Director
Jody H. Feragen	Director
J. Kevin Gilligan	Director
Martha A. Morfitt	Director
Mark W. Sheahan	Director
R. William Van Sant	Director
Kevin J. Wheeler	Director

Mark W. Sheahan, by signing his name hereto, does hereby sign this document on behalf of himself and each of the above named directors of the Registrant pursuant to powers of attorney duly executed by such persons.

/s/ Mark W. Sheahan	February 21, 2023
Mark W. Sheahan *(For himself and as attorney-in-fact)*	

Exhibit 3.2

RESTATED BYLAWS
GRACO INC.

(Adopted February 17, 2023)

ARTICLE I.
OFFICES, CORPORATE SEAL

Section 1.01. Offices. The principal executive office of the corporation shall be at 88 – 11th Avenue NE, Minneapolis, Minnesota 55413. The corporation may have such other offices, within or without the State of Minnesota, as the directors shall, from time to time, determine.

Section 1.02. Corporate Seal. The corporate seal shall be circular in form and shall have inscribed thereon the name of the corporation and the word "Minnesota" and the words "Corporate Seal".

ARTICLE II.
MEETINGS OF SHAREHOLDERS

Section 2.01. Place of Meetings. Meetings of the shareholders shall be held at the principal executive office of the corporation or at such other place as may be designated by the directors, except that any meeting called by or at the demand of a shareholder shall be held in the county in which the principal executive office of the corporation is located. The Board of Directors may determine that shareholders not physically present in person or by proxy at a shareholder meeting may, by means of remote communication, participate in a shareholder meeting held at a designated place. The Board of Directors also may determine that a meeting of the shareholders shall not be held at a physical place, but instead solely by means of remote communication. Participation by remote communication constitutes presence at the meeting.

Section 2.02. Regular Meetings. A regular meeting of the shareholders shall be held on an annual basis on such date and at such time as the Board of Directors shall by resolution establish. At a regular meeting the shareholders shall elect qualified successors for directors whose terms have expired or are due to expire within six months after the date of the meeting and shall transact such other business as may properly come before them.

Section 2.03. Special Meetings. Special meetings of the shareholders may be held at any time and for any purpose and may be called by the Chief Executive Officer, the Chief Financial Officer, two or more directors or a shareholder or shareholders holding 10% or more of the voting power of all shares entitled to vote, except that a special meeting called by a shareholder or shareholders for the purpose of considering any action to directly or indirectly facilitate or effect a business combination, including any action to change or otherwise affect the composition of the Board of Directors for that purpose, must be called by a shareholder or shareholders holding 25% or more of the voting power of all shares entitled to vote. A shareholder or shareholders holding the requisite percentage of the voting power may demand a special meeting of the shareholders by written notice given to the Chief Executive Officer or Chief Financial Officer of the corporation stating the purposes of the meeting. Within 30 days after receipt of such a demand by one of those officers, the

Board of Directors shall cause a special meeting of shareholders to be called and held on notice not later than 90 days after receipt of the demand, at the expense of the corporation. Special meetings shall be held on the date and at the time and place fixed by the Chief Executive Officer, the Chief Financial Officer or the Board of Directors, except that a special meeting called by or at demand of a shareholder or shareholders shall be held in the county where the principal executive office is located. The business transacted at a special meeting shall be limited to the purposes stated in the notice of the meeting.

Section 2.04. Quorum, Action by Shareholders. The holders of a majority of the shares entitled to vote shall constitute a quorum for the transaction of business at any regular or special meeting. All questions shall be decided by a majority vote of the number of shares entitled to vote and represented at the meeting at the time of the vote unless otherwise required by statute, the Articles of Incorporation, or these Bylaws. If a quorum is present when a duly called or held meeting is convened, the shareholders may continue to transact business until adjournment notwithstanding the withdrawal of enough shareholders to leave less than a quorum.

Section 2.05. Adjourned Meetings. Any meeting of the shareholders may be adjourned from time to time to another date, time or place solely by the chairperson of the meeting. If any meeting of the shareholders is so adjourned, no notice as to such adjourned meeting need be given if the date, time and place at which the meeting will be reconvened are announced at the time of adjournment and the adjourned meeting is held not more than 120 days after the date fixed for the original meeting. At adjourned meetings at which a quorum is present, any business may be transacted that might have been transacted at the meeting as originally noticed.

Section 2.06. Voting. At each meeting of the shareholders every shareholder having the right to vote shall be entitled to vote either in person or by proxy. Each shareholder shall have one vote for each share having voting power registered in such shareholder's name on the books of the corporation. Jointly owned shares may be voted by any joint owner unless the corporation receives written notice from any one of them denying the authority of that person to vote the shares. Any shareholder directly or indirectly soliciting proxies from other shareholders must use a proxy card color other than white, which shall be reserved for the exclusive use by the Board of Directors.

Section 2.07. Closing of Books. The Board of Directors may fix, or authorize an officer to fix, a date not more than 60 days preceding the date of any meeting of shareholders, as the date (the "record date") for the determination of the shareholders entitled to notice of, and to vote at, such meeting. When a record date is so fixed, only shareholders as of that date are entitled to notice of and permitted to vote at that meeting of shareholders.

Section 2.08. Notice of Meetings. Except as otherwise specified in Section 2.05 or required by law, written notice of each meeting of the shareholders, stating the date, time and place and, in the case of a special meeting, the purpose or purposes, shall be given at least 10 days and not more than 60 days prior to the meeting to every holder of shares entitled to vote at such meeting. Notice may be given to a shareholder by means of electronic communication if the requirements of Minnesota Statutes Section 302A.436, Subdivision 5, as amended from time to time, are met. Notice to a shareholder is also effectively given if the notice is addressed to the shareholder or a group of shareholders in a manner permitted by the rules and regulations under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), so long as the corporation has first received the written or implied consent required by those rules and regulations. The business transacted at a special meeting of shareholders is limited to the purposes stated in the notice of the meeting.

Section 2.09. Waiver of Notice. Notice of any regular or special meeting may be waived by any shareholder either before, at or after such meeting orally, in a writing or by authenticated electronic communication. Attendance by a shareholder at any meeting of shareholders is a waiver of notice of such meeting, except where the shareholder objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened or the item may not lawfully be considered at that meeting and the shareholder does not participate in the consideration of the item at that meeting.

Section 2.10. Advance Notice of Shareholder Proposals. As provided in Section 2.03, the business conducted at any special meeting of shareholders of the corporation shall be limited to the purposes stated in the notice of the special meeting pursuant to Section 2.08. At any regular meeting of shareholders of the corporation, only such business (other than the nomination and election of directors, which shall be subject to Sections 3.15 and 3.16) may be conducted as shall be appropriate for consideration at the meeting of shareholders and shall have been brought before the meeting (i) by or at the direction of the Board of Directors, or (ii) by any shareholder of the corporation entitled to vote at the meeting who complies with the notice procedures hereinafter set forth in this section.

