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 27, 2019**, 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	41-0285640
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

88 - 11th Avenue N.E. Minneapolis, Minnesota	55413
(Address of principal executive offices)	(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 is a shell company (as defined by Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of 164,281,638 shares of common stock held by non-affiliates of the registrant was $8,243,652,599 as of June 28, 2019.

167,916,424 shares of common stock were outstanding as of February 4, 2020.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company's definitive Proxy Statement for its Annual Meeting of Shareholders to be held on April 24, 2020, 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, 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 achieve environmental compliance.

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 2019, 2018 and 2017 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: Industrial, Process and Contractor.

Each segment sells its products in North, Central and South America (the "Americas"), Europe, Middle East and Africa ("EMEA"), and Asia Pacific. Sales in the Americas represent approximately 58 percent of our Company's total sales. Sales in EMEA represent approximately 25 percent. Sales in Asia Pacific represent approximately 17 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 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 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, Japan, Italy, Korea, the P.R.C., the United Kingdom and Brazil distribute our Company's products. Operations in Maasmechelen, Belgium; St. Gallen, Switzerland; Shanghai, P.R.C.; and Montevideo, Uruguay reinforce our commitment to their regions.

During 2019, manufacturing capacity met business demand. 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 2019, we completed a project to significantly expand our manufacturing facility in Sioux Falls, SD, and construction will be completed in early 2020 on a project that will more than double the size of our Contractor segment facility in Rogers, MN. We are in the planning and design phases of additional projects to expand capacity in other manufacturing and distribution locations in 2020 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; Suzhou and Shanghai, P.R.C.; Dexter, Michigan; Erie, Pennsylvania; Kamas, Utah; and Coventry and Brighouse, United Kingdom. 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.

Our Company consistently makes significant investments in new products. Total product development expenditures for all segments were $68 million in 2019, $63 million in 2018 and $59 million in 2017. 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. Our Company will invest in engineering, manufacturing and commercial resources for these businesses based on expected return on investment.

Business Segments

Industrial Segment

The Industrial segment is our largest segment and represents approximately 45 percent of our total sales in 2019. It includes the Industrial Products and Applied Fluid Technologies 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.

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.

Applied Fluid Technologies

The Applied Fluid Technologies division designs and sells equipment for use by industrial customers and specialty contractors. This equipment includes 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. This division also manufactures equipment that pumps, meters, mixes and dispenses sealant, adhesive and composite materials. Our advanced composite equipment includes gel-coat equipment, chop and wet-out systems, resin transfer molding systems and applicators and precision dispensing solutions. This equipment bonds, molds, seals, vacuum encapsulates and laminates parts and devices in a wide variety of industrial applications.

Industrial Products

The Industrial Products division makes finishing equipment that applies paint and other coatings to products such as motor vehicles, appliances, furniture and other industrial and consumer products. A majority of this division’s business is outside of North America.

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. We also offer a variety of applicators that use different methods of atomizing and spraying the 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.

This division also makes powder finishing products and systems that coat powder finishing 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 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 21 percent of our total sales in 2019. It includes our Process, Oil and Natural Gas, 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, semi-conductor, 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 semi-conductor industries.

Process

Our 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, semi-conductor, 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.

Oil and Natural Gas

Our Oil and Natural Gas division makes high pressure and ultra-high pressure valves used in the oil and natural gas industry, other industrial processes and research facilities. Our high and ultra-high pressure valves are sold directly to end-user customers as well as through distribution worldwide. The division also has a line of chemical injection pumping solutions for precise injection of chemicals into producing oil wells and pipelines and is sold through third-party distributors.

Lubrication

The Lubrication division designs and sells equipment for use in 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.

The Lubrication 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 needs and down time and extend the life of the equipment. Industries served include gas transmission, petrochemical, pulp and paper, mining, construction, agricultural equipment, food and beverage, material handling, metal manufacturing, wind energy and oil and natural gas.

Contractor Segment

The Contractor segment represented approximately 34 percent of our total sales in 2019. 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 painting 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's end users are primarily professional painters in the construction and maintenance industries, 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 by brush-and-roller 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.

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 adequately 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 2019, our raw material and purchased component availability was strong. Pressures from tariffs, mostly on metals and electronics, and increased material prices, particularly in aluminum, stainless steel, carbon steel bar stock, electronic controls, plastics and copper, increased production cost in 2019. Although pressures from tariffs continue in 2020, we are working 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 adjustable surcharges and credits, 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.

Sales to Major Customers

Worldwide sales in the Contractor and Industrial segments to The Sherwin-Williams Company represented over 10 percent of the Company's consolidated sales in 2019, 2018 and 2017.

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. 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 27, 2019.

Employees

As of December 27, 2019, we employed approximately 3,700 persons. Of this total, approximately 1,400 were employees based outside of the U.S., and 1,400 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.

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 the most significant factors that could materially and adversely affect our business, financial condition and results of operations.

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. 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 make, the new products that we develop and the channel expansions that we make.

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 will 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.

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

An economic downturn or financial market turmoil may depress demand for our equipment in all major geographies and markets. Economic uncertainty and volatility in various geographies 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 affect our ability to satisfy the financial covenants in the terms of our financing arrangements.

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

Our profitability will be affected if we do not develop new products and technologies that meet our customers' needs. Our ability to develop, market and sell products that meet our customers' needs depends upon a number of factors, including anticipating the features and products that our customers will need in the future, identifying and entering into new markets, and training our distributors. Changes in industries that we serve, including consolidation of competitors and customers, could affect our success. Increases in the number of competitors, the market reach of competitors, and 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.

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 commodities 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 or other political factors. Raw materials may become limited in availability from certain regions. Port labor disputes 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.

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 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 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 experience cybersecurity threats from time to time, and expect to continue to experience such threats in the future. To date, we have not experienced a material cybersecurity incident. 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 2019, approximately 49 percent of our sales were generated by customers located outside the United States. Operating and selling outside of the United States 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 could adversely impact our operations.

Changes in Laws and Regulations - Changes may impact how we can do business and the cost of doing business around the world.

The speed and frequency of implementation and the complexity of new or revised laws and regulations globally appear to be increasing. In addition, as our business grows and expands geographically, we may become subject to laws and regulations previously inapplicable to our business. These 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.

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.

Laws and regulations related to bribery, corruption and trade, and enforcement thereof, are increasing in frequency, complexity and severity on a global basis. 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-corruption laws, 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.

Impairment - If acquired businesses do not meet performance expectations, assets acquired 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.

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 may prevent us from expanding our business into certain geographies and may also limit our ability to grow our business. Civil disturbances may harm our business.

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 appears to be increasing, particularly in the U.S. Such costs may adversely affect our Company's profitability. 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.

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, 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.

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.

Variable Industries - Our success may be affected by variations in the construction, automotive, mining and oil and natural gas 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, mining and oil and natural gas industries.

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 18, 2020, is set forth in the chart below.

Facility	Owned or Leased	Square Footage	Facility Activities	Operating Segment
		North America		
Indianapolis, Indiana, United States	Owned	64,000	Warehouse, office, product development and application laboratory	Industrial
Dexter, Michigan, United States	Owned	65,000	Manufacturing, warehouse, office and product development	Process
Minneapolis, Minnesota, United States	Owned	141,000	Worldwide headquarters; office and product development	Corporate, Industrial and Process
Minneapolis, Minnesota, United States	Owned	42,000	Corporate office	All segments

Minneapolis, Minnesota, United States	Owned	390,000	Manufacturing and office	Industrial and Process
Minneapolis, Minnesota, United States	Owned	87,000	Assembly	Industrial and Process
Anoka, Minnesota, United States	Owned	208,000	Manufacturing, warehouse, office and product development	Process
Rogers, Minnesota, United States	Owned	796,000	Manufacturing, office and product development	Contractor
Rogers, Minnesota, United States	Leased	323,000	Distribution center and office	All segments
North Canton, Ohio, United States	Owned	131,000	Manufacturing, warehouse, office and application laboratory	Industrial
Erie, Pennsylvania, United States	Owned	89,000	Manufacturing, warehouse, office and product development	Process
Sioux Falls, South Dakota, United States	Owned	203,000	Manufacturing and office	Industrial and Contractor
Kamas, Utah, United States	Owned	46,000	Manufacturing, office and test laboratory	Process
Arcadia, California, United States	Leased	18,000	Manufacturing, office, warehouse	Process
Fremont, California, United States	Leased	27,000	Manufacturing, office, warehouse	Process
Pompano Beach, Florida, United States	Leased	109,000	Office and Warehouse	Contractor
Europe				
Maasmechelen, Belgium	Owned	210,000	EMEA headquarters, warehouse, assembly	All segments
Maasmechelen, Belgium	Leased	25,000	Office and assembly	All segments
Rödermark, Germany	Leased	41,000	Warehouse and office	Industrial
Sibiu, Romania	Leased	58,000	Manufacturing	Industrial
St. Gallen, Switzerland	Owned	82,000	Manufacturing, warehouse, office, product development and application laboratory	Industrial
St. Gallen, Switzerland	Leased	22,000	Manufacturing	Industrial
Verona, Italy	Owned	39,000	Warehouse and office	Industrial
Verona, Italy	Leased	53,000	Manufacturing and warehouse	Industrial
Brighouse, West Yorkshire, United Kingdom	Owned	68,000	Manufacturing, warehouse, office and product development	Process
Coventry, United Kingdom	Owned	38,000	Office building	Process
Asia Pacific				
Derrimut, Australia	Leased	22,000	Warehouse	All segments
Gurgaon, India	Leased	18,000	Office	All segments
Yokohama, Japan	Leased	19,000	Office	All segments
Shanghai, P.R.C.	Leased	80,000	Asia Pacific headquarters	All segments
Shanghai, P.R.C.	Leased	27,000	Warehouse and office	Industrial
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

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 18, 2020:

Patrick J. McHale, 58, became President and Chief Executive Officer in June 2007. He served as Vice President and General Manager, Lubrication Equipment Division from June 2003 to June 2007. He was Vice President, Manufacturing and Distribution Operations from April 2001 to June 2003. He served as Vice President, Contractor Equipment Division from February 2000 to April 2001. From September 1999 to February 2000, he was Vice President, Lubrication Equipment Division. Prior to September 1999, he held various manufacturing management positions in Minneapolis, Minnesota; Plymouth, Michigan; and Sioux Falls, South Dakota. Mr. McHale joined the Company in 1989.

David M. Ahlers, 61, 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. He joined the Company in 2008.

Caroline M. Chambers, 55, became Executive Vice President, Corporate Controller and Information Systems in June 2018. She has also served as the Company’s principal accounting officer since September 2007. 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, Ms. Chambers was an auditor with Deloitte & Touche in Minneapolis, Minnesota and Paris, France. Ms. Chambers joined the Company in 1992.

Mark D. Eberlein, 59, became President, Worldwide Process and Oil & Natural Gas Divisions in December 2018. He was President, Worldwide Process Division from June 2018 to December 2018. From January 2013 until June 2018 he was Vice President and General Manager, Process Division. From November 2008 to December 2012, he was Director, Business Development, Industrial Products Division. He was Director, Manufacturing Operations, Industrial Products Division from January to October 2008. From 2001 to 2008, he was Manufacturing Operations Manager of a variety of Graco business divisions. Prior to joining Graco, Mr. Eberlein worked as an engineer at Honeywell and at Sheldahl. He joined the Company in 1996.

Karen Park Gallivan, 63, became Executive Vice President, General Counsel and Corporate Secretary in June 2018. She was Vice President, General Counsel and Secretary from September 2005 to June 2018. She was Vice President, Human Resources from January 2003 to September 2005. Prior to joining Graco, she was Vice President of Human Resources and Communications at Syngenta Seeds, Inc. from January 1999 to January 2003. From 1988 through January 1999, she was General Counsel of Novartis Nutrition Corporation. Prior to joining Novartis, Ms. Gallivan was an attorney with the law firm of Rider, Bennett, Egan & Arundel, L.L.P. She joined the Company in 2003.

Dale D. Johnson, 65, 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. He joined the Company in 1976.

Jeffrey P. Johnson, 60, became President, New Ventures in December 2018. 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. He joined the Company in 2006.

David M. Lowe, 64, became President, Worldwide Industrial Products Division in June 2018. 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.

Bernard J. Moreau, 59, became President, South and Central America in June 2018. He was Vice President and General Manager, South and Central America from January 2013 to June 2018. From November 2003 to December 2012, he was Sales and Marketing Director, EMEA, Industrial/Automotive Equipment Division. From January 1997 to October 2003, he was Sales Manager, Middle East, Africa and East Europe. Prior to 1997, he worked in various Graco sales engineering and sales management positions, mainly to support Middle East, Africa and southern Europe territories. Mr. Moreau joined the Company in 1985.

Peter J. O'Shea, 55, became President, Worldwide Lubrication Equipment Division in June 2018. 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, 46, became President, Worldwide Applied Fluid Technologies Division in June 2018. 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.

Mark W. Sheahan, 55, became Chief Financial Officer and Treasurer in June 2018. 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.

Timothy R. White, 50, became President, EMEA in December 2018. 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, 48, became Executive Vice President, Operations in December 2018. 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.

Brian J. Zumbolo, 50, became President, Asia Pacific in June 2018. From January 2016 to June 2018 he was Vice President and General Manager, Asia Pacific. From August 2007 to December 2015, he was Vice President and General Manager, Lubrication Equipment Division. He was Director of Sales and Marketing, Lubrication Equipment and Applied Fluid Technologies, Asia Pacific, from November 2006 through July 2007. From February 2005 to November 2006, he was Director of Sales and Marketing, High Performance Coatings and Foam, Applied Fluid Technologies Division. Mr. Zumbolo was Director of Sales and Marketing, Finishing Equipment from May 2004 to February 2005. Prior to May 2004, he held various marketing positions in the Industrial Equipment division. Mr. Zumbolo joined the Company in 1999.

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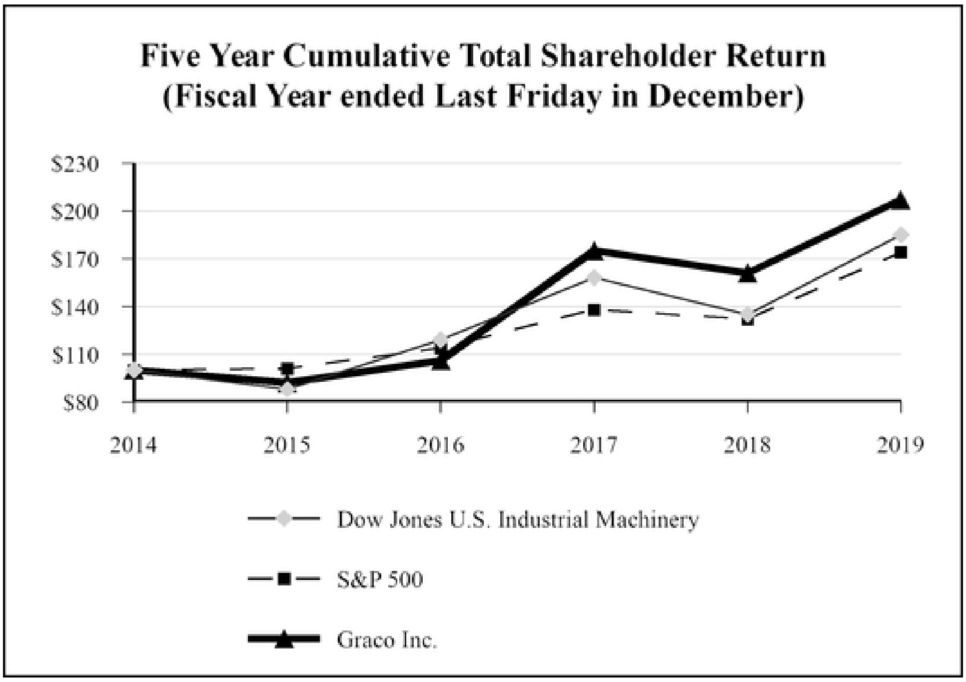
PART II

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 February 4, 2020 the share price was $55.28 and there were 167,916,424 shares outstanding and 1,857 common shareholders of record, which includes nominees or broker dealers holding stock on behalf of an estimated 101,000 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, 2014, and all dividends were reinvested).



