

Mission tested. Future focused.





Chase Corporation's vision is to be recognized as a leading manufacturer of protective materials for high reliability applications throughout the world.

We will achieve our vision by securing our place as a trusted partner of our customers. We will provide effective and reliable product solutions that enhance our customers' performance and competitive position.

We will grow our business responsibly by balancing short and long-term objectives, effectively managing risk, implementing sustainable business practices and continuously improving our operating performance.

We will conduct business ethically, contribute to the communities in which we operate, show respect for the environment, and treat our employees fairly.

Fulfilling our mission will create long-term value for our shareholders.



"Our Mission has always been people-driven. Our Vision and ability to achieve it is inextricably linked to the quality of everyone at Chase: frontline workers, logistics, administrative, management and the leadership team.

If we are truly to live our mission, we must be in lockstep to be successful."

Adam P. Chase, CEO



FELLOW SHAREHOLDERS,

While Fiscal 2022 turned out to be another challenging year, Chase Corporation met the moment to achieve increased revenue. Revenue grew to \$325,660,000 in Fiscal 2022 from \$293,336,000 in the previous fiscal year.

Despite the continued headwinds, Fiscal 2022 was also a milestone year for Chase, culminating in a definitive agreement to acquire NuCera Solutions—the largest acquisition in the Company's history. NuCera, a recognized global leader



in the production and development of highly differentiated specialty polymers and polymerization technologies, offers products critical to enabling end-product functionality, performance and reliability. The acquisition aligns closely with Chase's strategic objectives,

significantly enhancing our growth and providing long term integration opportunities.

Our strategic focus on acquisitions remained on track, but continued uncertainty around Covid-19's overhang delays throughout the supply chain remained on our radar as an ongoing constraint to the business. Given our success to date, the protocols put in place over the past two years will continue to guide our efforts in managing potential flare-ups during Fiscal 2023.

"The flexibility of hybrid work schedules also presented the opportunity to source employee prospects from a broader, richer talent pool—enabling us to fill openings from a population of exceptionally talented individuals."



As the pandemic eased in calendar year 2021, Chase implemented a hybrid work model. This proved effective, resulting in no impact on productivity. In light of that success, we elected to continue with this model. While not unaffected by the "great resignation", we translated staff departures into opportunities by evaluating our staffing needs—and hired exceptional new talent with strengths ideally suited to our longer-term growth objectives. We also elected to capitalize on the shift to hybrid work schedules, seizing the opportunity to reduce costs by downsizing our headquarters facility. The flexibility of hybrid work schedules also presented the opportunity to source employee prospects from a broader, richer talent pool—enabling us to fill openings from a larger population of exceptionally talented individuals.

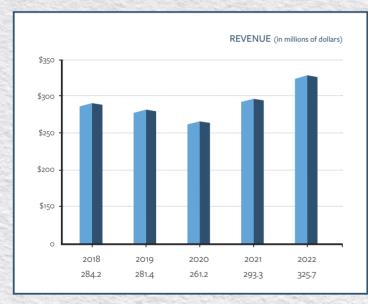
On other fronts, ongoing supply chain challenges persisted during Fiscal 2022—exacerbated by the consequences related to the February 2021 violent winter storm in Texas that overwhelmed the state's power grid and significantly affected our Houston plant. While our Texas team has proven its mettle by addressing those issues in their control, we see little evidence that other impacts—including broader supply chain issues—are on the wane.

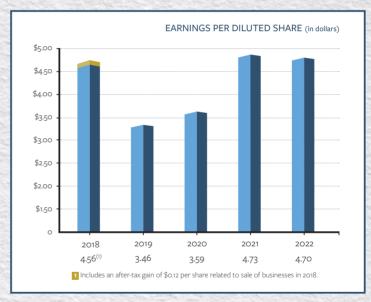
We have worked to turn the challenge to our advantage as resource-starved customers seek reliable, domestic sources for their needs. By "living our mission", we embraced our role as a trusted business partner to our customers—and delivered consistently on our commitments by balancing long-and short-term objectives, managing risk, implementing sustainable practices, and leveraging continuous improvement. As a result of that ongoing effort, Chase saw an increasing order backlog throughout Fiscal 2022 as customers grew inventories to hedge against ongoing supply shortages and delays.

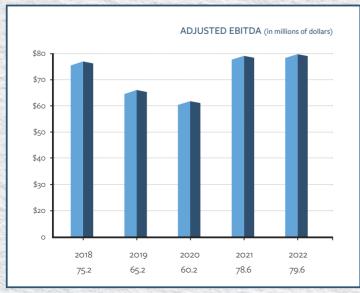


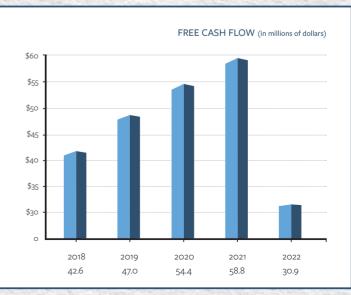
We declared a \$1.00 dividend as a continuation of our longstanding commitment to returning capital to shareholders, and is testament to the strong results obtained during fiscal 2022.

(in millions, except per share figures)	2022	2021	%Change
Revenue	325.7 293.3		+11%
Gross Margin %	37.8%	40.5%	
Net Income	44.7	44.9	(.4)%
Earnings Per Diluted Share	4.70	4.73	(.6)%
Adjusted EBITDA	79.6	78.6	+1.3%
Free Cash Flow	30.9	58.8	(47.4)%









FISCAL 2022 REINFORCED OUR COMMITMENT TO 'STAY THE COURSE' AND FOCUS ON THE FOLLOWING PROVEN CORE DRIVERS:

- ORGANIC GROWTH: Grow our global presence through new products and deeper end market penetration.
- **(* INORGANIC GROWTH**: Expand our market position in top end markets and drive share gains through strategic mergers & acquisitions.
- **CONSOLIDATION & OPTIMIZATION**: Enhance margins and return on investment through strategic consolidation and optimization of management and operations.

IN THE PURSUIT OF THOSE PRIORITIES, CHASE WILL CONTINUE ITS COMMITMENT TO
ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) SUSTAINABILITY INITIATIVES, REMAINING
FOCUSED ON THREE ESSENTIAL PRINCIPLES:

- Complying with all applicable environmental, health and safety laws and regulations as well as internal standards;
- © Operating our business with minimal environmental impact by preventing pollution and protecting ecosystems through continual improvement of our environmental, health and safety performance; and
- Maintaining a safe and healthy workplace for the people working for and on behalf of our organization where all have equal access to opportunity and merit-based career growth.

WE KNOW THAT OUR COMMITMENT TO SUSTAINABILITY WILL MAKE CHASE AND ITS PEOPLE BETTER CITIZENS—AND BRING SHARED SUCCESS TO ALL OUR STAKEHOLDERS WITHIN OUR VALUE CHAIN.

REVIEW OF OPERATIONS

Chase's operations consist of three reporting segments: Adhesives, Sealants and Additives; Industrial Tapes; and Corrosion Protection and Waterproofing.

The Adhesives, Sealants and Additives segment increased revenue to \$135,770,000 over Fiscal 2021. The segment realized increased revenue from its North American-focused functional additives product line, which included inorganic growth attributable to the ETi business acquired in Fiscal 2021. Revenue increases were primarily the result of sales price increases, counteracting downward pressure on margins.

Sales volumes were negatively impacted by the segment's world-wide focused electronic and industrial coatings line, where customer and prospect production were hampered by supply chain delays, computer chip shortages, and demand.

The Industrial Tapes segment revenue increased to \$143,954,000 compared to \$120,873,000 in Fiscal 2021. Sales price and volume-driven increases were attributable to the segment's wire and cable, specialty products, and pulling and detection product lines. The electronic materials product line revenue decreased due to soft demand in Asian markets.

REVIEW OF OPERATIONS (Cont.)

Revenue for the Corrosion Protection and Waterproofing segment increased to \$45,936,000 compared to \$45,599,000 in Fiscal 2021. The gain was due largely to sales price-driven increases to counteract margin compression in the segment's coating and lining, building envelope, and bridge and highway product lines. Sales decreased in its pipeline coatings product line, due to Covid-19 overhang delays in Middle East and Asian markets, which outpaced North American sales gains in oil pipeline repair and construction markets.

LOOKING AHEAD

During Fiscal 2022 business progressively moved toward a 'new normal'. In many cases the impacts from Covid-19 eased, marked by disruptions that continued to persist—and, in some instances, to grow. Despite, and in some cases because of those shifts, Chase Corporation remained focused on its principle-driven mission, and continued to grow and thrive, marked by management team enhancements, vital board growth and leadership, and strong year-over-year performance.

During the coming year, Chase will remain focused on its mission—and on the growth strategy that paved the way for the NuCera acquisition. While this acquisition promises transformational potential for our R&D and manufacturing capabilities, our M&A efforts will continue apace—marking a new chapter in the growth and success of Chase Corporation.

We owe our continued success—and our gratitude—to our exceptional team of global employees. Through their hard work, diligence, and innovation—and the strong support of our Board of Directors and Shareholders—we feel well justified in our optimism that Fiscal 2023 will mark another record year for Chase Corporation, and a bright future for all the stakeholders responsible for our success.

Sincerely,









Cof Chase

Adam P. Chase
President and Chief Executive Officer

Peter R. Chase
Executive Chairman

Michael J. Bourque
Treasurer and Chief Financial Officer

Jeffery D. Haigh
Vice President, General Counsel and
Corporate Secretary

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 AUGUST 31 2022

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

Commission File Number: 1-9852

CHASE CORPORATION

(Exact name of registrant as specified in its charter)

Massachusetts 11-1797126 (State or other jurisdiction of incorporation of organization) (I.R.S. Employer Identification No.) 375 University Avenue, Westwood, Massachusetts 02090 (Address of Principal Executive Offices) (Zip Code) (781) 332-0700 (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, \$.10 par value **NYSE American** CCF 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 Exchange 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 checkmark 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 \square Emerging growth company □ If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or

revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. □

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

Indicate by checkmark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES □ NO ☒

The aggregate market value of the common stock held by non-affiliates of the registrant, computed by reference to the closing price as of the last business day of the registrant's most recently completed second fiscal quarter, February 28, 2022, was approximately \$507,783,000.

As of October 31, 2022, the Company had outstanding 9,493,914 shares of common stock, \$0.10 par value, which is its only class of common stock.

Documents Incorporated By Reference:

Portions of the registrant's definitive proxy statement for the Annual Meeting of Shareholders, which is expected to be filed within 120 days after the registrant's fiscal year ended August 31, 2022, are incorporated by reference into Part III hereof.

CHASE CORPORATION INDEX TO ANNUAL REPORT ON FORM 10-K

For the Year Ended August 31, 2022

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Cautionary Note Concerning Forward-Looking Statements

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements, including without limitation forward-looking statements made under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations," involve risks and uncertainties. Any statements contained in this Annual Report that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements include, without limitation, statements as to our future operating results; seasonality expectations; plans for the development, utilization or disposal of manufacturing facilities; future economic conditions; our expectations as to legal proceedings; the effect of our market and product development efforts; and expectations or plans relating to the implementation or realization of our strategic goals and future growth, including through potential future acquisitions. Forward-looking statements may also include, among other things, statements relating to future sales, earnings, cash flow, results of operations, use of cash and other measures of financial performance, statements relating to future dividend payments, as well as the expected impact of the coronavirus disease 2019 (COVID-19) pandemic on the Company's businesses and the impact of inflation and other market forces. Forward-looking statements may be identified through the use of words such as "believes," "anticipates," "may," "should," "will," "plans," "projects," "expects," "expectations," "estimates," "predicts," "targets," "forecasts," "strategy," and other words of similar meaning in connection with the discussion of future operating or financial performance. These statements are based on current expectations, estimates and projections about the industries in which we operate, and the beliefs and assumptions made by management. Because forwardlooking statements relate to the future, they are subject to inherent risks, uncertainties and changes in circumstances that are difficult to predict. Accordingly, the Company's actual results may differ materially from those contemplated by the forward-looking statements. Investors, therefore, are cautioned against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Readers should refer to the discussions under Item 1A "Risk Factors" of this Annual Report on Form 10-K.

PART I

ITEM 1 – BUSINESS

Primary Operating Divisions and Facilities and Industry Segments

Chase Corporation (the "Company," "Chase," "we," or "us"), a global specialty chemicals company founded in 1946, is a leading manufacturer of protective materials for high-reliability applications across diverse market sectors. Our strategy is to maximize the performance of our core businesses and brands while seeking future opportunities through strategic acquisitions. Through investments in facilities, systems and organizational consolidation we seek to improve performance and gain economies of scale.

We are organized into three reportable operating segments: an Adhesives, Sealants and Additives segment, an Industrial Tapes segment and a Corrosion Protection and Waterproofing segment. The segments are distinguished by the nature of the products manufactured and how they are delivered to their respective markets.

The Adhesives, Sealants and Additives segment offers innovative and specialized product offerings consisting of both end-use products and intermediates that are generally used in, or integrated into, another company's product. Demand for the segment's product offerings is typically dependent upon general economic conditions. The Adhesives, Sealants and Additives segment leverages the core specialty chemical competencies of the Company and serves diverse markets and applications. The segment sells predominantly into the transportation, appliances, medical, general industrial and environmental market verticals. The segment's products include moisture protective coatings and cleaners, and customized sealant and adhesive systems for electronics, polymeric microspheres, polyurethane dispersions and superabsorbent polymers. Beginning September 1, 2020 (the first day of our fiscal year 2021), the Adhesives, Sealants and Additives segment includes the acquired operations of ABchimie, within the electronic and industrial coatings product line and beginning February 5, 2021, the acquired operations of Emerging Technologies, Inc ("ETi"), within the functional additives product line. Beginning September 1, 2022 (the first day of our fiscal year 2023), this segment will include the acquired operations of NuCera Solutions within the functional additives product line.

The Industrial Tapes segment features wire and cable materials, specialty tapes and other laminated and coated products. The segment derives its competitive advantage through its proven chemistries, its diverse specialty offerings and the reliability its supply chain offers to end customers. These products are generally used in the assembly of other manufacturers' products, with demand typically dependent upon general economic conditions. The Industrial Tapes segment sells mostly to established markets, with some exposure to growth opportunities through further development of existing products. Markets served include cable manufacturing, utilities and telecommunications, and electronics packaging. The segment's offerings include insulating and conducting materials for wire and cable manufacturers, laminated durable papers, laminates for the packaging and industrial laminate markets, custom manufacturing services, pulling and detection tapes used in the installation, measurement and location of fiber optic cables and water and natural gas lines and cover tapes essential to delivering semiconductor components via tape-and-reel packaging.

The Corrosion Protection and Waterproofing segment is principally composed of project-oriented product offerings that are primarily sold and used as "Chase" branded products. End markets include new and existing infrastructure projects on oil, gas, water and wastewater pipelines, highways and bridge decks, water and wastewater containment systems, and commercial buildings. The segment's products include protective coatings for pipeline applications, coating and lining systems for waterproofing and liquid storage applications, adhesives and sealants used in architectural and building envelope waterproofing applications, high-performance polymeric asphalt additives, and expansion joint systems for waterproofing applications in transportation and architectural markets. With sales generally dependent on outdoor project work, the segment experiences highly seasonal sales patterns.

Our manufacturing facilities are distinct to their respective segments apart from our O'Hara Township, PA, Blawnox, PA and Hickory, NC facilities, which produce products related to a combination of operating segments.

A summary of our operating structure as of August 31, 2022 is as follows:

ADHESIVES, SEALANTS AND ADDITIVES SEGMENT

Key Products	Primary Operating Locations	Background/History
Protective conformal coatings under the brand name HumiSeal®, moisture protective electronic coatings sold to the electronics industry including circuitry used in automobiles, industrial controls and home appliances.	O'Hara Township, PA	The HumiSeal business and product lines were acquired in the early 1970s. In the third quarter of 2021, we began relocating the electronic and industrial coatings manufacturing line from our Woburn, MA, location to our O'Hara Township, PA location. This relocation is expected to be completed in the first quarter of fiscal 2023.
Advanced adhesives, sealants, and coatings for automotive and industrial applications that require specialized bonding, encapsulating, environmental protection, or thermal management functionality.	Woburn, MA Hickory, NC	In September 2016, we acquired certain assets and the operations of Resin Designs, LLC. In the second quarter of 2021, we began relocating the sealants system manufacturing process from our Newark, CA, location to our Hickory, NC location. In the third quarter of 2021, we began relocating the electronic and industrial coatings manufacturing line from our Woburn, MA, location to our O'Hara Township, PA location. This relocation is expected to be completed in the first quarter of fiscal 2023.
Protective conformal coatings under the brand name HumiSeal®, moisture protective electronic coatings sold to the electronics industry including circuitry used in automobiles, industrial controls and home appliances.	Winnersh, Wokingham, England	In October 2005, we acquired all of the capital stock of Concoat Holdings Ltd. and its subsidiaries. In 2006, Concoat was renamed HumiSeal Europe.
industrial controls and nome appliances.	Paris, France	In March 2007, we expanded our international presence with the formation of HumiSeal Europe SARL in France. HumiSeal Europe SARL operates a sales/technical service office and warehouse near Paris, France. This business works closely with the HumiSeal operation in Winnersh, Wokingham, England, allowing direct sales and service to the French market.
	Pune, India	In June 2016, we further expanded our international presence through the purchase of Spray Products (India) Private Limited, located in Pune, India. This business enhances the Company's ability to provide technical, sales, manufacturing, chemical handling and packaging services in the region and works closely with our HumiSeal manufacturing operation in Winnersh, Wokingham, England. In December 2016, the business was renamed HumiSeal India Private Limited.
Solutions provider for the cleaning and protection of electronic assemblies under the brand name ABchimie.	Corbelin, France	In September 2020, we acquired all the capital stock of ABchimie.
Polymeric microspheres, sold under the Dualite® brand, which are utilized for weight and density reduction and sound dampening across varied industries.	Greenville, SC	In January 2015, we acquired two product lines from Henkel Corporation. They, along with the Superabsorbents business acquired in December 2017, comprise our functional additives product line.
Polyurethane dispersions utilized for various coating products.		The Company currently contracts with manufacturing partners to produce its polyurethane dispersions.
Superabsorbent polymers, sold through our Zappa Stewart and Emerging Technologies, Inc. divisions, which are utilized for water and liquid management, remediation and protection in	Hickory, NC Greensboro, NC	In December 2017, we acquired Stewart Superabsorbents, LLC and its Zappa-Tec business (collectively "Zappa Stewart").
diverse markets including wire and cable, medical, environmental, infrastructure, energy and consumer products.		In February 2021, we acquired the assets and operations of Emerging Technologies, Inc. (ETi).

INDUSTRIAL TAPES SEGMENT

INDUSTRIAL TAPES SEGMENT		
Key Products	Primary Operating Locations	Background/History
Specialty tapes and related products for the electronic and telecommunications industries using the brand name Chase & Sons®.	Oxford, MA	In August 2011, we relocated our manufacturing processes that had been previously conducted at our Webster, MA facility to this location.
Insulating and conducting materials for the manufacture of electrical and telephone wire and cable, electrical splicing, and terminating and repair tapes, which are marketed to wire and cable manufacturers selling into energy-oriented and communication markets, and to public utilities.		In December 2012, we relocated the majority of our manufacturing processes that had been previously conducted at our Randolph, MA facility to this location. Our Randolph facility was one of our first operating facilities, and had been producing products for the wire and cable industry for more than fifty years.
		In the fourth quarter of 2018, we moved the wire and cable material manufacturing process that had been conducted at our Pawtucket, RI facility to our Lenoir, NC and Oxford, MA locations.
PaperTyger®, a trademark for laminated durable papers sold to the envelope converting and commercial printing industries.		We acquired the Paper Tyger, LLC assets in 2003.
Chase BLH2OCK®, a water-blocking compound sold to the wire and cable industry.	Blawnox, PA	In September 2012, we relocated our Chase BLH2OCK® manufacturing processes that had been previously conducted at our Randolph, MA facility to this location.
Laminated film foils for the electronics and cable industries and cover tapes essential to delivering semiconductor components via tape and reel packaging.	Lenoir, NC Suzhou, China	In June 2012, we acquired all of the capital stock of NEPTCO Incorporated, which operated facilities in Rhode Island, North Carolina and China.
		In October 2013, we moved the manufacturing processes that had been conducted at our Taylorsville, NC facility to our Lenoir, NC location.
		In the fourth quarter of 2018, we moved the wire and cable material manufacturing process that had been conducted at our Pawtucket, RI facility to our Lenoir, NC and Oxford, MA locations.
Pulling and detection tapes used in the installation, measurement and location of fiber optic cable, and water and natural gas lines.	Hickory, NC	In the third quarter of 2019, we began relocating the pulling and detection tapes manufacturing process from our Granite Falls, NC location to our Hickory, NC location. This relocation was completed in the second quarter of fiscal 2020.

CORROSION PROTECTION AND WATERPROOFING SEGMENT

Key Products	Primary Operating Locations	Background/History
Protective pipe-coating tapes and other protectants for valves, regulators, casings, joints, metals, and concrete, which are sold under the brand name Royston®, to oil companies, gas utilities and pipeline companies.	Blawnox, PA	The Royston business was acquired in the early 1970s.
Rosphalt50® is a polymer additive that provides long-term cost- effective solutions in many applications such as waterproofing of bridge decks and approaches, ramps, racetracks, airport runways and taxiways and specialty road applications.		
Waterproofing membranes for highway bridge deck metal- supported surfaces.		
Waterproofing sealants, expansion joints and accessories for the transportation, industrial and architectural markets.	O'Hara Township, PA	In April 2005, we acquired certain assets of E-Poxy Engineered Materials. Additionally, in September 2006, we acquired all of the capital stock of Capital Services Joint Systems. Both of these acquisitions were combined to form the expansion joints business.
Technologically advanced products, including the brand Tapecoat®, for demanding anti-corrosion applications in the gas, oil and marine pipeline market segments, as well as tapes and membranes for roofing and other construction-related applications.	Evanston, IL	In November 2001, we acquired substantially all the assets of Tapecoat, previously a division of T.C. Manufacturing Inc.
Specialized high-performance coating and lining systems used worldwide in liquid storage and containment applications.	Houston, TX	In September 2009, we acquired all the outstanding capital stock of C.I.M. Industries Inc. ("CIM").
Waterproofing and corrosion protection systems for oil, gas and water pipelines, and a supplier to Europe, the Middle East and Southeast Asia.	Rye, East Sussex, England	In September 2007, we purchased certain product lines and a related manufacturing facility in Rye, East Sussex, England through our wholly-owned subsidiary, Chase Protective Coatings Ltd. This facility joins Chase's North American-based Tapecoat® and Royston® brands to broaden the protective pipeline coatings product line and better address global demand.
The ServiWrap® brand pipeline protection tapes and products, which offer long-term corrosion protection for buried pipelines in the most challenging natural environments.		In December 2009, we acquired the full range of ServiWrap® pipeline protection products ("ServiWrap") from Grace Construction Products Limited, a U.Kbased unit of W.R. Grace & Co. ServiWrap products complement our portfolio of pipeline protection tapes, coatings and accessories and extend our global customer base.