a. **Timing of Notice.** For such business to be properly brought before any regular meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the secretary of the corporation. To be timely, a shareholder's notice of any such business to be conducted at an annual shareholders meeting must be delivered to the secretary of the corporation, or mailed and received at the principal executive office of the corporation, not less than 90 days before the first anniversary of the date of the preceding year's annual shareholders meeting of shareholders. If, however, the date of the annual shareholders meeting of shareholders is more than 30 days before or after such anniversary date, notice by a shareholder shall be timely only if so delivered or so mailed and received not less than 90 days before such annual shareholders meeting or, if later, within 10 days after the first public announcement of the date of such annual shareholders meeting. To be timely, a shareholder's notice of any such business to be conducted at a regular meeting other than an annual shareholders meeting must be delivered to the secretary of the corporation, or mailed and received at the principal executive office of the corporation, not less than 90 days before such regular meeting or, if later, within 10 days after the first public announcement of the date of such regular meeting. Except to the extent otherwise required by law, the adjournment of a regular meeting of shareholders shall not commence a new time period for the giving of a shareholder's notice as required above.

b. **Content of Notice.** A shareholder's notice to the corporation shall set forth as to each matter the shareholder proposes to bring before the regular meeting (i) a brief description of the business desired to be brought before the meeting and the reasons for conducting such business at the meeting, (ii) the name and address, as they appear on the corporation's books, of the shareholder proposing such business and of any beneficial owner on whose behalf the proposal is made, (iii) (A) the class or series (if any) and number of shares of the corporation that are beneficially owned by such shareholder or any such beneficial owner, (B) any option, warrant, convertible security, stock appreciation right, swap or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the corporation or with a value derived in whole or in part from the value of any class or series of shares of the corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the corporation or otherwise (a "derivative instrument") owned beneficially by such shareholder or any such beneficial owner and any other opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of the corporation, (C) any proxy, contract, arrangement, understanding or relationship pursuant to which such shareholder or any such beneficial owner has a right to vote any shares of the corporation, (D) any short interest of such shareholder or any such beneficial owner in any security of the corporation, (E) any rights to dividends on the shares of the corporation owned beneficially by such shareholder or any such beneficial owner that are separated or separable from the underlying shares of the corporation, (F) any proportionate interest in shares of the corporation or derivative instruments held, directly or indirectly, by a general or limited partnership in which such shareholder or any such beneficial owner is a general partner or, directly or indirectly, beneficially owns an interest in a general partner, and (G) any performance-related fees (other than an asset-based fee) that such shareholder or any such beneficial owner is entitled to based on any increase or decrease in the value of shares of the corporation or derivative instruments, if any, as of the date of such notice, including without limitation any such interests held by members of such shareholder's or any such beneficial owner's immediate family sharing the same household (which information shall be supplemented by such shareholder not later than 10 days after the record date for the meeting to disclose such ownership as of the record date), (iv) any material interest of the shareholder or such beneficial owner in such business, (v) a representation that the shareholder is a holder of record of shares entitled to vote at the meeting, will continue to be a holder of record of shares entitled to vote at the meeting through the date of the meeting, and intends to appear in person or by proxy at the meeting to make the proposal, and (vi) a representation whether the shareholder or any such beneficial owner intends, or is part of a group that intends, to deliver a proxy statement or form of proxy to holders of at least the percentage of the corporation's outstanding shares required to adopt the proposal or otherwise to solicit proxies from shareholders in support of the proposal.

c. **Consequences of Failure to Give Timely Notice.** Notwithstanding anything in these Bylaws to the contrary, no business (other than the nomination and election of directors) shall be conducted at any regular meeting except in accordance with the procedures set forth in this Section. The chairperson of the meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the procedures described in this Section and, if such chairperson should so determine, such chairperson shall so declare to the meeting, and any such business not properly brought before the meeting shall not be transacted. Nothing in this Section shall be deemed to preclude discussion by any shareholder of any business properly brought before the meeting in accordance with these Bylaws.

d. **Public Announcement.** For purposes of this Section and Sections 3.15 and 3.16, "public announcement" means disclosure (i) when made in a press release reported by the Dow Jones News Service, Associated Press, or comparable national news service, (ii) when filed in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14, or 15(d) of the Exchange Act, or (iii) when mailed as the notice of the meeting pursuant to Section 2.08.

e. **Compliance with Law.** Notwithstanding the foregoing provisions of this Section, a shareholder shall also comply with all applicable requirements of Minnesota law and the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section.

f. **Inapplicable in Certain Circumstances.** Notwithstanding anything in this Section to the contrary, this Section does not apply to any shareholder proposal made pursuant to Rule 14a-8 promulgated under the Exchange Act to be included or described in the corporation's proxy statement or on the proxy card of the Board of Directors for any regular meeting of shareholders. The requirements, procedures and notice deadlines of Rule 14a-8 shall govern any proposal made pursuant thereto.

Section 2.11. Conduct of Meetings. Each meeting of shareholders shall be presided over by a chairperson, who shall be the Chair of the Board, the Chief Executive Officer or such other officer of the corporation as the Board of Directors shall designate as chairperson of the meeting. The Board of Directors shall be entitled to make such rules and regulations for the conduct of meetings of shareholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairperson of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in the meeting to shareholders of record of the corporation, their duly authorized and constituted proxies and such other persons as the chairperson of the meeting shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants, regulation of the opening and closing of the polls for balloting and matters which are to be voted on by ballot, and restricting the use of cell phones, audio or video recording devices and similar devices at the meeting. Unless and to the extent determined by the Board of Directors or the chairperson of the meeting, meetings of shareholders shall not be required to be held in accordance with the rules of parliamentary procedure.

ARTICLE III.
DIRECTORS

Section 3.01. General Powers. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors.

Section 3.02. Number, Qualification and Term of Office. The number of directors shall initially be ten and, thereafter, shall be fixed from time to time by the Board of Directors or by the affirmative vote of the holders of two-thirds of the voting power of the outstanding capital stock of the corporation, voting together as a single class. The directors shall be divided into three classes, as nearly equal in number as reasonably possible, with the term of office of the first class to expire at the 1988 annual meeting of shareholders, the term of office of the second class to expire at the 1989 annual meeting of shareholders and the term of office of the third class to expire at the 1990 annual meeting of shareholders. At each annual meeting of shareholders following such initial classification and election, directors elected to succeed those directors whose terms expire shall be elected for a term of office to expire at the third succeeding annual meeting of shareholders after their election.

Section 3.03. Board Meetings. Meetings of the Board of Directors may be held from time to time at such time and place as may be designated in the notice of such meeting.

Section 3.04. Calling Meetings; Notice. Meetings of the Board of Directors may be called by the Chief Executive Officer by giving at least 24 hours' notice, or by any other director by giving at least five days' notice, of the date, time and place thereof to each director by mail, telephone, electronic communication or in person. If the day or date, time and place of a Board meeting have been announced at a previous meeting of the Board, no notice is required. Notice of an adjourned meeting need not be given other than by announcement at the meeting at which adjournment is taken of the date, time and place at which the meeting will be reconvened.

Section 3.05. Waiver of Notice. Notice of any meeting of the Board of Directors may be waived by any director either before, at, or after such meeting orally, in a writing signed by such director or by authenticated electronic communication. A director, by his or her attendance at any meeting of the Board of Directors, shall be deemed to have waived notice of such meeting, except where the director objects at the beginning of the meeting to the transaction of business because the meeting is not lawfully called or convened and does not participate thereafter in the meeting.

Section 3.06. Quorum. A majority of the directors holding office immediately prior to a meeting of the Board of Directors shall constitute a quorum for the transaction of business at such meeting.

Section 3.07. Absent Directors. A director may give advance written consent or opposition to a proposal to be acted on at a meeting of the Board of Directors. If such director is not present at the meeting, consent or opposition to a proposal does not constitute presence for purposes of determining the existence of a quorum, but consent or opposition shall be counted as a vote in favor of or against the proposal and shall be entered in the minutes or other record of action at the meeting, if the proposal acted on at the meeting is substantially the same or has substantially the same effect as the proposal to which the director has consented or objected.