	2014	2015	2016	2017	2018	2019
Dow Jones U.S. Industrial Machinery	100	88	119	158	135	185
S&P 500	100	101	114	138	132	174
Graco Inc.	100	92	106	175	161	207

Issuer Purchases of Equity Securities

On April 24, 2015, the Board of Directors authorized the purchase of up to 18 million shares of 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.

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)
September 28, 2019 - October 25, 2019	94,597	$	44.44	94,597	20,847,631
October 26, 2019 - November 22, 2019	3,500	$	45.02	3,500	20,844,131
November 23, 2019 - December 27, 2019	—	$	—	—	20,844,131

Item 6. Selected Financial Data

The following table includes historical financial data (in millions, except per share amounts):

		2019		2018		2017		2016		2015
Net sales	$	1,646.0	$	1,653.3	$	1,474.7	$	1,329.3	$	1,286.5
Net earnings		343.9		341.1		252.4		40.7		345.7
Per common share[1]										
Basic net earnings	$	2.06	$	2.04	$	1.50	$	0.24	$	2.00
Diluted net earnings		2.00		1.97		1.45		0.24		1.95
Cash dividends declared		0.66		0.56		0.49		0.45		0.41
Total assets	$	1,692.2	$	1,472.7	$	1,390.6	$	1,243.1	$	1,391.4
Long-term debt (including current portion)		164.3		266.4		226.0		305.7		392.7

(1) All per share data reflects the three-for-one stock split distributed on December 27, 2017.

The 2017 Tax Cuts and Jobs Act reduced the Company's 2018 effective income tax rate by approximately 10 percentage points.

Net earnings in 2016 included $161 million of after-tax loss from impairment charges in the Company's Oil and Natural Gas reporting unit within the Process Segment.

Net earnings in 2015 included $141 million from the sale of the Liquid Finishing businesses acquired in 2012 held as a cost-method investment. Proceeds from the sale were principally used to retire long-term debt.

Additional information on the comparability of results is included in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

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. Certain prior year disclosures have been revised to conform with current year reporting. The discussion is organized in the following sections:

- Overview
- Results of Operations
- Segment Results
- Financial Condition and Cash Flow
- Critical Accounting Estimates
- Recent Accounting Pronouncements

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 expectation of 10 percent revenue growth and 12 percent consolidated net earnings growth. 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, Australia and Brazil.

Results of Operations

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

	2019	2018	2017
Net Sales	$ 1,646.0	$ 1,653.3	$ 1,474.7
Operating Earnings	424.5	436.4	378.7
Net Earnings	343.9	341.1	252.4
Diluted Net Earnings per Common Share	$ 2.00	$ 1.97	$ 1.45
Adjusted (non-GAAP)(1):			
Net Earnings, adjusted	325.4	326.1	249.4
Diluted Net Earnings per Common Share, adjusted	$ 1.90	$ 1.88	$ 1.43

(1) Excludes impacts of excess tax benefits from stock option exercises, non-recurring income tax adjustments and pension restructuring. See adjusted financial results below for a reconciliation of the adjusted non-GAAP financial measures to GAAP.

Multiple events in the last three years caused significant fluctuations in financial results. The restructuring of the Company's funded U.S. pension plan resulted in a $12 million settlement loss in 2017. U.S. federal income tax reform legislation passed at the end of 2017 required a revaluation of net deferred tax assets and instituted a toll charge on unrepatriated foreign earnings that together increased income taxes by a total of $36 million in 2017. Excess tax benefits related to stock option exercises reduced income taxes by $10 million in both 2019 and 2018, and $36 million in 2017. Other benefits from tax planning activities further reduced income taxes in 2019, 2018 and 2017. Excluding the impacts of those items presents a more consistent basis for comparison of financial results. A calculation of the non-GAAP measurements of adjusted earnings before income taxes, income taxes, effective income tax rates, net earnings and diluted earnings per share follows (in millions except per share amounts):

	2019	2018	2017
Earnings before income taxes, as reported	$ 405.9	$ 410.8	$ 347.1
Pension settlement loss	—	—	12.1
Earnings before income taxes, adjusted	$ 405.9	$ 410.8	$ 359.2
Income taxes, as reported	$ 62.0	$ 69.7	$ 94.7
Excess tax benefit from option exercises	10.4	10.0	36.3
Income tax reform	—	—	(35.6)
Other non-recurring tax changes	8.1	5.0	10.0
Tax effects of adjustments	—	—	4.4
Income taxes, adjusted	$ 80.5	$ 84.7	$ 109.8
Effective income tax rate			
As reported	15.3%	17.0%	27.3%
Adjusted	19.8%	20.6%	30.6%
Net Earnings, as reported	$ 343.9	$ 341.1	$ 252.4
Pension settlement loss, net	—	—	7.7
Excess tax benefit from option exercises	(10.4)	(10.0)	(36.3)
Income tax reform	—	—	35.6
Other non-recurring tax changes	(8.1)	(5.0)	(10.0)
Net Earnings, adjusted	$ 325.4	$ 326.1	$ 249.4
Weighted Average Diluted Shares	171.6	173.2	174.3
Diluted Net Earnings per Share			
As reported	$ 2.00	$ 1.97	$ 1.45
Adjusted	$ 1.90	$ 1.88	$ 1.43

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:

	2019	2018	2017
Net Sales	100.0%	100.0%	100.0%
Cost of products sold	47.8	46.6	46.1
Gross profit	52.2	53.4	53.9
Product development	4.1	3.8	4.0
Selling, marketing and distribution	14.2	14.9	15.7
General and administrative	8.1	8.3	8.5
Operating earnings	25.8	26.4	25.7
Interest expense	0.8	0.9	1.1
Other expense, net	0.3	0.7	1.1
Earnings before income taxes	24.7	24.8	23.5
Income taxes	3.8	4.2	6.4
Net Earnings	20.9%	20.6%	17.1%
Net Earnings, adjusted (see non-GAAP measurements above)	19.8%	19.7%	16.9%

Net Sales

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

	2019	2018	2017
Americas[1]	$ 960.8	$ 926.4	$ 850.5
EMEA[2]	406.5	393.1	343.3
Asia Pacific	278.7	333.8	280.9
Consolidated	$ 1,646.0	$ 1,653.3	$ 1,474.7

(1)North, South and Central America, including the U.S. Sales in the U.S. were $841 million in 2019, $806 million in 2018 and $743 million in 2017.
(2)Europe, Middle East and Africa

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

	2019				2018			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	4%	0%	0%	4%	8%	1%	0%	9%
EMEA	7%	1%	(5)%	3%	4%	7%	4%	15%
Asia Pacific	(15)%	1%	(3)%	(17)%	13%	4%	2%	19%
Consolidated	1%	0%	(1)%	0%	8%	3%	1%	12%

In 2019, sales growth in the Americas and EMEA was offset by weakness in Asia Pacific markets, particularly in automotive, in-plant manufacturing and China in general. EMEA had strong sales growth in all areas of the region except the Middle East. Demand for our products was generally positive in EMEA, with notable strength in sales of systems and contractor painting equipment, while automotive industry demand softened. In the Americas, construction markets remained favorable while manufacturing customers became cautious regarding capital spending due to softening end-market demand and general economic uncertainty. Changes in currency translation rates decreased worldwide sales by approximately $29 million.

Sales in the Americas were up solidly in 2018, matching the 9 percent increase in 2017, as economic conditions in North America remained broadly favorable. Sales growth in EMEA varied between products and countries in 2018, with Western Europe significantly outperforming the emerging countries. Sales growth in Asia Pacific was more broadly based across products and countries.

Gross Profit

Gross profit margin rates for 2019 decreased compared to 2018, driven by lower factory volume, unfavorable channel and product mix, and changes in currency translation rates. Price changes implemented early in the year offset the adverse impact of higher material costs, including tariffs.

Gross profit margin rate for 2018 was slightly lower than the rate for 2017. The unfavorable effects of lower margin rates of acquired operations and higher factory spending and material costs more than offset the favorable effects of currency translation and realized pricing.

Operating Expenses

Operating expenses in 2019 decreased $11 million (2 percent) compared to 2018. Reductions in volume and earnings-based expenses more than offset increases in product development expenses. Investment in new product development was $68 million in 2019, up 7 percent over 2018.

Operating expenses for 2018 increased $30 million (7 percent) compared to 2017. The increase includes $8 million from acquired operations, approximately $3 million related to currency translation, $5 million of increases directly based on volume and earnings, and $2 million of incremental share-based compensation. Investment in new product development was $63 million in 2018, up 7 percent over 2017.

Operating Earnings

Operating earnings in 2019 decreased 3 percent compared to 2018 as expense reductions did not fully offset the effects of lower sales and margin rates.

Strong sales increases and expense leverage in 2018 led to a 15 percent increase in operating earnings and improved return as a percentage of sales.

Other Expense

Other expense included market-based pension cost of $5 million in 2019, $8 million in 2018 and $18 million in 2017, including a $12 million loss related to the restructuring of the Company’s funded U.S. pension plan. Other expense also included exchange losses on net assets of foreign operations of $2 million in 2019 and $3 million in 2018, and gains of $2 million in 2017.

Income Taxes

The effective income tax rate was 15 percent for 2019, down approximately 2 percentage points from 2018. Revaluation of deferred taxes pursuant to a tax rate change in a foreign jurisdiction and an increase in non-recurring benefits from other tax planning activities drove the decrease.

The effective income tax rate was 17 percent for 2018, down 10 percentage points from 2017. Adjusted to exclude the impacts of excess tax benefits related to stock option exercises, the 2017 provisions totaling $36 million related to tax reform legislation, the benefit from a $40 million contribution to a pension plan in 2018, and the benefits from other tax planning activities (see reconciliation of non-GAAP measurements above), the effective income tax rate was 21 percent for 2018 compared to 31 percent for 2017. The adjusted rate was lower in 2018 due to the net effects of U.S. federal income tax reform legislation passed at the end of 2017.

Segment Results

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

	2019	2018	2017
Sales			
Industrial	$ 747.4	$ 781.0	$ 692.0
Process	344.9	338.0	294.6
Contractor	553.7	534.3	488.1
Total	$ 1,646.0	$ 1,653.3	$ 1,474.7
Operating Earnings			
Industrial	$ 247.2	$ 271.3	$ 237.7
Process	76.4	68.5	52.2
Contractor	128.3	120.9	113.9
Unallocated corporate (expense) (1)	(27.4)	(24.3)	(25.1)
Total	$ 424.5	$ 436.4	$ 378.7

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

Industrial Segment

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

	2019	2018	2017
Sales			
Americas	$ 324.3	$ 314.9	$ 299.5
EMEA	240.1	234.3	199.2
Asia Pacific	183.0	231.8	193.3
Total	$ 747.4	$ 781.0	$ 692.0
Operating Earnings as a Percentage of Sales	33%	35%	34%

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

	2019				2018			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	3%	0%	0%	3%	5%	0%	0%	5%
EMEA	7%	0%	(5)%	2%	3%	11%	4%	18%
Asia Pacific	(19)%	0%	(2)%	(21)%	12%	6%	2%	20%
Segment Total	(2)%	0%	(2)%	(4)%	6%	5%	2%	13%

Industrial segment sales declined in 2019 as weakness in worldwide manufacturing markets more than offset the impact of strong finishing system sales in EMEA. Automotive project demand was down substantially, particularly in Asia Pacific, and uncertainty around trade wars caused many manufacturers to postpone factory investments. Operating margin rate in this segment decreased compared to 2018 as the favorable effects of pricing were more than offset by the adverse impacts of higher material costs, lower sales and factory volume, product and channel mix, and currency translation.

Industrial segment sales growth in 2018 included $35 million from acquired operations. Generally favorable economic activity across many end markets, including construction, general industry, automotive, aerospace and alternate energy, drove demand in all regions. New product solutions that provide improved process automation, control and material savings contributed to sales growth. Operating margin rate in this segment improved slightly compared to 2017 as the favorable effects of currency translation and volume more than offset the effects of purchase accounting and lower operating margins in acquired operations.

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):

	2019	2018	2017
Sales			
Americas	$ 222.2	$ 215.9	$ 187.6
EMEA	61.5	58.5	56.0
Asia Pacific	61.2	63.6	51.0
Total	$ 344.9	$ 338.0	$ 294.6
Operating Earnings as a Percentage of Sales	22%	20%	18%

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

	2019				2018			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	3%	0%	0%	3%	14%	1%	0%	15%
EMEA	3%	5%	(3)%	5%	1%	0%	3%	4%
Asia Pacific	(5)%	4%	(3)%	(4)%	23%	1%	1%	25%
Segment Total	1%	2%	(1)%	2%	13%	1%	1%	15%

Process segment sales performance in 2019 varied by end market, with solid growth in semiconductor and environmental markets, and weakness in industrial, vehicle services and energy markets. Weakness in Asia Pacific also adversely affected Process segment sales, nearly offsetting increases in the Americas and EMEA. Sales from acquired operations contributed approximately $7 million of growth in the Process segment. Operating margin rate for this segment improved by 2 percentage points, driven by lower volume and earnings-based costs.

The Process segment had strong sales growth in all product applications in 2018, reflecting favorable conditions in many end markets, such as vehicle services, industrial lubrication, environmental, semi-conductors, mining and some recovery in oil and natural gas. New product introductions also contributed to sales growth. Operating margin rate for this segment improved by 2 percentage points, driven by higher sales volume and expense leverage.

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.

Contractor Segment

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

	2019	2018	2017
Sales			
Americas	$ 414.3	$ 395.6	$ 363.4
EMEA	104.9	100.4	88.1
Asia Pacific	34.5	38.3	36.6
Total	$ 553.7	$ 534.3	$ 488.1
Operating Earnings as a Percentage of Sales	23%	23%	23%

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

	2019				2018			
	Volume and Price	Acquisitions	Currency	Total	Volume and Price	Acquisitions	Currency	Total
Americas	5%	0%	0%	5%	8%	1%	0%	9%
EMEA	9%	0%	(5)%	4%	10%	0%	4%	14%
Asia Pacific	(6)%	0%	(4)%	(10)%	4%	0%	1%	5%
Segment Total	5%	0%	(1)%	4%	8%	1%	0%	9%

Contractor segment sales growth continued in 2019, with favorable response to new product offerings and the on-going favorable construction environment in the Americas and EMEA. Operating margin rate was consistent with the 2018 rate.

In 2018, growth in Contractor segment sales continued in all channels and regions, with new product introductions and strong underlying construction activity in North America and Western Europe. Contractor segment operating margin rate for 2018 was flat compared to 2017. Favorable effects of currency translation offset the effects of lower gross margin rate and increases in product development costs. Operating margins in the second half of the year faced pressure from higher factory spending, tariffs and material costs.

In this segment, sales in all regions are significant and management reviews economic and financial indicators in each region, 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.

Financial Condition and Cash Flow

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

	2019	2018
Working capital	$ 506.1	$ 423.4
Current ratio	2.8	2.4
Days of sales in receivables outstanding	59	60
Inventory turnover (LIFO)	2.7	2.9

Higher cash and cash equivalent balances drove the increases in working capital and current ratio. Decreases in accounts receivable and inventories were consistent with sales levels, and sales and earnings based accruals also decreased.

Capital Structure. At December 27, 2019, the Company's capital structure included current notes payable of $8 million, long-term debt of $164 million and shareholders' equity of $1,025 million. At December 28, 2018, the Company's capital structure included current notes payable of $11 million, long-term debt of $266 million and shareholders' equity of $752 million.

Shareholders' equity increased by $273 million in 2019. The increase from current year earnings of $344 million was offset by dividends of $109 million, other comprehensive loss of $25 million and share repurchases of $7 million. Increases related to shares issued and stock compensation totaled $70 million.

Liquidity and Capital Resources. The Company had cash held in deposit accounts totaling $221 million at December 27, 2019, and $132 million as of December 28, 2018. The Company asserted that it will indefinitely reinvest earnings of foreign subsidiaries to support expansion of its international business. As of December 27, 2019, the amount of cash held outside the U.S. was not significant to the Company's liquidity and was available to fund investments abroad.

On December 15, 2016, the Company executed an amendment to its revolving credit agreement, extending the expiration date to December 15, 2021 and decreasing certain interest rates and fees. The amended agreement with a syndicate of lenders provides up to $500 million of committed credit, available for general corporate purposes, working capital needs, share repurchases and acquisitions. The Company may borrow up to $50 million under the swingline portion of the facility for daily working capital needs.