Other Business Developments

On September 1, 2022 (the first day of fiscal 2023), the Company completed its acquisition of NuCera Solutions, a recognized global leader in the production and development of highly differentiated specialty polymers and polymerization technologies serving demanding applications, offering products critical to enabling end-product functionality, performance and reliability. The Company acquired all of the capital stock of NuCera for a purchase price of \$250,000,000, net of debt, accrued income taxes and cash at closing, and pending any working capital adjustments. Chase will continue to market under the NuCera brands and the business will be integrated into Chase's Adhesives, Sealants and Additives reporting unit. See Note 23 to the consolidated financial statements for additional information related to our subsequent event.

The Company completed the relocation of its corporate headquarters to another location within Westwood, MA during the fiscal year ending August 31, 2022. The move, part of the Company's ongoing consolidation and optimization initiative, capitalizes on the hybrid work model utilized by many of Chase's corporate and administrative employees and is expected to provide future operational cost savings. The new facility also consolidates and houses research and

development operations previously conducted at the previous Westwood, MA and Woburn, MA locations. Operations optimization costs related to the Westwood move of \$232,000 were expensed in fiscal 2022. No future costs related to the move are anticipated.

During the third quarter of fiscal 2021, Chase announced to the employees at its Woburn, MA location that its adhesives systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, would be consolidating into the Company's existing O'Hara Township, PA location. This rationalization and consolidation initiative aligns with the announcement in the second quarter of fiscal 2021 of the Company's plan to move its sealant systems production from Newark, CA to Hickory, NC, described in more detail below. Chase Corporation obtained both the adhesive and sealants systems as part of its fiscal 2017 acquisition of the operations of Resin Designs. The Company expensed \$463,000 and \$0 in fiscal 2022 and 2021, related to the move, and future costs related to this move are not anticipated to be significant to the consolidated financial statements.

During the second quarter of fiscal 2021, Chase began moving the sealant systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, from its Newark, CA location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. The sealant systems operations and Newark, CA location came to Chase Corporation as part of the fiscal 2017 acquisition of the operations of Resin Designs, and the Company's lease there terminated in fiscal 2021. The Company recognized \$147,000 in expense related to the move during fiscal year ended August 31, 2022 and \$977,000 in the fiscal year ended August 31, 2021. The project is now substantially completed and any future costs related to this move are not anticipated to be significant to the consolidated financial statements.

Products and Markets

Our principal products are specialty tapes, laminates, adhesives, sealants, coatings and chemical intermediates which are sold by our salespeople, manufacturers' representatives and distributors.

In our Adhesives, Sealants and Additives segment, these products consist of:

- (i) moisture protective coatings and cleaning solutions, which are sold to the electronics industry for circuitry manufacturing, including circuitry used in automobiles, industrial controls and home appliances;
- (ii) advanced adhesives, sealants, and coatings for automotive and industrial applications that require specialized bonding, encapsulating, environmental protection, or thermal management functionality;
- (iii) polymeric microspheres utilized by various industries to allow for weight and density reduction and sound dampening;
- (iv) polyurethane dispersions utilized for various coating products; and
- (v) superabsorbent polymers utilized for water and liquid management, remediation and protection in diverse markets including wire and cable, medical, environmental, infrastructure, energy and consumer products.

In our Industrial Tapes segment, these products consist of:

- (i) insulating and conducting materials for the manufacture of electrical and telephone wire and cable, electrical splicing, and terminating and repair tapes, which are marketed to wire and cable manufacturers;
- (ii) laminated film foils, including EMI/RFI shielding tapes used in communication and local area network (LAN) cable;
- (iii) industrial coated or laminate products and custom manufacturing services sold into medical, consumer, automotive, packaging, energy, telecommunications and other specialized markets;
- (iv) laminated durable papers, including laminated paper with an inner security barrier used in personal and mail-stream privacy protection, which are sold primarily to the envelope converting and commercial printing industries;
- (v) pulling and detection tapes used in the installation, measurement and location of fiber optic cable, water and natural gas lines, and power, data, and video cable for commercial buildings; and
- (vi) cover tapes with reliable adhesive and anti-static properties essential to delivering semiconductor components via tape and reel packaging.

In our Corrosion Protection and Waterproofing segment, these products consist of:

- (i) protective coatings, tapes and protectants for pipelines, valves, casings and other metals, which are sold to oil companies, gas companies and water/wastewater utilities for use in both the construction and maintenance of oil, gas, water and wastewater pipelines;
- (ii) fluid-applied coating and lining systems for use in the water and wastewater industry;
- (iii) waterproofing tapes and coatings used in waterproofing of the exterior of both commercial and industrial structures;

- (iv) waterproofing membranes for highway bridge deck metal-supported surfaces, and high-performance polymeric asphalt additives, which are sold to municipal transportation authorities; and
- (v) expansion and control joint systems designed for roads, bridges, stadiums and airport runways.

There is some seasonality in selling products into the construction market, which most acutely effects our Corrosion Protection and Waterproofing segment. Higher demand is often experienced when temperatures are warmer in most of North America (April through October), with lower demand occurring when temperatures are colder (typically our second fiscal quarter).

Human Capital Management

Chase Corporation's success derives from its dedicated employees worldwide, who are responsible for the operations, innovation and ethics core to our business and its future. In fiscal 2022, our employees continued to navigate the challenges of COVID-19, and, with an overarching commitment to health and safety, maintained a commitment to our customers, including providing products to critical industries such as healthcare, utilities, infrastructure and telecommunications.

As of August 31, 2022, we employed approximately 683 people (including union employees). Of these, 80% were U.S. based and 20% international. 26% of our employees worked in administrative, selling and research and development functions, while 74% worked in the manufacture of our products at our facilities. Given macrotrends faced worldwide, Chase currently operates in an increasingly competitive landscape in hiring and retaining a manufacturing labor force. We consider our employee relations to be good. In the U.S., we offer our employees a wide array of company-paid benefits, which we believe are competitive relative to others in our industry. In our operations outside the U.S., we offer benefits that may vary from those offered to our U.S. employees due to customary local practices and statutory requirements.

We have policies in place designed to provide a safe and healthy workplace and comply with applicable safety and health regulations and our own internal requirements. We work to provide and maintain a safe, healthy and productive workplace, in consultation with our employees, by addressing and remediating identified risks of accidents, injury and health impacts.

We strive to maintain workplace environments that are free from discrimination or harassment on the basis of race, sex, color, national or social origin, ethnicity, religion, age, disability, sexual orientation, gender identification or expression, political opinion, or any other status protected by applicable law. The qualities and characteristics we seek for recruitment, hiring, placement, development, training, compensation, and advancement at the Company are job qualifications, performance, skills, and experience.

Respect for human rights is a fundamental value of the Company. Chase strives to respect and promote human rights in accordance with the United Nations Guiding Principles on Business and Human Rights in our relationships with our employees, customers, suppliers, and vendors. Our aim is to further advance human rights within the communities in which we operate. The Chase Corporation Human Rights and Supplier Code of Conduct policies and statements on Safety Performance, Environmental Impact and Energy and Resources are available on our website (www.chasecorp.com).

Backlog, Customers and Competition

As of August 31, 2022, the backlog of customer orders believed to be firm was approximately \$40,600,000. This compared with a backlog of approximately \$30,400,000 as of August 31, 2021. The increase in backlog from the prior year amount was primarily due to raw material supply and logistics challenges broadly seen worldwide increasing the balance for the current year. We continue to work with our customers, vendors and supply chain partners to prioritize the flow of goods. During fiscal 2022 and 2021, no customer accounted for more than 10% of sales. No material portion of our business is subject to renegotiation or termination of profits or contracts at the election of the United States Federal Government.

There are other companies that manufacture or sell products and services similar to those made and sold by us. Many of those companies are larger and have greater financial resources than we have. We compete principally on the basis of technical performance, service reliability, quality and price.

Raw Materials

We obtain raw materials from a wide variety of suppliers, with alternative sources of most essential materials available within reasonable lead times.

Patents, Trademarks, Licenses, Franchises and Concessions

As of August 31, 2022, we owned the following trademarks that we believe were of material importance to our business: Chase Corporation[®], C-Spray (Logo), a trademark used in conjunction with most of the Company's business segment and product line marketing material and communications; HumiSeal®, a trademark for moisture protective coatings sold to the electronics industry; Chase & Sons[®], a trademark for barrier and insulating tapes sold to the wire and cable industry; Chase BLH2OCK®, a trademark for a water-blocking compound sold to the wire and cable industry; Rosphalt50[®], a trademark for an asphalt additive used predominantly on bridge decks for waterproofing protection; PaperTyger[®], a trademark for laminated durable papers sold to the envelope converting and commercial printing industries; DuraDocument[®], a trademark for durable, laminated papers sold to the digital print industry; Defender[®] a trademarked RFID protective material sold to the personal accessories and paper industries; Tapecoat®, a trademark for corrosion preventive surface coatings and primers; Maflowrap®, a trademark for anti-corrosive tapes incorporating selfadhesive mastic or rubber-backed strips, made of plastic materials; Royston[®], a trademark for a corrosion-inhibiting coating composition for use on pipes; Ceva[®], a trademark for epoxy pastes/gels/mortars and elastomeric concrete used in the construction industry; CIM® trademarks for fluid-applied coating and lining systems used in the water and wastewater industry; ServiWrap® trademarks for pipeline protection tapes, coatings and accessories; NEPTCO®, a trademark used in conjunction with most of NEPTCO's products marketing material and communications; NEPTAPE®, a trademark for coated shielding and insulation materials used in the wire and cable industry; Muletape[®], a trademark for pulling and installation tapes sold to the telecommunications industry; Trace-Safe®, a trademark for detection tapes sold to the telecommunications and water and gas utilities industries; Dualite®, a trademark for polymeric microspheres utilized for density and weight reduction and sound dampening by various industries; 4EvaSeal®, a trademark for adhesive-backed tape utilized in various industries; Resin Designs®, a trademark for adhesives and sealants sold into the microelectronics and semiconductor industries; SlickTape®, a trademark for a lubricated shielding tape sold to the wire and cable industry; HighDraw[®], a trademark for a highly extensible shielding tape sold to the wire and cable industry; ZapZorb®, a trademark for environmental solidification products that are designed to meet the specific challenges posed by a wide range of liquid-bearing waste streams; ZapLoc®, a trademark for medical waste solidifier products packaged in bottles or larger packages; ZapPak®, a trademark for medical waste solidifier products packaged in dissolvable film; and ABchimie®, a trademark used in conjunction with most of ABchimie's products marketing material and communications.

We do not have any other material trademarks, licenses, franchises, or concessions. While we do hold various patents, as well as other trademarks, we do not believe that they are material to the success of our business.

Research and Development

We expensed approximately \$4,415,000, \$4,056,000 and \$4,007,000 for Company-sponsored research and development during fiscal 2022, 2021 and 2020, respectively, which was recorded within Research and Product Development Costs on the Consolidated Statement of Operations. Research and development costs have stayed relatively consistent from fiscal 2020 through fiscal 2022 as the Company continued focused development work on strategic product lines.

Available Information

Chase maintains a website at http://www.chasecorp.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to such reports filed or furnished pursuant to section 13(a) or 15(d) of the Securities Exchange Act of 1934, as well as section 16 reports on Form 3, 4, or 5, are available free of charge on this site as soon as is reasonably practicable after they are filed or furnished with the SEC. Our Code of Conduct and Ethics and the charters for the Audit Committee, the Nominating and Governance Committee and the Compensation and Management Development Committee of our Board of Directors are also available on our internet website. The Code of Conduct and Ethics and charters are also available in print to any shareholder upon request. Requests for such documents should be directed to Shareholder and Investor Relations Department, at 375 University Avenue, Westwood, Massachusetts 02090. Our internet website and the information contained on it or connected to it are not part of nor incorporated by reference into this Form 10-K. Our filings with the SEC are also available on the SEC's website at http://www.sec.gov.

Financial Information regarding Segment and Geographic Areas

Please see Notes 11 and 12 to the Company's Consolidated Financial Statements for financial information about the Company's operating segments and domestic and foreign operations for each of the last three fiscal years.

ITEM 1A - RISK FACTORS

The following risk factors should be read carefully in connection with evaluating our business and the forward-looking information contained in this Annual Report on Form 10-K. We feel that any of the following risks could materially adversely affect our business, operations, industry, financial position or our future financial performance. While we believe that we have identified and discussed below the key risk factors affecting our business, there may be additional risks and uncertainties that are not presently known or that are not currently believed to be significant that may adversely affect our business, operations, industry, financial position and financial performance in the future.

Operational and Competitive Risks

We currently operate in mature markets where increases or decreases in market share could be significant.

Our sales and net income are largely dependent on sales from a consistent and well-established customer base. We have used and will continue to use strategic acquisitions as a means to build and grow the business. In this business environment, increases or decreases in market share could have a material effect on our business condition or results of operation. We face intense competition from a diverse range of competitors, including operating divisions of companies much larger and with far greater resources than we have. If we are unable to maintain our market share, our business could suffer.

Fluctuations in the supply and prices of raw materials may negatively impact our financial results.

We obtain raw materials needed to manufacture our products from a number of suppliers. Many of these raw materials are petroleum-based derivatives. Under normal market conditions, these materials are generally available on the open market and from a variety of producers. From time to time, however, the prices and availability of these raw materials fluctuate (as was experienced in the second half of fiscal 2021 and in the fiscal 2022 period), which could impair our ability to procure necessary materials, or increase the cost of manufacturing our products. If the prices of raw materials increase, and we are unable to pass these increases on to our customers, we could experience reduced profit margins.

If our products fail to perform as expected, or if we experience product recalls, we could incur significant and unexpected costs and lose existing and future business.

Our products are complex and could have defects or errors presently unknown to us, which may give rise to claims against us, diminish our brands or divert our resources from other purposes. Despite testing, new and existing products could contain defects and errors and may in the future contain manufacturing or design defects, errors or performance problems when first introduced, or even after these products have been used by our customers for a period of time. These problems could result in expensive and time-consuming design modifications or warranty charges, changes to our manufacturing processes, product recalls, significant increases in our maintenance costs, or exposure to liability for damages, any of which may result in substantial and unexpected expenditures, require significant management attention, damage our reputation and customer relationships, and adversely affect our business, our operating results and our cash flow.

The Company's results of operations have been adversely affected and could in the future be materially adversely impacted by the coronavirus disease 2019 (COVID-19) pandemic.

The global spread of the coronavirus disease 2019 (COVID-19) pandemic has created significant volatility, uncertainty and economic disruption. The Company experienced lower sales as a result of the economic disruption (most acutely in the second half of fiscal 2020 and the first half of fiscal 2021), and initiated cost-saving measures, including a targeted workforce reduction in 2020, in response to the uncertainties associated with the scope and duration of the pandemic. The extent to which the COVID-19 pandemic impacts the Company's business, operations and financial results in future periods will depend on numerous evolving factors that it may not be able to accurately predict, including: the duration and scope of the pandemic; future domestic and international waves and variants of COVID-19 and current vaccines' effectiveness against such variants; governmental, business and individuals' actions that have been and continue to be taken in response to the pandemic; the impact of the pandemic on economic activity and actions taken in response; the

effect on its customers' demand for its goods and services and its vendor's ability to supply it with raw materials; its ability to sell and provide goods and services, including as a result of travel restrictions and people working from home; the ability of its customers to pay for goods and services; and any closures of its customers' offices and facilities. Customers may also slow down decision-making, delay planned work or seek to terminate existing agreements.

Further, the effects of the pandemic may also increase the Company's cost of capital or make additional capital more difficult or available only on terms less favorable to it. A sustained downturn may also result in the carrying value of the Company's goodwill or other intangible assets exceeding their fair value, which may require it to recognize an impairment to those assets. A sustained downturn in the financial markets and asset values may have the effect of increasing the Company's pension funding obligations in order to ensure that its qualified pension plan continues to be adequately funded, which may divert cash flow from other uses.

We may experience difficulties in the redesign and consolidation of our manufacturing facilities which could impact shipments to customers, product quality, and our ability to realize cost savings.

We currently have several ongoing projects to streamline our manufacturing operations, which include the redesign and consolidation of certain manufacturing facilities in order to reduce overhead costs. Despite our planning, we may be unable to effectively leverage assets, personnel, and business processes in the transition of production among manufacturing facilities. Uncertainty is inherent within the facility redesign and consolidation process, and unforeseen circumstances could offset the anticipated benefits of these streamlining projects, disrupt service to customers, and impact product quality.

Strategic Risks

Our business strategy includes the pursuit of strategic acquisitions, which may not be successful if they happen at all.

From time to time, we engage in discussions with potential target companies concerning potential acquisitions. In executing our acquisition strategy, we may be unable to identify suitable acquisition candidates. In addition, we may face competition from other companies for acquisition candidates, making it more difficult to acquire suitable companies on favorable terms. We have historically financed larger acquisitions with additional borrowings under our bank credit agreements. Our credit agreement places certain restrictions on our ability to acquire other businesses, and imposes certain financial covenants on us that may limit our ability to borrow. If we incur additional indebtedness in order to finance an acquisition, that indebtedness may reduce the availability of our cash flow to fund future working capital, capital expenditures, and other general corporate purposes, may increase our vulnerability to adverse economic conditions, and may expose us to the risk of increased interest rates. If we finance an acquisition through the issuance of equity securities, the ownership interest of our existing shareholders would be proportionately diluted.

Even if we do identify a suitable acquisition target and are able to negotiate and close a transaction (as we did in fiscal 2021 for both ABchimie and the operations of Emerging Technologies, Inc. ("ETI"), and at the beginning of fiscal 2023 for NuCera), the integration of an acquired business into our operations involves numerous risks, including potential difficulties in integrating an acquired company's product line with ours; the diversion of our resources and management's attention from other business concerns; the potential loss of key employees; limitations imposed by antitrust or merger control laws in the United States or other jurisdictions; risks associated with entering a new geographical or product market; and the day-to-day management of a larger and more diverse combined company.

We may not realize the synergies, operating efficiencies, market position or revenue growth we anticipate from acquisitions, and our failure to effectively manage the above risks could have a material adverse effect on our business, growth prospects and financial performance.

If we cannot successfully manage the unique challenges presented by international markets, we may not be successful in expanding our international operations.

Our strategy includes expansion of our operations in existing and new international markets by selective acquisitions and strategic alliances. Our ability to successfully execute our strategy in international markets is affected by many of the same operational risks we face in expanding our U.S. operations. In addition, our international expansion may be adversely affected by our ability to identify and gain access to local suppliers as well as by local laws and customs, legal and regulatory constraints, political and economic conditions and currency regulations of the countries or regions in which we currently operate or intend to operate in the future. Risks inherent in our international operations also include, among others, the costs and difficulties of managing international operations, adverse tax consequences, domestic and international tariffs and trade policies and greater difficulty in enforcing intellectual property rights. Additionally, foreign currency exchange rates and fluctuations may have an impact on future costs or on future cash flows from our international operations.

Current and threatened tariffs on goods from China and other countries could result in lower revenue, profits and cash flows.

The Company imports raw materials from China, makes sales of finished goods into China and has manufacturing operations in China. The Company works to lower the potential negative effects of the tariffs through seeking alternative sources for our raw materials, when available and pragmatic, and, in certain cases, through altering our manufacturing logistics by utilizing non-U.S. manufacturing where tariffs do not apply. While we also attempt to pass on these additional costs to our customers, competitive factors (including competitors who import from other countries not subject to such tariffs) may limit our ability to sustain price increases and, as a result, may adversely impact our revenue, profits and cash flows. In addition, the imposition of tariffs may influence the sourcing habits of certain end users of our products which, in turn, could have a direct impact on the requirements of our direct customers for our products. Such an impact could adversely affect our revenue, profits and cash flows.

Industry Risks

Our results of operations could be adversely affected by uncertain economic and political conditions and the effects of these conditions on our customers' businesses and levels of business activity.

Global economic and political conditions can affect the businesses of our customers and the markets they serve. A severe or prolonged economic downturn or a negative or uncertain political climate could adversely affect, among others, the automotive, housing, construction, pipeline, energy, transportation, infrastructure or electronics industries. This may reduce demand for our products or depress pricing of those products, either of which may have a material adverse effect on our results of operations. Changes in global economic conditions or foreign and domestic trade policy could also shift demand to products for which we do not have competitive advantages, and this could negatively affect the amount of business that we are able to obtain. In addition, if we are unable to successfully anticipate changing economic and political conditions, we may be unable to effectively plan for and respond to those changes and our business could be negatively affected.

General economic factors, domestically and internationally, may also adversely affect our financial performance through increased raw material costs or other expenses and by making access to capital more difficult.