Section 3.08. Conference Communications. Any or all directors may participate in any meeting or conference of the Board of Directors, or of any duly constituted committee thereof, by any means of communication through which the directors may simultaneously hear each other during such meeting. For the purposes of establishing a quorum and taking any action, such directors participating pursuant to this Section 3.08 shall be deemed present in person at the meeting.

Section 3.09. Vacancies. Subject to the rights of the holders of any series of Preferred Stock then outstanding, newly created directorships resulting from any increase in the authorized number of directors or any vacancies in the Board of Directors resulting from death, resignation, retirement, disqualification, removal from office or other cause may be filled by a majority vote of the directors then in office though less than a quorum, and directors so chosen shall hold office for a term expiring at the next annual meeting of shareholders. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 3.10. Removal. Any directors, or the entire Board of Directors, may be removed from office at any time, but only for cause and only by the affirmative vote of the holders of the proportion or number of the voting power of the shares of the classes or series the director represents sufficient to elect them.

Section 3.11. Committees. A resolution approved by the affirmative vote of a majority of the Board of Directors may establish committees having the authority of the Board in the management of the business of the corporation to the extent provided in the resolution. A committee shall consist of one or more persons, who need not be directors, appointed by affirmative vote of a majority of the directors present. Committees are subject to the direction and control of, and vacancies in the membership thereof shall be filled by, the Board of Directors, except as provided by Section 3.12. A majority of the members of the committee holding office immediately prior to a meeting of the committee shall constitute a quorum for the transaction of business, unless a larger or smaller proportion or number is provided in the resolution establishing the committee.

Section 3.12. Committee of Disinterested Persons. Pursuant to the procedure set forth in Section 3.11, the Board may establish a committee composed of two or more disinterested directors or other disinterested persons to determine whether it is in the best interests of the corporation to pursue a particular legal right or remedy of the corporation and whether to cause the dismissal or discontinuance of a particular proceeding that seeks to assert a right or remedy on behalf of the corporation. The committee, once established, is not subject to the direction or control of, or termination by, the Board. A vacancy on the committee may be filled by a majority of the remaining committee members. The good faith determinations of the committee are binding upon the corporation and its directors, officers and shareholders. The committee terminates when it issues a written report of its determination to the Board.

Section 3.13. Written Action. Any action which might be taken at a meeting of the Board of Directors, or any duly constituted committee thereof, may be taken without a meeting if done in writing and signed, or consented to by authenticated electronic communication, by all of the directors or committee members. Any action, other than an action requiring shareholder approval, if the Articles of Incorporation so provide, may be taken by written action signed, or consented to by authenticated electronic communication, by the number of directors or committee members that would be required to take the same action at a meeting of the Board or committee at which all directors or committee members were present.

Section 3.14. Compensation. The Board may fix the compensation, if any, of directors.

Section 3.15. Nomination of Director Candidates. Only persons who are nominated in accordance with the procedures set forth in this Section 3.15 or Section 3.16 shall be eligible for election as directors. Nominations of persons for election to the Board of Directors of the corporation may be made at a meeting of shareholders (i) by or at the direction of the Board of Directors, or (ii) by any shareholder of the corporation entitled to vote for the election of directors at the meeting who complies with the notice procedures hereinafter set forth in this Section 3.15 or Section 3.16.

a. **Timing of Notice.** Nominations by shareholders shall be made pursuant to timely notice in writing to the secretary of the corporation. To be timely, a shareholder's notice of nominations to be made at an annual shareholders meeting of shareholders must be delivered to the secretary of the corporation, or mailed and received at the principal executive office of the corporation, not less than 90 days before the first anniversary date of the preceding year's annual shareholders meeting of shareholders. If, however, the date of the annual shareholders meeting of shareholders is more than 30 days before or after such anniversary date, notice by a shareholder shall be timely only if so delivered or so mailed and received not less than 90 days before such annual shareholders meeting or, if later, within 10 days after the first public announcement of the date of such annual shareholders meeting. If a special meeting of shareholders of the corporation is called in accordance with Section 2.03 for the purpose of electing one or more directors to the Board of Directors or if a regular meeting other than an annual shareholders meeting is held, for a shareholder's notice of nominations to be timely it must be delivered to the secretary of the corporation, or mailed and received at the principal executive office of the corporation, not less than 90 days before such special meeting or such regular meeting or, if later, within 10 days after the first public announcement of the date of such special meeting or such regular meeting. Except to the extent otherwise required by law, the adjournment of a regular or special meeting of shareholders shall not commence a new time period for the giving of a shareholder's notice as described above.

b. **Content of Notice.** A shareholder's notice to the corporation of nominations for a regular or special meeting of shareholders shall set forth (x) as to each person whom the shareholder proposes to nominate for election or re-election as a director: (i) such person's name, age, business address and residence address and principal occupation or employment, (ii) all other information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or that is otherwise required, pursuant to Regulation 14A under the Exchange Act, and (iii) such person's written consent to being named in any proxy materials as a nominee and to serving as a director if elected; and (y) as to the shareholder giving the notice: (i) the name and address, as they appear on the corporation's books, of such shareholder and of any beneficial owner on whose behalf the nomination is made, (ii) the information called for by Section 2.10(b)(iii) with respect to such shareholder and any such beneficial owner, and (iii) a representation that the shareholder is a holder of record of shares of the corporation entitled to vote for the election of directors, will continue to be a holder of record of shares entitled to vote at the meeting through the date of the meeting, and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice. The corporation also may require any proposed nominee to furnish a completed and signed questionnaire required of the corporation's directors (the form of which will be provided by the secretary of the corporation upon written request). At the request of the Board of Directors, any person nominated by the Board of Directors for election as a director shall furnish to the secretary of the corporation the information required to be set forth in a shareholder's notice of nomination that pertains to a nominee. A shareholder who intends to solicit proxies in support of director nominees other than the corporation's director nominees and who has delivered a notice of nomination pursuant to this Section 3.15 shall promptly certify to the corporation, and notify the corporation in writing, that it has complied with or will comply with the requirements of Rule 14a-19 under the Exchange Act, and upon request of the corporation, shall, not later than five business days prior to the date of the applicable meeting of shareholders, deliver to the corporation reasonable evidence of such compliance.

c. **Consequences of Failure to Give Timely Notice.** Notwithstanding anything in these Bylaws to the contrary, no person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this Section. The chairperson of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the procedures prescribed in this Section and, if such chairperson should so determine, such chairperson shall so declare to the meeting, and the defective nomination shall be disregarded.

d. **Compliance with Law.** Notwithstanding the foregoing provisions of this Section, a shareholder shall also comply with all applicable requirements of Minnesota law and the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Section. Unless otherwise required by law, if any shareholder (i) provides notice pursuant to Rule 14a-19 under the Exchange Act and (ii) subsequently (A) notifies the corporation that such shareholder no longer intends to solicit proxies in support of director nominees other than the corporation's director nominees in accordance with Rule 14a-19, (B) fails to comply with the requirements of Rule 14a-19, or (C) fails to provide reasonable evidence sufficient to satisfy the corporation that such requirements have been met, then such shareholder's nominations shall be deemed null and void and the corporation shall disregard any proxies or votes solicited for any nominee proposed by such shareholder.