Under terms of the amended revolving credit agreement, borrowings may be denominated in U.S. dollars or certain other currencies. 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 currencies other than U.S. dollars bear interest at a LIBOR-based rate. The base rate is an annual rate equal to a margin ranging from zero percent to 0.75 percent, depending on the Company's cash flow leverage ratio (debt to earnings before interest, taxes, depreciation, amortization and extraordinary non-operating or non-cash charges and expenses) plus the highest of (i) the bank's prime rate, (ii) the federal funds rate plus 0.5 percent, or (iii) one-month LIBOR plus 1.5 percent. In general, LIBOR-based loans bear interest at LIBOR plus 1 percent to 1.75 percent, 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 fee on the unused amount of the loan commitments at an annual rate ranging from 0.125 percent to 0.25 percent, depending on the Company's cash flow leverage ratio.

On September 24, 2018, the Company entered into a revolving credit agreement with a sole lender that was scheduled to expire in September 2020. This credit agreement 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 revolving credit 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 the new revolving credit agreement are substantially similar to those of the Company's other revolving credit agreement that expires in December 2021. This revolver was amended effective January 29, 2020 to remove the expiration date, eliminate commitment fees, reduce interest rate margins and delete negative covenants regarding cash flow leverage and interest coverage ratios.

On December 27, 2019, the Company had $594 million in lines of credit, including the $550 million in committed credit facilities described above and $44 million with foreign banks. The unused portion of committed credit lines was $546 million as of December 27, 2019.

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 27, 2019.

Internally generated funds and unused financing sources are expected to provide the Company with the flexibility to meet its liquidity needs in 2020, including its capital expenditure plan of approximately $80 million, including $40 million for building projects to expand production and distribution capacity, planned dividends estimated at $117 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.

In December 2019, the Company's Board of Directors increased the Company's regular quarterly dividend to $0.175 from $0.160 per share, an increase of 9 percent.

Subsequent event: On January 29, 2020, the Company entered into a master note agreement with a sole lender that expires on January 29, 2023. The note agreement sets forth certain terms on which the Company may issue, and affiliates of the lender may purchase, up to $200 million of the Company's senior notes. Interest on the senior notes will be determined at the time of issuance, at a fixed or LIBOR-based floating rate at the option of the Company, provided that the maximum aggregate principal amount of notes bearing interest at a floating rate may not exceed $100 million. Fixed rate notes issued under the agreement will mature no longer than 12 years from date of issuance and variable rate notes will mature no longer than 10 years from issuance. Under terms of the 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.

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

	2019	2018	2017
Operating activities	$ 418.7	$ 368.0	$ 337.9
Investing activities	(155.5)	(66.3)	(68.5)
Financing activities	(174.0)	(282.7)	(217.1)
Effect of exchange rates on cash	(0.3)	0.2	(1.0)
Net cash provided	88.9	19.2	51.3
Cash and cash equivalents at end of year	$ 221.0	$ 132.1	$ 112.9

Cash Flows From Operating Activities. Net cash provided by operating activities was $419 million in 2019, up $51 million compared to 2018. A $40 million voluntary contribution in 2018 to one of the Company's U.S. qualified defined benefit retirement plans was not repeated in 2019. Net cash provided by operating activities was $368 million in 2018, up $30 million compared to 2017. The impact of the increase in net earnings was partially offset by the $40 million pension contribution.

Cash Flows Used in Investing Activities. Cash flows used in investing activities totaled $155 million in 2019, including $128 million for capital additions and $27 million for business acquisitions. Capital additions in 2019 included $97 million related to building expansion projects to increase production and distribution capacity. Cash flows used in investing activities totaled $66 million in 2018 including $54 million for capital additions and $11 million for business acquisitions. Cash outflows from investing activities totaled $68 million in 2017 including $40 million for capital additions and $28 million for business acquisitions.

Cash Flows Used in Financing Activities. Cash flows used in financing activities totaled $174 million in 2019 and included dividends of $106 million and net payments on long-term debt and outstanding lines of credit of $105 million (including a $75 million prepayment of private placement debt that was due in 2020), partially offset by net proceeds from share issuances and repurchases totaling $37 million. Cash flows used in financing activities totaled $283 million in 2018 and included dividends of $89 million, share repurchases of $245 million (partially offset by net proceeds from share issuances of $25 million) and taxes paid related to net share settlement of equity awards of $16 million. Inflows from net borrowings totaled $42 million. Cash flows used in financing activities totaled $217 million in 2017 and included dividends of $80 million, net payments of $83 million on long-term debt and outstanding lines of credit (including a $75 million prepayment of private placement debt that was due in 2018) and share repurchases of $90 million (partially offset by proceeds from share issuances of $61 million).

On April 24, 2015, the Board of Directors authorized the purchase of up to 18 million shares of 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. As of December 27, 2019, approximately 20.8 million shares remain available for purchase under the authorizations.

The Company repurchased and retired 0.2 million shares in 2019, compared to 5.8 million shares in 2018 and 2.6 million shares in 2017. The Company may continue to make opportunistic share repurchases in 2020 via open market transactions or short-dated accelerated share repurchase (“ASR”) programs.

Off-Balance Sheet Arrangements and Contractual Obligations. The Company has no significant off-balance sheet debt or other unrecorded obligations other than the items noted in the following table. In addition, the Company could be obligated to perform under standby letters of credit totaling $2 million at December 27, 2019. The Company has also guaranteed the debt of its subsidiaries for up to $42 million. All debt of subsidiaries is reflected in the consolidated balance sheets.

As of December 27, 2019, the Company is obligated to make cash payments in connection with obligations as follows (in millions):

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Long-term debt	$ 164.3	$ —	$ 14.3	$ 75.0	$ 75.0
Interest on long-term debt	39.9	8.4	15.5	9.0	7.0
Operating leases	35.7	8.2	13.9	6.1	7.5
Service contracts	20.7	10.5	9.4	0.5	0.3
Purchase obligations [1]	127.0	127.0	—	—	—
Unfunded pension and postretirement medical benefits [2]	40.0	3.5	7.1	7.7	21.7
Total	$ 427.6	$ 157.6	$ 60.2	$ 98.3	$ 111.5

(1) The Company is committed to pay suppliers under the terms of open purchase orders issued in the normal course of business. 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.

(2) The amounts and timing of future Company contributions to the funded qualified defined benefit pension plans are unknown because they are dependent on pension fund asset performance and pension obligation valuation assumptions.

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 increase 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 2020, the Company will use investment return assumptions of 7.0 percent for the larger of its two funded U.S. plans and 6.0 percent for the smaller plan, down 0.25 percentage point from the rates assumed for 2019. Mortality rates are based on current common group mortality tables for males and females.

At December 27, 2019, a one-half percentage point decrease in the indicated assumptions would have the following effects (in millions):

Assumption	Funded Status	Expense
Discount rate	$ 34.3	$ 2.7
Expected return on assets	—	1.3

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 2019, 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 review.

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.

Recent Accounting Pronouncements

Refer to Note A (Summary of Significant Accounting Policies) to the Consolidated Financial Statements of this Form 10-K for disclosures related to recent accounting pronouncements.

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 27, 2019, 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 yuan renminbi and South Korean won. 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 2019, changes in currency translation rates increased sales and net earnings by approximately $29 million and $12 million, respectively. In 2018, changes in currency translation rates increased sales and net earnings by approximately $15 million and $7 million, respectively. In 2017, changes in currency translation rates reduced sales and net earnings by approximately $2 million and $1 million, respectively.

2020 Outlook

We expect challenging end market conditions to remain in place for at least the first half of 2020 in our Industrial and Process segments. Our outlook for the Contractor segment remains positive as favorable conditions continue, and demand for our products is solid across major end markets and product categories. As a result, our outlook for 2020 is low single-digit revenue growth on an organic, constant currency basis.

At January 2020 exchange rates, assuming the same volumes, mix of products and mix of business by currency as in 2019, the movement in foreign currencies would have an immaterial impact on sales and operating earnings in 2020, with a modest unfavorable impact in the first half of the year.

The Company's backlog is not large enough to be a good indicator of future 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 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 27, 2019. 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 27, 2019.

The Company's independent auditors have issued an attestation report on the Company's internal control over financial reporting. That report appears in this 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 27, 2019, 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 27, 2019, 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 27, 2019 of the Company and our report dated February 18, 2020 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 18, 2020

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 27, 2019 and December 28, 2018, the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended December 27, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15 (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 27, 2019 and December 28, 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 27, 2019, 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 27, 2019, 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 18, 2020 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 27, 2019, the pension benefit obligation balance was $449.4 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:

- We tested the effectiveness of internal controls over the valuation of the pension obligation, including management's controls over selection of the discount rates.
- 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 18, 2020

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 27, 2019	December 28, 2018	December 29, 2017
Net Sales	$ 1,646,045	$ 1,653,292	$ 1,474,744
Cost of products sold	786,289	770,753	679,542
Gross Profit	859,756	882,539	795,202
Product development	67,557	63,124	59,217
Selling, marketing and distribution	234,325	245,473	231,364
General and administrative	133,418	137,515	125,876
Operating Earnings	424,456	436,427	378,745
Interest expense	13,110	14,385	16,202
Other expense, net	5,469	11,276	15,449
Earnings Before Income Taxes	405,877	410,766	347,094
Income taxes	62,024	69,712	94,682
Net Earnings	$ 343,853	$ 341,054	$ 252,412
Basic Net Earnings per Common Share	$ 2.06	$ 2.04	$ 1.50
Diluted Net Earnings per Common Share	$ 2.00	$ 1.97	$ 1.45

See notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)

	Years Ended		
	December 27, 2019	December 28, 2018	December 29, 2017
Net Earnings	$ 343,853	$ 341,054	$ 252,412
Components of other comprehensive income (loss)			
Cumulative translation adjustment	1,902	(8,609)	16,443
Pension and postretirement medical liability adjustment	(33,772)	8,793	(3,321)
Income taxes - pension and postretirement medical liability	6,940	(1,799)	1,317
Other comprehensive income (loss)	(24,930)	(1,615)	14,439
Comprehensive Income	$ 318,923	$ 339,439	$ 266,851

See notes to consolidated financial statements.

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

	December 27, 2019	December 28, 2018
ASSETS		
Current Assets		
Cash and cash equivalents	$ 220,973	$ 132,118
Accounts receivable, less allowances of $5,300 and $5,300	267,345	274,608
Inventories	273,233	283,982
Other current assets	29,917	32,508
Total current assets	791,468	723,216
Property, Plant and Equipment, net	325,546	229,295
Goodwill	307,663	293,846
Other Intangible Assets, net	162,623	166,310
Operating Lease Assets	29,891	—
Deferred Income Taxes	39,327	32,055
Other Assets	35,692	28,019
Total Assets	$ 1,692,210	$ 1,472,741
LIABILITIES AND SHAREHOLDERS’ EQUITY		
Current Liabilities		
Notes payable to banks	$ 7,732	$ 11,083
Trade accounts payable	54,117	56,902
Salaries and incentives	51,301	62,297
Dividends payable	29,235	26,480
Other current liabilities	142,937	143,041
Total current liabilities	285,322	299,803
Long-term Debt	164,298	266,391
Retirement Benefits and Deferred Compensation	182,707	133,388
Operating Lease Liabilities	24,176	—
Deferred Income Taxes	10,776	16,586
Other Non-current Liabilities	—	4,700
Commitments and Contingencies (Note K)		
Shareholders’ Equity		
Common stock, $1 par value; 291,000,000 shares authorized; 167,286,836 and 165,170,888 shares outstanding in 2019 and 2018	167,287	165,171
Additional paid-in-capital	578,440	510,825
Retained earnings	448,991	220,734
Accumulated other comprehensive income (loss)	(169,787)	(144,857)
Total shareholders’ equity	1,024,931	751,873
Total Liabilities and Shareholders’ Equity	$ 1,692,210	$ 1,472,741

See notes to consolidated financial statements.

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

	Years Ended		
	December 27, 2019	December 28, 2018	December 29, 2017
Cash Flows From Operating Activities			
Net Earnings	$ 343,853	$ 341,054	$ 252,412
Adjustments to reconcile net earnings to net cash provided by operating activities			
Depreciation and amortization	48,911	47,754	45,583
Deferred income taxes	(6,411)	15,405	34,446
Share-based compensation	26,669	25,565	23,652
Change in			
Accounts receivable	8,934	(12,402)	(37,669)
Inventories	12,435	(30,719)	(32,011)
Trade accounts payable	(539)	(1,976)	4,588
Salaries and incentives	(14,069)	2,336	11,431
Retirement benefits and deferred compensation	13,264	(27,237)	6,920
Other accrued liabilities	(11,510)	7,517	35,321
Other	(2,803)	688	(6,809)
Net cash provided by operating activities	418,734	367,985	337,864
Cash Flows From Investing Activities			
Property, plant and equipment additions	(127,953)	(53,854)	(40,194)
Acquisition of businesses, net of cash acquired	(26,577)	(10,769)	(27,905)
Other	(939)	(1,624)	(348)
Net cash provided by (used in) investing activities	(155,469)	(66,247)	(68,447)
Cash Flows From Financing Activities			
Borrowings (payments) on short-term lines of credit, net	(3,341)	4,931	(3,026)
Borrowings on long-term lines of credit	105,423	620,746	315,920
Payments on long-term debt and lines of credit	(207,191)	(583,212)	(395,570)
Common stock issued	48,250	24,634	60,685
Common stock repurchased	(9,482)	(244,814)	(90,160)
Taxes paid related to net share settlement of equity awards	(1,268)	(16,151)	(24,448)
Cash dividends paid	(106,443)	(88,845)	(80,477)
Net cash provided by (used in) financing activities	(174,052)	(282,711)	(217,076)
Effect of exchange rate changes on cash	(358)	187	(1,032)
Net increase (decrease) in cash and cash equivalents	88,855	19,214	51,309
Cash, Cash Equivalents and Restricted Cash			
Beginning of year	132,118	112,904	61,595
End of year	$ 220,973	$ 132,118	$ 112,904
Reconciliation to Consolidated Balance Sheets			
Cash and cash equivalents	$ 220,973	$ 132,118	$ 103,662
Restricted cash included in other current assets	—	—	9,242
Cash, cash equivalents and restricted cash	$ 220,973	$ 132,118	$ 112,904

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 30, 2016	$ 55,834	$ 453,394	$ 206,820	$ (142,228)	$ 573,820
Stock split	112,879	—	(112,879)	—	—
Shares issued	1,489	35,164	—	—	36,653
Shares repurchased	(883)	(7,172)	(82,105)	—	(90,160)
Stock compensation cost	—	18,963	—	—	18,963
Restricted stock canceled (issued)	—	(415)	—	—	(415)
Net earnings	—	—	252,412	—	252,412
Dividends declared ($0.4925 per share)	—	—	(82,649)	—	(82,649)
Other comprehensive income (loss)	—	—	—	14,439	14,439
Balance December 29, 2017	169,319	499,934	181,599	(127,789)	723,063
Shares issued	1,657	7,598	—	—	9,255
Shares repurchased	(5,805)	(17,140)	(224,307)	—	(247,252)
Stock compensation cost	—	21,205	—	—	21,205
Restricted stock canceled (issued)	—	(772)	—	—	(772)
Net earnings	—	—	341,054	—	341,054
Dividends declared ($0.5575 per share)	—	—	(93,065)	—	(93,065)
Reclassified to retained earnings from AOCI	—	—	15,453	(15,453)	—
Other comprehensive income (loss)	—	—	—	(1,615)	(1,615)
Balance December 28, 2018	165,171	510,825	220,734	(144,857)	751,873
Shares issued	2,274	44,707	—	—	46,981
Shares repurchased	(158)	(490)	(6,397)	—	(7,045)
Stock compensation cost	—	23,398	—	—	23,398
Net earnings	—	—	343,853	—	343,853
Dividends declared ($0.6550 per share)	—	—	(109,199)	—	(109,199)
Other comprehensive income (loss)	—	—	—	(24,930)	(24,930)
Balance December 27, 2019	$ 167,287	$ 578,440	$ 448,991	$ (169,787)	$ 1,024,931

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Graco Inc. and Subsidiaries
Years Ended December 27, 2019, December 28, 2018 and December 29, 2017

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 years ended December 27, 2019, December 28, 2018 and December 29, 2017 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 27, 2019, all subsidiaries are 100 percent controlled by the Company. Certain prior year disclosures have been revised to conform with current year reporting.