The cumulative effect of higher interest rates, energy costs, inflation, levels of unemployment, healthcare costs, unsettled financial markets, and other economic factors (including changes in foreign currency exchange rates and changes to federal, state, local and international tax laws or the application or enforcement practices of such laws) could adversely affect our financial condition by increasing our manufacturing costs and other expenses at the same time that our customers may be scaling back demand for our products. Prices of certain commodity products, including oil and petroleum-based products, are historically volatile and are subject to fluctuations arising from changes in domestic and international supply and demand, labor costs, competition, weather events and climate change, regional and global public

health crises, market speculation, government regulations and periodic delays in delivery. Rapid and significant changes in commodity prices may affect our sales and profit margins. These factors can increase our cost of products and services sold and/or selling, general and administrative expenses, and otherwise adversely affect our operating results. Disruptions in the credit markets may limit our ability to access debt capital for use in acquisitions or other purposes on advantageous terms or at all. If we are unable to manage our expenses in response to general economic conditions and margin pressures, or if we are unable to obtain capital for strategic acquisitions or other needs, then our results of operations would be negatively affected.

Other Risks

We are dependent on key personnel.

We depend significantly on our executive officers including our President and Chief Executive Officer, Adam P. Chase, and on other key employees. The loss of the services of any of these key employees could have a material impact on our business and results of operations. In addition, our acquisition strategy will require that we attract, motivate and retain additional skilled and experienced personnel. We have experienced in the past, and may continue to experience, an increasingly competitive landscape relating to obtaining and retaining a manufacturing labor force. The inability to satisfy such requirements could have a negative impact on our ability to remain competitive in the future.

Financial market performance may have a material adverse effect on our pension plan assets and require additional funding requirements.

Significant and sustained declines in the financial markets may have a material adverse effect on the fair market value of the assets of our qualified pension plan. While these pension plan assets are considered non-financial assets since they are not carried on our balance sheet (i.e. the balance sheet reflects only the net of plan assets and obligations), the fair market valuation of these assets could impact our funding requirements, funded status or net periodic pension cost. Any significant and sustained declines in the fair market value of these pension assets could require us to increase our funding requirements, which would have an impact on our cash flow, and could also lead to additional pension expense.

If we fail to maintain effective internal control over financial reporting, this may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required under Section 404 of the Sarbanes-Oxley Act to furnish a report by management on the effectiveness of our internal control over financial reporting and to include a report by our independent auditors attesting to such effectiveness. Any failure by us to maintain effective internal control over financial reporting could adversely affect our ability to report accurately our financial condition or results of operations.

If we are unable to maintain effective internal control over financial reporting, or if our independent auditors determine that we have a material weakness in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, also could restrict our future access to the capital markets.

Failure or compromise of security with respect to an operating or information system or portable electronic device could adversely affect our results of operations and financial condition or the effectiveness of our internal controls over operations and financial reporting.

We are highly dependent on automated systems to record and process our daily transactions and certain other components of our financial statements. Notwithstanding efforts to ensure the integrity of our automated systems, we could experience a failure of one or more of these systems, or a compromise of our security due to technical system flaws, data input or recordkeeping errors, or tampering or manipulation of our systems by employees or unauthorized third parties. Information security risks also exist with respect to the use of portable electronic devices, such as laptops and smartphones, which are particularly vulnerable to loss and theft.

We could be subject to disruptions of any of these systems arising from events that are wholly or partially beyond our control (for example, natural disasters, acts of terrorism, epidemics, pandemics, computer viruses, cyberattacks, malware, ransomware, and electrical/telecommunications outages). All of these risks are also applicable wherever we rely on outside vendors to provide services. Operating system failures, disruptions, or the compromise of security with respect to operating systems or portable electronic devices (with information technology security threats increasing in frequency and sophistication) could subject us to liability claims, harm our reputation, interrupt our operations, or adversely affect our business, results from operations, financial condition, cash flow or internal control over financial reporting.

ITEM 1B - UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2 – PROPERTIES

The principal properties of the Company as of August 31, 2022 are situated at the following locations and have the following characteristics:

Location	Square Feet	Owned / Leased	Principal Use
Westwood, MA	10,000	Leased	Corporate headquarters, executive office and global operations center,
Westwood, Mr	10,000	Leasea	including research and development, sales and administrative services
Blawnox, PA	44,000	Owned	Manufacture and sale of protective coatings and tape products
Corbelin, France	9,600	Leased	Manufacture and sale of protective electronic coatings, as well as research and development
Evanston, IL	100,000	Owned	Manufacture and sale of protective coatings and tape products
Granite Falls, NC	108,000	Owned	The building is currently being leased to a third party
Greenville, SC	34,600	Leased	Manufacture and sale of polymeric microspheres, as well as research and development
Greensboro, NC	16,000	Leased	Formulation and sale of superabsorbent polymer products
Hickory, NC	180,000	Leased	Manufacture and sale of superabsorbent polymer products, pulling and detection tapes and sealant systems, as well as research and development
Houston, TX	45,000	Owned	Manufacture of coating and lining systems for use in liquid storage and containment applications
Lenoir, NC	110,000	Owned	Manufacture and sale of laminated film foils and cover tapes
Mississauga, Canada	2,500	Leased	Distribution center
O'Hara Township, PA	109,000	Owned	Manufacture and sale of protective electronic coatings, expansion joints and accessories
Oxford, MA	73,600	Owned	Manufacture of tape and related products for the electronic and telecommunications industries, as well as laminated durable papers
Paris, France	1,900	Leased	Sales/technical service office and warehouse allowing direct sales and service to the French market
Pune, India	4,650	Leased	Manufacture, packaging and sale of protective electronic coatings
Rotterdam, Netherlands	2,500	Leased	Distribution center
Rye, East Sussex, England	36,600	Owned	Manufacture and sale of protective coatings and tape products
Suzhou, China	48,000	Leased	Manufacture of packaging tape products for the electronics industries
Winnersh, Wokingham, England	18,800	Leased	Manufacture and sale of protective electronic coatings, as well as research and development
Woburn, MA	34,000	Leased	Manufacture and sale of adhesive systems, as well as research and development

The above facilities vary in age, are in good condition and, in the opinion of management, are adequate and suitable for present operations. We also own equipment and machinery that is in good repair and, in the opinion of management, adequate and suitable for present operations. We believe that we could significantly add to our capacity by increasing shift operations. Availability of machine hours through additional shifts would provide expansion of current production volume without significant additional capital investment.

ITEM 3 – LEGAL PROCEEDINGS

The Company is involved from time to time in litigation incidental to the conduct of its business. Although the Company does not expect that the outcome in any of these matters, individually or collectively, will have a material adverse effect on its financial condition, results of operations or cash flows, litigation is inherently unpredictable. Therefore, judgments could be rendered, or settlements agreed to, that could adversely affect the Company's operating results or cash flows in a particular period. The Company routinely assesses all its litigation and threatened litigation as to the probability of ultimately incurring a liability and records its best estimate of the ultimate loss in situations where it assesses the likelihood of loss as probable.

ITEM 4 – MINE SAFETY DISCLOSURES

Not applicable.

ITEM 4A – INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following table sets forth information concerning our Executive Officers as of October 31, 2022. Each of our Executive Officers is selected by our Board of Directors and holds office until his successor is elected and qualified.

Name	Age	Offices Held and Business Experience during the Past Five Years
Adam P. Chase	50	President of the Company since January 2008, Chief Executive Officer of the
		Company since February 2015. Adam Chase was the Chief Operating Officer of
		the Company from February 2007 to February 2015.
Peter R. Chase	74	Chairman of the Board of the Company since February 2007, and Executive
		Chairman of the Company since February 2015. Peter Chase was the Chief
		Executive Officer of the Company from September 1993 to February 2015.
		Peter Chase is the father of Adam Chase.
Michael J. Bourque	59	Chief Financial Officer of the Company since February 2021. Previously, Chief
		Financial Officer of Keystone Dental, Inc., since April 2019. Prior to that,
		Mr. Bourque was employed at Analogic Corporation since 2014, most recently
		as Senior Vice President, Chief Financial Officer and Treasurer.
Jeffery D. Haigh	55	Vice President, General Counsel and Corporate Secretary since February 2021.
		Previously, Vice President, General Counsel since joining Chase in July 2020.
		Prior to that, Mr. Haigh worked in private practice from 2018 to 2020, having
		worked at Clean Harbors, Inc. from 2008 to 2018, most recently as Senior
		Counsel.

PART II

ITEM 5 – MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is traded on the NYSE American under the symbol CCF. As of October 31, 2022, there were 247 shareholders of record of our Common Stock and we believe there were approximately 11,064 beneficial owners who held shares through brokers or other nominees. On that date, the closing price of our common stock was \$94.21 per share as reported by the NYSE American.

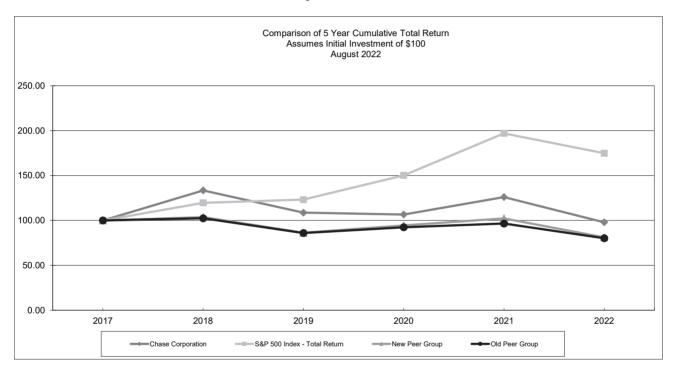
Single annual cash dividend payments were declared and scheduled to be paid subsequent to each year ended August 31, 2022, 2021 and 2020 in the amounts of \$1.00, \$1.00 and \$0.80 per common share, respectively. Our revolving credit facility contains financial covenants which may have the effect of limiting the amount of dividends that we can pay.

Comparative Stock Performance

The following line graph compares the yearly percentage change in our cumulative total shareholder return on the Common Stock for the last five fiscal years with the cumulative total return on the Standard & Poor's 500 Stock Index (the "S&P 500 Index"), and a composite old and new peer index that is weighted by market equity capitalization (the "Peer Group Index").

The Company realigned its composite peer group index in fiscal 2022 to account for acquisitions that occurred for some members of our old peer group and to better align our peer group with our industry and market capitalization. The companies included in the old Peer Group Index are Henkel AG & Co KGaA, H.B. Fuller Company, Intertape Polymer Group, Rogers Corporation and RPM International, Inc. The companies included in our new Peer Group Index are Henkel AG & Co KGaA, H.B. Fuller Company, CSW Industrials, Inc., Element Solutions, Inc., Quaker Chemical Corporation, and RPM International, Inc.

Cumulative total returns are calculated assuming that \$100 was invested on August 31, 2017 in each of the Common Stock, the S&P 500 Index and the Peer Group Index, and that all dividends were reinvested.



	2017	2018	2019	2020	2021	2022
Chase Corp	\$ 100	\$ 133	\$ 109	\$ 107	\$ 126	\$ 98
S&P 500 Index	\$ 100	\$ 120	\$ 123	\$ 150	\$ 197	\$ 175
New Peer Group Index	\$ 100	\$ 103	\$ 86	\$ 95	\$ 102	\$ 81
Old Peer Group Index	\$ 100	\$ 102	\$ 86	\$ 92	\$ 97	\$ 80

The information under the caption "Comparative Stock Performance" above is not deemed to be "filed" as part of this Annual Report, and is not subject to the liability provisions of Section 18 of the Securities Exchange Act of 1934. Such information will not be deemed to be incorporated by reference into any filing we make under the Securities Act of 1933 unless we explicitly incorporate it into such a filing at the time.

ITEM 6 - RESERVED

Not required.

ITEM 7 – MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion provides an analysis of our financial condition and results of operations. This material should be read in conjunction with the Consolidated Financial Statements and notes thereto included in Item 8 of this Annual Report on Form 10-K.

The discussion of the comparison of our fiscal 2021 and fiscal 2020 results was previously presented in the Management's Discussion & Analysis in Part II, Item 7 of the Company's Annual Report on Form 10-K filed with the SEC on November 15, 2021, and has been omitted from this section pursuant to Instruction 1 to Item 303(a) of Regulation S-K.

Selected Relationships within the Consolidated Statements of Operations

	 Years Ended August 31,					
	 2022	2021		2020		
	(De	ollars in thousands)				
Revenue	\$ 325,660	\$	293,336	\$	261,162	
Net income	\$ 44,671	\$	44,920	\$	34,157	
Increase (decrease) in revenue from prior year						
Amount	\$ 32,324	\$	32,174	\$	(20,189)	
Percentage	11 %		12 %)	(7)%	
Increase (decrease) in net income from prior year						
Amount	\$ (249)	\$	10,763	\$	1,446	
Percentage	(1)%		32 %)	4 %	
Percentage of revenue:						
Revenue	100 %		100 %)	100 %	
Cost of products and services sold	62		60		62	
Selling, general and administrative expenses	17		18		19	
Research and Product Development Costs	1		1		2	
Other (income) expense, net	2		1		*	
Income before income taxes	18 %		20 %)	17 %	
Income taxes	4		5		4	
Net income	 14 %		15 %		13 %	

^{*} denotes less than one percent

Note: Some percentage of revenue amounts may not sum due to rounding

Overview

General

The Company's revenue increased in fiscal 2022, with all three of its reportable operating segments surpassing sales achieved in fiscal 2021. Despite the ongoing challenges of the global operating environment detailed below, the Company improved its gross margin percentage from the first half of fiscal 2022 to the second half, to end the year at 37.8%.

Despite the Company's sales growth in fiscal 2022, and continued recovery of our gross margin percentage from the first half of the fiscal year, the Company continued to have a less favorable gross margin percentage in fiscal 2022 compared to the prior year. Higher operating costs seen in the fiscal year resulted in decreased operating income over the prior year. Chase's relative gross margin in fiscal 2022 was negatively impacted by both: a.) increased input costs caused by continued global raw material inflationary pressures, increased logistics costs and a more competitive labor market; and b.) a less favorable sales mix, with sales price and demand-driven volume increase in its lower margin Industrial Tapes segment outpacing revenue gains seen in its higher margin Adhesives, Sealants and Additives, and Corrosion Protection and Waterproofing segments. Further, the Adhesives, Sealants and Additives segment also experienced a less favorable sales mix within the segment itself due to historically less favorable margin products constituting a comparatively larger part of total segment sales compared to the prior year.

The Company continues to work with our customers and suppliers in an effort to counteract margin compression. However, given the delay experienced due to notification period requirements with certain customers and the continuation of upward inflationary pressures on input costs, fiscal 2022 results reflect a lag (in the first half of the year) in the realization of the full benefits of these efforts.

Revenue by Segment

The Company has three reportable operating segments summarized below:

Segment	Product Lines	Manufacturing Focus and Products
Adhesives, Sealants and Additives	Electronic and Industrial Coatings Functional Additives	Protective coatings, including moisture protective coatings and cleaning solutions, and customized sealant and adhesive systems for electronics; polyurethane dispersions, polymeric microspheres and superabsorbent polymers.
Industrial Tapes	Cable Materials Specialty Products Pulling and Detection Electronic Materials	Protective tape and coating products and services, including insulating and conducting materials for wire and cable manufacturers; laminated durable papers, packaging and industrial laminate products and custom manufacturing services; pulling and detection tapes used in the installation, measurement and location of fiber optic cable and water and natural gas lines; and cover tapes essential to delivering semiconductor components via tape and reel packaging.
Corrosion Protection and Waterproofing	Coating and Lining Systems Pipeline Coatings Building Envelope Bridge and Highway	Protective coatings and tape products, including coating and lining systems for use in liquid storage and containment applications; protective coatings for pipeline and general construction applications; adhesives and sealants used in architectural and building envelope waterproofing applications; high-performance polymeric asphalt additives and expansion and control joint systems for use in the transportation and architectural markets.

Revenue from our Adhesives, Sealants and Additives segment increased in fiscal 2022 compared to fiscal 2021 primarily due to sales price increases to counteract margin compression for our North American-focused functional additives product line. Revenue gains also reflect inorganic growth from our Emerging Technologies, Inc. ("ETi")

business acquired in the last month of the second quarter of fiscal 2021. Partially offsetting this increase in revenue was our reduction in sales volume from our worldwide-focused electronic and industrial coatings product line due to reduced demand acutely seen with sales within the automotive industry during the fiscal period.

Revenue from our Industrial Tapes segment surpassed the COVID-19 impacted prior year due to sales price increase and demand-driven growth in our wire and cable, specialty products, and pulling and detection product lines. Tempering the increase in revenue sales was a decrease from our electronic materials product line, due to decreased demand in the Asian-end market.

Revenue from our Corrosion Protection and Waterproofing segment showed modest increases in fiscal 2022 compared to fiscal 2021, primarily due to sales price increases to counteract margin compression from its coating and lining, building envelope and bridge and highway product lines. Partially offsetting these increases in revenue was a decrease in net sales volume from the pipeline coatings product line, due to COVID-19 overhang delays in products sold into Middle East and Asian markets outpacing North American sales gains in oil and gas pipeline repair and construction markets

Balance Sheet and Cash Flow

Chase Corporation's balance sheet remained strong as of August 31, 2022, with cash on hand of \$315,495,000 (or a net of \$135,495,000 when excluding the \$180,000,000 cash used to fund the NuCera acquisition on September 1, 2022 (the first day of fiscal 2023) and a current ratio of 12.4. The Company's cash position remained healthy, as did cash flow from operations. The increase in cash balance (at the end of the fiscal year) was attributed to the \$180,000,000 of cash drawn from its revolving credit facility to fund the acquisition of NuCera which closed on September 1, 2022 (the first day of fiscal 2023). See note 23 of the consolidated financial statements relating to this subsequent event.

Cash provided by operating activities of \$34,859,000 for fiscal year 2022 was impacted by the Company's strategic inventory build during the fiscal period, undertaken to help ensure our ability to satisfy customers' demands and to address our elevated backlog caused in part by supply chain challenges. In addition, during the second fiscal quarter Chase Corporation paid out our largest ever annual cash dividend of \$9,460,000 on December 9, 2021.

The Company had a \$180,000,000 outstanding balance on its \$200,000,000 revolving credit facility as of August 31, 2022 in order to fund the NuCera acquisition as noted above. The revolving credit facility, which was amended and restated in July 2021 (fourth quarter of fiscal 2021) to increase its capacity from \$150,000,000 to \$200,000,000, allows for the Company to pay down debt with excess cash, while retaining access to immediate liquidity to fund future accretive activities, including mergers and acquisitions, as they are identified. The new facility also gives Chase the ability to request an increase in this amount by an additional \$100,000,000 (\$300,000,000 in total borrowing capacity) at the individual or collective option of any of the lenders. The facility matures in July 2026.

Results of Operations

Revenue and Income Before Income Taxes by Segment are as follows:

	Revenue (Dollars in the			come Before ncome Taxes sands)	% of Revenue
Fiscal 2022		Ì			
Adhesives, Sealants and Additives	\$	135,770	\$	37,657 ^(a)	28 %
Industrial Tapes		143,954		41,387	29 %
Corrosion Protection and Waterproofing		45,936		17,415	38 %
	\$	325,660		96,459	30 %
Less corporate and common costs				$(37,861)^{(b)}$	
Income before income taxes			\$	58,598	
Fiscal 2021					
Adhesives, Sealants and Additives	\$	126,864	\$	36,520 ^(c)	29 %
Industrial Tapes		120,873		37,407	31 %
Corrosion Protection and Waterproofing		45,599		15,913 ^(d)	35 %
	\$	293,336		89,840	31 %
Less corporate and common costs				$(31,246)^{(e)}$	
Income before income taxes			\$	58,594	
				-	
Fiscal 2020					
Adhesives, Sealants and Additives	\$	96,208	\$	25,953	27 %
Industrial Tapes		118,960		31,237 ^(f)	26 %
Corrosion Protection and Waterproofing		45,994		16,638 ^(g)	36 %
	\$	261,162		73,828	28 %
Less corporate and common costs				$(28,508)^{(h)}$	
Income before income taxes			\$	45,320	
			_		

⁽a) Includes a \$432 loss on the upward adjustment of the performance-based earn-out contingent consideration associated with the September 2020 acquisition of ABchimie, \$463 in operation optimization costs related to the move from Woburn, MA to O'Hara Township, PA and \$147 of operations optimization costs related to the move from Newark, CA to Hickory, NC

⁽b) Includes \$232 of operations optimization costs related to the Company's move to the new corporate headquarters within Westwood, MA, and \$4,000 of acquisition-related expenses attributable to NuCera

⁽c) Includes \$1,664 in loss on the upward adjustment of the performance-based earn out contingent consideration associated with the September 2020 acquisition of ABchimie and \$977 in exit costs related to the movement of the sealants system business out of the Newark, CA location and into the Hickory, NC location during fiscal 2021

⁽d) Includes expense of \$100 for the write-down of certain assets under construction

⁽e) Includes \$128 in acquisition-related expense attributable to the February 2021 acquisition of the operations of ETi

⁽f) Includes \$559 in exit costs related to the movement of the pulling and detection business out of the Granite Falls, NC location and into the Hickory, NC location during the first six months of fiscal 2020

⁽g) Includes \$170 gain on the refund of a payment made in fiscal 2019 related to engineering studies performed to assess potential operational changes and further plant rationalization and consolidation and an expense of \$405 for the write-down of certain assets under construction

⁽h) Includes \$150 of expense related to exploratory IT work performed to assess potential future upgrades to the Company's companywide ERP system, a \$760 gain related to the April 2020 sale of the Company's Pawtucket, RI location, a \$1,791 gain related to the August 2020 sale of the Company's Randolph, MA property, \$183 in severance expense related to the May 2020 reduction in force, \$85 in expenses related to the final transition out of the Pawtucket, RI facility, \$155 of pension-related settlement costs due to the timing of lump-sum distribution and \$274 in acquisition-related costs attributable to the September 2020 (fiscal 2021) acquisition of ABchimie

Total Revenue

Total revenue in fiscal 2022 increased \$32,324,000 or 11% to \$325,660,000 from \$293,336,000 in the prior year.

Revenue in the Company's Adhesives, Sealants and Additives segment increased \$8,906,000 or 7% to \$135,770,000 for the year ended August 31, 2022 compared to \$126,864,000 in fiscal 2021. Positively impacting sales for the segment was increased revenue of \$11,463,000 from its North American-focused functional additives product line, which includes inorganic growth attributable to the ETi business acquired in the last month of the second quarter of fiscal 2021. Additionally, the increase in revenue from its North American-focused functional additives was primarily attributed to sales price increases to counteract margin compression. Negatively impacting the segment's sales were volume-driven decreases from its worldwide-focused electronic and industrial coatings line totaling \$2,557,000 in fiscal 2022, with logistics and raw material supply constraints affecting demand in automotive verticals.