Section 3.16. Proxy Access for Nomination of Director Candidates.

a. **Proxy Access Eligibility.** Whenever the Board of Directors solicits proxies with respect to the election of directors at an annual meeting of shareholders, subject to the provisions of this Section 3.16, the corporation shall include in its proxy statement for such annual meeting, in addition to any persons nominated for election by the Board of Directors or any committee thereof, the name, together with the Required Information (as defined below), of any person nominated for election (the "Shareholder Nominee") to the Board of Directors by a shareholder or group of no more than 20 shareholders that satisfies the requirements of this Section 3.16 (the "Eligible Shareholder") and that expressly elects at the time of providing the notice required by Section 3.16(e) below (the "Notice of Proxy Access Nomination") to have such nominee included in the corporation's proxy materials pursuant to this Section 3.16. For purposes of this Section 3.16, the "Required Information" that the corporation will include in its proxy statement is (i) the information provided to the secretary of the corporation concerning the Shareholder Nominee and the Eligible Shareholder that is required to be disclosed in the corporation's proxy statement pursuant to Section 14 of the Exchange Act, and the rules and regulations promulgated thereunder, and (ii) if the Eligible Shareholder so elects, a Supporting Statement (as defined below). The Required Information must be provided with the Notice of Proxy Access Nomination.

b. **Maximum Number of Shareholder Nominees.** The maximum number of Shareholder Nominees nominated by all Eligible Shareholders that will be included in the corporation's proxy materials with respect to an annual meeting of shareholders shall not exceed the greater of (i) two or (ii) 20% of the number of directors in office as of the last day on which a Notice of Proxy Access Nomination may be delivered pursuant to and in accordance with this Section 3.16 (the "Final Proxy Access Nomination Date") or, if such amount is not a whole number, the closest whole number below 20%. In the event that one or more vacancies for any reason occurs on the Board of Directors after the Final Proxy Access Nomination Date but before the date of the annual meeting and the Board of Directors resolves to reduce the size of the Board of Directors in connection therewith, the maximum number of Shareholder Nominees included in the corporation's proxy materials shall be calculated based on the number of directors in office as so reduced. For purposes of determining when the maximum number of Shareholder Nominees provided for in this Section 3.16 has been reached, each of the following persons shall be counted as one of the Shareholder Nominees:

(i) any individual nominated by an Eligible Shareholder for inclusion in the corporation's proxy materials pursuant to this Section 3.16 whose nomination is subsequently withdrawn,

(ii) any individual nominated by an Eligible Shareholder for inclusion in the corporation's proxy materials pursuant to this Section 3.16 whom the Board of Directors decides to nominate for election to the Board of Directors, and

(iii) any director in office as of the Final Proxy Access Nomination Date who was included in the corporation's proxy materials as a Shareholder Nominee for either of the two preceding annual meetings of Shareholders (including any individual counted as a Shareholder Nominee pursuant to the immediately preceding clause (ii)) and whom the Board of Directors decides to nominate for re-election to the Board of Directors.

Any Eligible Shareholder submitting more than one Shareholder Nominee for inclusion in the corporation's proxy materials pursuant to this Section 3.16 shall rank such Shareholder Nominees based on the order in which the Eligible Shareholder desires such Shareholder Nominees to be selected for inclusion in the corporation's proxy materials. In the event that the number of Shareholder Nominees submitted by Eligible Shareholders pursuant to this Section 3.16 exceeds the maximum number of Shareholder Nominees provided for in this Section 3.16, the highest ranking Shareholder Nominee who meets the requirements of this Section 3.16 from each Eligible Shareholder will be selected for inclusion in the corporation's proxy materials until the maximum number is reached, going in order of the amount (largest to smallest) of shares of common stock of the corporation each Eligible Shareholder disclosed as owned in its Notice of Proxy Access Nomination. If the maximum number is not reached after the highest ranking Shareholder Nominee who meets the requirements of this Section 3.16 from each Eligible Shareholder has been selected, then the next highest ranking Shareholder Nominee who meets the requirements of this Section 3.16 from each Eligible Shareholder will be selected for inclusion in the corporation's proxy materials, and this process will continue as many times as necessary, following the same order each time, until the maximum number is reached.

c. **Required Shares and Minimum Holding Period.** In order to make a nomination pursuant to this Section 3.16, an Eligible Shareholder must have owned (as defined below) at least 3% of the corporation's outstanding common stock (the "Required Shares") continuously for at least three years (the "Minimum Holding Period") as of both the date the Notice of Proxy Access Nomination is delivered to the secretary of the corporation in accordance with this Section 3.16 and the record date for determining the shareholders entitled to receive notice of the annual meeting, and must continue to own the Required Shares through the date of the annual meeting. For purposes of this Section 3.16, an Eligible Shareholder shall be deemed to "own" only those outstanding shares of common stock of the corporation as to which the shareholder possesses both:

(i) the full voting and investment rights pertaining to the shares, and

(ii) the full economic interest in (including the opportunity for profit from and risk of loss on) such shares,

provided that the number of shares calculated in accordance with the immediately preceding clauses (i) and (ii) shall not include any shares:

(A) sold by such shareholder or any of its affiliates in any transaction that has not been settled or closed,

(B) borrowed by such shareholder or any of its affiliates for any purposes or purchased by such shareholder or any of its affiliates pursuant to an agreement to resell, or

(C) subject to any option, warrant, forward contract, swap, contract of sale, other derivative or similar instrument or agreement entered into by such shareholder or any of its affiliates, whether any such instrument or agreement is to be settled with shares or with cash based on the notional amount or value of shares of outstanding common stock of the corporation, if, in any such case, such instrument or agreement has, or is intended to have, the purpose or effect of:

(1) reducing in any manner, to any extent or at any time in the future, such shareholder's or its affiliates' full right to vote or direct the voting of any such shares, and/or

(2) hedging, offsetting or altering to any degree any gain or loss realized or realizable from maintaining the full economic ownership of such shares by such shareholder or affiliate.

A shareholder shall "own" shares held in the name of a nominee or other intermediary so long as the shareholder retains the right to instruct how the shares are voted with respect to the election of directors and possesses the full economic interest in the shares. A person's ownership of shares shall be deemed to continue during any period in which (i) the shareholder has loaned such shares, provided that the person has the power to recall such loaned shared on three business days' notice or (ii) the shareholder has delegated any voting power by means of a proxy, power of attorney or other instrument or arrangement which is revocable at any time by the shareholder. The terms "owned," "owning" and other variations of the word "own" shall have correlative meanings. Whether outstanding shares of the common stock of the corporation are "owned" for these purposes shall be determined by the Board of Directors or any committee thereof. For purposes of this Section 3.16, the term "affiliate" or "affiliates" shall have the meaning ascribed thereto under the General Rules and Regulations under the Exchange Act.

d. **Requirements for a Group.**

(i) Whenever the Eligible Shareholder consists of a group of shareholders:

(A) a group of funds under common management and control shall be treated as one shareholder,

(B) each provision in this Section 3.16 that requires the Eligible Shareholder to provide any written statements, representations, undertakings, agreements or other instruments or to meet any other conditions shall be deemed to require each shareholder that is a member of such group to provide such statements, representations, undertakings, agreements or other instruments and to meet such other conditions (except that the members of such group may aggregate their shareholdings in order to meet the 3% ownership requirement of the "Required Shares" definition),

(C) a breach of any obligation, agreement or representation under this Section 3.16 by any member of such group shall be deemed a breach by the Eligible Shareholder, and

(D) the Notice of Proxy Access Nomination must designate one member of the group for purposes of receiving communications, notices and inquiries from the corporation and otherwise authorize such member to act on behalf of all members of the group with respect to all matters relating to the nomination under this Section 3.16 (including withdrawal of the nomination).