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 generally accepted accounting principles 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	2019	2018
Assets			
Cash surrender value of life insurance	2	$ 17,702	$ 14,320
Forward exchange contracts	2	—	82
Total assets at fair value		$ 17,702	$ 14,402
Liabilities			
Contingent consideration	3	$ 9,072	$ 7,200
Deferred compensation	2	4,719	4,203
Forward exchange contracts	2	87	—
Total liabilities at fair value		$ 13,878	$ 11,403

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 $256 million in 2019 and $262 million in 2018. Other receivables totaled $11 million in 2019 and $13 million in 2018.

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):

	2019	2018
Prepaid income taxes	$ 13,462	$ 14,762
Prepaid expenses and other	16,455	17,746
Total	$ 29,917	$ 32,508

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 review of all long-lived assets in the fourth quarter of 2019. No impairment charges were recorded as a result of that review. There were no impairment charges in 2018 or 2017.

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 29, 2017	$ 161,673	$ 97,971	$ 19,145	$ 278,789
Additions, adjustments from business acquisitions	17,544	170	409	18,123
Foreign currency translation	(2,093)	(973)	—	(3,066)
Balance, December 28, 2018	177,124	97,168	19,554	293,846
Additions, adjustments from business acquisitions	—	13,444	—	13,444
Foreign currency translation	(12)	385	—	373
Balance, December 27, 2019	$ 177,112	$ 110,997	$ 19,554	$ 307,663

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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 27, 2019					
Cost	$ 186,310	$ 20,413	$ 1,020	$ 61,920	$ 269,663
Accumulated amortization	(80,764)	(10,526)	(650)	—	(91,940)
Foreign currency translation	(10,412)	(885)	(73)	(3,730)	(15,100)
Book value	$ 95,134	$ 9,002	$ 297	$ 58,190	$ 162,623
Weighted average life in years	13	10	4	N/A	
As of December 28, 2018					
Cost	$ 179,449	$ 18,571	$ 1,020	$ 59,537	$ 258,577
Accumulated amortization	(67,322)	(8,647)	(439)	—	(76,408)
Foreign currency translation	(10,817)	(895)	(73)	(4,074)	(15,859)
Book value	$ 101,310	$ 9,029	$ 508	$ 55,463	$ 166,310
Weighted average life in years	13	10	4	N/A	

Amortization of intangibles was $15.5 million in 2019, $15.6 million in 2018 and $14.8 million in 2017. Estimated future annual amortization expense based on the current carrying amount of other intangible assets is as follows (in thousands):

	2020	2021	2022	2023	2024	Thereafter
Estimated Amortization Expense	$ 16,095	$ 15,806	$ 15,716	$ 14,811	$ 13,249	$ 28,756

The Company completed business acquisitions in 2019, 2018 and 2017 that were not material to the consolidated financial statements.

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

	2019	2018
Cash surrender value of life insurance	$ 17,702	$ 14,320
Capitalized software	2,985	2,742
Equity method investment	7,603	7,252
Prepaid pension	2,931	—
Deposits and other	4,471	3,705
Total	$ 35,692	$ 28,019

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 operating expense. The cash surrender value increased $3.4 million in 2019, decreased $1.8 million in 2018 and increased $2.3 million in 2017.

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):

	2019	2018
Accrued self-insurance retentions	$ 7,570	$ 7,870
Accrued warranty and service liabilities	12,785	11,056
Accrued trade promotions	8,390	11,449
Payable for employee stock purchases	13,722	11,916
Customer advances and deferred revenue	33,138	39,995
Income taxes payable	8,706	8,515
Operating lease liabilities, current	7,690	—
Right of return refund liability	13,791	12,705
Other	37,145	39,535
Total	$ 142,937	$ 143,041

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 $7.6 million as of December 27, 2019, and $7.9 million as of December 28, 2018.

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):

	2019	2018
Balance, beginning of year	$ 11,056	$ 10,535
Charged to expense	10,350	8,963
Margin on parts sales reversed	2,576	1,193
Reductions for claims settled	(11,197)	(9,635)
Balance, end of year	$ 12,785	$ 11,056

Revenue Recognition.

Accounting Policy

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.

Deferred Revenues

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 $33.1 million as of December 27, 2019 and $40.0 million as of December 28, 2018. Net sales for the year included $39.4 million that was in deferred revenue and customer advances as of December 28, 2018.

Practical Expedients and Exemptions

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.

Disaggregated revenues by reporting segment and geography are disclosed in accordance with the revenue standard. See Note B, Segment Information.

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 27, 2019, totaled $33 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):

	2019	2018
Foreign Currency Contracts		
Assets	$ —	$ 322
Liabilities	(87)	(240)
Net Assets (Liabilities)	$ (87)	$ 82

Recent Accounting Pronouncements.

Credit Losses

In June 2016, the FASB issued a final standard on accounting for credit losses. The new standard is effective for the Company in fiscal 2020 and requires a change in credit loss calculations using the expected loss method. The Company has determined there will be no significant impact on earnings or financial condition from the adoption of the new standard. Accounting policies and systems have been updated as needed and disclosures required by the new standard will be provided in the Company's first quarter 2020 reporting cycle.

B. Segment Information

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

The Industrial segment includes our Industrial Products and Applied Fluid Technologies 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, Oil and Natural Gas, 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, wastewater, mining, fast oil change facilities, service garages, fleet service centers, automobile dealerships and industrial lubrication applications.

The Contractor segment markets sprayers for architectural coatings for painting, corrosion control, texture and line striping.

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.

Segments information follows (in thousands):

	2019	2018	2017
Net Sales			
Industrial	$ 747,396	$ 781,029	$ 691,978
Process	344,930	337,953	294,652
Contractor	553,719	534,310	488,114
Total	$ 1,646,045	$ 1,653,292	$ 1,474,744
Operating Earnings			
Industrial	$ 247,216	$ 271,307	$ 237,700
Process	76,367	68,514	52,216
Contractor	128,282	120,905	113,898
Unallocated corporate (expense)	(27,409)	(24,299)	(25,069)
Total	$ 424,456	$ 436,427	$ 378,745
Assets			
Industrial	$ 615,486	$ 640,683	
Process	387,216	350,306	
Contractor	368,832	283,727	
Unallocated corporate	320,676	198,025	
Total	$ 1,692,210	$ 1,472,741	

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):

	2019	2018	2017
Net Sales (based on customer location)			
United States	$ 840,659	$ 806,127	$ 743,344
Other countries	805,386	847,165	731,400
Total	$ 1,646,045	$ 1,653,292	$ 1,474,744
Long-lived Assets			
United States	$ 268,864	$ 178,331	
Other countries	56,682	50,964	
Total	$ 325,546	$ 229,295	

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 2019, 2018 and 2017.

C. Inventories

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

	2019	2018
Finished products and components	$ 132,128	$ 142,535
Products and components in various stages of completion	86,957	83,768
Raw materials and purchased components	117,026	115,705
Subtotal	336,111	342,008
Reduction to LIFO cost	(62,878)	(58,026)
Total	$ 273,233	$ 283,982

Inventories valued under the LIFO method were $140.3 million in 2019 and $154.4 million in 2018. All other inventory was valued on the FIFO method.

In 2019, certain inventory quantities were reduced, resulting in liquidation of LIFO inventory quantities carried at lower costs from prior years, although increases in material costs, including tariffs, offset the impact of the decrement and drove the LIFO reserve requirement higher. The effect of the LIFO reserve change on net earnings was not significant.

D. Property, Plant and Equipment

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

	2019	2018
Land and improvements	$ 29,817	$ 26,252
Buildings and improvements	182,195	157,385
Manufacturing equipment	320,240	317,011
Office, warehouse and automotive equipment	48,476	44,901
Additions in progress	99,476	24,484
Total property, plant and equipment	680,204	570,033
Accumulated depreciation	(354,658)	(340,738)
Net property, plant and equipment	$ 325,546	$ 229,295

Depreciation expense was $32.2 million in 2019, $31.1 million in 2018 and $29.5 million in 2017.

E. Income Taxes

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

	2019	2018	2017
Domestic	$ 294,402	$ 310,999	$ 269,258
Foreign	111,475	99,767	77,836
Total	$ 405,877	$ 410,766	$ 347,094

Income tax expense consists of (in thousands):

	2019	2018	2017
Current			
Federal	$ 39,015	$ 27,760	$ 41,996
State and local	3,347	3,398	3,088
Foreign	26,270	23,118	19,486
Current income tax expense	68,632	54,276	64,570
Deferred			
Domestic	(151)	17,058	35,782
Foreign	(6,457)	(1,622)	(5,670)
Deferred income tax expense (benefit)	(6,608)	15,436	30,112
Total	$ 62,024	$ 69,712	$ 94,682

Income taxes paid were $67.1 million in 2019, $58.1 million in 2018 and $61.0 million in 2017.

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

	2019	2018	2017
Statutory tax rate	21 %	21 %	35 %
Tax effect of international operations	(1)	—	(6)
State taxes, net of federal effect	1	1	1
U.S. general business tax credits	(1)	(1)	(1)
Domestic production deduction	—	—	(2)
Stock compensation excess tax benefit	(3)	(2)	(10)
Impact of 2017 Tax Cuts and Jobs Act	—	—	10
Global Intangible Low-taxed Income (GILTI)	1	1	—
Foreign Derived Intangible Income (FDII)	(3)	(2)	—
Pension contribution	—	(1)	—
Effective tax rate	15 %	17 %	27 %

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):

	2019	2018
Inventory valuations	$ 966	$ (1,012)
Self-insurance retention accruals	1,280	1,284
Warranty reserves	2,095	1,778
Vacation accruals	2,335	2,259
Bad debt reserves	3,142	2,785
Excess of tax over book depreciation and amortization	(38,735)	(37,208)
Pension liability	32,079	22,884
Postretirement medical	4,625	4,491
Acquisition costs	407	601
Stock compensation	13,979	13,763
Deferred compensation	1,960	1,994
Net operating loss carryforward	929	—
Deferred revenue	1,638	590
Other	1,851	1,260
Net deferred tax assets	$ 28,551	$ 15,469

Total deferred tax assets were $68.9 million and $56.1 million, and total deferred tax liabilities were $40.4 million and $40.6 million on December 27, 2019 and December 28, 2018. The difference between the deferred income tax provision and the change in net deferred income taxes is due to the change in other comprehensive income (loss) items.

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 2013.

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 27, 2019, 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 27, 2019	Maturity	2019	2018
Private placement unsecured fixed-rate notes				
Series B	5.01%	March 2023	75,000	75,000
Series C	4.88%	January 2020	—	75,000
Series D	5.35%	July 2026	75,000	75,000
Unsecured revolving credit facility	N/A	December 2021	—	—
Unsecured revolving credit facility - CNH	4.41%	N/A	14,298	41,391
Notes payable to banks	1.11%	2020	7,732	11,083
Total debt			$ 172,030	$ 277,474

The estimated fair value of the fixed interest rate private placement debt was $165 million on December 27, 2019 and $235 million on December 28, 2018. 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 December 15, 2016, the Company executed an amendment to its revolving credit agreement, extending the expiration date to December 15, 2021 and decreasing certain interest rates and fees. The amended agreement with a syndicate of lenders provides up to $500 million of committed credit, available for general corporate purposes, working capital needs, share repurchases and acquisitions. The Company may borrow up to $50 million under the swingline portion of the facility for daily working capital needs.

Under terms of the amended revolving credit agreement, borrowings may be denominated in U.S. dollars or certain other currencies. 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 currencies other than U.S. dollars bear interest at a LIBOR-based rate. The base rate is an annual rate equal to a margin ranging from zero percent to 0.75 percent, depending on the Company's cash flow leverage ratio (debt to earnings before interest, taxes, depreciation, amortization and extraordinary non-operating or non-cash charges and expenses) plus the highest of (i) the bank's prime rate, (ii) the federal funds rate plus 0.5 percent, or (iii) one-month LIBOR plus 1.5 percent. In general, LIBOR-based loans bear interest at LIBOR plus 1 percent to 1.75 percent, 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 fee on the unused amount of the loan commitments at an annual rate ranging from 0.125 percent to 0.25 percent, depending on the Company's cash flow leverage ratio.

On September 24, 2018, the Company entered into a revolving credit agreement with a sole lender that was scheduled to expire in September 2020. The credit agreement 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 revolving credit agreement that expires in December 2021. This revolver was amended effective January 29, 2020 to remove the expiration date, eliminate commitment fees, reduce interest rate margins and delete negative covenants regarding cash flow leverage and interest coverage ratios.

On December 27, 2019, the Company had $594 million in lines of credit, including the $550 million in committed credit facilities described above and $44 million with foreign banks. The unused portion of committed credit lines was $546 million as of December 27, 2019. In addition, the Company has unused, uncommitted lines of credit with foreign banks totaling $27 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 percent 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 27, 2019.

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

	2020	2021	2022	2023	2024	Thereafter
Maturities of debt	$ 7,732	$ 14,298	$ —	$ 75,000	$ —	$ 75,000

Interest paid on debt was $13.5 million in 2019, $14.0 million in 2018 and $16.5 million in 2017.

Subsequent Event

On January 29, 2020, the Company entered into a master note agreement with a sole lender that expires on January 29, 2023. The note agreement sets forth certain terms on which the Company may issue, and affiliates of the lender may purchase, up to $200 million of the Company's senior notes. Interest on the senior notes will be determined at the time of issuance, at a fixed or LIBOR-based floating rate at the option of the Company, provided that the maximum aggregate principal amount of notes bearing interest at a floating rate may not exceed $100 million. Fixed rate notes issued under the agreement will mature no longer than 12 years from date of issuance and variable rate notes will mature no longer than 10 years from issuance. Under terms of the 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.

G. Shareholders' Equity

At December 27, 2019, 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 30, 2016	$ (76,426)	$ (65,802)	$ (142,228)
Other comprehensive income (loss) before reclassifications	(14,791)	16,443	1,652
Amounts reclassified from accumulated other comprehensive income	12,787	—	12,787
Balance, December 29, 2017	(78,430)	(49,359)	(127,789)
Other comprehensive income (loss) before reclassifications	(196)	(8,609)	(8,805)
Amounts reclassified from accumulated other comprehensive income	7,190	—	7,190
Reclassified to retained earnings	(15,453)	—	(15,453)
Balance, December 28, 2018	(86,889)	(57,968)	(144,857)
Other comprehensive income (loss) before reclassifications	(33,938)	1,902	(32,036)
Amounts reclassified from accumulated other comprehensive income	7,106	—	7,106
Balance, December 27, 2019	$ (113,721)	$ (56,066)	$ (169,787)

Amounts related to pension and postretirement medical adjustments are reclassified to non-service components of pension cost that are included within other non-operating expenses. Included in the 2017 reclassification is $12 million related to a pension settlement loss (Note J).

In February 2018, FASB issued a new standard related to reclassification of certain tax effects from accumulated other comprehensive income (AOCI). The Company adopted the new standard in the first quarter of 2018. We elected to reclassify $15.5 million from accumulated other comprehensive income to retained earnings, representing the amount of “stranded” tax effects resulting from the change in the U.S. federal tax rate and the consequent revaluation of deferred tax assets related to pension and postretirement medical expense.

On April 30, 2018, the Company repurchased 0.7 million shares of its common stock for $28.2 million from the President and Chief Executive Officer of the Company. The $43.33 per share purchase price represented a discount of 3 percent from the closing price of the Company’s stock immediately prior to the date of the transaction. The Company used available cash balances and borrowings under its revolving line of credit to fund the repurchase.

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 three or four years, and in such installments as set by the Company, and expire ten 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 $3.3 million in 2019, $4.4 million in 2018 and $4.5 million in 2017.