Revenue in the Company's Industrial Tapes segment increased \$23,081,000 or 19% to \$143,954,000 for the year ended August 31, 2022 compared to \$120,873,000 in fiscal 2021. Positively impacting sales for the segment were sales price and volume-driven increases of \$23,538,000 due to its wire and cable, specialty products, and pulling and detection product lines, over the COVID-19 impacted prior year period. Negatively impacting the segment's sales was a decrease in revenue from its electronic materials product line totaling \$457,000 in fiscal 2022, due to decreased demand in the Asian end-market.

Revenue in the Company's Corrosion Protection and Waterproofing segment increased \$337,000 or 1% to \$45,936,000 for the year ended August 31, 2022 compared to \$45,599,000 for fiscal 2021. Positively impacting the segment sales for the fiscal year were sales price-driven increases to counteract margin compression in the Company's coatings and lining, building envelope and bridge and highway product lines totaling \$1,053,000. Negatively impacting the segment's sales was a decrease in revenue from its pipeline coatings product line totaling \$716,000, due to COVID-19 overhang delays in products sold into Middle East and Asian markets outpacing North American sales gains in oil and gas pipeline repair and construction markets.

Royalties and commissions in the Adhesive, Sealants and Additives segment totaled \$3,198,000 and \$3,534,000 for the years ended August 31, 2022 and 2021, respectively. The decrease in royalties and commissions in fiscal 2022 compared to fiscal 2021 was primarily due to decreased sales of electronic and industrial coatings products by our licensed manufacturer in Asia.

Export sales from domestic operations to unaffiliated third parties was \$36,305,000 and \$33,439,000 for the years ended August 31, 2022 and 2021, respectively. The increase in export sales from fiscal 2021 to fiscal 2022 is reflective of the company-wide year-over-year increase in revenue attributed to a combination of sales price and demand-driven increases.

Cost of Products and Services Sold

Cost of products and services sold increased \$28,048,000 or 16% to \$202,708,000 for the fiscal year ended August 31, 2022 compared to \$174,660,000 in fiscal 2021.

The following table summarizes the relative percentages of cost of products and services sold to revenue for our three operating segments:

	Fiscal Years Ended August 31,		
Cost of products and services sold	2022	2021	2020
Adhesives, Sealants and Additives	59 %	57 %	58 %
Industrial Tapes	67 %	64 %	68 %
Corrosion Protection and Waterproofing	57 %	57 %	55 %
Total Company	62 %	60 %	62 %

Cost of products and services sold in our Adhesives, Sealants and Additives segment was \$80,619,000 for the fiscal year ended August 31, 2022 compared to \$71,805,000 in fiscal 2021. Cost of products and services sold in the Industrial Tapes segment was \$96,132,000 for the fiscal year ended August 31, 2022 compared to \$77,013,000 in fiscal 2021. Cost of products sold in the Corrosion Protection and Waterproofing segment was \$25,957,000 for the fiscal year ended August 31, 2022 compared to \$25,842,000 in fiscal 2021.

As a percentage of revenue, cost of products and services increased for the Adhesives, Sealants and Additives and Industrial Tapes segments in fiscal 2022. As a percentage of revenue, cost of products and services sold for the Corrosion Protection and Waterproofing segment remained flat in fiscal 2022. The decrease in the relative gross margin for the Adhesives, Sealants and Additives and Industrial Tapes segments for the most recent fiscal year were due to continued global raw material inflationary pressures, increased logistics and freight costs and a more competitive labor market. Additionally, the Company's overall relative margin was affected by a less favorable sales mix with sales price increases realized in our lower margin Industrial Tapes segment that outpaced sales price increase realized in our Adhesive, Sealants and Additives and Corrosion Protection and Waterproofing segments. The Adhesives, Sealants and Additives segment also experienced a less favorable sales mix within the segment itself, with historically less favorable margin products constituting a comparatively larger part of total segment sales. The Company has implemented and continues to implement customer price adjustments and continues to work with our customers and suppliers in an effort to counteract margin compression, but with a lag reflected in the first half of the fiscal year results.

With the composition of our finished goods and the markets we serve, the costs of certain commodities (including petroleum-based solvents, films, yarns, polymers and nonwovens, aluminum and copper foils, specialty papers, and various resins, adhesives and inks) both directly and indirectly affect the purchase price of our raw materials and the market demand for our product offerings. The Company diligently monitors raw material and commodities pricing across all its product lines in its efforts to preserve margins.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased \$2,338,000 or 5% to \$54,438,000 during fiscal 2022 compared to \$52,100,000 in fiscal 2021. The increase in activity is attributed to total increased selling and sales activity in the most recent fiscal year. As a percentage of revenue, selling, general and administrative expenses were 17% and 18% of total revenue in fiscal 2022 and 2021, respectively. The Company continues to closely monitor spending with an emphasis on controlling costs and leveraging existing resources.

Research and Product Development Costs

Research and Product Development Costs increased \$359,000 or 9% to \$4,415,000 during fiscal 2022, compared to \$4,056,000 in fiscal 2021. Research and development costs increased from fiscal 2021 to 2022 as the Company continued focused development work on strategic product lines.

Operations Optimization Costs

The Company completed the relocation of its corporate headquarters to another location within Westwood, MA during the year ended August 31, 2022. The move, part of the Company's ongoing consolidation and optimization initiative, capitalizes on the hybrid work model utilized by many of Chase's corporate and administrative employees and is expected to provide future operational cost savings. The new facility also consolidates and houses research and development operations previously conducted at the previous Westwood, MA and Woburn, MA locations. Operations optimization costs related to the Westwood move of \$232,000 were expensed in the year. No future costs related to the move are anticipated.

During the third quarter of fiscal 2021, Chase announced to the employees at its Woburn, MA location that its adhesives systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, would be consolidating into the Company's existing O'Hara Township, PA location. This rationalization and consolidation initiative-related announcement aligns with the second quarter announcement of the Company's plan to move its sealant systems production from Newark, CA to Hickory, NC, described in more detail below. Chase Corporation obtained both the adhesive and sealants systems as part of its fiscal 2017 acquisition of the operations of

Resin Designs. The Company expensed \$463,000 and \$0 in fiscal 2022 and 2021, related to the move, and future costs related to its move are not anticipated to be significant to the consolidated financial statements.

During the second quarter of fiscal 2021, Chase began moving the sealant systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, from its Newark, CA location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. The sealant systems operations and Newark, CA location came to Chase Corporation as part of the fiscal 2017 acquisition of the operations of Resin Designs, and the Company's lease there terminated in the current fiscal year. The Company recognized \$147,000 and \$977,000 in operations costs related to the move during fiscal 2022 and fiscal 2021, respectively. This project is now substantially completed and any future costs related to this move are not anticipated to be significant to the consolidated financial statements.

During the third fiscal quarter of 2020, the Company implemented changes in its cost structure designed to address market changes brought on, in part, by COVID-19. These changes included a targeted reduction of approximately 4.5% of the Company's global workforce. This reduction, which was contemplated pre-pandemic but catalyzed by COVID-19, resulted in the recognition of \$183,000 in severance costs during the third quarter of fiscal 2020. The reduction in force, which impacted operations in the Blawnox, PA, Hickory, NC, Lenoir, NC, Evanston, IL, Oxford, MA and Westwood, MA facilities, was effective May 2020.

During the first quarter of fiscal 2020, the Company commissioned third party led studies regarding the potential upgrading of the Company's current worldwide ERP system. Chase Corporation reviewed the data and recommendations provided by the study and has made the decision to upgrade (beginning in fiscal 2023) from our current Oracle Legacy ERP System to the Oracle Fusion Cloud Platform. This upgrade will position us with a more advanced system to support business expansion, access to upgrades in functionality and a more modern system for operations, all within the Oracle Ecosystem. Additionally, the upgrade will be a multi-year, phased in approach that will mitigate any disruptions to our business. The Company recognized \$150,000 in third party studies in fiscal 2020 and no costs were recognized in fiscal 2022 and 2021.

During the third quarter of fiscal 2019, Chase began moving the pulling and detection operations housed in its Granite Falls, NC location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. At the time, the pulling and detection operations were the only Chase-owned production operations in Granite Falls, NC, with the remaining portions of the building being either utilized for research and development or leased to a third party. The process of moving, including moving internal research and development capabilities, was substantially completed during the second quarter of fiscal 2020. The Company recognized \$559,000 in expense related to the move in the first half of fiscal 2020. This project is substantively completed. No costs were recorded after the first half of fiscal 2020, and any future costs related to this move are not anticipated to be significant to the consolidated financial statements.

During the fourth quarter of fiscal 2019, Chase commissioned engineering studies of certain legacy operations, machinery and locations related to the Company's ongoing facility rationalization and consolidation initiative. Chase completed its review of the data and recommendations provided by the study in the fourth quarter of fiscal 2020. The Company recognized a gain of \$170,000 in fiscal 2020, as certain amounts expensed in fiscal 2019 were refunded. Chase may utilize third party engineering, IT and other professional services firms in the future for similar optimization-related work. Given the ongoing nature of the facility rationalization and consolidation initiative, an estimate of future costs cannot currently be determined.

During the fourth quarter of 2018, the Company announced to its employees the planned closing of its Pawtucket, RI manufacturing facility effective August 31, 2018. The manufacture of products previously produced in the Pawtucket, RI facility was substantially moved to Company facilities in Oxford, MA and Lenoir, NC during a two-month transition period. The Company completed the sale of its Pawtucket, RI location to a third-party in April 2020, for net proceeds totaling \$1,810,000. This transaction resulted in a gain of \$760,000 which was recorded during the third quarter of fiscal 2020. Also, during the third quarter of fiscal 2020, the Company recognized \$85,000 in final Pawtucket, RI transition and exit costs, with no further costs related to this initiative anticipated in future periods.

Acquisition-Related Costs

In the fourth quarter of fiscal 2022, the Company incurred \$4,000,000 of acquisition-related costs related to our acquisition of NuCera Solutions ("NuCera") on September 1, 2022 (first day of fiscal 2023). See Note 23 to the consolidated financial statements for additional information related to our subsequent event.

In the second quarter of fiscal 2021, the Company incurred \$128,000 of acquisition-related costs related to our acquisition of Emerging Technologies, Inc ("ETi") on February 5, 2021. This acquisition was accounted for as a business combination in accordance with applicable accounting standards, and all related professional service fees (including legal, accounting and actuarial fees) were expensed as incurred within the second quarter of fiscal 2021.

In fiscal 2020, the Company incurred \$274,000 of costs related to our acquisition of ABchimie. This acquisition was accounted for as a business combination in accordance with applicable accounting standards, and all related professional service fees (including banking, legal, accounting and actuarial fees) were expensed as incurred within the second, third and fourth quarters of fiscal 2020. The transaction was consummated at the beginning of fiscal 2021.

Gain on Sale of Real Estate

In August 2020, the Company finalized the sale of its Randolph, MA property for net proceeds of \$1,805,000. This transaction resulted in a gain of \$1,791,000 which was recorded during the quarter ended August 31, 2020 (fiscal 2020).

In April 2020, the Company finalized the sale of its Pawtucket, RI location for net proceeds of \$1,810,000. This transaction resulted in a gain of \$760,000 which was recorded during the quarter ended May 31, 2020 (fiscal 2020).

Write-down of certain assets under construction

In the fourth quarter of fiscal 2021, the Company wrote down the value of certain non-operating production assets related to the pipeline coatings product line, within the Corrosion Protection and Waterproofing segment. Given the nature and prospects of the equipment, the Company determined its then carrying value exceeded its fair value and recognized an expense of \$100,000 related to the machinery.

In the fourth quarter of fiscal 2020, given the results and recommendations of a commissioned engineering study, the Company wrote down the value of certain non-operating production assets related to the pipeline coatings product line, within the Corrosion Protection and Waterproofing segment. Given the nature and prospects of the equipment, the Company determined its then carrying value exceeded its fair value and recognized an expense of \$405,000 related to the machinery.

Loss on Contingent Consideration

As a component of the September 1, 2020 acquisition of ABchimie, the Company incurred a performance-based earn out liability potentially worth an additional €7,000,000 (approximately \$8,330,000 at the time of the transaction) in consideration. Following its initial recording of an accrual for \$928,000 at the acquisition date, \$432,000 and \$1,664,000 in expense related to upward adjustments to the performance-based earn out accrual were recorded to the consolidated statement of operations for the years ended August 31, 2022 and 2021, respectively.

Interest Expense

Interest expense increased \$128,000 or 43% to \$425,000 in fiscal 2022 compared to \$297,000 in fiscal 2021. The increase in interest expense is related primarily to two days of interest expense recorded from long-term debt and unused commitment fee from our new revolving debt facility that commenced in the fourth quarter of fiscal 2021.

Other Income (Expense)

Other income (expense) was income of \$198,000 in fiscal 2022 compared to an expense of \$760,000 in fiscal 2021, an increase of \$958,000. Other income (expense) primarily includes foreign exchange gains (losses) caused by changes in exchange rates on transactions or balances denominated in currencies other than the functional currency of our subsidiaries, non-service cost components of periodic pension expense (including pension-related settlement costs due to the timing of lump-sum distributions), interest income, rental income and other non-trade/non-royalty/non-commission receipts. The increase in total other income in fiscal 2022 compared to fiscal 2021 was largely due to the recognition of a foreign exchange gain in fiscal 2022 as compared to fiscal 2021.

Income Taxes

Our effective tax rate for fiscal 2022 was 23.8% as compared to 23.3% in fiscal 2021.

For fiscal 2022 and 2021, the Company utilized the 21% Federal tax rate enacted by the Tax Cuts and Jobs Act (the "Act") passed in December 2017. Please see Note 7 — "Income Taxes" to the Consolidated Financial Statements for further discussion of the effects of the Tax Act.

Net Income

Net income decreased \$249,000 or less than 1% to \$44,671,000 compared to \$44,920,000 in fiscal 2021. The decrease in net income in the fiscal year was primarily due to a.) increased input costs caused by continued global raw material inflationary pressures, increased logistics costs and a more competitive labor market; and b.) a less favorable sales mix, with sales price and volume-driven increases in its lower margin Industrial Tapes segment outpacing sales price revenue gains seen in its higher margin Adhesive, Sealants and Additives and Corrosion Protection and Waterproofing segments.

Liquidity and Sources of Capital

Our cash balance increased \$196,066,000 to \$315,495,000 (or to \$135,495,000 when excluding the \$180,000,000 cash used to fund the NuCera acquisition on September 1, 2022 (the first day of fiscal 2023)) from \$119,429,000 at August 31, 2021. The increase in cash balance (at the end of the fiscal year) was attributed to the \$180,000,000 of cash drawn from its revolving credit facility to fund the acquisition of NuCera which closed on September 1, 2022 (the first day of fiscal 2023), cash provided by operations of \$34,859,000 offset by the \$9,460,000 annual dividend in the second quarter of fiscal 2022 and the strategic inventory build in fiscal 2022. Of the above-noted amounts, \$28,951,000 and \$26,309,000 were held outside the U.S. by Chase Corporation and our foreign subsidiaries as of August 31, 2022 and 2021, respectively. Given our cash position and borrowing capability in the United States and the potential for increased investment and acquisitions in foreign jurisdictions, prior to the second quarter of fiscal 2018, we did not have a history of repatriating a significant portion of our foreign cash. With the passage of the Tax Cuts and Jobs Act (the "Tax Act") in the second fiscal quarter of 2018, significant changes in the Internal Revenue Code were enacted, changing the U.S. taxable nature of previously unrepatriated foreign earnings. Following the passage of the Tax Act, the Company repatriated \$10,499,000 in U.K. foreign earnings in fiscal 2018 and \$17,230,000 in fiscal 2019. No additional amounts were repatriated in fiscal year 2020, 2021 or 2022. Please see Note 7 — "Income Taxes" to the Consolidated Financial Statements for further discussion of the effects of the Tax Act.

Cash provided by operations was \$34,859,000 for the year ended August 31, 2022 compared to \$61,217,000 in fiscal 2021. Cash provided by operations during the current period was primarily related to operating income. Negatively impacting the cash flow from operations in fiscal 2022 was our continued strategic inventory build, undertaken to help ensure our ability to satisfy our customers' demands and to address our elevated backlog caused in part by macroeconomic supply chain challenges

The ratio of current assets to current liabilities was 12.4 (or 7.3 excluding the \$180,000,000 cash used to fund the NuCera acquisition) as of August 31, 2022 compared to 6.5 as of August 31, 2021. The increase in our current ratio in fiscal 2022 was primarily attributable to increased cash funding from our revolving credit facility to fund the acquisition of NuCera and increase in inventory. See Note 23 of the consolidated financial statements for additional information related to our subsequent event.

Cash used in investing activities was \$4,427,000 for the year ended August 31, 2022 compared to \$33,927,000 in cash used in investing activities in fiscal 2021. During fiscal 2021, cash used in investing activities was largely due to the cash on hand purchases of both ABchimie and ETi and cash spent on capital purchases of machinery and equipment.

Cash provided in financing activities was \$169,845,000 for the year ended August 31, 2022 compared to \$8,248,000 of cash used in financing activities in fiscal 2021. Cash provided in financing activities in fiscal 2022 was primarily attributed to an increase of \$180,000,000 from our existing credit facility to fund the NuCera acquisition, offset by the annual dividends of \$9,460,000. Cash used in financing activities in fiscal 2021 was primarily attributed to our annual dividend payment of \$7,557,000.

On November 10, 2022, Chase announced a cash dividend of \$1.00 per share (totaling approximately \$9,494,000) to shareholders of record on November 30, 2022 and payable on December 9, 2022.

On November 15, 2021, Chase announced a cash dividend of \$1.00 per share (totaling \$9,460,000) to shareholders of record on November 30, 2021 and payable on December 9, 2021.

On July 27, 2021 (the fourth quarter of fiscal 2021), the Company entered into the Second Amended and Restated Credit Agreement (the "Credit Agreement") by and among the Company and NEPTCO Incorporated ("NEPTCO"), each as borrowers, the guarantor subsidiaries party thereto, the financial institutions party thereto as Lenders, and Bank of America, N.A., as administrative agent, with participation from Wells Fargo Bank, N.A., PNC Bank, N.A. and JPMorgan Chase Bank, N.A. The Credit Agreement was entered into to amend, restate and extend the Company's preexisting credit agreement (the "Prior Credit Agreement"), which had a maturity date of December 15, 2021, and to provide for additional liquidity to finance acquisitions, working capital and capital expenditures, and for other general corporate purposes. Under the Credit Agreement, Chase obtained an increased revolving credit loan (the "Revolving Facility"), with borrowing capabilities not to exceed \$200,000,000 at any time, with the ability to request an increase in this amount by an additional \$100,000,000 at the individual or collective option of any of the Lenders. The applicable interest rate for the Revolving Facility and Term Loan (defined below) is based on the effective London Interbank Offered Rate (LIBOR) plus a range of 1.00% to 1.75%, depending on the consolidated net leverage ratio of Chase and its subsidiaries. As of August 31, 2022, the Company had \$180,000,000 in long-term debt attributed to the acquisition of NuCera Solutions that closed on September 1, 2022. The long-term debt has an applicable interest rate of 5.5%.

The Credit Agreement has a five-year term with interest payments due at the end of the applicable LIBOR period (but in no event less frequently than the three-month anniversary of the commencement of such LIBOR period) and principal payment due at the expiration of the agreement, July 27, 2026. The Credit Agreement contains provisions that may replace LIBOR as the benchmark index under certain circumstances. In addition, the Company may elect a base rate option for all or a portion of the Revolving Facility, in which case interest payments shall be due with respect to such portion of the Revolving Facility on the last business day of each quarter. Subject to certain conditions set forth in the Credit Agreement, the Company may elect to convert all or a portion of the outstanding Revolving Facility into a new term loan twice during the term of the Revolving Facility (each, a "Term Loan", and collectively with the Revolving Facility, the "Credit Facility"), which Term Loan shall be payable quarterly in equal installments sufficient to amortize the original principal amount of such Term Loan on a ten year amortization schedule.

The outstanding balance on the Credit Facility is guaranteed by all of Chase's direct and indirect domestic subsidiaries, which collectively had a carrying value of approximately \$314,662,000 at August 31, 2022. The Credit Facility is subject to restrictive covenants under the Credit Agreement, and financial covenants that require Chase and its subsidiaries to maintain certain financial ratios on a consolidated basis, including a consolidated net leverage ratio of 3.25 to 1.00 and a consolidated interest coverage ratio of 3.50 to 1.00 (both defined in the Credit Agreement). Chase Corporation was in compliance with the debt covenants as of August 31, 2022. The Credit Agreement also places certain Lender-approval requirements as to the size of permitted acquisitions which may be entered into by the Company and its subsidiaries, and allows for a temporary step-up in the allowed consolidated leverage ratio for the four fiscal quarters ending after certain designated acquisitions. Prepayment is allowed by the Credit Agreement at any time during the term of the agreement, subject to customary notice requirements and the payment of customary LIBOR breakage fees.

The Prior Credit Agreement was an all-revolving credit facility with a borrowing capacity of \$150,000,000, which could be increased by an additional \$50,000,000 at the request of the Company and the individual or collective option of any of the lenders, and with an interest rate based on the effective LIBOR plus an additional amount in the range of 1.00% to 1.75%, depending on our consolidated net leverage ratio or, at the Company's option, at the bank's base lending rate. It was substantially available at July 27, 2021, the time of its amendment and restatement.

The Company has several ongoing capital projects, including upgrading the Company's ERP system, as well as its facility rationalization and consolidation initiative, which are important to its long-term strategic goals. Machinery and equipment may be added as needed to increase capacity or enhance operating efficiencies in the Company's production facilities.