(ii) Whenever the Eligible Shareholder consists of a group of shareholders aggregating their shareholdings in order to meet the 3% ownership requirement of the "Required Shares" definition in Section 3.16(c) hereof:

(A) such ownership shall be determined by aggregating the lowest number of shares continuously owned by each such shareholder during the Minimum Holding Period, and

(B) the Notice of Proxy Access Nomination must indicate, for each such shareholder, such lowest number of shares continuously owned by such shareholder during the Minimum Holding Period.

(iii) Any group of funds whose shares are aggregated for purposes of constituting an Eligible Shareholder must, within five business days after the date of the Notice of Proxy Access Nomination, provide documentation reasonably satisfactory to the corporation that demonstrates that the funds are under common management and investment control. No person may be a member of more than one group of shareholders constituting an Eligible Shareholder with respect to any annual meeting. For the avoidance of doubt, a shareholder may withdraw from a group of shareholders constituting an Eligible Shareholder at any time prior to the annual meeting and if, as a result of such withdrawal, the Eligible Shareholder no longer owns the Required Shares, the nomination shall be disregarded as provided in Section 3.16(j)(ix).

e. **Deadline for Notice of Proxy Access Nomination.** Nominations by shareholders pursuant to this Section 3.16, must be made pursuant to timely notice to the secretary of the corporation in accordance with this Section 3.16. To be timely, a Notice of Proxy Access Nomination must be received by the secretary not less than 120 days and not more than 150 days prior to the first anniversary of the date that the corporation distributed its proxy statement to shareholders for the preceding year's annual meeting. If, however, the date of the annual meeting is more than 30 days before or 60 days after the first anniversary date of the preceding year's annual meeting, the Notice of Proxy Access Nomination shall be timely only if received not less than 90 days and not more than 120 days prior to the annual meeting, or if later, within 10 days after the first public announcement of the date of the annual meeting. In no event shall the adjournment of an annual meeting, or the public announcement of such an adjournment, commence a new time period (or extend any time period) for the giving of a Notice of Proxy Access Nomination pursuant to this Section 3.16.

f. **Requirements for Notice of Proxy Access Nomination.** To be in proper form for purposes of this Section 3.16, the Notice of Proxy Access Nomination must include or be accompanied by the following:

(i) the information and representations that would be required to be set forth in a shareholder's notice of a nomination pursuant to Section 3.15(b) (including the written consent of each Shareholder Nominee to be named in the proxy materials as a nominee and to serve as a director if elected),

(ii) one or more written statements from the record holder of the Required Shares (and from each intermediary through which the Required Shares are or have been held during the Minimum Holding Period) verifying that, as of a date within seven calendar days prior to the date the Notice of Proxy Access Nomination is delivered to or mailed and received by the secretary of the corporation, the Eligible Shareholder owns, and has owned continuously for the Minimum Holding Period, the Required Shares, and the Eligible Shareholder's agreement to provide one or more written statements from the record holder and such intermediaries verifying the Eligible Shareholder's continuous ownership of the Required Shares through the record date for determining the shareholders entitled to receive notice of the annual meeting, which statements must be provided within five business days after the record date,

(iii) a copy of the Schedule 14N that has been filed with the Securities and Exchange Commission as required by Rule 14a-18 under the Exchange Act,

(iv) a representation that the Eligible Shareholder:

(A) will continue to hold the Required Shares through the date of the annual meeting,

(B) acquired the Required Shares in the ordinary course of business and not with the intent to change or influence control at the corporation, and does not presently have such intent,

(C) has not nominated and will not nominate for election to the Board of Directors at the annual meeting any person other than the Shareholder Nominee(s) it is nominating pursuant to this Section 3.16,

(D) has not engaged and will not engage in, and has not and will not be a "participant" in another person's, "solicitation" within the meaning of Rule 14a-1(l) under the Exchange Act in support of the election of any individual as a director at the annual meeting other than its Shareholder Nominee(s) or a nominee of the Board of Directors,

(E) has not distributed and will not distribute to any shareholder of the corporation any form of proxy for the annual meeting other than the form distributed by the corporation,

(F) has complied and will comply with all laws and regulations applicable to solicitations and the use, if any, of soliciting material in connection with the annual meeting,

(G) will file with the Securities and Exchange Commission any solicitation or other communication with the corporation's shareholders relating to the meeting at which the Shareholder Nominee will be nominated, regardless of whether any such filing is required under Regulation 14A of the Exchange Act or whether any exemption from filing is available for such solicitation or other communication under Regulation 14A of the Exchange Act, and

(H) has provided and will provide facts, statements and other information in all communications with the corporation and its shareholders that are or will be true and correct in all material respects and do not and will not omit to state a material fact necessary in order to make such information, in light of the circumstances under which it was or will be made or provided, not misleading,

(v) an undertaking that the Eligible Shareholder agrees to:

(A) assume all liability stemming from any legal or regulatory violation arising out of communications with the shareholders of the corporation by the Eligible Shareholder, its affiliates and associates or their respective agents and representatives, either before or after providing a Notice of Proxy Access Nomination pursuant to this Section 3.16, or out of the facts, statements or other information that the Eligible Shareholder or its Shareholder Nominee(s) provided to the corporation in connection with the inclusion of such Shareholder Nominee(s) in the corporation's proxy materials, and

(B) indemnify and hold harmless the corporation and each of its directors, officers and employees individually against any liability, loss or damages in connection with any threatened or pending action, suit or proceeding, whether legal, administrative or investigative, against the corporation or any of its directors, officers or employees arising out of any nomination submitted by the Eligible Shareholder pursuant to this Section 3.16, and

(vi) a written representation and agreement from each Shareholder Nominee that such Shareholder Nominee:

(A) is not and will not become a party to any agreement, arrangement or understanding with, and has not given any commitment or assurance to, any person or entity as to how such Shareholder Nominee, if elected as a director of the corporation, will act or vote on any issue or question that has not been disclosed to the corporation,

(B) is not and will not become a party to any agreement, arrangement or understanding with any person or entity other than the corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a Shareholder Nominee that has not been disclosed to the corporation, and is not and will not become a party to any agreement, arrangement or understanding with any person other than the corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director,

(C) has read and will comply with the corporation's code of ethics, corporate governance guidelines, stock ownership guidelines, securities trading policy, information security policy and any other policies or guidelines of the corporation applicable to directors, and

(D) will make such other acknowledgments, enter into such agreements and provide such information as the Board of Directors requires of all directors, including promptly submitting all completed and signed questionnaires required of the corporation's directors.

g. **Additional Information that May be Required.** In addition to the information required pursuant to Section 3.16(f) or any other provision of these Bylaws, the corporation also may require each Shareholder Nominee to furnish any other information:

(i) that may reasonably be requested by the corporation to determine whether the Shareholder Nominee would be independent under the rules and listing standards of the principal United States securities exchanges upon which the common stock of the corporation is listed or traded, any applicable rules of the Securities and Exchange Commission or any publicly disclosed standards used by the Board of Directors in determining and disclosing the independence of the corporation's directors (collectively, the "Independence Standards"),

(ii) that could be material to a reasonable shareholder's understanding of the independence, or lack thereof, of such Shareholder Nominee, or