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 15,016 shares in 2019, 14,595 shares in 2018 and 20,646 shares in 2017. 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 30, 2016	16,605	$ 18.42	11,016	$ 15.13
Granted	1,725	30.71		
Exercised	(4,903)	12.86		
Canceled	(137)	26.63		
Outstanding, December 29, 2017	13,290	21.99	7,729	18.33
Granted	1,163	44.05		
Exercised	(2,081)	18.17		
Canceled	(102)	28.59		
Outstanding, December 28, 2018	12,270	24.67	7,312	20.17
Granted	1,781	46.36		
Exercised	(1,886)	17.64		
Canceled	(53)	33.13		
Outstanding, December 27, 2019	12,112	$ 28.91	8,231	$ 23.75

The following table summarizes information for options outstanding and exercisable at December 27, 2019 (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
\$5 - \$20	2,513	2.1	$ 16.46	2,513	$ 16.46
\$20 - \$30	5,141	5.5	25.09	4,671	25.20
\$30 - \$40	1,549	7.2	30.74	731	30.77
\$40 - \$51	2,909	8.9	45.46	316	44.05
\$5 - \$51	12,112	5.8	$ 28.91	8,231	$ 23.75

The aggregate intrinsic value of exercisable option shares was $233.2 million as of December 27, 2019, with a weighted average contractual term of 4.7 years. There were approximately 12.1 million vested share options and share options expected to vest as of December 27, 2019, with an aggregate intrinsic value of $280.6 million, a weighted average exercise price of $28.91 and a weighted average contractual term of 5.8 years.

Information related to options exercised follows (in thousands):

	2019	2018	2017
Cash received	$ 32,749	$ 11,158	$ 48,833
Aggregate intrinsic value	57,419	57,979	119,442
Tax benefit realized	12,000	12,000	42,000

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 397,833 shares in 2019, 480,461 shares in 2018 and 499,956 shares in 2017.

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 27, 2019
Stock Incentive Plan (2019)	10,000	9,413
Employee Stock Purchase Plan (2006)	21,000	12,897
Total	31,000	22,310

Amounts available for future issuance exclude outstanding options. Options outstanding as of December 27, 2019, include options granted under three 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):

	2019	2018	2017
Share-based compensation	$ 26,669	$ 25,565	$ 23,652
Tax benefit	2,100	3,500	5,100
Share-based compensation, net of tax	$ 24,569	$ 22,065	$ 18,552

As of December 27, 2019, there was $9.9 million of unrecognized compensation cost related to unvested options, expected to be recognized over a weighted average period of approximately 2.5 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:

	2019	2018	2017
Expected life in years	6.8	7.5	7.0
Interest rate	2.3%	2.8%	2.2%
Volatility	24.0%	25.5%	26.7%
Dividend yield	1.4%	1.2%	1.6%
Weighted average fair value per share	$ 11.31	$ 12.84	$ 8.08

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:

	2019	2018	2017
Expected life in years	1.0	1.0	1.0
Interest rate	2.6%	2.1%	0.9%
Volatility	22.7%	21.3%	22.3%
Dividend yield	1.4%	1.2%	1.5%
Weighted average fair value per share	$ 11.36	$ 10.28	$ 7.32

I. Earnings per Share

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

	2019	2018	2017
Net earnings available to common shareholders	$ 343,853	$ 341,054	$ 252,412
Weighted average shares outstanding for basic earnings per share	166,515	167,364	167,925
Dilutive effect of stock options computed based on the treasury stock method using the average market price	5,109	5,849	6,393
Weighted average shares outstanding for diluted earnings per share	171,624	173,213	174,318
Basic earnings per share	$ 2.06	$ 2.04	$ 1.50
Diluted earnings per share	$ 2.00	$ 1.97	$ 1.45

Anti-dilutive stock options excluded from computations of diluted earnings per share totaled 1.1 million shares in 2019 and 1.1 million shares in 2018. The number of anti-dilutive options excluded from the 2017 computation of diluted earnings per share was not significant.

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 1.5 percent of the employee's compensation through 2019 and increased the contribution to 2.0 percent effective January 1, 2020. Employer contributions totaled $8.4 million in 2019, $8.0 million in 2018 and $7.8 million in 2017.

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 its U.S. qualified defined benefit plan in 2017. Under the restructuring, the plan transferred $42 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 2017 other non-operating expense. Remaining pension plan participants and related liabilities and assets were transferred into one of two new, legally separate qualified defined benefit plans, and the former plan was terminated. 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. The Company funds annually in amounts consistent with minimum funding levels and maximum tax deduction limits.

Investment policies and strategies of the U.S. funded pension plans are based on participant demographics of each plan. For the larger of the two plans (the "Blue plan") covering 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 Blue plan assets are 50 percent equity securities, 37 percent fixed income securities and 13 percent real estate and alternative investments. For the smaller of the two plans (the "Gray plan") covering retirees with lower benefit amounts, investments are based on a shorter-term, more conservative outlook. The midpoints of the ranges of strategic target allocations for the Gray plan assets are 28 percent equity securities, 60 percent fixed income securities and 12 percent real estate and alternative investments.

Plan assets are held in trusts 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 or 60 days advance notice, while most of the funds allow redemptions daily. The plans had unfunded commitments to make additional investments in certain funds totaling $2.5 million as of December 27, 2019 and $3.0 million as of December 28, 2018.

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	2019	2018
Cash and cash equivalents[(1)]	1	$ (156)	$ 927
Insurance contract	3	27,675	26,364
Investments categorized in fair value hierarchy		27,519	27,291
Equity			
U.S. Large Cap	N/A	84,330	53,597
U.S. Small/Mid Cap	N/A	9,202	7,602
International	N/A	39,240	31,586
Total Equity		132,772	92,785
Fixed income	N/A	107,832	76,213
Real estate and other	N/A	35,821	72,964
Investments measured at net asset value		276,425	241,962
Total		$ 303,944	$ 269,253

(1) Negative cash for 2019 represents unsettled pending trades within an investment that are classified in cash and cash equivalents until settled.

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

	2019	2018
Balance, beginning of year	$ 26,364	$ 26,411
Purchases	2,151	2,074
Redemptions	(1,326)	(2,086)
Unrealized gains (losses)	486	(35)
Balance, end of year	$ 27,675	$ 26,364

The following provides a reconciliation of the changes in the plans' benefit obligations and fair value of assets over the periods ending December 27, 2019, and December 28, 2018, and a statement of the funded status as of the same dates (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2019	2018	2019	2018
Change in benefit obligation				
Obligation, beginning of year	$ 371,282	$ 393,559	$ 27,778	$ 27,771
Service cost	7,735	8,487	545	636
Interest cost	15,103	13,424	1,162	1,084
Actuarial loss (gain)	67,756	(30,452)	2,532	(397)
Benefit payments	(12,594)	(11,265)	(1,371)	(1,316)
Settlements	—	(1,561)	—	—
Exchange rate changes	137	(910)	—	—
Obligation, end of year	$ 449,419	$ 371,282	$ 30,646	$ 27,778
Change in plan assets				
Fair value, beginning of year	$ 269,253	$ 254,186	$ —	$ —
Actual return on assets	44,743	(13,875)	—	—
Employer contributions	2,276	42,023	1,371	1,316
Benefit payments	(12,594)	(11,265)	(1,371)	(1,316)
Settlements	—	(1,561)	—	—
Exchange rate changes	266	(255)	—	—
Fair value, end of year	$ 303,944	$ 269,253	$ —	$ —
Funded status	$ (145,475)	$ (102,029)	$ (30,646)	$ (27,778)

Amounts recognized in consolidated balance sheets				
Non-current assets	$ 2,931	$ —	$ —	$ —
Current liabilities	1,824	1,453	1,656	1,573
Non-current liabilities	146,582	100,576	28,990	26,205
Net	$ 145,475	$ 102,029	$ 30,646	$ 27,778

Changes in discount rates used to value pension obligations were the main drivers of large actuarial losses (gains) in 2019 and 2018. In the third quarter of 2018, the Company made a $40 million voluntary contribution 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 $410 million for 2019 and $344 million for 2018. Information for plans with an accumulated benefit obligation in excess of plan assets follows (in thousands):

	2019	2018
Projected benefit obligation	$ 402,900	$ 371,282
Accumulated benefit obligation	363,497	343,705
Fair value of plan assets	254,493	269,253

The components of net periodic benefit cost for the plans for 2019, 2018 and 2017 were as follows (in thousands):

	Pension Benefits			Postretirement Medical Benefits		
	2019	2018	2017	2019	2018	2017
Service cost-benefits earned during the period	$ 7,735	$ 8,487	$ 7,675	$ 545	$ 636	$ 601
Interest cost on projected benefit obligation	15,103	13,424	15,044	1,162	1,084	1,093
Expected return on assets	(17,152)	(17,447)	(17,186)	—	—	—
Amortization of prior service cost (credit)	279	279	255	—	—	(344)
Amortization of net loss (gain)	8,392	7,931	8,634	273	646	334
Settlement loss (gain)	—	184	12,313	—	—	—
Cost of pension plans which are not significant and have not adopted ASC 715	110	106	122	N/A	N/A	N/A
Net periodic benefit cost	$ 14,467	$ 12,964	$ 26,857	$ 1,980	$ 2,366	$ 1,684

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 $5 million in 2019, $8 million in 2018 and $18 million in 2017.

Amounts recognized in other comprehensive (income) loss in 2019 and 2018 were as follows (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2019	2018	2019	2018
Net loss (gain) arising during the period	$ 40,184	$ 644	$ 2,532	$ (397)
Amortization of net gain (loss)	(8,392)	(7,931)	(273)	(646)
Settlement gain (loss)	—	(184)	—	—
Amortization of prior service credit (cost)	(279)	(279)	—	—
Total	$ 31,513	$ (7,750)	$ 2,259	$ (1,043)

Amounts included in accumulated other comprehensive (income) loss as of December 27, 2019 and December 28, 2018, that had not yet been recognized as components of net periodic benefit cost, were as follows (in thousands):

	Pension Benefits		Postretirement Medical Benefits	
	2019	2018	2019	2018
Prior service cost (credit)	$ 1,197	$ 1,465	$ —	$ —
Net loss	135,910	104,127	8,052	5,793
Net before income taxes	137,107	105,592	8,052	5,793
Income taxes	(29,666)	(23,221)	(1,772)	(1,275)
Net	$ 107,441	$ 82,371	$ 6,280	$ 4,518

Amounts included in accumulated other comprehensive (income) loss that are expected to be recognized as components of net periodic benefit cost in 2020 were as follows (in thousands):

	Pension Benefits	Postretirement Medical Benefits
Prior service cost (credit)	$ 282	$ —
Net loss (gain)	10,354	707
Net before income taxes	10,636	707
Income taxes	(2,340)	(156)
Net	$ 8,296	$ 551

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

	Pension Benefits		Postretirement Medical Benefits	
Weighted average assumptions	2019	2018	2019	2018
U.S. Plans				
Discount rate	3.5%	4.5%	3.4%	4.5%
Rate of compensation increase	2.8%	2.8%	N/A	N/A
Non-U.S. Plans				
Discount rate	0.4%	1.3%	N/A	N/A
Rate of compensation increase	1.3%	1.4%	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	2019	2018	2017	2019	2018	2017
U.S. Plans						
Discount rate	4.5%	3.9%	4.5%	4.5%	3.9%	4.5%
Rate of compensation increase	2.8%	2.8%	2.8%	N/A	N/A	N/A
Expected return on assets	7.0%	7.1%	7.0%	N/A	N/A	N/A
Non-U.S. Plans						
Discount rate	1.3%	1.0%	0.9%	N/A	N/A	N/A
Rate of compensation increase	1.4%	0.9%	1.0%	N/A	N/A	N/A
Expected return on assets	2.0%	2.0%	2.0%	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 5.8 percent for 2020, decreasing each year to a constant rate of 4.5 percent for 2038 and thereafter, subject to the plan's annual increase limitation.

At December 27, 2019, a one percent change in assumed health care cost trend rates would not have a significant impact on the service and interest cost components of net periodic postretirement health care benefit cost or the APBO for health care benefits.

The Company expects to contribute $1.8 million to its unfunded pension plans and $1.7 million to the postretirement medical plan in 2020. The Company expects to utilize available credits to satisfy any required contributions to the funded pension plans under minimum funding requirements for 2020. Estimated future benefit payments are as follows (in thousands):

	Pension Benefits	Postretirement Medical Benefits
2020	$ 15,337	$ 1,656
2021	16,520	1,707
2022	17,917	1,731
2023	19,173	1,727
2024	21,281	1,703
Years 2025-2029	115,303	8,357

K. Commitments and Contingencies

Operating Lease Liabilities and Assets

The Company adopted ASU No. 2016-02— *Leases (Topic 842)* as of December 29, 2018, the beginning of its fiscal year 2019. Using the modified retrospective approach with transition relief, the Company recorded operating lease assets and liabilities of $35 million as of December 29, 2018, and made no adjustments to retained earnings. Adoption of the new standard did not materially impact consolidated net earnings and cash flows.

Electing the package of practical expedients permitted under transition guidance, the Company did not reassess previous conclusions about whether existing contracts contained a lease, historical lease classification, or initial direct costs. Electing the hindsight practical expedient to determine the lease term for existing leases did not result in any changes to existing lease terms. The Company elected not to apply recognition requirements to short term leases with terms of twelve months or less across all asset classes. The Company elected to analyze vehicle assets using the portfolio approach. Lastly, the Company elected as an accounting policy not to separate the lease and non-lease components in the lease payments across all asset classes.

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.

As of December 27, 2019, the weighted average remaining lease term was 5.7 years and the weighted average discount rate used to determine the operating lease liability was 3.9 percent. For the twelve months ended December 27, 2019, expense related to operating leases was $11.5 million, operating lease payments included in operating cash flows totaled $11.0 million, and non-cash additions to operating lease assets totaled $2.4 million. Variable lease costs and short term lease costs were not significant for the twelve months ended December 27, 2019.

As of December 27, 2019, future maturities of operating lease liabilities were as follows (in thousands):

2020	$	8,222
2021		8,237
2022		5,657
2023		4,226
2024		1,843
Thereafter		7,490
Total lease payments	$	35,675
Present value adjustment		(3,809)
Operating lease liabilities	$	31,866

Aggregate annual rental commitments under operating leases with noncancelable terms of more than one year at December 28, 2018 were reported under previous lease accounting standards as follows (in thousands):

2019	$	11,613
2020		8,759
2021		6,745
2022		5,102
2023		3,721
Thereafter		2,340
Total	$	38,280

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 $83 million at December 27, 2019. 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 $44 million.

The Company enters into contracts with vendors to receive services. Commitments under these service contracts with noncancelable terms of more than one year totaled $10 million in 2020, $8 million in 2021, $2 million in 2022 and $1 million thereafter.

In addition, the Company could be obligated to perform under standby letters of credit totaling $2 million at December 27, 2019. The Company has also guaranteed the debt of its subsidiaries for up to $42 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.

L. Quarterly Financial Information (Unaudited)

Unaudited quarterly financial data is summarized below (in thousands, except per share amounts):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2019				
Net Sales	$ 404,870	$ 428,328	$ 400,555	$ 412,292
Gross Profit	216,042	226,954	207,379	209,381
Net Earnings	86,749	88,137	84,132	84,835
Basic Net Earnings per Common Share	$ 0.52	$ 0.53	$ 0.50	$ 0.51
Diluted Net Earnings per Common Share	0.51	0.51	0.49	0.49
Cash Dividends Declared per Common Share	0.16	0.16	0.16	0.18
2018				
Net Sales	$ 406,348	$ 424,570	$ 415,936	$ 406,438
Gross Profit	222,421	229,903	221,459	208,756
Net Earnings	85,510	89,140	92,681	73,723
Basic Net Earnings per Common Share	$ 0.51	$ 0.53	$ 0.55	$ 0.44
Diluted Net Earnings per Common Share	0.49	0.51	0.54	0.43
Cash Dividends Declared per Common Share	0.13	0.13	0.13	0.16

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 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 (the Exchange Act)). 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 2019 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 2019 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

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 2019 Annual Report on Form 10-K and the information under the heading “Board of Directors” in our Company’s Proxy Statement for its 2020 Annual Meeting of Shareholders to be held on April 24, 2020 (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.

Section 16(a) Reporting Compliance

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

Item 11. Executive Compensation

The information contained under the headings “Director Compensation,” “Executive Compensation,” “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.