We may acquire companies or other assets in future periods which are complementary to our business. The acquisition of ABchimie included a potential earnout based on performance of up to an additional €7,000,000 (approximately \$8,330,000 at the time of the transaction), which the Company expects to pay with cash on hand if the applicable conditions are met. The acquisition of ETi included a \$1,000,000 withholding, which was paid out by the Company on August 4, 2022 (eighteen months after the acquisition). The Company believes that its existing resources, including cash on hand and the Credit Agreement, together with cash generated from operations and additional bank borrowings, will be sufficient to fund its cash flow requirements through at least the next twelve months. However, there can be no assurance that additional financing, if needed, will be available on favorable terms, if at all.

To the extent that interest rates increase in future periods, we will assess the impact of these higher interest rates on the financial and cash flow projections of our potential acquisitions.

We have no material off-balance sheet arrangements.

Contractual Cash Obligations

The following table summarizes our contractual cash obligations at August 31, 2022 under operating leases and the effect such obligations are expected to have on our liquidity and cash flow in future periods (dollars in thousands):

			Payments Due							
Contractual Obligations	Total	2023	2024	024 2025		2027		028 and ereafter		
Operating leases	\$ 8,808	\$ 1,651	\$ 1,576	\$ 1,418	\$ 1,173	\$ 791	\$	2,199		
Total	\$ 8,808	\$ 1,651	\$ 1,576	\$ 1,418	\$ 1,173	\$ 791	\$	2,199		

We may be required to make payments related to our unrecognized tax benefits. Due to the uncertainty of the timing of future cash flows associated with these unrecognized tax benefits, we are unable to make reasonably reliable estimates of the period of cash settlement, if any, with the respective taxing authorities. The Company's unrecognized tax benefits was \$1,820,000 as of August 31, 2022. See Note 7 — "Income Taxes" to the Consolidated Financial Statements for further information.

We also expect to make payments as needed to satisfy our funding obligations for our obligations for pension and other post-retirement benefit plans. As of August 31, 2022, we had recognized an accrued benefit plan liability of \$8,996,000 representing the unfunded obligations of the pension benefit plans. See Note 9 — "Benefits and Pension Plans" to the Consolidated Financial Statements for further information, including expected pension benefit payments for the next 10 years.

The Company does not have significant agreements for the purchase of raw materials or other goods specifying minimum quantities or set prices that exceed expected requirements or extend beyond one year.

Recently Issued Accounting Standards

For discussion of the newly issued accounting pronouncements see "Recently Adopted Accounting Standards" in Note 1 — "Summary of Significant Accounting Policies" to the Consolidated Financial Statements included in this Report.

Critical Accounting Policies, Judgments, and Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the U.S. requires management to make judgments, assumptions and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. Our significant accounting policies are described in Note 1 — "Summary of Significant Accounting Policies" to the Consolidated Financial Statements included in this Report.

The U.S. Securities and Exchange Commission ("SEC") requires companies to provide additional disclosure and commentary on their most critical accounting policies and estimates. The SEC has defined critical accounting policies as the ones that are most important to the portrayal of a company's financial condition and operating results, and require management to make its most significant estimates and judgments in the preparation of its Consolidated Financial Statements. The SEC has defined critical accounting estimates as those estimates made in accordance with generally accepted accounting principles that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on the financial condition or results of operations of a company.

Judgments, assumptions, and estimates are used for, but not limited to, the allowances for accounts receivable; inventory allowances; business combinations, goodwill, intangible assets, and other long-lived assets; revenue; income tax reserves; deferred income taxes; stock-based compensation; as well as discount and return rates used to calculate pension obligations. The accounting policies described below are significantly affected by critical accounting estimates.

Business Combinations

We assign the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired, and liabilities assumed on the basis of their fair values at the date of acquisition. The Company assesses the fair value of assets, including intangible assets, using a variety of methods, and each asset is measured at fair value from the perspective of a market participant. The method used to estimate the fair values of intangible assets incorporates significant assumptions regarding the estimates a market participant would make in order to evaluate an asset, including a market participant's use of the asset and the appropriate discount rates for a market participant. Assets recorded from the perspective of a market participant that are determined to not have economic use for the Company are expensed immediately. Any excess purchase price over the fair value of the net tangible and intangible assets acquired is allocated to goodwill. Transaction costs and restructuring costs associated with a transaction to acquire a business are expensed as incurred.

Impact of Inflation

The Company's relative gross margin and sales mix was negatively impacted by continued global raw material inflationary pressures during fiscal 2022. Chase continues to work with our customers and suppliers in an effort to counteract margin compression in the form of sales price increases. In the event of significant inflation over an extended period of time, our continued efforts to recover cost increases could be hampered as a result of the competitive nature of the industries in which we operate. Future volatility of general price inflation or deflation and raw material cost and availability could adversely affect our financial results.

ITEM 7A – OUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We limit the amount of credit exposure to any one issuer. At August 31, 2022, other than our restricted investments (which are restricted for use in a non-qualified retirement savings plans for certain key employees and members of the Board of Directors), all of our funds were either in demand deposit accounts or investment instruments that meet high credit quality standards such as money market funds, government securities, or commercial paper.

Our domestic operations have limited currency exposure since substantially all transactions are denominated in U.S. dollars. However, our European and Asian operations are subject to currency exchange fluctuations. We continue to review our policies and procedures to control this exposure while maintaining the benefit from these operations and sales not denominated in U.S. dollars. The effect of an immediate hypothetical 10% change in the exchange rate between the British pound or euro and the U.S. dollar would not have a material effect on the Company's overall liquidity. As of August 31, 2022, the Company had cash balances in the following foreign currencies (with USD equivalents in thousands):

Currency Code	Currency Name	 USD Equivalent at August 31, 2022
GBP	British Pound	\$ 16,782
EUR	Euro	\$ 6,645
CAD	Canadian Dollar	\$ 2,616
CNY	Chinese Yuan	\$ 738
INR	Indian Rupee	\$ 299

The Company will continue to review its current cash balances denominated in foreign currency considering current tax guidelines, including the impact of the Tax Act to the U.S. Internal Revenue Code, working capital requirements, infrastructure improvements and potential acquisitions.

The Company recognized a foreign currency translation loss for the year ended August 31, 2022 in the amount of \$9,582,000 related to our European and Indian operations, which is recorded in accumulated other comprehensive income (loss) within our consolidated statement of equity. The functional currency for all our other operations is the U.S. Dollar. We do not have or utilize any derivative financial instruments.

We pay interest on our outstanding long-term debt at interest rates that fluctuate based upon changes in various base interest rates. There were \$180,000,000 and \$0 outstanding balances of long-term debt at August 31, 2022 and 2021, respectively. See "Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Liquidity and Sources of Capital," Note 6 — "Long-Term Debt" and Note 16 — "Fair Value Measurements" to the Consolidated Financial Statements for additional information regarding our outstanding long-term debt. The effect of an immediate hypothetical 10% change in variable interest rates would not have a material effect on our Consolidated Financial Statements.

ITEM 8 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following Consolidated Financial Statements of Chase Corporation are filed as part of this Annual Report on Form 10-K:

Index to Consolidated Financial Statements:

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Report of Independent Registered Public Accounting Firm (PCAOB ID: 248)	36
Consolidated Balance Sheets as of August 31, 2022 and 2021	37
Consolidated Statements of Operations for each of the three fiscal years in the period ended August 31, 2022	38
Consolidated Statements of Comprehensive Income for each of the three fiscal years in the period ended August 31, 2022	39
Consolidated Statements of Equity for each of the three fiscal years in the period ended August 31, 2022	40
Consolidated Statements of Cash Flows for each of the three fiscal years in the period ended August 31, 2022	41
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders Chase Corporation

Opinion on the financial statements

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

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of August 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated November 10, 2022 expressed an unqualified opinion.

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 matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2019

Boston, Massachusetts

November 10, 2022

CONSOLIDATED BALANCE SHEETS

In thousands, except share and per share amounts

	A	ugust 31, 2022	A	ugust 31, 2021
ASSETS				
Current Assets				
Cash and cash equivalents	\$	315,495	\$	119,429
Accounts receivable, less allowances of \$610 and \$451		51,540		46,212
Inventory		63,039		41,217
Prepaid expenses and other current assets		4,374		2,851
Prepaid income taxes and refunds due		2,329		3,255
Total current assets		436,777		212,964
Property, plant and equipment, less accumulated depreciation of \$52,503 and \$50,666		24,248		24,267
Other Assets				
Goodwill		95,160		97,866
Intangible assets, less accumulated amortization of \$101,237 and \$91,484		33,661		46,954
Cash surrender value of life insurance		4,450		4,450
Restricted investments		2,367		2,260
Deferred income taxes		5,763		5,265
Operating lease right-of-use assets		8,596		9,312
Other assets		558		821
Total assets	\$	611,580	\$	404,159
LIABILITIES AND EQUITY				
Current Liabilities				
Accounts payable	\$	20,122	\$	19,575
Accrued payroll and other compensation		6,381		7,179
Income taxes payable		554		761
Accrued expenses		8,271		5,407
Total current liabilities		35,328		32,922
Long-term debt		180,000		_
Operating lease long-term liabilities		6,618		7,202
Deferred compensation		2,375		2,267
Accumulated pension obligation		7,431		9,416
Other liabilities		2,897		2,537
Deferred income taxes		2,282		3,301
Accrued income taxes		1,820		2,190
Total liabilities	\$	238,751	\$	59,835
Commitments and contingencies (Note 21)				
Equity				
First Serial Preferred Stock, \$1.00 par value: Authorized 100,000 shares; none issued Common stock, \$.10 par value: Authorized 20,000,000 shares; 9,462,765 shares at August 31, 2022 and		_		_
9,447,905 shares at August 31, 2021 issued and outstanding		947		946
Additional paid-in capital		21,409		18,959
Accumulated other comprehensive loss		(20,367)		(11,210)
Retained earnings		370,840		335,629
Total equity		372,829		344,324
Total liabilities and equity	\$	611,580	\$	404,159

CONSOLIDATED STATEMENTS OF OPERATIONS

In thousands, except share and per share amounts

		Years Ended August 3:			31,	31,		
		2022	_	2021		2020		
Revenue								
Sales	\$	322,462	\$	289,802	\$	257,742		
Royalties and commissions		3,198		3,534		3,420		
·		325,660		293,336		261,162		
Costs and Expenses								
Cost of products and services sold		202,708		174,660		161,615		
Selling, general and administrative expenses		54,438		52,100		49,364		
Research and product development costs		4,415		4,056		4,007		
Operations optimization costs (Note 20)		842		977		807		
Acquisition-related costs (Note 14)		4,000		128		274		
Gain on sale of real estate (Note 19)		_		_		(2,551)		
Write-down of certain assets under construction (Note 20)		_		100		405		
Loss on contingent consideration (Note 14)		432		1,664				
Operating income		58,825		59,651		47,241		
Interest expense		(425)		(297)		(246)		
Other income (expense)		198		(760)		(1,675)		
Income before income taxes		58,598		58,594		45,320		
Income taxes (Note 7)	_	13,927	_	13,674	_	11,163		
Net income	\$	44,671	\$	44,920	\$	34,157		
Net income available to common shareholders, per common and common equivalent share (Note 17)								
Basic	\$	4.72	\$	4.75	\$	3.62		
Diluted	\$	4.70	\$	4.73	\$	3.59		
Weighted average shares outstanding								
Basic		9,399,085		9,383,085		9,359,940		
Diluted		9,434,341		9,428,416		9,439,750		
Annual cash dividends declared per share	\$	1.00	\$	0.80	\$	0.80		

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

In thousands, except share and per share amounts

	Years Ended August 31,				
	 2022		2021		2020
Net income	\$ 44,671	\$	44,920	\$	34,157
Other comprehensive income (loss):					
Net unrealized (loss) gain on restricted investments, net of tax	(354)		249		115
Change in funded status of pension plans, net of tax	779		338		(658)
Foreign currency translation adjustment	(9,582)		1,295		3,163
Total other comprehensive income (loss)	(9,157)		1,882		2,620
Comprehensive income	\$ 35,514	\$	46,802	\$	36,777

CONSOLIDATED STATEMENTS OF EQUITY

In thousands, except share and per share amounts

	Common Stock	Stock	Additional Paid-In Conited	Accumulated Other Comprehensive	other ive	Retained	Total Stockholders'	
Balance at August 31, 2019	9,400,748	\$ 940	\$ 14,351	\$ (14	324)	\$ 270,260	\$ 271,227	_
Restricted stock grants, net of forfeitures	45,621	5	(5)					I .
Amortization of restricted stock grants			2,290				2,290	С
Amortization of stock option grants			918				918	00
Exercise of stock options	3,618		123				123	3
Common stock received for payment of stock option exercises	(1,057)	1	(123)				(123)	3
Common stock retained to pay statutory minimum withholding taxes on common stock	(9,848)	(1)	(880)				(881)	1)
						(7,539)	(7,539)	6
Change in funded status of pension plans, net of tax (\$215)					(858)		(859)	8)
Foreign currency translation adjustment				9	3,163		3,163	~
Net unrealized gain on restricted investments, net of tax \$40					115		115	S
Adoption of ASU 2018-02 (Note 1)				1)	(1,388)	1,388		
Net income						34,157	34,157	_
Balance at August 31, 2020	9,439,082	\$ 944	\$ 16,674	\$ (13	(13,092)	\$ 298,266	\$ 302,792	2
Restricted stock grants, net of forfeitures	10,245	2	(2)					- 1
Amortization of restricted stock grants			2,351				2,351	_
Amortization of stock option grants			627				627	7
Exercise of stock options	7,546		292				293	~
Common stock received for payment of stock option exercises	(1,809)		(206)				(206)	9
Common stock retained to pay statutory minimum withholding taxes on common stock	(7,159)	(I)	(777)				(278)	8
Cash dividend paid, \$0.80 per share						(7,557)	(7,557)	<u></u>
Change in funded status of pension plans, net of tax \$585					338		338	<u>α</u>
Foreign currency translation adjustment				1	1,295		1,295	S
Net unrealized gain on restricted investments, net of tax \$75					249		249	6
Net income								C
Balance at August 31, 2021	9,447,905	\$ 946	\$ 18,959	\$ (11)	(11,210)	\$ 335,629	\$ 344,324	4
Restricted stock grants, net of forfeitures	20,615	2	(2)	ı				1
Amortization of restricted stock grants			2,255				2,255	5
Amortization of stock option grants			892				892	2
Exercise of stock options	2,533		40				40	C
Common stock received for payment of stock option exercises	(435)		(40)				(40)	0
Common stock retained to pay statutory minimum withholding taxes on common stock	(7,853)	(1)	(695)				(969)	9
Cash dividend on common stock, \$1.00 per share						(9,460)	(9,460)	0
Change in funded status of pension plans, net of tax \$255					6/2		779	6
Foreign currency translation adjustment Net unrealized rain (loce) on restricted investments not of tax \$116				6)	(9,582)		(9,582)	36
Net income					(+66)	44.671	44.671	
Balance at August 31, 2022	9,462,765	\$ 947	\$ 21,409	\$ (20	(20,367)	\$ 370,840	\$ 372,829	16
								II

See accompanying notes to the Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

In thousands

	Ye	ars En	ded August	31,	
	 2022		2021		2020
CASH FLOWS FROM OPERATING ACTIVITIES					
Net income	\$ 44,671	\$	44,920	\$	34,157
Adjustments to reconcile net income to net cash provided by operating activities					
Gain on sale of real estate	_		_		(2,551)
Write-down of certain assets under construction	_		100		405
Loss on contingent consideration	432		1,664		_
Depreciation	3,547		3,946		4,015
Amortization	11,751		12,858		11,576
Provision for allowance for doubtful accounts	169		11		(307)
Stock-based compensation	3,147		2,978		3,208
Realized gain on restricted investments	(96)		(65)		(37)
Pension curtailment and settlement loss			`—´		155
Deferred taxes	(1,023)		(908)		(769)
Increase (decrease) from changes in assets and liabilities					
Accounts receivable	(6,580)		(7,921)		3,092
Inventory	(22,645)		(910)		3,562
Prepaid expenses and other assets	(1,395)		(490)		43
Accounts payable	989		6,164		260
Accrued compensation and other expenses	1,506		954		(1,865)
Accrued income taxes	386		(2,084)		790
Net cash provided by operating activities	34,859		61,217		55,734
CASH FLOWS FROM INVESTING ACTIVITIES					
Purchases of property, plant and equipment	(3,938)		(2,441)		(1,371)
Payments for acquisitions			(31,238)		
Proceeds from sale of real estate	_				3,615
Changes in restricted investments	(489)		(248)		(167)
Net cash (used) provided in investing activities	(4,427)		(33,927)		2,077
CASH FLOWS FROM FINANCING ACTIVITIES					
Borrowings on debt	180,000		_		_
Dividend paid	(9,460)		(7,557)		(7,539)
Proceeds from exercise of common stock options			87		
Payments of taxes on stock options and restricted stock	(695)		(778)		(881)
Net cash provided (used) in financing activities	169,845		(8,248)		(8,420)
INCREASE IN CASH & CASH EQUIVALENTS	200,277		19,042		49,391
Effect of foreign exchange rates on cash	(4,211)		1,319		1,906
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	119,429		99,068		47,771
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 315,495	\$	119,429	\$	99,068

See Note 13 for supplemental cash flow information including non-cash financing and investing activities

In thousands, except share and per share amounts

Note 1—Summary of Significant Accounting Policies

The principal accounting policies of Chase Corporation (the "Company") and its subsidiaries are as follows:

Products and Markets

Our principal products are specialty tapes, laminates, adhesives, sealants, coatings and chemical intermediates that are sold by our salespeople, manufacturers' representatives and distributors.

In our Adhesives, Sealants and Additives segment, these products consist of:

- (i) moisture protective coatings and cleaning solutions, which are sold to the electronics industry for circuitry manufacturing, including circuitry used in automobiles, industrial controls and home appliances;
- (ii) advanced adhesives, sealants, and coatings for automotive and industrial applications that require specialized bonding, encapsulating, environmental protection, or thermal management functionality;
- (iii) polymeric microspheres utilized by various industries to allow for weight and density reduction and sound dampening;
- (iv) polyurethane dispersions utilized for various coating products; and
- (v) superabsorbent polymers utilized for water and liquid management, remediation and protection in diverse markets including wire and cable, medical, environmental, infrastructure, energy and consumer products.

In our Industrial Tapes segment, these products consist of:

- (i) insulating and conducting materials for the manufacture of electrical and telephone wire and cable, electrical splicing, and terminating and repair tapes, which are marketed to wire and cable manufacturers:
- (ii) laminated film foils, including EMI/RFI shielding tapes, used in communication and local area network (LAN) cable;
- (iii) industrial coated or laminate products and custom manufacturing services sold into medical, consumer, automotive, packaging, energy, telecommunications and other specialized markets;
- (iv) laminated durable papers, including laminated paper with an inner security barrier used in personal and mail-stream privacy protection, which are sold primarily to the envelope converting and commercial printing industries;
- (v) pulling and detection tapes used in the installation, measurement and location of fiber optic cable, water and natural gas lines, and power, data and video cable for commercial buildings; and
- (vi) cover tapes with reliable adhesive and anti-static properties essential to delivering semiconductor components via tape and reel packaging.

In thousands, except share and per share amounts

In our Corrosion Protection and Waterproofing segment, these products consist of:

- (i) protective coatings, tapes and protectants for pipelines, valves, casings and other metals, which are sold to oil companies, gas companies and water/wastewater utilities for use in both the construction and maintenance of oil, gas, water and wastewater pipelines;
- (ii) fluid applied coating and lining systems for use in the water and wastewater industry;
- (iii) waterproofing tapes and coatings used in waterproofing of the exterior of both commercial and industrial structures;
- (iv) waterproofing membranes for highway bridge deck metal supported surfaces, which are sold to municipal transportation authorities, and high-performance polymeric asphalt additives; and
- (v) expansion and control joint systems designed for roads, bridges, stadiums and airport runways.

Basis of Presentation

The financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation. The Company uses the U.S. dollar as the functional currency for financial reporting. Certain reclassifications have been made to the prior year amounts to conform to the current year's presentation.

Other Business Developments

On September 1, 2022, the Company completed its acquisition of NuCera Solutions, a recognized global leader in the production and development of highly differentiated specialty polymers and polymerization technologies serving demanding applications, offering products critical to enabling end-product functionality, performance and reliability. The aggregate purchase price was \$250,000, pending any working capital adjustments and excluding acquisition-related costs. Chase will continue to market under the NuCera brands and the business will be integrated into Chase's Adhesives, Sealants and Additives reporting unit.

The Company completed the relocation of its corporate headquarters to another location within Westwood, MA during the fiscal year ending August 31, 2022. The move, part of the Company's ongoing consolidation and optimization initiative, capitalizes on the hybrid work model utilized by many of Chase's corporate and administrative employees and is expected to provide future operational cost savings. The new facility also consolidates and houses research and development operations previously conducted at the previous Westwood, MA and Woburn, MA locations. Operations optimization costs related to the Westwood move of \$232 were expensed in fiscal 2022. No future costs related to the move are anticipated.

During the third quarter of fiscal 2021, Chase announced to the employees at its Woburn, MA location that its adhesives systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, would be consolidating into the Company's existing O'Hara Township, PA location. This rationalization and consolidation initiative aligns with the announcement in the second quarter of fiscal 2021 of the Company's plan to move its sealant systems production from Newark, CA to Hickory, NC, described in more detail below. Chase Corporation obtained both the adhesive and sealants systems as part of its fiscal 2017 acquisition of the operations of Resin Designs. The Company expensed \$463 and \$0 in fiscal 2022 and 2021, related to the move, and future costs related to this move are not anticipated to be significant to the consolidated financial statements.

In thousands, except share and per share amounts

During the second quarter of fiscal 2021, Chase began moving the sealant systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, from its Newark, CA location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. The sealant systems operations and Newark, CA location came to Chase Corporation as part of the fiscal 2017 acquisition of the operations of Resin Designs, and the Company's lease there terminated in fiscal 2021. The Company recognized \$977 in expense related to the move during the fiscal year ended August 31, 2021 and \$147 in expense during the fiscal year ended August 31, 2022. The project is now substantially completed and any future costs related to this move are not anticipated to be significant to the consolidated financial statements.