(iii) that may reasonably be required to determine the eligibility of such Shareholder Nominee to serve as a director of the corporation.

h. **Supporting Statement.** The Eligible Shareholder may, at its option, provide to the secretary of the corporation, at the time the Notice of Proxy Access Nomination is provided, a written statement, not to exceed 500 words, in support of the Shareholder Nominee(s)' candidacy (a "Supporting Statement"). Only one Supporting Statement may be submitted by an Eligible Shareholder (including any group of shareholders together constituting an Eligible Shareholder) in support of its Shareholder Nominee(s). Notwithstanding anything to the contrary contained in this Section 3.16, the corporation may omit from its proxy materials any information or Supporting Statement (or portion thereof) that it believes would violate any applicable law or regulation.

i. **Eligible Shareholder and Shareholder Nominee Duty to Update.** In the event that any information or communications provided by an Eligible Shareholder or a Shareholder Nominee to the corporation or its shareholders ceases to be true and correct in all material respects or omits a material fact necessary to make such information, in light of the circumstances under which it was made or provided, not misleading, such Eligible Shareholder or Shareholder Nominee, as the case may be, shall promptly notify the secretary of the corporation of any defect in such previously provided information and of the information that is required to correct any such defect. In addition, any person providing any information pursuant to this Section 3.16 shall further update and supplement such information, if necessary, so that all such information shall be true and correct as of the record date for determining the shareholders entitled to receive notice of the annual meeting and as of the date that is 10 business days prior to such annual meeting or any adjournment or postponement thereof, and such update and supplement (or a written certification that no such updates or supplements are necessary and that the information previously provided remains true and correct as of the applicable date) shall be delivered to or be mailed and received by the secretary at the principal executive offices of the corporation not later than five business days after the record date for determining the shareholders entitled to receive notice of such annual meeting (in the case of the update and supplement required to be made as of the record date), and not later than seven business days prior to the date of the annual meeting or any adjournment or postponement thereof (in the case of the update and supplement required to be made as of 10 business days prior to the meeting).

j. **Other Reasons to Exclude Shareholder Nominee.** Notwithstanding anything to the contrary contained in this Section 3.16, the corporation shall not be required to include, pursuant to this Section 3.16, a Shareholder Nominee in its proxy materials:

(i) for any meeting of shareholders for which the secretary of the corporation receives notice that the Eligible Shareholder or any other shareholder intends to nominate one or more persons for election to the Board of Directors pursuant to the advance notice requirements for shareholder nominees set forth in Section 3.15,

(ii) if such Shareholder Nominee would not be an independent director under the Independence Standards, as determined by the Board of Directors or any committee thereof,

(iii) if such Shareholder Nominee's election as a member of the Board of Directors would cause the corporation to be in violation of these Bylaws, the Articles of Incorporation, the rules and listing standards of the principal United States securities exchanges upon which the common stock of the corporation is listed or traded, or any applicable state or federal law, rule or regulation,

(iv) if such Shareholder Nominee is or has been, within the past three years, an officer or director of a competitor, as defined in Section 8 of the Clayton Antitrust Act of 1914,

(v) who is a named subject of a pending criminal proceeding (excluding traffic violations and other minor offenses) or has been convicted in such a criminal proceeding within the past 10 years,

(vi) if such Shareholder Nominee is subject to any order of the type specified in Rule 506(d) of Regulation D promulgated under the Securities Act of 1933, as amended,

(vii) if such Shareholder Nominee or the Eligible Shareholder who nominated such Shareholder Nominee provides any facts, statements or other information to the corporation or its shareholders required or requested pursuant to this Section 3.16 that is not true and correct in all material respects or that omits a material fact necessary to make such information, in light of the circumstances in which it is made or provided, not misleading,

(viii) if such Shareholder Nominee or the Eligible Shareholder who nominated such Shareholder Nominee otherwise contravenes any of the agreements or representations made by such Shareholder Nominee or Eligible Shareholder or fails to comply with its obligations pursuant to this Section 3.16, or

(ix) If either:

(A) a Shareholder Nominee and/or the applicable Eligible Shareholder breaches any of its or their obligations, agreements or representations under this Section 3.16, or

(B) the Shareholder Nominee otherwise becomes ineligible for inclusion in the corporation's proxy materials pursuant to this Section 3.16 or dies, becomes disabled or is otherwise disqualified from being nominated for election or serving as a director of the corporation,

in each case under this Section 3.16(j)(ix) as determined by the Board of Directors, any committee thereof or the chairperson of the annual meeting, then:

(1) the corporation may omit or, to the extent feasible, remove the information concerning such Shareholder Nominee and the related Supporting Statement from its proxy materials and/or otherwise communicate to its shareholders that such Shareholder Nominee will not be eligible for election at the annual meeting,

(2) the corporation shall not be required to include in its proxy materials for that annual meeting any successor or replacement nominee proposed by the applicable

Eligible Shareholder or any other Eligible Shareholder, and

(3) the Board of Directors or the chairperson of the annual meeting shall declare such nomination to be invalid, such nomination shall be disregarded notwithstanding that proxies in respect of such vote may have been received by the corporation and the named proxies will not vote any proxies received from shareholders with respect to such Shareholder Nominee.

In addition, if the Eligible Shareholder (or a representative thereof) does not appear at the annual meeting to present any nomination pursuant to this Section 3.16, such nomination shall be disregarded as provided in the immediately preceding clause (3).

k. **Resubmission of Shareholder Nominee.** Any Shareholder Nominee who is included in the corporation's proxy materials for a particular annual meeting of shareholders but either (i) withdraws from or becomes ineligible or unavailable for election at the annual meeting, or (ii) does not receive at least 25% of the votes cast in favor of such Shareholder Nominee's election, will be ineligible to be a Shareholder Nominee pursuant to this Section 3.16 for the next two annual meetings of Shareholders.

l. **Exclusivity.** This Section 3.16 provides the exclusive method for a shareholder to include nominees for election to the Board of Directors in the corporation's proxy materials (including, without limitation, any proxy card or written ballot), other than with respect to Rule 14a-19 to the extent applicable with respect to form of proxies.

Section 3.17. Chair of the Board. The Board of Directors may elect or appoint from its members a Chair of the Board who shall preside at all meetings of the directors and shall have such other duties as may be prescribed, from time to time, by the Board of Directors.

ARTICLE IV.
OFFICERS

Section 4.01. Number and Designation. The corporation shall have one or more natural persons exercising the functions of the offices of Chief Executive Officer and Chief Financial Officer. The Board of Directors may elect or appoint such other officers or agents as it deems necessary for the operation and management of the corporation, with such powers, rights, duties and responsibilities as may be determined by the Board, including, without limitation, a President, one or more Vice Presidents, a Secretary, a Treasurer, and such assistant officers or other officers as may from time to time, be elected or appointed by the Board. Each such officer shall have the powers, rights, duties and responsibilities set forth in these Bylaws unless otherwise determined by the Board. The Chief Executive Officer may also appoint, and may prescribe the powers, rights, duties and responsibilities of, such other officers, other than the Chief Financial Officer or any other executive officer, as the

Chief Executive Officer deems necessary for the operation and management of the corporation. Any number of offices may be held by the same person.