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PART IV

Item 15. Exhibits, Financial Statement Schedules

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

Schedule II - Valuation and Qualifying Accounts

Graco Inc. and Subsidiaries
(in thousands)

	Allowance for Doubtful Accounts
Balance, December 30, 2016	$ 3,900
Additions charged to costs and expenses	1,600
Deductions from reserves (1)	(1,700)
Other additions (deductions) (2)	200
Balance, December 29, 2017	4,000
Additions charged to costs and expenses	1,400
Deductions from reserves (1)	(900)
Other additions (deductions) (2)	300
Balance, December 28, 2018	4,800
Additions charged to costs and expenses	800
Deductions from reserves (1)	(900)
Other additions (deductions) (2)	100
Balance, December 27, 2019	$ 4,800

(1) Represents amounts determined to be uncollectible and charged against reserves, net of collections on accounts previously charged against reserves.
(2) Includes amounts assumed or established in connection with acquisitions and effects of foreign currency translation.

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 14, 2014. (Incorporated by reference to Exhibit 3.2 to the Company's 2013 Annual Report on Form 10-K.)
4.1	Description of Our Securities.
*10.1	Graco Inc. Incentive Bonus Plan. (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed March 15, 2017.)
*10.2	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.)
*10.3	Graco Inc. Amended and Restated Stock Incentive Plan (2006). (Incorporated by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed March 14, 2006.)
*10.4	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.)
*10.5	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.)
*10.6	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.)
*10.7	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.)
*10.8	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.)
*10.9	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.)
*10.10	Form of Amendment to Executive Officer and Non-Employee Director Stock Options to Permit Net Exercises, as adopted by the Board of Directors February 17, 2012. (Incorporated by reference to Exhibit 10.1 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 nonstatutory stock options to nonemployee directors under the Graco Inc. Amended and Restated Stock Incentive Plan (2006). (Incorporated by reference to Exhibit 10.3 to the Company's Report on Form 10-Q for the thirteen weeks ended June 29, 2007.) Amended form of agreement for awards made to nonemployee directors in 2008. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended June 27, 2008.) Amended and restated form of agreement for awards made to nonemployee directors in 2009. (Incorporated by reference to Exhibit 10.14 to the Company's 2009 Annual Report on Form 10-K/A.)

*10.12	Stock Option Agreement. Form of agreement used for award of nonstatutory 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.)
*10.13	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to executive officers under the Graco Inc. Amended and Restated Stock Incentive Plan (2006) in 2007. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended March 30, 2007.) Amended form of agreement for awards made to executive officers in 2008, 2009 and 2010. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended March 28, 2008.)
*10.14	Stock Option Agreement. Form of agreement used for award of non-incentive stock options to Chief Executive Officer under the Graco Inc. Amended and Restated Stock Incentive Plan (2006) in 2007. (Incorporated by reference to Exhibit 10.1 to the Company's Report on Form 10-Q for the thirteen weeks ended March 30, 2007.) Amended form of agreement for awards made to Chief Executive Officer in 2008, 2009 and 2010. (Incorporated by reference to Exhibit 10.2 to the Company's Report on Form 10-Q for the thirteen weeks ended March 28, 2008.)
*10.15	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.)
*10.16	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.)
*10.17	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 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.)
*10.18	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 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.)
*10.19	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 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.)
*10.20	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 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.)
*10.21	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 in 2020.
*10.22	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 in 2020.
*10.23	Nonemployee Director Stock and Deferred Stock Program. (Incorporated by reference to Exhibit 10.22 to the Company's 2009 Annual Report on Form 10-K/A.)
*10.24	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.)
*10.25	Key Employee Agreement. Form of agreement used with Chief Executive Officer. (Incorporated by reference to Exhibit 10.24 to the Company's 2007 Annual Report on Form 10-K.)
*10.26	Key Employee Agreement. Form of agreement used with executive officers other than the Chief Executive Officer. (Incorporated by reference to Exhibit 10.25 to the Company's 2007 Annual Report on Form 10-K.)
10.27	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.)

10.28	Omnibus Amendment, dated June 26, 2014, amending and restating the Credit Agreement 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 July 1, 2014.) Third Amendment to Credit Agreement, dated December 15, 2016, amending the Credit Agreement 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 8-K filed December 20, 2016.) Fourth amendment to Credit Agreement, dated May 23, 2017, amending the Credit Agreement 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 10.2 to the Company's 10-Q filed for the thirteen weeks ended June 30, 2017.)
10.29	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 filed 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 filed for the thirteen weeks ended June 30, 2017.)
10.30	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.)
11	Statement of Computation of Earnings per share included in Note I on page 48
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/ PATRICK J. MCHALE	February 18, 2020
Patrick J. McHale 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/ PATRICK J. MCHALE	February 18, 2020
Patrick J. McHale President and Chief Executive Officer *(Principal Executive Officer)*	
/s/ MARK W. SHEAHAN	February 18, 2020
Mark W. Sheahan Chief Financial Officer and Treasurer *(Principal Financial Officer)*	
/s/ CAROLINE M. CHAMBERS	February 18, 2020
Caroline M. Chambers Executive Vice President, Corporate Controller and Information Systems *(Principal Accounting Officer)*	

Lee R. Mitau	Director, Chairman of the Board
William J. Carroll	Director
Eric P. Etchart	Director
Jack W. Eugster	Director
Jody H. Feragen	Director
J. Kevin Gilligan	Director
Patrick J. McHale	Director
Martha A. Morfitt	Director
R. William Van Sant	Director
Emily C. White	Director

Patrick J. McHale, 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/ PATRICK J. MCHALE	February 18, 2020
Patrick J. McHale *(For himself and as attorney-in-fact)*	

Exhibit 4.1

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following description of the capital stock of Graco Inc. (the "Company," "we," "us," and "our") is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Articles of Incorporation (the "Articles") and our Restated Bylaws (the "Bylaws"), each of which is filed as an exhibit to our most recent Annual Report on Form 10-K. We encourage you to read our Articles, our Bylaws and the applicable provisions of the Minnesota Business Corporation Act (the "MBCA") for additional information.

General

Authorized Capital Stock. The Company is authorize to issue up to 291,000,000 shares of common stock, par value $1.00 per share ("Common Stock"), 3,000,000 shares of preferred stock, par value $1.00 per share ("Preferred Stock"), and 22,549 shares of cumulative preferred stock, par value $100.00 per share ("Cumulative Preferred Stock"). Our Common Stock is listed and principally traded on the New York Stock Exchange under the symbol "GGG." All outstanding shares of our Common Stock are fully paid and nonassessable.

Dividend Rights. Subject to the rights of holders of outstanding shares of Preferred Stock or Cumulative Preferred Stock, if any, the holders of Common Stock are entitled to receive dividends when and as declared by our Board of Directors out of any funds legally available for the payment of dividends.

Voting Rights. The holders of Common Stock are entitled to one vote for each share held on all matters voted on by shareholders, including the election of directors, subject to the voting rights of any Preferred Stock then outstanding. The holders of Common Stock are not entitled to cumulative voting of their shares in the election of directors. Directors are to be elected by a majority of the votes cast by the holders of Common Stock entitled to vote and present in person or represented by proxy, provided that if the number of nominees standing for election at any meeting of the shareholders exceeds the number of directors to be elected, the directors will be elected by a plurality of the votes cast.

Liquidation Rights. In the event of liquidation, dissolution or winding up of the Company, holders of Common Stock are entitled to share ratably in the remaining assets of the Company, subject to the liquidation preference of any Preferred Stock and Cumulative Preferred Stock then outstanding.

Other Rights and Preferences. The holders of Common Stock do not have any preemptive right to purchase or subscribe to any issue of shares of the Company or any security of the Company convertible into shares. There are no redemption or sinking fund provisions applicable to our Common Stock.

Certain Provisions of Our Articles and Bylaws

Business Combinations. Our Articles provide that the affirmative vote of at least two-thirds of the outstanding shares of voting stock of the Company is required for the approval or authorization of any "Business Combination" with any "Related Person." A "Business Combination" refers generally to: (i) any merger or consolidation of the Company or a subsidiary with or into a Related Person; (ii) any exchange of shares of the Company or a subsidiary for the shares of a Related Person; (iii) any sale, lease, exchange, transfer or other disposition of all or any substantial part of the assets of the Company or of a subsidiary to or with a Related Person; (iv) any sale, lease, exchange, transfer or other disposition of all or any substantial part of the assets of a Related Person to or with the Company or a subsidiary; (v) the issuance of any securities of the Company or a subsidiary to a Related Person; (vi) any recapitalization or reclassification that would have the effect of increasing the voting power of a Related Person; and (vii) any agreement, contract or other arrangement providing for any of the foregoing types of transactions. A "Related Person" refers to and includes any individual, corporation, partnership or other person or entity which, together with its affiliates and associates, beneficially owns in the aggregate 15% or more of the outstanding voting stock of the Company. The two-thirds voting requirement does not apply if a majority of the continuing directors have expressly approved the Business Combination, or the Business Combination is a merger, consolidation, exchange of shares or sale of all or substantially all of the assets of the Company and the cash or fair market value of the property, securities or other consideration to be received per share by holders of Common Stock (other than the Related Person) is not less than the highest per share price paid by the Related Person in acquiring any of its holdings of Common Stock during the two-year period prior to the effective date of the Business Combination or the distribution of the proceeds of a sale of assets. The provisions of the Articles pertaining to Business Combinations may not be repealed or amended unless such action is approved by the affirmative vote of at least two-thirds of the outstanding shares of voting stock of the Company.

Special Meetings of Shareholders. Our Bylaws provide that a special meeting called by a shareholder 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 at least 25% of the voting power of all shares entitled to vote.

Classification of the Board of Directors. Our Bylaws provide that the Company's Board of Directors is divided into three classes of directors serving staggered three-year terms. The classification of our directors may make it more difficult for shareholders to change the composition of the Board of Directors in a short period of time.

Preferred Stock. Our Articles provide that our Board of Directors may issue one or more series of Preferred Stock from time to time without shareholder approval. The issuance of Preferred Stock without shareholder approval could discourage or make more difficult attempts to take control of the Company through a merger, tender offer, proxy contest or otherwise. Preferred Stock with special voting rights or other features issued to persons favoring the Company's management could stop a takeover by preventing the person trying to take control of the Company from acquiring enough voting shares necessary to take control.

Shareholder Proposals. At an annual meeting of shareholders, the business to be conducted shall be only such business that is brought before the meeting: (i) by or at the direction of the Board of Directors; or (ii) by any shareholder of the Company entitled to vote at the meeting who complies with the notice procedures set forth in the Bylaws.

Nomination of Director Candidates. Nominations of persons for election to the Board of Directors may be made at an annual meeting of shareholders: (i) by or at the direction of the Board of Directors; or (ii) by any shareholder of the Company entitled to vote at the meeting who complies with the notice procedures set forth in the Bylaws.

Certain Provisions of the MBCA

Shareholder Action by Unanimous Written Consent. Section 302A.441 of the MBCA provides that action may be taken by shareholders without a meeting only by unanimous written consent.

Control Share Provision. Section 302A.671 of the MBCA applies, with certain exceptions, to any acquisition of the Company's voting stock (from a person other than the Company and other than in connection with certain mergers and exchanges to which the Company is a party) resulting in the acquiring person owning 20% or more of the Company's voting stock then outstanding. Section 302A.671 requires approval of any such acquisitions by both (i) the affirmative vote of the holders of a majority of the shares entitled to vote, including shares held by the acquiring person, and (ii) the affirmative vote of the holders of a majority of the shares entitled to vote, excluding all interested shares. In general, shares acquired in the absence of such approval are denied voting rights and are redeemable at their then fair market value by the Company within 30 days after the acquiring person has failed to give a timely information statement to the Company or the date the shareholders voted not to grant voting rights to the acquiring person's shares.

Business Combination Provision. Section 302A.673 of the MBCA generally prohibits the Company or any of its subsidiaries from entering into any merger, share exchange, sale of material assets or similar transaction with a 10% shareholder within four years following the date the person became a 10% shareholder, unless either the transaction or the person's acquisition of shares is approved prior to the person becoming a 10% shareholder by a committee of all of the disinterested members of the Board of Directors.

Takeover Offer; Fair Price. Under Section 302A.675 of the MBCA, an offeror may not acquire shares of a publicly held corporation within two years following the last purchase of shares pursuant to a takeover offer with respect to that class, including acquisitions made by purchase, exchange, merger, consolidation, partial or complete liquidation, redemption, reverse stock split, recapitalization, reorganization, or any other similar transaction, unless (i) the acquisition is approved by a committee of the board's disinterested directors before the purchase of any shares by the offeror pursuant to the earlier takeover offer, or (ii) shareholders are afforded, at the time of the proposed acquisition, a reasonable opportunity to dispose of the shares to the offeror upon substantially equivalent terms as those provided in the earlier takeover offer.

Greenmail Restrictions. Under Section 302A.553 of the MBCA, a corporation is prohibited from buying shares at an above-market price from a greater than 5% shareholder who has held the shares for less than two years unless (i) the purchase is approved by holders of a majority of the outstanding shares entitled to vote, or (ii) the corporation makes an equal or better offer to all shareholders for all other shares of that class or series and any other class or series into which they may be converted.

Graco Inc. Non-Qualified Stock Option Agreement

[Grant Plan Long Name]

Graco Inc., a Minnesota corporation, (the “Company”), pursuant to the terms of the Graco Inc. 2019 Stock Incentive Plan (the “Plan”), wishes to grant this Option (as defined in the Terms and Conditions below) to you (“Employee”).

You must carefully read the Terms and Conditions governing this Option, as well as the Prospectus and any other documents provided in connection with the Option grant. Be sure you understand these documents and what your responsibilities and obligations are before acknowledging receipt of the Option. If you are not willing to agree to the Option Terms and Conditions, you must not accept the Option and you should not sign the Option Grant Acknowledgment and Agreement. If you accept the Option, you are accepting all of the Terms and Conditions that are applicable to your receipt of the Option. If you do not accept the Option, you are forfeiting your right to receive any potential benefits from the Option.

Participant: XXXX

Global ID: XXXXXXX

Award Type: XXXXXX

Date of Grant: XXXX

Award Expiration Date: XXXXX

Shares Granted: XXXXXX

Award Price: XX.XXUSD

Note: The statements above are qualified in their entirety by the Terms and Conditions below, and should be read in conjunction with such Terms and Conditions.

CEO Grant

TERMS AND CONDITIONS

1. Grant of Option

The Company grants to Employee, the right and option (the "Option") to purchase all or any part of an aggregate of the Shares Granted of Common Stock of the Company, par value USD 1.00 per share, at the Award Price per share on the terms and conditions set forth below.

2. Duration and Exercisability

A. No portion of this Option may be exercised by Employee until the first anniversary of the Date of Grant and then only in accordance with the Vesting Schedule set forth below. In no event shall this Option or any portion of this Option be exercisable following the tenth anniversary of the Date of Grant.

Vesting Schedule

Vesting Date	Portion of Option Exercisable
First Anniversary of Date of Grant	25%
Second Anniversary of Date of Grant	50%
Third Anniversary of Date of Grant	75%
Fourth Anniversary of Date of Grant	100%

If Employee does not purchase in any one year the full number of shares of Common Stock of the Company to which Employee is entitled under this Option, Employee may, subject to the terms and conditions of Section 3, purchase such shares of Common Stock in any subsequent year during the term of this Option. This Option shall expire as of the close of trading at the national securities exchange on which the Common Stock is traded ("Exchange") on the tenth anniversary of the Date of Grant or if the Exchange is closed on the anniversary date or the Common Stock of the Company is not trading on said anniversary date, such earlier business day on which the Common Stock is trading on the Exchange.

B. During the lifetime of Employee, the Option shall be exercisable only by Employee and shall not be assignable or transferable by Employee otherwise than (i) by will or the laws of descent and distribution, or (ii) by designating a beneficiary or beneficiaries (in a manner established by the Management Organization and Compensation Committee of the Board of Directors of the Company (the "Committee")) to exercise the rights of Employee and receive any property distributable with respect to the Option upon the death of the Employee (any person to whom the Option has been transferred pursuant to this Section 2B, a "Transferee"). The Transferee shall be subject to the provisions of the Agreement, and, as a condition to the transfer of the Option becoming effective, the Transferee shall agree to be bound by the provisions of this Agreement.