On February 5, 2021, the Company acquired certain assets of Emerging Technologies, Inc. ("ETi"), a superabsorbent polymers solutions provider, located in Greensboro, NC. The business was acquired for a purchase price of \$9,997, comprising \$8,997 paid on February 5, 2021 and an accrual of \$1,000 to be paid out up to eighteen months after purchase, subsequent to final working capital adjustments, and excluding acquisition-related costs. As part of this transaction, Chase acquired substantially all working capital and fixed assets of the business and entered a multi-year lease at ETi's existing location. The Company expensed \$128 of acquisition-related costs associated with this acquisition. The purchase was funded with available cash on hand. ETi is a solutions provider and formulator of absorbent polymers for use in the packaging, recreational, consumer, and sanitation markets. The acquisition broadens the Company's superabsorbent polymers product offerings and formulation capabilities while expanding its market reach. The Company finalized purchase accounting, regarding a final allocation of the purchase price to tangible and identifiable intangible assets assumed, and anticipates completion within the first quarter of fiscal 2022. Since the effective date of the acquisition, the financial results of ETi's acquired operations have been included in the Company's financial statements within the functional additives product line, contained within the Adhesives, Sealants and Additives operating segment.

On September 1, 2020 (the first day of fiscal 2021), the Company acquired all the capital stock of ABchimie for €18,654 (approximately \$22,241 at the time of the transaction) net of cash acquired, subsequent to final working capital adjustment, excluding acquisition-related costs totaling \$274 recognized in fiscal 2020 and with a potential earn out based on performance potentially worth an additional €7,000 (approximately \$8,330 at the time of the transaction). ABchimie is a Corbelin, France headquartered solutions provider for the cleaning and protection of electronic assemblies, with further formulation, production, and research and development capabilities. The transaction was funded with cash on hand. The financial results of the business were included in the Company's fiscal 2021 financial statements within the Adhesives, Sealants and Additives operating segment in the electronic and industrial coatings product line. The Company finalized purchase accounting during the fourth quarter of fiscal 2021, with no significant change to amounts initially recorded.

Fiscal 2020 saw the beginning of the global spread of the coronavirus pandemic (COVID-19), which grew to create significant volatility, uncertainty and global economic disruption. During the third fiscal quarter of 2020, the Company implemented changes to its cost structure designed to address market changes brought on by COVID-19 and demonstrate its commitment to fiscal prudence: (a) the Company made a targeted reduction in its global workforce, contemplated pre-pandemic but catalyzed by COVID-19, which resulted in the recognition of \$183 in severance costs during the period; and (b) the Company also instituted a temporary 20% reduction in the base salaries of its named executive officers and select members of senior management, as well as the cash compensation of the non-employee members of its Board of Directors. The reduction in force, which impacted operations in the Company's U.S. facilities, and the adjustments in compensation, were both effective May 2020. The executive officers' and Board of Directors' temporary compensation reductions were lifted on December 1, 2020, retroactive to September 1, 2020.

During the first quarter of fiscal 2020, the Company commissioned third party led studies regarding the potential upgrading of the Company's current worldwide ERP system. Chase Corporation reviewed the data and recommendations provided by the study and has made the decision upgrade (beginning in fiscal 2023) from our current

In thousands, except share and per share amounts

Oracle Legacy ERP System with to Oracle Fusion Cloud Platform. This upgrade will position us with a more advanced system to support business expansion, access to upgrades in functionality, and a more modern system for operations, all within the Oracle Ecosystem. Additionally, the upgrade will be a multi-year, phased in approach that will mitigate any disruptions to our business. The Company recognized \$150 in third party studies in fiscal 2020 and no costs were recognized in fiscal 2022 and 2021.

During the third quarter of fiscal 2019, the Company began moving the pulling and detection operations housed in its Granite Falls, NC location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. At the time, the pulling and detection operations were the only Chase-owned production operations in Granite Falls, NC, with the remaining portions of the building being either utilized for research and development or leased to a third party. The process of moving, including moving internal research and development capabilities, was substantially completed during the second quarter of fiscal 2020. The Company recognized \$559 in expense related to the first half of fiscal 2020, having recognized \$526 in expense during the second half of fiscal 2019. No costs were recognized in the second half of 2020 or during fiscal 2021, and future costs related to this move are not anticipated to be significant to the consolidated financial statements.

During the fourth quarter of fiscal 2019, Chase Corporation commissioned engineering studies of certain legacy operations, machinery and locations related to the Company's ongoing facility rationalization and consolidation initiative. Chase completed its review of the data and recommendations provided by the study in the fourth quarter of fiscal 2020. The Company recognized \$200 in expense related to these services in fiscal 2019, and a gain of \$170 in fiscal 2020, as certain amounts expensed in fiscal 2019 were refunded. Also in the fourth quarter of fiscal 2020 and related to the recommendations of the commissioned engineering studies, the Company wrote down the value of certain non-operating production assets related to the pipeline coatings product line, within the Corrosion Protection and Waterproofing segment. Given the nature and prospects of the equipment, the Company determined its then carrying value exceeded its fair value and recognized an expense of \$405 related to the machinery. The Company recognized an additional \$100 in the fourth quarter of fiscal 2021, to fully write-down the equipment's value. Chase may utilize third party engineering, IT and other professional services firms in the future for similar optimization-related work. Given the ongoing nature of the facility rationalization and consolidation initiative, an estimate of future costs cannot currently be determined.

On June 25, 2018, the Company announced to its employees the planned closing of its Pawtucket, RI manufacturing facility effective August 31, 2018. This is in line with the Company's ongoing efforts to consolidate its manufacturing plants and streamline its existing processes. The manufacture of products previously produced in the Pawtucket, RI facility was substantially moved to Company facilities in Oxford, MA and Lenoir, NC during a two-month transition period. In the fourth quarter of fiscal 2018, the Company expensed \$1,272 related to the closure. The Company also recognized \$260 in expense related to the move in the three-month period ended November 30, 2018, with no additional expense recognized in the remainder of fiscal 2019. The Company completed the sale of its Pawtucket, RI location to a third party in the third quarter of fiscal 2020 for net proceeds totaling \$1,810, recognizing a gain on sale of real estate of \$760. Also, during the third quarter of fiscal 2020, the Company recognized \$85 in final Pawtucket, RI transition and exit costs, with no further costs related to this initiative anticipated in future periods.

The Company has evaluated events and transactions subsequent to the balance sheet date. Based on this evaluation, and other than the cash dividend announced on November 10, 2022 of \$1.00 per share to shareholders of record on November 30, 2022 and payable on December 9, 2022, the Company is not aware of any other events or transactions that occurred subsequent to the balance sheet date, but prior to filing, that would require recognition or disclosure in its consolidated financial statements.

In thousands, except share and per share amounts

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of demand deposit accounts or investment instruments that meet high credit quality standards such as money market funds, government securities, or commercial paper. The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less from the date of purchase to be cash equivalents.

Credit risk related to cash and cash equivalents is limited based on the creditworthiness of the financial institutions at which these funds are held. We maintain cash balances in multiple banks. Accounts located in the United States are insured by the Federal Deposit Insurance Corporation (FDIC) up to \$250. Certain of our account balances exceed the FDIC limit. Cash balances held outside the United States totaled \$28,951 as of August 31, 2022.

Accounts Receivable

As a result of the adoption of ASU 2016-13, the Company has updated its critical accounting policy related to trade accounts receivable and allowances for credit losses effective September 1, 2020 as follows:

All trade accounts receivable are reported net of allowances for credit losses. The allowances for credit losses represent management's best estimate of the credit losses expected from our trade accounts receivable over the life of the underlying assets. Assets with similar risk characteristics are pooled together for determination of their current expected credit losses. The Company regularly performs detailed reviews of our pooled assets to evaluate the collectability of receivables based on a combination of past, current, and future financial and qualitative factors that may affect customers' ability to pay. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations, a specific reserve is recorded against amounts due to reduce the recognized receivable to the amount reasonably expected to be collected. Receivables are written off against these reserves in the period they are determined to be uncollectable.

Prior to September 1, 2020, the Company evaluated the collectability of accounts receivable balances based on a combination of factors. In cases where the Company was aware of circumstances that may have impaired a specific customer's ability to meet its financial obligations to it, a specific allowance against amounts due to the Company was recorded, and thereby reduced the net recognized receivable to the amount the Company reasonably believed would be collected. For all other customers, the Company recognized allowances for doubtful accounts based on the length of time the receivables were past due, industry and geographic factors, the current business environment and its historical experience.

Inventory

The Company values inventory at the lower of cost or net realizable value using the first in, first out (FIFO) method. Management assesses the recoverability of inventory based on types and levels of inventory held, forecasted demand and changes in technology. These assessments require management judgments and estimates, and valuation adjustments for excess and obsolete inventory may be recorded based on these assessments. We estimate excess and obsolescence exposures based upon assumptions about future demand, product transitions, and market conditions, and

In thousands, except share and per share amounts

record adjustments to reduce inventories to their estimated net realizable value. The failure to accurately forecast demand may lead to additional excess and obsolete inventory and future charges.

Goodwill

The Company accounts for goodwill in accordance with ASC Topic 350, "Intangibles — Goodwill and Other." The Company performs impairment reviews annually each fourth quarter and whenever events or circumstances indicate the carrying value of goodwill may not be recoverable.

The Company has adopted Accounting Standards Update ("ASU") No. 2017-04 "Intangibles — Goodwill and Other Topics (Topic 350): Simplifying the Test for Goodwill Impairment." When evaluating the potential impairment of goodwill, Chase first assesses a range of qualitative factors, including but not limited to, industry conditions, the competitive environment, changes in the market for our products and services, entity-specific factors such as strategy and changes in key personnel, and the overall financial performance for each of our reporting units relative to historical or projected future operating results. If after completing this assessment, it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we then assess goodwill for impairment by comparing the fair value of the reporting unit to its carrying amount. If the fair value of a reporting unit is less than its carrying value, an impairment loss, limited to the amount of goodwill allocated to that reporting unit, is recorded. Fair values for reporting units are determined based on the income approach (discounted cash flow method).

For the annual fiscal 2022 fourth quarter review, no goodwill impairment, nor at-risk reporting units, was indicated as of August 31, 2022. For the annual fiscal 2022 goodwill impairment test, we performed a qualitative assessment of goodwill impairment and concluded that it was more likely than not that our reporting units' fair values exceeded their carrying values (i.e. indicated no impairment of goodwill). Accordingly, it was not necessary for us to perform the quantitative analysis.

Intangible Assets

Intangible assets consist of patents, formulas, trade names, customer relationships and trademarks. The Company capitalizes costs related to patent applications and technology agreements. The costs of these assets are amortized over the lesser of the useful life of the asset or its statutory life. Capitalized costs are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

Property, Plant and Equipment

Property, plant and equipment are stated at cost and depreciated using the straight-line method over the assets' estimated useful lives. Expenditures for maintenance repairs and minor renewals are charged to expense as incurred. Betterments and major renewals are capitalized. Upon retirement or other disposition of assets, related allowances for depreciation and amortization are eliminated from the accounts and any resulting gain or loss is included in the determination of income or loss. The estimated useful lives of property, plant and equipment are as follows:

Buildings and improvements	15	to	40	years
Machinery and equipment	3	to	10	years

Leasehold improvements are depreciated over the lesser of the useful life or the term of the lease.

In thousands, except share and per share amounts

Restricted Investments and Deferred Compensation

The Company has a non-qualified deferred savings plan that covers its Board of Directors and a separate plan covering selected employees. Participants may elect to defer a portion of their compensation for payment in a future tax year. The plans are funded by trusteed assets that are restricted to the payment of deferred compensation or satisfaction of the Company's general creditors. The Company's restricted investments under the plans were \$2,367 and \$2,260 at August 31, 2022 and 2021, respectively, and corresponding deferred compensation liabilities were \$2,375 and \$2,267 at August 31, 2022 and 2021, respectively. The Company accounts for the restricted investments as available for sale by recording net unrealized gains or losses in other comprehensive income as a component of stockholders' equity.

Revenue

The Company accounts for revenue using ASC Topic 606 "Revenue from Contracts with Customers." The Company accounts for revenue when: (a) there is approval and commitment from both parties; (b) the rights of the parties are identified; (c) payment terms are identified; (d) the contract has commercial substance; and (e) collectability of consideration is probable. Revenue is primarily derived from customer purchase orders, master sales agreements, and negotiated contracts, all of which represent contracts with customers. See Note 15 to the consolidated financial statements for more information on our accounting for revenue.

Research and Product Development Costs

Research and product development costs are expensed as incurred and include primarily engineering salaries, overhead and materials used in connection with research and development projects. Research and development expense amounted to \$4,415, \$4,056 and \$4,007 for the years ended August 31, 2022, 2021 and 2020, respectively, and was recorded within Research and product development costs on the consolidated statements of operations.

Pension Plans

The Company accounts for its pension plans following the requirements of ASC Topic 715, "Compensation — Retirement Benefits" ("ASC 715"). ASC 715 requires an employer to: (a) recognize in its statement of financial position the funded status of a benefit plan; (b) measure defined benefit plan assets and obligations as of the end of the employer's fiscal year (with limited exceptions); and (c) recognize as a component of other comprehensive income, net of tax, the gains or losses and prior service costs or credits that arise but are not recognized as components of net periodic benefit costs pursuant to prior existing guidance.

Stock-Based Compensation

In accordance with the accounting for stock-based compensation guidance, ASC Topic 718 "Compensation – Stock Compensation" ("ASC 718"), the Company measures and recognizes compensation expense for all share-based payment awards made to employees, directors and consultants based on estimated fair values. This includes restricted stock, restricted stock units and stock options. The guidance allows for the continued use of the simplified method as the Company has concluded that its historical share option exercise experience does not provide a reasonable basis for estimating expected term.

Stock-based compensation expense recognized in fiscal years 2022, 2021 and 2020 was \$3,147, \$2,978 and \$3,208, respectively.

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The fair value of options granted was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions for the years ending August 31, 2022, 2021 and 2020:

	2022	2021	2020
Expected dividend yield	0.8 %	0.7 %	0.7 %
Expected life	6.3 years	6.0 years	6.0 years
Expected volatility	38.7 %	39.5 %	31.0 %
Risk-free interest rate	1.3 %	0.4 %	1.4 %

Expected volatility is determined by looking at a combination of historical volatility over the past six years as well as implied future volatility.

Translation of Foreign Currency

The financial position and results of operations of the Company's HumiSeal Europe Ltd and Chase Protective Coatings Ltd businesses are measured using the British pound as the functional currency. The financial position and results of operations of the Company's HumiSeal Europe SARL and ABchimie businesses in France are measured using euros as the functional currency. The financial position and results of the Company's HumiSeal India Private Limited business in India are measured using the Indian rupee as the functional currency. The functional currency for all our other operations is the U.S. dollar. Revenue and expenses of these international businesses have been translated at average exchange rates. Foreign currency translation gains and losses are determined using current exchange rates for monetary items and historical exchange rates for other balance sheet items, and are recorded as a change in other comprehensive income (a component of stockholders' equity). Transaction gains and losses generated from the remeasurement of assets and liabilities denominated in currencies other than the functional currency of these international operations are included in other income (expense) on the consolidated statements of operations and were gains (losses) of \$442, (\$512) and (\$911) for the fiscal years ended August 31, 2022, 2021 and 2020, respectively.

Income Taxes

The Company accounts for income taxes under the asset and liability method. Under this method, a deferred tax asset or liability is determined based upon the differences between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates that will be in effect when these differences reverse. Tax credits are recorded as a reduction in income taxes. Valuation allowances are provided if, based upon the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company estimates contingent income tax liabilities based on the guidance for accounting for uncertain tax positions as prescribed in ASC Topic 740, "Income Taxes." See Note 7 for more information on the Company's income taxes, including information on the effects of the Tax Cuts and Jobs Act of 2017 (the "Tax Act") on our financial position and results of operations.

Net Income Per Share

The Company has unvested share-based payment awards with a right to receive nonforfeitable dividends, which are considered participating securities under ASC Topic 260, "Earnings Per Share" ("ASC 260"). The Company allocates earnings to participating securities and computes earnings per share using the two-class method.

Comprehensive Income

Comprehensive income is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including foreign currency translation

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adjustments, unrealized gains and losses on marketable securities and adjustments related to the change in the funded status of the pension plans.

Segments

ASC Topic 280 "Segment Reporting" of the Financial Accounting Standards Board ("FASB") codification establishes standards for reporting information about operating segments. The Company is organized into three reportable operating segments: Adhesives, Sealants and Additives; Industrial Tapes; and Corrosion Protection and Waterproofing. The segments are distinguished by the nature of the products manufactured and how they are delivered to their respective markets.

The Adhesives, Sealants and Additives segment offers innovative and specialized product offerings consisting of both end-use products and intermediates that are generally used in, or integrated into, another company's products. Demand for the segment's product offerings is typically dependent upon general economic conditions. The Adhesives, Sealants and Additives segment leverages the core specialty chemical competencies of the Company, and serves diverse markets and applications. The segment sells predominantly into the transportation, appliances, medical, general industrial and environmental market verticals. The segment's products include moisture protective coatings and cleaners and customized sealant and adhesive systems for electronics, polymeric microspheres, polyurethane dispersions and superabsorbent polymers. Beginning September 1, 2020 (first day of fiscal 2021), the Adhesives, Sealants and Additives segment includes the acquired operations of ABchimie, within the electronic and industrial coatings product line and beginning February 5, 2021, the acquired operations of Emerging Technologies, Inc. ("ETi"), within the functional additives product line.

The Industrial Tapes segment features wire and cable materials, specialty tapes, and other laminated and coated products. The segment derives its competitive advantage through its proven chemistries, diverse specialty offerings and the reliability its supply chain offers to end customers. These products are generally used in the assembly of other manufacturers' products, with demand typically dependent upon general economic conditions. The Industrial Tapes segment sells mostly to established markets, with some exposure to growth opportunities through further development of existing products. Markets served include cable manufacturing, utilities and telecommunications, and electronics packaging. The segment's offerings include insulating and conducting materials for wire and cable manufacturers, laminated durable papers, laminates for the packaging and industrial laminate markets, custom manufacturing services, pulling and detection tapes used in the installation, measurement and location of fiber optic cable and water and natural gas lines, and cover tapes essential to delivering semiconductor components via tape and reel packaging.

The Corrosion Protection and Waterproofing segment is principally composed of project-oriented product offerings that are primarily sold and used as "Chase" branded products. End markets include new and existing infrastructure projects on oil, gas, water and wastewater pipelines, highways and bridge decks, water and wastewater containment systems, and commercial buildings. The segment's products include protective coatings for pipeline applications, coating and lining systems for waterproofing and liquid storage applications, adhesives and sealants used in architectural and building envelope waterproofing applications, high-performance polymeric asphalt additives, and expansion joint systems for waterproofing applications in transportation and architectural markets. With sales generally dependent on outdoor project work, the segment experiences highly seasonal sales patterns.

In thousands, except share and per share amounts

Contingent Consideration

In connection with accounting for the ABchimie acquisition on September 1, 2020, the Company recorded a contingent consideration liability included within Other liabilities on the consolidated balance sheet. The contingent consideration liability was valued using a Monte Carlo simulation model in an option pricing framework based on key inputs requiring significant judgments and estimates to be made by the Company, including forecasts of future earnings over the multiyear period encompassed by the earnout, and that are not all observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The Company assesses the fair value of the contingent consideration liability at each reporting period. Any subsequent changes in the estimated fair value of the liability are reflected in Loss on contingent consideration on the consolidated statement of operations until the liability is settled. If fully realized, the contingent consideration due would total €7,000 (approximately \$8,330 at the time of the initial transaction)

Recently Adopted Accounting Standards

Fiscal 2022

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers", which amends the accounting for contract assets and contract liabilities from revenue contracts with customers in a business combination. The amendment requires that an entity acquiring the contract assets and contract liabilities in a business combination be recognized in accordance with ASU 2014-09, "Revenue from Contracts with Customers (Topic 606)". The ASU is effective for all public entities for fiscal years beginning after December 15, 2022, and interim periods therein. The Company early adopted ASU 2021-08 on February 28, 2022 and any impact on the consolidated financial statements will be dependent on the magnitude and nature of future acquired entities.

Fiscal 2021

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting". The ASU applies to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The ASU provides optional expedients and exceptions for applying generally accepted accounting principles (GAAP) to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The expedients and exceptions provided by the ASU do not apply to contract modifications made and hedging relationships entered into or evaluated after December 31, 2022, except for hedging relationships existing as of December 31, 2022 for which an entity has elected certain optional expedients and that are retained through the end of the hedging relationship. The ASU is effective for all entities as of March 12, 2020 through December 31, 2022. ASU 2020-04 has not had, and the Company does not expect it to have in future periods, a material impact on the Company's consolidated financial statements and disclosures.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments," which modifies the measurement approach for credit losses on financial assets measured on an amortized cost basis from an 'incurred loss' method to an 'expected loss' method. In November 2019, the FASB issued ASU 2019-11, "Codification Improvements to Topic 326, Financial Instruments – Credit Losses." ASU 2019-11 is an accounting pronouncement that amends ASU 2016-13. This amendment provides clarity and improves the codification to ASU 2016-13. The pronouncements are concurrently effective for fiscal years beginning after December 15, 2019 and interim periods therein. The Company adopted ASU 2016-13 on September 1, 2020, using the modified retrospective transition method which resulted in no material impact on the consolidated financial statements.

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As a result of the adoption of ASU 2016-13, the Company has updated its critical accounting policy related to trade accounts receivable and allowances for credit losses effective September 1, 2020 from the critical accounting policies previously disclosed in our audited financial statements for the year ended August 31, 2020 as follows:

All trade accounts receivable are reported net of allowances for credit losses. The allowances for credit losses represent management's best estimate of the credit losses expected from our trade accounts receivable over the life of the underlying assets. Assets with similar risk characteristics are pooled together for determination of their current expected credit losses. The Company regularly performs detailed reviews of our pooled assets to evaluate the collectability of receivables based on a combination of past, current, and future financial and qualitative factors that may affect customers' ability to pay. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations, a specific reserve is recorded against amounts due to reduce the recognized receivable to the amount reasonably expected to be collected.