Section 4.02. Chief Executive Officer. Unless provided otherwise by a resolution adopted by the Board of Directors, the Chief Executive Officer (a) shall have general active management of the business of the corporation; (b), shall, when present, preside at all meetings of the shareholders; (c) shall see that all orders and resolutions of the Board are carried into effect; (d) shall sign and deliver in the name of the corporation any deeds, mortgages, bonds, contracts or other instruments pertaining to the business of the corporation, except in cases in which the authority to sign and deliver is required by law to be exercised by another person or is expressly delegated by these Bylaws or the Board to some other officer or agent of the corporation; (e) may maintain records of and certify proceedings of the Board and shareholders; and (f) shall perform such other duties as may from time to time be assigned to him or her by the Board.

Section 4.03. Chief Operating Officer. The Chief Operating Officer (if one is elected by the Board) shall be either the President or a Vice President. He or she shall be responsible for the management of all of the operations of the corporation's business and shall have such other authority and duties as the Board of Directors or the Chief Executive Officer from time to time may prescribe. He or she shall report to the Chief Executive Officer and be responsible to him or her. He or she may also execute and deliver in the name of the corporation any instruments or documents pertaining to the business of the corporation which could be executed by the Chief Executive Officer.

Section 4.04. Chief Financial Officer. Unless provided otherwise by a resolution adopted by the Board of Directors, the Chief Financial Officer (a) shall keep accurate financial records for the corporation; (b) shall deposit all monies, drafts and checks in the name of and to the credit of the corporation in such banks and depositories as the Board of Directors shall designate from time to time; (c) shall endorse for deposit all notes, checks and drafts received by the corporation as ordered by the Board, making proper vouchers therefor; (d) shall disburse corporate funds and issue checks and drafts in the name of the corporation, as ordered by the Board; (e) shall render to the Chief Executive Officer and the Board of Directors, whenever requested, an account of all of his or her transactions as Chief Financial Officer and of the financial condition of the corporation; and (f) shall perform such other duties as may be prescribed by the Board of Directors or the Chief Executive Officer from time to time.

Section 4.05. President. Unless otherwise determined by the Board, the President shall be the Chief Executive Officer of the corporation and shall supervise and control the business affairs of the corporation. If an officer other than the President is designated Chief Executive Officer, the President shall perform such duties as may from time to time be assigned to him or her by the Board or the Chief Executive Officer.

Section 4.06. Vice President. The Board of Directors or the Chief Executive Officer may designate one or more Vice Presidents, who shall have such designations and powers and shall perform such duties as prescribed by the Board of Directors or by the Chief Executive Officer. Notwithstanding anything to the contrary in this Section 4.06, only the Board of Directors shall have the authority to elect, appoint, and prescribe the duties of executive officers of the corporation.

Section 4.07. Secretary. The Secretary shall be secretary of and shall attend all meetings of the shareholders and Board of Directors and shall record all proceedings of such meetings in the minute book of the corporation. Except as otherwise required or permitted by statute or by these Bylaws, the Secretary shall give notice of meetings of shareholders and directors. The Secretary shall perform such other duties as may, from time to time, be prescribed by the Board of Directors or by the Chief Executive Officer.

Section 4.08. Treasurer. Unless otherwise determined by the Board, the Treasurer shall be the Chief Financial Officer of the corporation. If an officer other than the Treasurer is designated Chief Financial Officer, the Treasurer shall perform such duties as may from time to time be assigned to him or her by the Board, the Chief Executive Officer or the Chief Financial Officer.

Section 4.9. Authority and Duties. In addition to the foregoing authority and duties, all officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be determined from time to time by the Board of Directors. Unless prohibited by a resolution of the Board of Directors, an officer elected or appointed by the Board may, without specific approval of the Board, delegate some or all of the duties and powers of an office to other persons.

Section 4.10. Removal and Vacancies. Any officer may be removed from his or her office by the Board of Directors at any time, with or without cause. An officer, other than the Chief Financial Officer or any other executive officer, also may be removed at any time, with or without cause, by the Chief Executive Officer. Any such removal, however, shall be without prejudice to the contract rights of the person so removed. If there be a vacancy among the officers of the corporation by reason of death, resignation or otherwise, such vacancy shall be filled for the unexpired term by the Board of Directors or by the Chief Executive Officer in accordance with these Bylaws.

Section 4.11. Compensation. The officers of this corporation shall receive such compensation for their services as may be determined by or in accordance with resolutions of the Board of Directors.

ARTICLE V.
SHARES AND THEIR TRANSFER

Section 5.01. Certificated and Uncertificated Shares. Shares of the corporation's stock may be certificated or uncertificated, as provided under Minnesota law. All certificates of stock of the corporation shall be numbered and shall be entered in the books of the corporation as they are issued. They shall exhibit the holder's name and number of shares and shall be signed, in the name of the corporation, by the Chief Executive Officer, the President or any Vice President and by the Secretary or an Assistant Secretary or by such officers as the Board of Directors may designate. Any or all of the signatures on the certificate may be a facsimile.

Section 5.02. Transfer of Stock. Transfers of stock shall be made on the books of the corporation only by the record holder of such stock, or the record holder's legal representative, or the record holder's duly authorized attorney-in-fact, and in the case of stock represented by a certificate, upon surrender of the certificate. The corporation may treat as the absolute owner of shares of the corporation, the person or persons in whose name the shares are recorded on the books of the corporation. The Board of Directors may appoint one or more transfer agents and registrars to maintain the share records of the corporation and to effect share transfers on its behalf.

Section 5.03. Loss of Certificates. Any shareholder claiming a certificate for shares to be lost, stolen or destroyed shall make an affidavit of that fact in such form as the Board of Directors shall require and shall, if the Board of Directors so requires, give the corporation a bond of indemnity in form, in an amount, and with one or more sureties satisfactory to the Board of Directors, to indemnify the corporation against any claim which may be made against it on account of the reissue of such certificate, whereupon a new certificate may be issued in the same tenor and for the same number of shares as the one alleged to have been lost, stolen or destroyed.

ARTICLE VI.
DIVIDENDS, RECORD DATE

Section 6.01. Dividends. The Board of Directors shall have the authority to declare dividends and other distributions upon shares to the extent permitted by law.

Section 6.02. Record Date. The Board of Directors may fix a date not exceeding 60 days preceding the date fixed for the payment of any dividend as the record date for the determination of the shareholders entitled to receive payment of the dividend and, in such case, only shareholders of record on the date so fixed shall be entitled to receive payment of such dividend.

ARTICLE VII.
SECURITIES OF OTHER CORPORATIONS

Section 7.01. Voting Securities Held by the Corporation. The Chief Executive Officer shall have full power and authority on behalf of the corporation (a) to attend any meeting of security holders of other corporations in which the corporation may hold securities and to vote such securities on behalf of this corporation; (b) to execute any proxy for such meeting on behalf of the corporation; or (c) to execute a written action in lieu of a meeting of such other corporation on behalf of this corporation. At such meeting, the Chief Executive Officer shall possess and may exercise any and all rights and powers incident to the ownership of such securities that the corporation possesses. The Board of Directors or the Chief Executive Officer may, from time to time, confer or delegate such powers to one or more other persons.

Section 7.02. Purchase and Sale of Securities. The Chief Executive Officer shall have full power and authority on behalf of the corporation to purchase, sell, transfer or encumber any and all securities of any other corporation owned by the corporation, and may execute and deliver such documents as may be necessary to effectuate such purchase, sale, transfer or encumbrance. The Board of Directors or the Chief Executive Officer may, from time to time, confer or delegate such powers to one or more other persons.