C. Under no circumstances may the Option or any portion of the Option granted by this Agreement be exercised after the term of the Option expires.

3. Effect of Termination of Employment

A. If Employee's employment terminates for any reason other than Employee's gross and willful misconduct, death, retirement (as defined in Section 3D), or disability (as defined in Section 3D), any portion of the Option that was exercisable as of the date of termination of employment shall be exercisable at any time within the period beginning on the day after termination of Employee's employment and ending at the close of trading on the Exchange ninety (90) days later.

B. If Employee's employment terminates by reason of Employee's gross and willful misconduct during employment, including, but not limited to, wrongful appropriation of Company or affiliate funds, serious violations of Company policy, breach of fiduciary duty or the conviction of a felony, the unexercised portion of the Option shall terminate as of the time of the misconduct. If the Company determines subsequent to the termination of Employee's employment for whatever reason, that Employee engaged in conduct during employment that would constitute gross and willful misconduct justifying termination, the Option shall terminate as of the time of such misconduct. Furthermore, if the Option is exercised in whole or in part and the Company thereafter determines that Employee engaged in gross and willful misconduct during employment which would have justified termination at any time prior to the date of such exercise, the Option shall be deemed to have terminated as of the time of the misconduct and the Company may elect to rescind the Option exercise. Gross and willful misconduct shall not include any action or inaction by the Employee contrary to the direction of the Board with respect to any initiative, strategy or action of the Company, which action or inaction the Employee believes is in the best interest of the Company.

C. If Employee shall die while employed by the Company or an affiliate and shall not have fully exercised the Option, all shares remaining under the Option shall become immediately exercisable. If Employee shall die within ninety (90) days after a termination of employment which meets the criteria of Section 3A above, only the portion of the Option for those shares that are vested as of the date of termination shall be exercisable. The executor or administrator of Employee's estate or any Transferee may exercise the portion of such exercisable Option at any time during a period beginning on the day after the date of Employee's death and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant.

D. If Employee's termination of employment is due to retirement or disability, all shares remaining under the Option shall become immediately exercisable. Employee shall be deemed to have retired if the termination of employment occurs for reasons other than the Employee's gross and willful misconduct, death, or disability after Employee (i) has attained age 55 and 10 years of service with the Company or an affiliate, or (ii) has attained age 65. Employee shall be deemed to be disabled if the termination of employment occurs because Employee is unable to work due to an impairment which would qualify as a disability under the Company's long term disability program. Employee may exercise the portion of the Option remaining unexercised at any time during a period beginning on the day after the date of Employee's termination of employment and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant. If Employee should die during the period between the date of Employee's retirement or disability and the expiration of the Option, the unexercised portion of the Option shall be exercisable at any time during a period beginning the day after the date of Employee's death and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant.

E. Notwithstanding anything to the contrary contained in this Section 3, if Employee's employment is terminated by retirement (as defined in Section 3D) and Employee has not given written notice to the Chair of the Committee, of Employee's intention to retire not less than six (6) months prior to the date of Employee's retirement, then in such event, for purposes of this Agreement only, said termination of employment shall be deemed to be not a retirement but a termination subject to the provisions of Section 3A, *provided, however,* that in the event that the Committee determines that said termination of employment without six (6) months prior written notice is in the best interests of the Company, such termination shall be deemed to be a retirement and shall be subject to Section 3D.

F. If the Option is exercised by a Transferee or the executors or administrators of the estate of a deceased optionee, the Company shall be under no obligation to issue stock hereunder unless and until the Company is satisfied that the person(s) exercising the Option is the validly designated beneficiary or the duly appointed legal representative of the deceased optionee's estate or the proper legatee or distributee thereof.

G. For purposes of this Section 3, if the last day of the relevant period is a day upon which the Exchange is not open for trading or the Common Stock is not trading on that day, the relevant period will expire at the close of trading on such earlier business day on which the Exchange is open and the Common Stock is trading.

4. <u>Manner of Exercise</u>

A. Employee or other proper party may exercise the Option only by delivering within the term of the Option written notice to the Company at its principal office in Minneapolis, Minnesota, stating the number of shares as to which the Option is being exercised and, except as provided in Sections 4B(2), 4B(3) and 4B(4), accompanied by payment-in-full of the Option price for all shares designated in the notice.

B. The Employee may, at Employee's election, pay the Option price as follows:

(1) by cash or check (bank check, certified check, or personal check);

(2) by delivering to the Company for cancellation, shares of Common Stock of the Company which have a fair market value equal to the Option price;

(3) if the Employee is still serving as an executive officer of the Company on the date of exercise, by a reduction in the number of shares of Common Stock to be delivered upon exercise, which number of shares to be withheld shall have an aggregate fair market value on the date of exercise equal to the exercise price; or

(4) by delivering to the Company a properly executed exercise notice, together with irrevocable instructions to a broker to promptly deliver to the Company from sale or loan proceeds the amount required to pay the exercise price.

For purposes of Sections 4B(2) and 4B(3), the fair market value per share of the Company's Common Stock shall be the closing price of the Common Stock on the day immediately preceding the date of exercise on the Exchange. If there is not a quotation available for such day, then the closing price on the next preceding day for which such a quotation exists shall be determinative of fair market value. If the Common Stock is not then traded on the Exchange, then the fair market value shall be determined in such manner as the Company shall deem reasonable.

5. Payment of Withholding Taxes

Upon exercise of any portion of this Option, Employee shall pay to the Company an amount sufficient to satisfy any federal, state, or local withholding tax requirements which arise as a result of the exercise of the Option or provide the Company with satisfactory indemnification for such payment. Employee may pay such amount by delivering to the Company for cancellation shares of Common Stock of the Company with a fair market value equal to the minimum amount of such withholding tax requirement by (i) electing to have the Company withhold shares otherwise to be delivered with a fair market value equal to the minimum statutory amount of such taxes required to be withheld by the Company, or (ii) electing to surrender to the Company previously owned shares with a fair market value equal to the amount of such minimum tax obligation.

6. Change of Control

A. Notwithstanding Section 2A hereof, the entire Option shall become immediately and fully exercisable upon a "Change of Control" and shall remain fully exercisable until either exercised or expiring by its terms. A "Change of Control" means:

(1) an acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "1934 Act")), (a "Person"), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) which, together with other acquisitions by such Person, results in the aggregate beneficial ownership by such Person of 30% or more of either

(a) the then outstanding shares of Common Stock of the Company (the "Outstanding Company Common Stock") or

(b) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities");

provided, however, that the following acquisitions will not result in a Change of Control:

(i) an acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company,

(ii) an acquisition by the Employee or any group that includes the Employee, or

(iii) an acquisition by any entity pursuant to a transaction that complies with clauses (a), (b) and (c) of Section 6A(3) below; or

(2) Individuals who, as of the date hereof, constitute the Board of Directors of the Company (the "Incumbent Board") cease for any reason to constitute at least a majority of said Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board will be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial membership on the Board occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies by or on behalf of a Person other than the Board; or

(3) Consummation of a reorganization, merger or consolidation of the Company with or into another entity or a statutory exchange of Outstanding Company Common Stock or Outstanding Company Voting Securities or sale or other disposition of all or substantially all of the assets of the Company ("Business Combination"); excluding, however, such a Business Combination pursuant to which

(a) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, a majority of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors (or comparable equity interests), as the case may be, of the surviving or acquiring entity resulting from such Business Combination (including, without limitation, an entity that as a result of such transaction beneficially owns 100% of the outstanding shares of common stock and the combined voting power of the then outstanding voting securities (or comparable equity securities) or all or substantially all of the Company's assets either directly or indirectly) in substantially the same proportions (as compared to the other holders of the Company's common stock and voting securities prior to the Business Combination) as their respective ownership, immediately prior to such Business Combination, of the Outstanding Company Common Stock and Outstanding Company Voting Securities,

(b) no Person (excluding (i) any employee benefit plan (or related trust) sponsored or maintained by the Company or such entity resulting from such Business Combination or any entity controlled by the Company or the entity resulting from such Business Combination, (ii) any entity beneficially owning 100% of the outstanding shares of common stock and the combined voting power of the then outstanding voting securities (or comparable equity securities) or all or substantially all of the Company's assets either directly or indirectly and (iii) the Employee and any group that includes the Employee) beneficially owns, directly or indirectly, 30% or more of the then outstanding shares of common stock (or comparable equity interests) of the entity resulting from such Business Combination or the combined voting power of the then outstanding voting securities (or comparable equity interests) of such entity, and

(c) immediately after the Business Combination, a majority of the members of the board of directors (or comparable governors) of the entity resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(4) approval by the shareholders of the Company of a complete liquidation or dissolution of the Company.

7. Adjustments; Fundamental Change

A. If there shall be any change in the number or character of the Common Stock of the Company through merger, consolidation, reorganization, recapitalization, dividend in the form of stock (of whatever amount), stock split or other change in the corporate structure of the Company, and all or any portion of the Option shall then be unexercised and not yet expired, appropriate adjustments in the outstanding Option shall be made by the Company, in order to prevent dilution or enlargement of Employee's Option rights. Such adjustments shall include, where appropriate, changes in the number of shares of Common Stock and the price per share subject to the outstanding Option.

B. In the event of a proposed (i) dissolution or liquidation of the Company, (ii) a sale of substantially all of the assets of the Company, (iii) a merger or consolidation of the Company with or into any other corporation, regardless of whether the Company is the surviving corporation, or (iv) a statutory share exchange involving the capital stock of the Company (each, a "Fundamental Change"), the Committee may, but shall not be obligated to:

(1) with respect to a Fundamental Change that involves a merger, consolidation or statutory share exchange, make appropriate provision for the protection of the Option by the substitution of options and appropriate voting common stock of the corporation surviving any such merger or consolidation or, if appropriate, the "parent corporation" (as defined in Section 424(e) of the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder, or any successor provision) of the Company or such surviving corporation, in lieu of the Option and shares of Common Stock of the Company, or

(2) with respect to any Fundamental Change, including, without limitation, a merger, consolidation or statutory share exchange, declare, prior to the occurrence of the Fundamental Change, and provide written notice to the holder of the Option of the declaration, that the Option, whether or not then exercisable, shall be canceled at the time of, or immediately prior to the occurrence of, the Fundamental Change in exchange for payment to the holder of the Option, within 20 days after the Fundamental Change, of cash (or, if the Committee so elects in lieu of solely cash, of such form(s) of consideration, including cash and/or property, singly or in such combination as the Committee shall determine, that the holder of the Option would have received as a result of the Fundamental Change if the holder of the Option had exercised the Option immediately prior to the Fundamental Change) equal to, for each share of Common Stock covered by the canceled Option, the amount, if any, by which the Fair Market Value (as defined in this Section 7B) per share of Common Stock exceeds the exercise price per share of Common Stock covered by the Option. At the time of the declaration provided for in the immediately preceding sentence, the Option shall immediately become exercisable in full and the holder of the Option shall have the right, during the period preceding the time of cancellation of the Option, to exercise the Option as to all or any part of the shares of Common Stock covered thereby in whole or in part, as the case may be. In the event of a declaration pursuant to this Section 7B, the Option, to the extent that it shall not have been exercised prior to the Fundamental Change, shall be canceled at the time of, or immediately prior to, the Fundamental Change, as provided in the declaration. Notwithstanding the foregoing, the holder of the Option shall not be entitled to the payment provided for in this Section 7B if such Option shall have expired or been forfeited. For purposes of this Section 7B only, "Fair Market Value" per share of Common Stock means the fair market value, as determined in good faith by the Committee, of the consideration to be received per share of Common Stock by the shareholders of the Company upon the occurrence of the Fundamental Change, notwithstanding anything to the contrary provided in this Agreement.

8. Miscellaneous

A. This Option is issued pursuant to the Plan and is subject to its terms. The terms of the Plan are available for inspection during business hours at the principal offices of the Company.

B. This Agreement shall not confer on Employee any right with respect to continuance of employment by the Company or any of its subsidiaries, nor will it interfere in any way with the right of the Company to terminate such employment at any time.

C. Neither Employee, the Employee’s legal representative, a Transferee, nor the executor(s) or administrator(s) of the Employee’s estate shall be, or have any of the rights or privileges of, a shareholder of the Company in respect of any shares of Common Stock receivable upon the exercise of this Option, in whole or in part, unless and until such shares shall have been issued upon exercise of this Option.

D. The Company shall at all times during the term of the Option reserve and keep available such number of shares as will be sufficient to satisfy the requirements of this Agreement.

E. The internal law, and not the law of conflicts, of the State of Minnesota, USA, shall govern all questions concerning the validity, construction and effect of this Agreement, the Plan and any rules and regulations relating to the Plan or this Option.

F. Employee hereby consents to the transfer by Employee’s employer or the Company of information relating to Employee’s participation in the Plan, including the personal data set forth in this Agreement, between them or to other related parties in the United States or elsewhere, or to any financial institution or other third party engaged by the Company, but solely for the purpose of administering the Plan and this Option. Employee also consents to the storage and processing of such data by such persons for this purpose.

Graco Inc. Non-Qualified Stock Option Agreement
[Grant Plan Long Name]

Graco Inc., a Minnesota corporation, (the “Company”), pursuant to the terms of the Graco Inc. 2019 Stock Incentive Plan (the “Plan”), wishes to grant this Option (as defined in the Terms and Conditions below) to you (“Employee”).

You must carefully read the Terms and Conditions governing this Option, as well as the Prospectus and any other documents provided in connection with the Option grant. Be sure you understand these documents and what your responsibilities and obligations are before acknowledging receipt of the Option. If you are not willing to agree to the Option Terms and Conditions, you must not accept the Option and you should not sign the Option Grant Acknowledgment and Agreement. If you accept the Option, you are accepting all of the Terms and Conditions that are applicable to your receipt of the Option.

Participant: XXXX
Global ID: XXXXXXX
Award Type: XXXXXX
Date of Grant: XXXX
Award Expiration Date: XXXXX
Shares Granted: XXXXXX
Award Price: XX.XXUSD

Note: The statements above are qualified in their entirety by the Terms and Conditions below, and should be read in conjunction with such Terms and Conditions.

Executive Officer Grant

TERMS AND CONDITIONS

1. Grant of Option

The Company grants to Employee, the right and option (the "Option") to purchase all or any part of an aggregate of the Shares Granted of Common Stock of the Company, par value USD 1.00 per share, at the Award Price per share on the terms and conditions set forth below.

2. Duration and Exercisability

A. No portion of this Option may be exercised by Employee until the first anniversary of the Date of Grant and then only in accordance with the Vesting Schedule set forth below. In no event shall this Option or any portion of this Option be exercisable following the tenth anniversary of the Date of Grant.

Vesting Schedule

Vesting Date	Portion of Option Exercisable
First Anniversary of Date of Grant	25%
Second Anniversary of Date of Grant	50%
Third Anniversary of Date of Grant	75%
Fourth Anniversary of Date of Grant	100%

If Employee does not purchase in any one year the full number of shares of Common Stock of the Company to which Employee is entitled under this Option, Employee may, subject to the terms and conditions of Section 3, purchase such shares of Common Stock in any subsequent year during the term of this Option. This Option shall expire as of the close of trading at the national securities exchange on which the Common Stock is traded ("Exchange") on the tenth anniversary of the Date of Grant or if the Exchange is closed on the anniversary date or the Common Stock of the Company is not trading on said anniversary date, such earlier business day on which the Common Stock is trading on the Exchange.

B. During the lifetime of Employee, the Option shall be exercisable only by Employee and shall not be assignable or transferable by Employee otherwise than (i) by will or the laws of descent and distribution, or (ii) by designating a beneficiary or beneficiaries (in a manner established by the Management Organization and Compensation Committee of the Board of Directors of the Company (the "Committee")) to exercise the rights of Employee and receive any property distributable with respect to the Option upon the death of the Employee (any person to whom the Option has been transferred pursuant to this Section 2B, a "Transferee"). The Transferee shall be subject to the provisions of the Agreement, and, as a condition to the transfer of the Option becoming effective, the Transferee shall agree to be bound by the provisions of this Agreement.

C. Under no circumstances may the Option or any portion of the Option granted by this Agreement be exercised after the term of the Option expires.