Fiscal 2020

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)." Under the new guidance, lessees are required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (a) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (b) a right-of-use asset, which represents the lessee's right to use, or control the use of, a specified asset for the lease term. In July 2018, the FASB issued ASU 2018-11, "Leases (Topic 842) Targeted Improvements." The updated guidance provided an optional transition method, which allows for the application of the standard as of the adoption date with no restatement of prior period amounts. The Company adopted the standard on September 1, 2019 (start of fiscal 2020) under the optional transition method described above.

The new standard provides several optional practical expedients in transition. The Company has elected to apply the "package of practical expedients" which allows it to not reassess i) whether existing or expired arrangements contain a lease, ii) the lease classification of existing or expired leases, or iii) whether previous initial direct costs would qualify for capitalization under the new lease standard. In preparation for adoption of the standard, the Company enhanced its internal controls to enable the preparation of financial information including the assessment of the impact of the standard. The initial adoption of the ASU resulted in the recognition of additional lease liabilities of \$9,644 (\$2,071 short-term and \$7,573 long-term) and right-of-use assets of \$10,200 as of September 1, 2019 on the consolidated balance sheet as it relates to the Company's operating leases. The new standard did not have a material impact on the Company's consolidated statement of operations or cash flows.

In February 2018, the FASB issued ASU 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220) - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This ASU was issued to address a narrow-scope financial reporting issue that arose as a result of the enactment of the Tax Cuts and Jobs Act ("Tax Reform") on December 22, 2017. The objective of ASU 2018-02 is to address the tax effects of items within accumulated other comprehensive income (referred to as "stranded tax effects") that do not reflect the appropriate tax rate enacted in the Tax Reform. As a result, the ASU 2018-02 allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the newly enacted federal corporate income tax rate. The amount of the reclassification would be the difference between the historical corporate income tax rate of 35 percent and the current enacted corporate income tax rate of 21 percent. ASU 2018-02 is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, including adoption in an interim period. The amendments in this ASU may be applied retrospectively to each period in which the effect of the change in the U.S. Federal corporate income tax rate in the Tax Reform is recognized. Therefore, the Company adopted ASU 2018-02 in the first quarter of the year ending August 31, 2020, and has elected to reclassify the income tax effects of the Tax Reform related to its pension funding from accumulated other comprehensive loss to retained earnings.

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Note 2—Inventory

Inventory consisted of the following as of August 31, 2022 and 2021:

	August :	1,	August 31, 2021
Raw materials	\$ 37,	909 \$	3 24,055
Work in process	9,	569	5,928
Finished goods	15,	561	11,234
Total Inventory	\$ 63,	039 \$	41,217

Note 3—Property, Plant and Equipment

Property, plant and equipment consisted of the following as of August 31, 2022 and 2021:

	A	August 31, 2022		ugust 31, 2021
Land and improvements	\$	4,994	\$	5,020
Buildings		16,771		16,904
Machinery and equipment		49,458		49,505
Leasehold improvements		4,774		2,891
Construction in progress		754		613
		76,751		74,933
Accumulated depreciation		(52,503)		(50,666)
Property, plant and equipment, net	\$	24,248	\$	24,267

Note 4—Goodwill and Intangible Assets

The changes in the carrying value of goodwill, by operating segment, were as follows:

	Se	dhesives, alants and Additives	Industrial Tapes																Pro	Corrosion otection and oterproofing	Co	onsolidated
Balance at August 31, 2020	\$	50,487	\$	21,215	\$	10,700	\$	82,402														
Acquisition of ABchimie		13,055		_		_		13,055														
Acquisition of Emerging Technologies, Inc.		2,451		_		_		2,451														
Foreign currency translation adjustment		(48)		_		6		(42)														
Balance at August 31, 2021	\$	65,945	\$	21,215	\$	10,706	\$	97,866														
Foreign currency translation adjustment		(2,673)		_		(33)		(2,706)														
Balance at August 31, 2022	\$	63,272	\$	21,215	\$	10,673	\$	95,160														

The Company's goodwill is allocated to each reporting unit based on the nature of the products manufactured by the respective business combinations that originally created the goodwill. The Company has identified a total of three reporting units, corresponding to its three reportable operating segments that are used to evaluate the possible impairment of goodwill. Goodwill impairment exists when the carrying amount of goodwill exceeds its fair value. Assessments of possible impairment of goodwill are made when events or changes in circumstances indicate that the

In thousands, except share and per share amounts

carrying value of the asset may not be recoverable through future operations. Additionally, testing for possible impairment of recorded goodwill and certain intangible asset balances is required annually. The amount and timing of any impairment charges based on these assessments require the estimation of future cash flows and the fair market value of the related assets based on management's best estimates of certain key factors, including future selling prices and volumes; operating, raw material and energy costs; and various other projected operating and economic factors, including the on-going impact of the coronavirus disease 2019 (COVID-19) pandemic. When testing, fair values of the reporting units and the related implied fair values of their respective goodwill are established using discounted cash flows.

The Company adopted Accounting Standards Update ("ASU") No. 2017-04 "Intangibles — Goodwill and Other Topics (Topic 350): Simplifying the Test for Goodwill Impairment." When evaluating the potential impairment of goodwill, we first assess a range of qualitative factors, including but not limited to, industry conditions, the competitive environment, changes in the market for our products and services, entity-specific factors such as strategy and changes in key personnel, and the overall financial performance for each of our reporting units relative to historical or projected future operating results. If after completing this assessment, it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we then assess goodwill for impairment by comparing the fair value of the reporting unit to its carrying amount. If the fair value of a reporting unit is less than its carrying value, an impairment loss, limited to the amount of goodwill allocated to that reporting unit, is recorded. Fair values for reporting units are determined based on the income approach (discounted cash flow method).

The Company performs impairment reviews annually each fourth quarter and whenever events or circumstances indicate the carrying value of goodwill may not be recoverable. For the annual fiscal 2022 goodwill impairment test, we performed a qualitative assessment of goodwill impairment and concluded that it was more likely than not that our reporting units' fair values exceeded their carrying values (i.e. indicated no impairment of goodwill). Accordingly, it was not necessary for us to perform the quantitative analysis.

As of August 31, 2022 and 2021, the Company had a total goodwill balance of \$95,160 and \$97,866, respectively, related to its acquisitions, of which \$27,472 and \$30,697 respectively, remained deductible for income taxes.

Intangible assets subject to amortization consisted of the following as of August 31, 2022 and 2021:

	Weighted Average Amortization Period	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
August 31, 2022				
Patents and agreements	14.6 years	\$ 1,760	\$ 1,724	\$ 36
Formulas and technology	7.8 years	10,730	9,961	769
Trade names	5.9 years	8,673	8,407	266
Customer lists and relationships	9.1 years	113,735	81,145	32,590
		\$ 134,898	\$ 101,237	\$ 33,661
August 31, 2021				
Patents and agreements	14.6 years	\$ 1,760	\$ 1,715	\$ 45
Formulas and technology	7.9 years	10,987	9,769	1,218
Trade names	5.9 years	8,836	8,285	551
Customer lists and relationships	9.2 years	116,855	71,715	45,140
		\$ 138,438	\$ 91,484	\$ 46,954

In thousands, except share and per share amounts

Aggregate amortization expense related to intangible assets for the years ended August 31, 2022, 2021 and 2020 was \$11,751, \$12,858, and \$11,576, respectively. As of August 31, 2022 estimated amortization expense for the next five fiscal years is as follows:

Years ending August 31,	
2023	8,542
2024	7,334
2025	5,734
2026	4,937
2027	2,389

Note 5—Cash Surrender Value of Life Insurance

The Company recognized cash surrender value of a life insurance policy with the following carrier as of August 31, 2022 and 2021:

	 2022	2021		
John Hancock	\$ 4,450	\$	4,450	
Cash surrender value of life insurance policies	\$ 4,450	\$	4,450	

The policy is subject to periodic review. The Company currently intends to maintain the policy through the life or retirement of the insured, and records at the premium paid balance.

Note 6—Long-Term Debt

Long-term debt consisted of the following at August 31, 2022 and 2021:

	2022	2021
All-revolving credit facility with a borrowing capacity of \$200,000	180,000	
Long-term debt	\$ 180,000	\$ —

On July 27, 2021 (the fourth quarter of fiscal 2021), the Company entered into the Second Amended and Restated Credit Agreement (the "Credit Agreement") by and among the Company and NEPTCO Incorporated ("NEPTCO"), each as borrowers, the guarantor subsidiaries party thereto, the financial institutions party thereto as Lenders, and Bank of America, N.A., as administrative agent, with participation from Wells Fargo Bank, N.A., PNC Bank, N.A. and JPMorgan Chase Bank, N.A. The Credit Agreement was entered into to amend, restate and extend the Company's preexisting Amended and Restated Credit Agreement (the "Prior Credit Agreement"), which had a maturity date of December 15, 2021, and to provide for additional liquidity to finance acquisitions, working capital and capital expenditures, and for other general corporate purposes. Under the Credit Agreement, Chase obtained an increased revolving credit loan (the "Revolving Facility"), with borrowing capabilities not to exceed \$200,000 at any time, with the ability to request an increase in this amount by an additional \$100,000 at the individual or collective option of any of the Lenders. The applicable interest rate for the Revolving Facility and Term Loan (defined below) is based on the effective London Interbank Offered Rate (LIBOR) plus a range of 1.00% to 1.75%, depending on the consolidated net leverage ratio of Chase and its subsidiaries. As of August 31, 2022, the Company had \$180,000 in long-term debt attributed to the acquisition of NuCera Solutions that closed on September 1, 2022. The long-term debt has an applicable interest rate of 5.5%.

In thousands, except share and per share amounts

The Credit Agreement has a five-year term with interest payments due at the end of the applicable LIBOR period (but in no event less frequently than the three-month anniversary of the commencement of such LIBOR period) and principal payment due at the expiration of the agreement, July 27, 2026. The Credit Agreement contains provisions that may replace LIBOR as the benchmark index under certain circumstances. In addition, the Company may elect a base rate option for all or a portion of the Revolving Facility, in which case interest payments shall be due with respect to such portion of the Revolving Facility on the last business day of each quarter. Subject to certain conditions set forth in the Credit Agreement, the Company may elect to convert all or a portion of the outstanding Revolving Facility into a new term loan twice during the term of the Revolving Facility (each, a "Term Loan", and collectively with the Revolving Facility, the "Credit Facility"), which Term Loan shall be payable quarterly in equal installments sufficient to amortize the original principal amount of such Term Loan on a ten year amortization schedule.

The outstanding balance on the Credit Facility is guaranteed by all of Chase's direct and indirect domestic subsidiaries, which collectively had a carrying value of approximately \$314,662 at August 31, 2022. The Credit Facility is subject to restrictive covenants under the Credit Agreement, and financial covenants that require Chase and its subsidiaries to maintain certain financial ratios on a consolidated basis, including a consolidated net leverage ratio of 3.25 to 1.00 and a consolidated interest coverage ratio of 3.50 to 1.00 (both defined in the Credit Agreement). Chase Corporation was in compliance with the debt covenants as of August 31, 2022. The Credit Agreement also places certain Lender-approval requirements as to the size of permitted acquisitions which may be entered into by the Company and its subsidiaries, and allows for a temporary step-up in the allowed consolidated leverage ratio for the four fiscal quarters ending after certain designated acquisitions. Prepayment is allowed by the Credit Agreement at any time during the term of the agreement, subject to customary notice requirements and the payment of customary LIBOR breakage fees.

The Prior Credit Agreement was an all-revolving credit facility with a borrowing capacity of \$150,000, which could be increased by an additional \$50,000 at the request of the Company and the individual or collective option of any of the lenders, and with an interest rate based on the effective LIBOR plus an additional amount in the range of 1.00% to 1.75%, depending on our consolidated net leverage ratio or, at the Company's option, at the bank's base lending rate. It was substantially available at July 27, 2021, the time of its amendment and restatement.

Note 7—Income Taxes

The Company has applied the U.S. statutory Federal rate of 21%, enacted as part of the Tax Cuts and Jobs Act (the "Tax Act") in December 2017, for fiscal years end August 31, 2022, 2021 and 2020.

In fiscal 2019, the Company began recognizing an additional component of total Federal tax expense, the tax on Global Intangible Low-Taxed Income ("GILTI") provision of the Tax Act, which became applicable to the Company in fiscal 2019. The Company elected to account for GILTI as a period cost, and therefore included GILTI expense in the effective tax rate calculation. This provision did not have a material effect on the effective tax rate for the years ended August 31, 2022, 2021 and 2020.

The Company concluded that the Base Erosion and Anti Abuse Tax ("BEAT") provision of the Tax Act, which also became applicable to the Company in fiscal 2019, had no effect on our effective tax rate for fiscal 2022, 2021 or 2020.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, included a technical correction to the Tax Act which will allow accelerated deductions for qualified improvement property. The Company is currently evaluating the impact of the CARES Act, but at present does not expect that the qualified improvement property correction nor other provisions of the CARES Act would result in a material tax benefit to us in future periods. The CARES Act had no material effect on the effective tax rate for fiscal 2022, 2021 and 2020.

In thousands, except share and per share amounts

In July 2020, the United States Internal Revenue Service ("IRS") released final regulations (TD 9901) that ease documentation standards and provide greater flexibility for taxpayers claiming the deduction for Foreign-Derived Intangible Income ("FDII"). During fiscal 2022, the Company's effective tax rate included a FDII deduction benefit of \$728. In addition, during fiscal 2022, the Company recognized \$307 of tax benefit due to the expiration of statute of limitations.

The Inflation Reduction Act ("IRA") was enacted into law on August 16, 2022. Included in the IRA was a provision to implement a 15% corporate alternative minimum tax on "adjusted financial statement income" for applicable corporations and a 1% excise tax on repurchases of stock. These provisions are effective for tax years beginning after December 31, 2022. We are in the process of evaluating the provisions of the IRA, but we do not currently believe the IRA will have a material impact on our reported results, cash flows or financial position when it becomes effective.

Domestic and foreign pre-tax income for the years ended August 31, 2022, 2021 and 2020 was:

	 Year Ended August 31,					
	2022		2021		2020	
United States	\$ 49,015	\$	52,182	\$	42,027	
Foreign	 9,583		6,412		3,293	
	\$ 58,598	\$	58,594	\$	45,320	

The provision (benefit) for income taxes for the years ended August 31, 2022, 2021 and 2020 was:

	Year Ended August 31,					
	2022		2021			2020
Current:						
Federal	\$	10,346	\$	11,677	\$	9,157
State		2,589		782		1,813
Foreign		2,015		2,123		962
Total current income tax provision		14,950		14,582		11,932
Deferred:						
Federal		(775)		(832)		(520)
State		47		(124)		(184)
Foreign		(295)		48		(65)
Total deferred income tax benefit		(1,023)		(908)		(769)
Total income tax provision	\$	13,927	\$	13,674	\$	11,163

In thousands, except share and per share amounts

The provision (benefit) for income taxes differs from the amount computed by applying the Federal statutory income tax rate to income before income taxes. The Company's combined federal, state and foreign effective tax rate as a percentage of income before taxes for fiscal 2022, 2021 and 2020, net of offsets generated by federal, state and foreign tax benefits, was 23.8%, 23.3% and 24.6%, respectively. The following is a reconciliation of the effective income tax rate with the U.S. Federal statutory income tax rate for the years ended August 31, 2022, 2021 and 2020:

	Year Ended August 31,				
	2022	2021	2020		
Federal statutory rates	21.0 %	21.0 %	21.0 %		
Adjustment resulting from the tax effect of:					
State and local taxes, net of federal benefit	2.3 %	2.3 %	3.0 %		
Foreign tax rate differential	(0.3)%	(0.3)%	0.0 %		
Adjustment to uncertain tax position	(0.5)%	0.1 %	(1.1)%		
Transaction costs not deductible	0.8 %	0.0 %	0.5 %		
Research credit generated	(0.1)%	(0.1)%	(0.1)%		
Stock Compensation	0.0 %	(0.3)%	(0.3)%		
Permanent items	2.2 %	1.1 %	0.9 %		
GILTI and Subpart F, net of foreign tax credit	0.2 %	0.3 %	0.3 %		
Other	(0.3)%	(0.4)%	0.4 %		
Deferred income tax remeasurement	(0.5)%	0.1 %	0.0 %		
Foreign Derived Intangible Income	(1.2)%	(1.1)%	0.0 %		
Performance-based earnout contingency	0.2 %	0.6 %	0.0 %		
Effective income tax rate	23.8 %	23.3 %	24.6 %		

In thousands, except share and per share amounts

The following table summarizes the tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities:

	As of A	august 31,
	2022	2021
Deferred tax assets:		
Allowance for doubtful accounts	\$ 363	\$ 320
Inventories	715	520
Accruals	728	966
Warranty reserve	6	6
Pension accrual	1,872	2,386
Deferred compensation	559	545
Foreign currency loss on previously taxed income	56	96
Loan finance costs	<u> </u>	3
Restricted stock grants	495	327
Non-qualified stock options	323	347
Lease liability	2,208	2,328
Foreign net operating loss, net of valuation allowance	_	192
Other	36	41
	7,361	8,077
Deferred tax liabilities:		
Prepaid liabilities	(38)	(18)
Foreign intangibles	(2,099)	(3,156)
Right-of-use asset	(2,154)	(2,280)
Depreciation and amortization	411	(659)
	(3,880)	(6,113)
Net deferred tax assets (liabilities)	\$ 3,481	\$ 1,964

In fiscal 2021, the Company included \$599 of net operating loss carry forwards which offset future taxable income. The entire \$599 of net operating loss carry forwards was utilized in fiscal 2022 and the operating loss for the year was \$0.

Chase Corporation is required to apply a valuation allowance to reduce the deferred tax assets reported if based on the weight of the evidence it is more likely than not that some portion or all of the deferred tax assets will not be realized. As of August 31, 2022, the Company determined that a valuation allowance was not needed.

Consistent with the Company's practice prior to the passage of the Tax Act, we do not currently take the position that undistributed foreign subsidiaries' earnings are considered to be permanently reinvested.

In thousands, except share and per share amounts

A summary of the Company's adjustments to its uncertain tax positions, included within long-term accrued income taxes on the consolidated balance sheet, in fiscal years ended August 31, 2022, 2021 and 2020 are as follows:

	 2022	 2021	2020
Balance, at beginning of the year	\$ 2,190	\$ 1,941	\$ 2,324
Increase for tax positions related to the current year	99	_	101
Decreases for currency translation adjustments	(71)	_	_
Increase (decrease) for tax positions related to prior years	_	1,180	(609)
Decreases for settlement of uncertain tax positions	_	(705)	_
Increase for interest and penalties	97	208	125
Decrease for lapses of statute of limitations	(495)	(434)	_
Balance, at end of year	\$ 1,820	\$ 2,190	\$ 1,941

The unrecognized tax benefits mentioned above include an aggregate of \$584 of accrued interest and penalty balances related to uncertain tax positions. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. An increase in accrued interest and penalty charges of approximately \$398, net of Federal tax expense, was recorded as a tax expense during the current fiscal year. The Company anticipates that its accrual for uncertain tax positions could change by approximately \$330 over the next twelve-month period due to statute of limitations expiration.

The Company is subject to U.S. Federal income tax, as well as to income tax of multiple state, local and foreign tax jurisdictions. The statute of limitations for all material U.S. Federal, state, and local tax filings remains open for fiscal years subsequent to 2018. For foreign jurisdictions, the statute of limitations remains open in the U.K and France for fiscal years subsequent to 2018.

Note 8—Leases

The Company accounts for Leases using ASC Topic 842. At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Leases with a term greater than one year are recognized on the balance sheet as right-of-use (ROU) assets and short-term and long-term lease liabilities, as applicable. The Company does not have any financing leases that are material in nature.

Operating lease liabilities and their corresponding right-of-use assets are initially recorded based on the present value of lease payments over the expected remaining lease term. The interest rate implicit in lease contracts is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate to discount lease payments, which reflects the fixed rate at which the Company believes it could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment.

The Company has elected not to recognize leases with an original term of one year or less on the balance sheet. The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

In thousands, except share and per share amounts

The following table presents the right-of-use asset and short-term and long-term lease liabilities amounts recorded on the consolidated balance sheet as of August 31, 2022 and 2021:

	August 31, 2022		August 31, 2021		
Assets					
Operating lease right-of-use assets	\$	8,596	\$	9,312	
Liabilities					
Current (accrued expenses)	\$	1,448	\$	1,515	
Operating lease long-term liabilities		6,618		7,202	
Total lease liability	\$	8,066	\$	8,717	

Lease cost

The components of lease costs for the years ended August 31, 2022, 2021, and 2020 are as follows:

	 Year Ended August 31,					
	2022		2021		2020	
Operating lease cost (a)	\$ 3,332	\$	3,772	\$	3,783	

(a) Includes short-term leases and variable lease costs (e.g. common area maintenance), which are immaterial.

Maturity of lease liability

The maturity of the Company's lease liabilities on August 31, 2022 was as follows:

Year ending August 31,	Future Operating Lease Payments
2023	1,651
2024	1,576
2025	1,418
2026	1,173
2027	792
2028 and thereafter	2,199
Less: Interest	(743)
Present value of lease liabilities	\$ 8,066

The weighted average remaining lease term and discount rates are as follows:

	August 31, 2022	August 31, 2021
Lease Term and Discount Rate		
Weighted average remaining lease term (years)		
Operating leases	6.5	6.8
Weighted average discount rate (percentage)		
Operating leases	2.8 %	3.1 %

In thousands, except share and per share amounts

Other Information

Supplemental cash flow information related to leases is as follows:

	Year Ended August 31,			ıst 31,
		2022		2021
Operating cash outflows from operating leases	\$	1,725	\$	2,266
Total cash paid for amounts included in the measurement of lease liabilities	\$	1,725	\$	2,266

Total rental expense for all operating leases amounted to \$3,332, \$3,772 and \$3,783 for the years ended August 31, 2022, 2021 and 2020, respectively.

Note 9—Benefits and Pension Plans

401(k) Plans

The Company has a defined contribution plan adopted pursuant to section 401(k) of the Internal Revenue Code of 1986 (the "Chase 401(k) Plan"). Any qualified employee who has attained age 21 and has been employed by the Company for at least three months may contribute a portion of his or her salary to the plan and the Company will match 100% of the first one percent of salary contributed and 50% thereafter, up to an amount equal to three and one-half percent of such employee's annual salary.