ARTICLE VIII.
INDEMNIFICATION OF CERTAIN PERSONS

Section 8.01. The corporation shall indemnify officers and directors, for such expenses and liabilities, in such manner, under such circumstances, and to such extent as permitted by Minnesota Statutes Section 302A.521, as now enacted or hereafter amended.

ARTICLE IX.
AMENDMENTS

Section 9.01. These Bylaws may be amended or altered by the Board of Directors at any meeting if notice of such proposed amendment shall have been given in the notice of such meeting. Such authority in the Board of Directors is subject to (a) the limitations imposed by Minnesota Statutes Section 302A.181, as now enacted or hereafter amended, or other applicable law and (b) the power of the shareholders to change or repeal such Bylaws by a majority vote of the shareholders present or represented at any meeting of shareholders called for such purpose.

Exhibit 21

Subsidiaries of Graco Inc.

The following are subsidiaries of the Company as of December 30, 2022

Subsidiary	Jurisdiction of Organization	Ownership Type[1]	Percent Owned
Electric Torque Machines, Inc	Delaware, USA	Direct	100%
Gema Eastern Europe s.r.l.	Romania	Indirect	100%
Gema Europe s.r.l.	Italy	Indirect	100%
Gema México Powder Finishing, S. de R.L. de C.V.	Mexico	Direct & Indirect	100%
Gema (Shanghai) Co., Ltd.	P.R. China	Indirect	100%
Gema Switzerland GmbH	Switzerland	Indirect	100%
Gema USA Inc.	Minnesota, USA	Direct	100%
GFEC Free Zone Uruguay S.A.	Uruguay	Indirect	100%
GFEC Uruguay S.A.	Uruguay	Indirect	100%
Graco Australia Pty Ltd	Australia	Indirect	100%
Graco BV	Belgium	Indirect	100%
Graco Canada Inc.	Canada	Indirect	100%
Graco Chile SpA	Chile	Direct	100%
Graco Colombia S.A.S.	Colombia	Direct	100%
Graco Distribution BV	Belgium	Indirect	100%
Graco Finance Hong Kong Limited	Hong Kong, P.R. China	Direct	100%
Graco Fluid Equipment (Shanghai) Co., Ltd.	P.R. China	Direct & Indirect	100%
Graco Fluid Equipment (Suzhou) Co., Ltd.	P.R. China	Indirect	100%
Graco Fluid Handling (D) Inc.	Minnesota, USA	Direct	100%
Graco Fluid Handling (I) Inc.	Minnesota, USA	Direct	100%
Graco Global Holdings	Luxembourg	Direct	100%
Graco GmbH	Germany	Indirect	100%
Graco High Pressure Equipment Inc.	Minnesota, USA	Direct	100%
Graco Hong Kong Limited	Hong Kong, P.R. China	Indirect	100%
Graco India Private Limited	India	Indirect	100%
Graco International Holdings	Luxembourg	Indirect	100%
Graco K.K.	Japan	Indirect	100%
Graco Korea Inc.	South Korea	Indirect	100%
Graco Limited	England and Wales, UK	Indirect	100%
Graco Malaysia Sdn. Bhd.	Malaysia	Indirect	100%
Graco Minnesota Inc.	Minnesota, USA	Direct	100%
Graco Ohio Inc.	Ohio, USA	Direct	100%
Graco S.A.S.	France	Indirect	100%
Graco Serviços e Importação de Máquinas e Equipamentos em Geral Ltda.	Brazil	Indirect	100%
Graco Singapore Pte. Ltd.	Singapore	Direct	100%
Graco Solutions Inc.	Minnesota, USA	Direct	100%
Graco Trading (Shanghai) Co., Ltd.	P.R. China	Indirect	100%
Hi-Tech Spray Equipment, S.A.	Spain	Indirect[2]	89.5%
International Polymer Solutions Inc.	Delaware, USA	Indirect	100%
Landtec North America, Inc.	California, USA	Indirect	100%
Q.E.D. Environmental Systems, Inc.	Michigan, USA	Direct	100%
Q.E.D. Environmental Systems Limited	England and Wales, UK	Indirect	100%
SAT (Surface Aluminium Technologies) S.r.l.	Italy	Indirect	100%

Smith Surface Preparation Systems Inc.	Minnesota, USA	Direct	100%
Staffordshire Hydraulic Services Limited	England and Wales, UK	Indirect	100%
White Knight Fluid Handling Inc.	Minnesota, USA	Direct	100%

[1] Ownership type indicates whether each subsidiary is directly owned by Graco Inc., indirectly owned by Graco Inc. through direct ownership by one or more of its subsidiaries, or a combination thereof.

[2] 10.5% of the shares of this subsidiary are held by three employees of the subsidiary.

Exhibit 23

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statements No. 333-123813, No. 333-134162, No. 333-140848, No. 333-167602, No. 333-180970, No. 333-204028 and No. 333-231362 on Form S-8 of our reports dated February 21, 2023, relating to the financial statements of Graco Inc. and the effectiveness of Graco Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K for the year ended December 30, 2022.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 21, 2023

Exhibit 24

Power of Attorney

Know all by these presents, that each person whose signature appears below hereby constitutes and appoints Mark W. Sheahan or David M. Lowe, that person's true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution for that person and in that person's name, place and stead, in any and all capacities, to sign the Report on Form 10-K for the year ended December 30, 2022, of Graco Inc. (and any and all amendments thereto) and to file the same 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 or necessary to be done in and about the premises, as fully to all intents and purposes as that person might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitutes, may lawfully do or cause to be done by virtue hereof.

In witness whereof, the following persons have signed this Power of Attorney on the date indicated.

	Date
/s/ BRETT C. CARTER Brett C. Carter	February 21, 2023
/s/ ERIC P. ETCHART Eric P. Etchart	February 21, 2023
/s/ JODY H. FERAGEN Jody H. Feragen	February 21, 2023
/s/ J. KEVIN GILLIGAN J. Kevin Gilligan	February 21, 2023
/s/ LEE R. MITAU Lee R. Mitau	February 21, 2023
/s/ MARTHA A. MORFITT Martha A. Morfitt	February 21, 2023
/s/ MARK W. SHEAHAN Mark W. Sheahan	February 21, 2023
/s/ R. WILLIAM VAN SANT R. William Van Sant	February 21, 2023
/s/ KEVIN J. WHEELER Kevin J. Wheeler	February 21, 2023

Exhibit 31.1

Certification

I, Mark W. Sheahan, certify that:

1. I have reviewed this annual report on Form 10-K of Graco Inc.;

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

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

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

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

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

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

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

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

   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:	February 21, 2023	/s/ MARK W. SHEAHAN
		Mark W. Sheahan
		President and Chief Executive Officer

Exhibit 31.2

Certification

I, David M. Lowe, certify that:

1. I have reviewed this annual report on Form 10-K of Graco Inc.;

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

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

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

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

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

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

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

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of registrant’s board of directors:

   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: February 21, 2023

/s/ DAVID M. LOWE
David M. Lowe
Chief Financial Officer and Treasurer

Exhibit 32

Certification Under Section 1350

Pursuant to Section 1350 of Title 18 of the United States Code, each of the undersigned certifies that this periodic report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in this periodic report fairly presents, in all material respects, the financial condition and results of operations of Graco Inc.

Date:	February 21, 2023	/s/ MARK W. SHEAHAN Mark W. Sheahan President and Chief Executive Officer
Date:	February 21, 2023	/s/ DAVID M. LOWE David M. Lowe Chief Financial Officer and Treasurer