3. Effect of Termination of Employment

A. If Employee's employment terminates for any reason other than Employee's gross and willful misconduct, death, retirement (as defined in Section 3D), or disability (as defined in Section 3D), any portion of the Option that was exercisable as of the date of termination of employment shall be exercisable at any time within the period beginning on the day after termination of Employee's employment and ending at the close of trading on the Exchange ninety (90) days later.

B. If Employee's employment terminates by reason of Employee's gross and willful misconduct during employment, including, but not limited to, wrongful appropriation of Company or affiliate funds, serious violations of Company policy, breach of fiduciary duty or the conviction of a felony, the unexercised portion of the Option shall terminate as of the time of the misconduct. If the Company determines subsequent to the termination of Employee's employment for whatever reason, that Employee engaged in conduct during employment that would constitute gross and willful misconduct justifying termination, the Option shall terminate as of the time of such misconduct. Furthermore, if the Option is exercised in whole or in part and the Company thereafter determines that Employee engaged in gross and willful misconduct during employment which would have justified termination at any time prior to the date of such exercise, the Option shall be deemed to have terminated as of the time of the misconduct and the Company may elect to rescind the Option exercise.

C. If Employee shall die while employed by the Company or an affiliate and shall not have fully exercised the Option, all shares remaining under the Option shall become immediately exercisable. If Employee shall die within ninety (90) days after a termination of employment which meets the criteria of Section 3A above, only the portion of the Option for those shares that are vested as of the date of termination shall be exercisable. The executor or administrator of Employee's estate or any Transferee may exercise the portion of such exercisable Option at any time during a period beginning on the day after the date of Employee's death and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant.

D. If Employee's termination of employment is due to retirement or disability, all shares remaining under the Option shall become immediately exercisable. Employee shall be deemed to have retired if the termination of employment occurs for reasons other than the Employee's gross and willful misconduct, death, or disability after Employee (i) has attained age 55 and 10 years of service with the Company or an affiliate, or (ii) has attained age 65. Employee shall be deemed to be disabled if the termination of employment occurs because Employee is unable to work due to an impairment which would qualify as a disability under the Company's long term disability program. Employee may exercise the portion of the Option remaining unexercised at any time during a period beginning on the day after the date of Employee's termination of employment and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant. If Employee should die during the period between the date of Employee's retirement or disability and the expiration of the Option, the unexercised portion of the Option shall be exercisable at any time during a period beginning the day after the date of Employee's death and ending at the close of trading on the Exchange on the tenth anniversary of the Date of Grant.

E. Notwithstanding anything to the contrary contained in this Section 3, if Employee's employment is terminated by retirement (as defined in Section 3D) and Employee has not given the Company written notice to Employee's immediate supervisor and the Chief Executive Officer, of Employee's intention to retire not less than six (6) months prior to the date of Employee's retirement, then in such event, for purposes of this Agreement only, said termination of employment shall be deemed to be not a retirement but a termination subject to the provisions of Section 3A, *provided, however,* that in the event that the Chief Executive Officer determines that said termination of employment without six (6) months prior written notice is in the best interests of the Company, such termination shall be deemed to be a retirement and shall be subject to Section 3D.

F. If the Option is exercised by a Transferee or the executors or administrators of the estate of a deceased optionee, the Company shall be under no obligation to issue stock hereunder unless and until the Company is satisfied that the person(s) exercising the Option is the validly designated beneficiary or the duly appointed legal representative of the deceased optionee's estate or the proper legatee or distributee thereof.

G. For purposes of this Section 3, if the last day of the relevant period is a day upon which the Exchange is not open for trading or the Common Stock is not trading on that day, the relevant period will expire at the close of trading on such earlier business day on which the Exchange is open and the Common Stock is trading.

4. <u>Manner of Exercise</u>

A. Employee or other proper party may exercise the Option only by delivering within the term of the Option written notice to the Company at its principal office in Minneapolis, Minnesota, stating the number of shares as to which the Option is being exercised and, except as provided in Sections 4B(2), 4B(3) and 4B(4), accompanied by payment-in-full of the Option price for all shares designated in the notice.

B. The Employee may, at Employee's election, pay the Option price as follows:

(1) by cash or check (bank check, certified check, or personal check);

(2) by delivering to the Company for cancellation, shares of Common Stock of the Company which have a fair market value equal to the Option price;

(3) if the Employee is still serving as an executive officer of the Company on the date of exercise, by a reduction in the number of shares of Common Stock to be delivered upon exercise, which number of shares to be withheld shall have an aggregate fair market value on the date of exercise equal to the exercise price; or

(4) by delivering to the Company a properly executed exercise notice, together with irrevocable instructions to a broker to promptly deliver to the Company from sale or loan proceeds the amount required to pay the exercise price.

For purposes of Sections 4B(2) and 4B(3), the fair market value per share of the Company's Common Stock shall be the closing price of the Common Stock on the day immediately preceding the date of exercise on the Exchange. If there is not a quotation available for such day, then the closing price on the next preceding day for which such a quotation exists shall be determinative of fair market value. If the Common Stock is not then traded on the Exchange, then the fair market value shall be determined in such manner as the Company shall deem reasonable.

5. Payment of Withholding Taxes

Upon exercise of any portion of this Option, Employee shall pay to the Company an amount sufficient to satisfy any federal, state, or local withholding tax requirements which arise as a result of the exercise of the Option or provide the Company with satisfactory indemnification for such payment. Employee may pay such amount by delivering to the Company for cancellation shares of Common Stock of the Company with a fair market value equal to the minimum amount of such withholding tax requirement by (i) electing to have the Company withhold shares otherwise to be delivered with a fair market value equal to the minimum statutory amount of such taxes required to be withheld by the Company, or (ii) electing to surrender to the Company previously owned shares with a fair market value equal to the amount of such minimum tax obligation.

6. Change of Control

A. Notwithstanding Section 2A hereof, the entire Option shall become immediately and fully exercisable upon a "Change of Control" and shall remain fully exercisable until either exercised or expiring by its terms. A "Change of Control" means:

(1) an acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "1934 Act")), (a "Person"), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) which, together with other acquisitions by such Person, results in the aggregate beneficial ownership by such Person of 30% or more of either

(a) the then outstanding shares of Common Stock of the Company (the "Outstanding Company Common Stock") or

(b) the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (the "Outstanding Company Voting Securities");

provided, however, that the following acquisitions will not result in a Change of Control:

(i) an acquisition by any employee benefit plan (or related trust) sponsored or maintained by the Company or any corporation controlled by the Company,

(ii) an acquisition by the Employee or any group that includes the Employee, or

(iii) an acquisition by any entity pursuant to a transaction that complies with clauses (a), (b) and (c) of Section 6A(3) below; or

(2) Individuals who, as of the date hereof, constitute the Board of Directors of the Company (the “Incumbent Board”) cease for any reason to constitute at least a majority of said Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company’s shareholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board will be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial membership on the Board occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies by or on behalf of a Person other than the Board; or

(3) Consummation of a reorganization, merger or consolidation of the Company with or into another entity or a statutory exchange of Outstanding Company Common Stock or Outstanding Company Voting Securities or sale or other disposition of all or substantially all of the assets of the Company (“Business Combination”); excluding, however, such a Business Combination pursuant to which

(a) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, a majority of, respectively, the then outstanding shares of common stock and the combined voting power of the then outstanding voting securities entitled to vote generally in the election of directors (or comparable equity interests), as the case may be, of the surviving or acquiring entity resulting from such Business Combination (including, without limitation, an entity that as a result of such transaction beneficially owns 100% of the outstanding shares of common stock and the combined voting power of the then outstanding voting securities (or comparable equity securities) or all or substantially all of the Company’s assets either directly or indirectly) in substantially the same proportions (as compared to the other holders of the Company’s common stock and voting securities prior to the Business Combination) as their respective ownership, immediately prior to such Business Combination, of the Outstanding Company Common Stock and Outstanding Company Voting Securities,

(b) no Person (excluding (i) any employee benefit plan (or related trust) sponsored or maintained by the Company or such entity resulting from such Business Combination or any entity controlled by the Company or the entity resulting from such Business Combination, (ii) any entity beneficially owning 100% of the outstanding shares of common stock and the combined voting power of the then outstanding voting securities (or comparable equity securities) or all or substantially all of the Company’s assets either directly or indirectly and (iii) the Employee and any group that includes the Employee) beneficially owns, directly or indirectly, 30% or more of the then outstanding shares of common stock (or comparable equity interests) of the entity resulting from such Business Combination or the combined voting power of the then outstanding voting securities (or comparable equity interests) of such entity, and

(c) immediately after the Business Combination, a majority of the members of the board of directors (or comparable governors) of the entity resulting from such Business Combination were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such Business Combination; or

(4) approval by the shareholders of the Company of a complete liquidation or dissolution of the Company.

7. Adjustments; Fundamental Change

A. If there shall be any change in the number or character of the Common Stock of the Company through merger, consolidation, reorganization, recapitalization, dividend in the form of stock (of whatever amount), stock split or other change in the corporate structure of the Company, and all or any portion of the Option shall then be unexercised and not yet expired, appropriate adjustments in the outstanding Option shall be made by the Company, in order to prevent dilution or enlargement of Employee’s Option rights. Such adjustments shall include, where appropriate, changes in the number of shares of Common Stock and the price per share subject to the outstanding Option.

B. In the event of a proposed (i) dissolution or liquidation of the Company, (ii) a sale of substantially all of the assets of the Company, (iii) a merger or consolidation of the Company with or into any other corporation, regardless of whether the Company is the surviving corporation, or (iv) a statutory share exchange involving the capital stock of the Company (each, a “Fundamental Change”), the Committee may, but shall not be obligated to:

(1) with respect to a Fundamental Change that involves a merger, consolidation or statutory share exchange, make appropriate provision for the protection of the Option by the substitution of options and appropriate voting common stock of the corporation surviving any such merger or consolidation or, if appropriate, the “parent corporation” (as defined in Section 424(e) of the Internal Revenue Code of 1986, as amended from time to time, and any regulations promulgated thereunder, or any successor provision) of the Company or such surviving corporation, in lieu of the Option and shares of Common Stock of the Company, or

(2) with respect to any Fundamental Change, including, without limitation, a merger, consolidation or statutory share exchange, declare, prior to the occurrence of the Fundamental Change, and provide written notice to the holder of the Option of the declaration, that the Option, whether or not then exercisable, shall be canceled at the time of, or immediately prior to the occurrence of, the Fundamental Change in exchange for payment to the holder of the Option, within 20 days after the Fundamental Change, of cash (or, if the Committee so elects in lieu of solely cash, of such form(s) of consideration, including cash and/or property, singly or in such combination as the Committee shall determine, that the holder of the Option would have received as a result of the Fundamental Change if the holder of the Option had exercised the Option immediately prior to the Fundamental Change) equal to, for each share of Common Stock covered by the canceled Option, the amount, if any, by which the Fair Market Value (as defined in this Section 7B) per share of Common Stock exceeds the exercise price per share of Common Stock covered by the Option. At the time of the declaration provided for in the immediately preceding sentence, the Option shall immediately become exercisable in full and the holder of the Option shall have the right, during the period preceding the time of cancellation of the Option, to exercise the Option as to all or any part of the shares of Common Stock covered thereby in whole or in part, as the case may be. In the event of a declaration pursuant to this Section 7B, the Option, to the extent that it shall not have been exercised prior to the Fundamental Change, shall be canceled at the time of, or immediately prior to, the Fundamental Change, as provided in the declaration. Notwithstanding the foregoing, the holder of the Option shall not be entitled to the payment provided for in this Section 7B if such Option shall have expired or been forfeited. For purposes of this Section 7B only, “Fair Market Value” per share of Common Stock means the fair market value, as determined in good faith by the Committee, of the consideration to be received per share of Common Stock by the shareholders of the Company upon the occurrence of the Fundamental Change, notwithstanding anything to the contrary provided in this Agreement.

8. <u>Miscellaneous</u>

A. This Option is issued pursuant to the Plan and is subject to its terms. The terms of the Plan are available for inspection during business hours at the principal offices of the Company.

B. This Agreement shall not create an employment relationship between Employee and the Company and shall not confer on Employee any right with respect to continuance of employment by the Company or any of its affiliates or subsidiaries, nor will it interfere in any way with the right of the Company to terminate such employment at any time.

C. Neither Employee, the Employee's legal representative, a Transferee, nor the executor(s) or administrator(s) of the Employee's estate shall be, or have any of the rights or privileges of, a shareholder of the Company in respect of any shares of Common Stock receivable upon the exercise of this Option, in whole or in part, unless and until such shares shall have been issued upon exercise of this Option.

D. This Option has been granted to Employee as a purely discretionary benefit and shall not form part of Employee's salary or entitle Employee to receive similar option grants in the future. Benefits received under the Plan shall not be used in calculating severance payments, if any.

E. The Company shall at all times during the term of the Option reserve and keep available such number of shares as will be sufficient to satisfy the requirements of this Agreement.

F. The internal law, and not the law of conflicts, of the State of Minnesota, USA, shall govern all questions concerning the validity, construction and effect of this Agreement, the Plan and any rules and regulations relating to the Plan or this Option.

G. Employee hereby consents to the transfer by Employee's employer or the Company of information relating to Employee's participation in the Plan, including the personal data set forth in this Agreement, between them or to other related parties in the United States or elsewhere, or to any financial institution or other third party engaged by the Company, but solely for the purpose of administering the Plan and this Option. Employee also consents to the storage and processing of such data by such persons for this purpose.

Exhibit 21

Subsidiaries of Graco Inc.

The following are subsidiaries of the Company as of December 27, 2019

Subsidiary	Jurisdiction of Organization	Ownership Type[1]	Percent Owned
Alco Components Limited	England and Wales, UK	Indirect	100%
Alco Valves Group Limited	England and Wales, UK	Indirect	100%
Alco Valves Singapore PTE Limited	Singapore	Indirect	100%
Alco Valves (US), Inc.	Texas, USA	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%
GG Manufacturing s.r.l.	Romania	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 do Brasil Ltda.	Brazil	Indirect	100%
Graco Finance Hong Kong Limited	Hong Kong, P.R. China	Direct	100%
Graco Fluid Equipment (Shanghai) Co., Ltd.	P.R. China	Direct	100%
Graco Fluid Equipment (Suzhou) Co., Ltd.	P.R. China	Indirect	100%
Graco Fluid Handling (D) Inc.	Minnesota, USA	Direct	100%
Graco Fluid Handling (H) Inc.	Minnesota, USA	Direct	100%
Graco Fluid Handling (I) Inc.	Minnesota, USA	Direct	100%
Graco Global Holdings	Luxembourg	Indirect	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	Direct	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 Trading (Shanghai) Co., Ltd.	P.R. China	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.

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 18, 2020, 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 27, 2019.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 18, 2020

Exhibit 24

Power of Attorney

Know all by these presents, that each person whose signature appears below hereby constitutes and appoints Patrick J. McHale or Mark W. Sheahan, 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 27, 2019, 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/ WILLIAM J. CARROLL William J. Carroll	February 14, 2020
/s/ ERIC P. ETCHART Eric P. Etchart	February 14, 2020
/s/ JACK W. EUGSTER Jack W. Eugster	February 14, 2020
/s/ JODY H. FERAGEN Jody H. Feragen	February 14, 2020
/s/ J. KEVIN GILLIGAN J. Kevin Gilligan	February 14, 2020
/s/ PATRICK J. MCHALE Patrick J. McHale	February 14, 2020
/s/ LEE R. MITAU Lee R. Mitau	February 14, 2020
/s/ MARTHA A. MORFITT Martha A. Morfitt	February 14, 2020
/s/ R. WILLIAM VAN SANT R. William Van Sant	February 14, 2020
/s/ EMILY C. WHITE Emily C. White	February 14, 2020

Exhibit 31.1

Certification

I, Patrick J. McHale, 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 18, 2020	/s/ PATRICK J. MCHALE
		Patrick J. McHale
		President and Chief Executive Officer

Exhibit 31.2

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 18, 2020	/s/ MARK W. SHEAHAN
		Mark W. Sheahan
		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 18, 2020	/s/ PATRICK J. MCHALE
		Patrick J. McHale
		President and Chief Executive Officer
Date:	February 18, 2020	/s/ MARK W. SHEAHAN
		Mark W. Sheahan
		Chief Financial Officer and Treasurer