The Company's contribution expense for all 401(k) plans was \$942, \$844 and \$852 for the years ended August 31, 2022, 2021 and 2020, respectively.

Non-Qualified Deferred Savings Plans

The Company has a non-qualified deferred savings plan covering the Board of Directors and a separate plan covering selected employees. Participants may elect to defer a portion of their compensation for future payment. The plans are funded by trusteed assets that are restricted to the payment of deferred compensation or satisfaction of the Company's general creditors. The Company's liability under the plans was \$2,375 and \$2,267 on August 31, 2022 and 2021, respectively.

Pension Plans

The Company has noncontributory defined benefit pension plans covering employees of certain divisions of the Company. The Company has a funded, qualified plan ("Qualified Plan") and an unfunded supplemental plan ("Supplemental Plan") designed to maintain benefits for certain employees at the plan formula level. The plans provide for pension benefits determined by a participant's years of service and final average compensation. The Qualified Plan assets consist of separate pooled investment accounts with a trust company. The measurement date for the plans is August 31, 2022.

Effective December 1, 2008, a "soft freeze" in the Qualified Plan was adopted whereby no new employees hired would be admitted to the Qualified Plan, with the exception of employees who were members of the International Association of Machinists and Aerospace Workers Union whose contract was amended in June 2012 to include a soft freeze with an effective date of July 15, 2012. All eligible participants who were admitted to the plan prior to the applicable soft freeze dates continue to accrue benefits as detailed in the plan agreements.

In thousands, except share and per share amounts

Through our wholly-owned subsidiary NEPTCO, the Company had a third defined benefit pension plan ("NEPTCO Pension Plan") covering our union employees at our Pawtucket facility. This plan was frozen effective October 31, 2006, and as a result, no new participants could enter the plan and the benefits of current participants were frozen as of that date. The benefits were based on years of service and the employee's average compensation during the earlier of five years before retirement, or October 31, 2006. The NEPTCO Pension Plan assets consisted of separate pooled investment accounts with a trust company. The measurement date for the NEPTCO Pension Plan was historically the same as the Company's fiscal year end.

In August 2019, the Board of Directors approved a plan to terminate the NEPTCO Pension Plan. The Company established November 15, 2019 as the plan termination date and during fiscal 2020 performed the administrative actions required to carry out the termination. No balance related to the NEPTCO defined benefit plan was carried on the Company's consolidated balance sheet as of August 31, 2022 or 2021.

The following tables reflect the status of the Company's pension plans for the years ended August 31, 2022 2021 and 2020:

	Year Ended August 31,				
	 2022		2021		2020
Change in benefit obligation					
Projected benefit obligation at beginning of year	\$ 20,261	\$	20,663	\$	20,087
Service cost	382		366		295
Interest cost	384		341		451
Actuarial (gain) loss	(2,202)		645		2,253
Benefits paid	(2,027)		(1,754)		(2,423)
Projected benefit obligation at end of year	\$ 16,798	\$	20,261	\$	20,663
Change in plan assets					
Fair value of plan assets at beginning of year	\$ 9,280	\$	8,168	\$	7,859
Actual return on plan assets	(1,369)		1,301		868
Employer contribution	1,917		1,565		1,864
Benefits paid	 (2,026)		(1,754)		(2,423)
Fair value of plan assets at end of year	\$ 7,802	\$	9,280	\$	8,168
Funded status at end of year	\$ (8,996)	\$	(10,981)	\$	(12,495)

In thousands, except share and per share amounts

	Year Ended August 31,					
		2022		2021		2020
Amounts recognized in consolidated balance sheets						
Noncurrent assets	\$	_	\$	_	\$	_
Current liabilities		(1,565)		(1,565)		(1,565)
Noncurrent liabilities		(7,431)		(9,416)		(10,930)
Net amount recognized in consolidated balance sheets	\$	(8,996)	\$	(10,981)	\$	(12,495)
Actuarial present value of benefit obligation and funded status						
Accumulated benefit obligations	\$	15,093	\$	17,898	\$	18,307
Projected benefit obligations	\$	16,798	\$	20,261	\$	20,663
Plan assets at fair value	\$	7,802	\$	9,280	\$	8,168
Amounts recognized in accumulated other comprehensive income						
Prior service cost	\$	37	\$	40	\$	44
Net actuarial loss		8,659		9,674		10,595
Adjustment to pre-tax accumulated other comprehensive income	\$	8,696	\$	9,714	\$	10,639
		Ye	ear E	nded August 3	31,	
		2022		2021		2020
Other changes in plan assets and benefit obligations recognized in		2022		2021		2020
other comprehensive income				-		
other comprehensive income Net (gain)/loss	\$	(439)	\$	(884)	\$	711
Net (gain)/loss Amortization of loss	\$	(439) (593)	\$	(884) (656)	\$	711 (664)
Net (gain)/loss Amortization of loss Supplemental plan assumption change	\$	(439) (593) 17	\$	(884) (656) 619	\$	711 (664) 1,065
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost	\$	(439) (593)	\$	(884) (656)	\$	711 (664) 1,065 (3)
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income	\$	(439) (593) 17 (3)	\$	(884) (656) 619 (3)	\$	711 (664) 1,065 (3) (155)
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost	\$	(439) (593) 17	\$	(884) (656) 619	\$	711 (664) 1,065 (3)
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income	\$	(439) (593) 17 (3)	\$	(884) (656) 619 (3)	\$	711 (664) 1,065 (3) (155)
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income Total recognized in other comprehensive income	\$	(439) (593) 17 (3) — (1,018)	\$	(884) (656) 619 (3) — (924)	\$	711 (664) 1,065 (3) (155) 954
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income Total recognized in other comprehensive income Net periodic pension cost	\$	(439) (593) 17 (3) — (1,018)	\$	(884) (656) 619 (3) — (924)	\$	711 (664) 1,065 (3) (155) 954
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income Total recognized in other comprehensive income Net periodic pension cost Total recognized in net periodic pension cost and other comprehensive		(439) (593) 17 (3) — (1,018) 951		(884) (656) 619 (3) — (924) 975		711 (664) 1,065 (3) (155) 954 1,178
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income Total recognized in other comprehensive income Net periodic pension cost Total recognized in net periodic pension cost and other comprehensive income Estimated amounts that will be amortized from accumulated comprehensive income over the next fiscal year		(439) (593) 17 (3) — (1,018) 951		(884) (656) 619 (3) — (924) 975		711 (664) 1,065 (3) (155) 954 1,178
Net (gain)/loss Amortization of loss Supplemental plan assumption change Amortization of prior service cost Effect of settlement on accumulated other comprehensive income Total recognized in other comprehensive income Net periodic pension cost Total recognized in net periodic pension cost and other comprehensive income Estimated amounts that will be amortized from accumulated		(439) (593) 17 (3) — (1,018) 951		(884) (656) 619 (3) — (924) 975		711 (664) 1,065 (3) (155) 954 1,178

Prior service cost arose from the amendment of the plan's benefit schedules to comply with the Tax Reform Act of 1986 and adoption of the unfunded supplemental pension plan.

In thousands, except share and per share amounts

Components of net periodic pension cost for the fiscal years ended August 31, 2022, 2021 and 2020 included the following:

	2022	2022 2021	
Components of net periodic benefit cost			
Service cost	\$ 382	\$ 366	\$ 295
Interest cost	384	341	451
Expected return on plan assets	(411)	(391)	(390)
Amortization of prior service cost	3	3	3
Amortization of accumulated loss	593	656	664
Curtailment and settlement loss	<u> </u>		155
Net periodic benefit cost	\$ 951	\$ 975	\$ 1,178

Weighted average assumptions used to determine benefit obligations as of August 31, 2022, 2021 and 2020 are as follows:

	2022	2021	2020
Discount rate			
Qualified plan	4.21 %	2.15 %	1.92 %
Supplemental plan	4.36 %	1.95 %	1.65 %
NEPTCO plan	— %	— %	— %
Rate of compensation increase			
Qualified and Supplemental plan	3.50 %	3.50 %	3.50 %
NEPTCO plan	— %	— %	— %

Weighted average assumptions used to determine net periodic benefit cost for the years ended August 31, 2022, 2021 and 2020 are as follows:

	2022	2021	2020
Discount rate			
Qualified plan	2.15 %	1.92 %	2.58 %
Supplemental plan	1.95 %	1.65 %	2.37 %
NEPTCO plan	— %	— %	2.29 %
Expected long-term return on plan assets			
Qualified plan	4.85 %	5.25 %	5.60 %
Supplemental plan	— %	— %	— %
NEPTCO plan	— %	— %	5.60 %
Rate of compensation increase			
Qualified and Supplemental plan	3.50 %	3.50 %	3.50 %
NEPTCO plan	— %	— %	— %

It is the Company's policy to evaluate, on an annual basis, the discount rate used to determine the projected benefit obligation to approximate rates on high quality, long-term obligations. The Moody's Corporate Aa Bond index has generally been used as a benchmark for this purpose, with adjustments made if the duration of the index differed from that of the plan. The discount rate is determined by matching the expected payouts from the respective plans to the spot rates inherent in the FTSE Pension Discount Curve (formerly Citigroup Pension Discount Curve). A single rate is then developed, that when applied to the expected cash flows, results in the same present value as determined using the various spot rates. The Company believes that this approach produces the most appropriate approximation of the plan liability.

In thousands, except share and per share amounts

The Company estimates that each 100-basis point reduction in the discount rate would result in additional (decreased) net periodic pension cost, the Company's primary pension obligation, of approximately \$37 for the Qualified Plan and (\$35) for the Supplemental Plan. The expected return on plan assets is derived from a periodic study of long-term historical rates of return on the various asset classes included in the Company's targeted pension plan asset allocation. The Company estimates that each 100-basis point reduction in the expected return on plan assets would result in additional net periodic pension cost of approximately \$85 for the Qualified Plan. No rate of return is assumed for the Supplemental Plan since that plan is currently not funded. The rate of compensation increase is also evaluated and is adjusted by the Company, if necessary, periodically.

Qualified Plan Assets

The investment policy for the Qualified Plan is based on ERISA standards for prudent investing. The fundamental goal underlying the investment policy is to ensure that the assets of the plans are invested in a prudent manner to meet the obligations of the plans as these obligations come due. The primary investment objectives include providing a total return which will promote the goal of benefit security by attaining an appropriate ratio of plan assets to plan obligations, to provide for real asset growth while also tracking plan obligations, to diversify investments across and within asset classes, to reduce the impact of losses in single investments, and to follow investment practices that comply with applicable laws and regulations.

The primary policy objectives will be met by investing assets to achieve a reasonable tradeoff between return and risk relative to the plan's obligations. This includes investing a portion of the assets in funds selected in part to hedge the interest rate sensitivity to plan obligations.

The Qualified Plan assets are invested in a diversified mix of both domestic and foreign equity investments and fixed income securities. Asset manager performance is reviewed at least annually and benchmarked against the peer universe for the given investment style. The Company's expected return for the Qualified Plan is 5.55%. To determine the expected long-term rate of return on the assets for the Qualified Plan, the Company considered the historical and expected return on the plan assets, as well as the current and expected allocation of the plan assets.

Asset allocation is monitored on an ongoing basis relative to the established asset class targets. The interaction between plan assets and benefit obligations is periodically studied to assist in the establishment of strategic asset allocation targets. The investment policy permits variances from the targets within certain parameters. Asset rebalancing occurs when the underlying asset class allocations move outside these parameters, at which time the asset allocation is rebalanced back to the policy target weight.

The Qualified Plan has the following target allocation and weighted average asset allocations as of August 31, 2022, 2021 and 2020:

	Target Allocation	Percentage of	Plan Assets as of	August 31,
Asset Category	Range	2022	2021	2020
Equity securities	10-80 %	47 %	46 %	49 %
Debt securities	20-75 %	53 %	54 %	51 %
Other	0-100 %	— %	— %	— %
Total	100 %	100 %	100 %	100 %

In thousands, except share and per share amounts

NEPTCO Pension Plan

The NEPTCO Pension Plan terminated in fiscal 2020. Given the plan's termination and full payout in fiscal 2020, the plan no longer holds assets as of August 31, 2020.

Fair Market Value of Pension Plan Assets

The Company is required to categorize pension plan assets using a three-tier fair value hierarchy, which classifies the inputs used in measuring fair values. These tiers include: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The following table presents the Company's pension plan assets at August 31, 2022 and 2021 by asset category:

				Fair value measurements at August 31, 2022							Fair val A		easuren 31, 202		
	Aı	igust 31, 2022	in m	ted prices active arkets Level 1)	obse in	ificant ther ervable puts evel 2)	une	ignificant observable inputs (Level 3)		August 31, 2021	oted prices in active markets (Level 1)	obse in	ificant ther ervable puts evel 2)	Signifi unobser inpu (Leve	vable its
Asset Category															
Equity securities	\$	3,667	\$	3,667	\$	_	\$	_	\$	4,241	\$ 4,241	\$	_	\$	_
Debt securities	_	4,135		4,135			_		_	5,039	 5,039				_
Total	\$	7,802	\$	7,802	\$		\$	_	\$	9,280	\$ 9,280	\$		\$	_

Level 1 Assets: The fair values of the common stocks, corporate bonds and U.S. Government securities included in this tier are based on the closing price reported on the active market where the individual securities are traded.

Estimated Future Benefit Payments

The following pension benefit payments (which include expected future service) are assumed to be paid in each of the following fiscal years based on the participants' normal retirement age, and giving consideration to the termination of the NEPTCO Pension plan:

Year ending August 31,	Pensio	on Benefits
2023	\$	3,413
2024		2,004
2025		1,830
2026		1,802
2027		1,322
2028-2032	\$	4,221

The Company contributed \$1,917, \$1,565 and \$1,864 to fund its obligations under the pension plans for the years ended August 31, 2022, 2021 and 2020, respectively, including final cash outlays related to the termination of the NEPTCO plan in fiscal 2020. The Company plans to make the necessary contributions during fiscal 2023 to ensure its pension plans continue to be adequately funded given the current market conditions and does not anticipate a material change from amounts contributed during the current fiscal year.

In thousands, except share and per share amounts

Note 10—Stockholders' Equity

Amended and Restated 2013 Equity Incentive Plan

In December 2021, the Company adopted an amendment and restatement of the Chase Corporation 2013 Equity Incentive Plan (the "Amended 2013 Plan"). The Amended 2013 Plan was approved by stockholders in February 2022. The Amended 2013 Plan permits the grant of restricted stock, stock options, deferred stock, stock payments or other awards to employees, participating officers, directors, consultants and advisors who are linked directly to increases in shareholder value. The aggregate number of shares available for grant under the 2013 Equity Incentive Plan was initially 1,200,000. No additional shares were included as a result of the December 2021 amendments. Additional shares may become available in connection with share splits, share dividends or similar transactions. As of August 31, 2022, 912,638 shares remained available for future grant under the Amended 2013 Plan.

2005 Incentive Plan

In November 2005, the Company adopted, and the stockholders subsequently approved, the 2005 Incentive Plan (the "2005 Plan"). The 2005 Plan permitted the grant of restricted stock, stock options, deferred stock, stock payments or other awards to employees, participating officers, directors, consultants and advisors who are linked directly to increases in shareholder value. The aggregate number of shares available for grant under the 2005 Plan was initially 1,000,000. The Company is no longer granting equity awards under the 2005 Plan. Options to purchase 31,543 shares of common stock remained outstanding under the 2005 Plan as of August 31, 2022.

Restricted Stock

Employees and Executive Management

During the first quarter of fiscal 2016, a grant of 5,000 restricted shares was made to a non-executive member of management with a vesting date of October 20, 2020. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2016, the Board of Directors of the Company approved the fiscal year 2017 LTIP for the executive officers and other members of management. The 2017 LTIP was an equity-based plan with a grant date of September 1, 2016. In addition to the stock option component described below, the plan contained the following restricted stock components: (a) a performance and service-based restricted stock grant of 5,399 shares in the aggregate, subject to adjustment based on fiscal 2017 results, with a vesting date of August 31, 2019, for which compensation expense was recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 5,367 shares in the aggregate, with a vesting date of August 31, 2019, for which compensation expense was recognized on a ratable basis over the vesting period.

Based on the fiscal year 2017 financial results, 5,399 additional shares of restricted stock (total of 10,798 shares) were earned and granted subsequent to the end of fiscal year 2017 in accordance with the performance measurement criteria. No further performance-based measurements apply to this award.

In August 2016, the Board of Directors of the Company also approved equity retention agreements with certain executive officers. The equity-based retention agreements had a grant date of September 1, 2016. In addition to the stock option component described below, the equity retention agreements contained a time-based restricted stock grant of 16,312 shares in the aggregate, with 7,768 shares having a vesting date of August 31, 2019, and 8,544 shares initially having a vesting date of August 31, 2021. The latter award was amended in August 2017 to vest in five equal annual installments over the five-year period following the grant date. Compensation expense was recognized on a ratable basis over the vesting period.

In thousands, except share and per share amounts

During the first quarter of fiscal 2017, additional grants totaling 8,805 shares of restricted stock were issued to non-executive members of management with a vesting date of August 31, 2021. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2017, the Board of Directors of the Company approved the fiscal year 2018 LTIP for the executive officers and other members of management. The 2018 LTIP was an equity-based plan with a grant date of September 1, 2017. In addition to the stock option component described below, the plan contained the following restricted stock components: (a) a performance and service-based restricted stock grant of 4,249 shares in the aggregate, subject to adjustment based on fiscal 2018 results, with a vesting date of August 31, 2020, for which compensation expense was recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 3,473 shares in the aggregate, with a vesting date of August 31, 2020, for which compensation expense was recognized on a ratable basis over the vesting period.

Based on the fiscal year 2018 financial results, 572 additional shares of restricted stock (total of 4,821 shares) were earned and granted subsequent to the end of fiscal year 2018 in accordance with the performance measurement criteria. No further performance-based measurements apply to this award.

During the third quarter of fiscal 2018, an additional grant totaling 192 shares of restricted stock was issued to a non-executive member of management with a vesting date of August 31, 2020. Compensation expense was recognized on a ratable basis over the vesting period.

During the fourth quarter of fiscal 2018, an additional grant totaling 609 shares of restricted stock was issued to an executive member of management with a vesting date of August 20, 2019. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2018, the Board of Directors of the Company approved the fiscal year 2019 LTIP for the executive officers and other members of management. The 2019 LTIP was an equity-based plan with a grant date of September 1, 2018. In addition to the stock option component described below, the plan contained the following restricted stock components: (a) a performance and service-based restricted stock grant of 3,541 shares in the aggregate, subject to adjustment based on fiscal 2019 results, with a vesting date of August 31, 2021, for which compensation expense was recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 3,068 shares in the aggregate, with a vesting date of August 31, 2021, for which compensation expense was recognized on a ratable basis over the vesting period.

In September 2018, restricted stock in the amount of 2,472 shares related to a first quarter of fiscal 2017 grant was forfeited in conjunction with the termination of employment of a non-executive member of management of the Company.

During the fourth quarter of fiscal 2019, an additional grant of restricted stock was made related to the 2019 LTIP grant in conjunction with an amendment to the equity compensation program for a promoted employee. The additional grant contained the following restricted stock components: (a) a performance and service-based restricted stock grant of 211 shares in the aggregate, subject to adjustment based on fiscal 2019 results, with a vesting date of August 31, 2021, for which compensation expense was recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 132 shares in the aggregate, with a vesting date of August 31, 2021, for which compensation expense was recognized on a ratable basis over the vesting period.

In August 2019, restricted stock in the amount of 833 shares related to the 2019 LTIP grant was forfeited in conjunction with an amendment in the equity compensation agreement of an employee.

In thousands, except share and per share amounts

Based on the fiscal year 2019 financial results, 2,694 shares of restricted stock already granted under the 2019 LTIP were forfeited subsequent to the end of fiscal year 2019 in accordance with the performance measurement criteria of the awards. No further performance-based measurements apply to this award. Compensation expense relating to the remaining portion was recognized on a ratable basis over the vesting period.

In August 2019, the Board of Directors of the Company approved the fiscal year 2020 LTIP for the executive officers and other members of management. The 2020 LTIP is an equity-based plan with a grant date of September 1, 2019 and contains the following equity components: (a) a performance and service-based restricted stock grant of 3,697 shares in the aggregate, subject to adjustment based on fiscal 2020 results, with a vesting date of August 31, 2022, for which compensation expense was recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 3,689 shares in the aggregate, with a vesting date of August 31, 2022, for which compensation expense was recognized on a ratable basis over the vesting period.

In August 2019, the Board of Directors of the Company approved equity retention agreements with certain executive officers. The equity-based retention agreements have a grant date of September 1, 2019 and contained time-based restricted stock grants of 15,945 shares in the aggregate, and have a vesting date of August 31, 2022. Compensation expense was recognized on a ratable basis over the vesting period.

During the second quarter of fiscal 2020, additional grants of 432,616 and 18,720 shares of restricted stock (total of 19,768) were issued to non-executive members of management with vesting dates of December 31, 2021, 2022 and 2024, respectively. Compensation expense is being recognized on a ratable basis over the vesting period.

In May 2020, restricted stock in the amount of 432 shares related to a second quarter of fiscal 2020 grant was forfeited in conjunction with the termination of employment of a non-executive member of management of the Company.

During the fourth quarter of fiscal 2020, two additional grants totaling 481 shares and 261 shares of restricted stock were issued to two non-executive members of management, with vesting dates of July 27, 2021 and June 15, 2021, respectively. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2020, the Board of Directors of the Company approved the fiscal year 2021 LTIP for the executive officers and other members of management. The 2021 LTIP is an equity-based plan with a grant date of September 1, 2020 and contains the following equity components: (a) a performance and service-based restricted stock grant of 3,798 shares in the aggregate, subject to adjustment based on fiscal 2021 results, with a vesting date of August 31, 2023, for which compensation expense is recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 4,919 shares in the aggregate, with a vesting date of August 31, 2023, for which compensation expense is recognized on a ratable basis over the vesting period.

In the first quarter of 2021, restricted stock in the amount of 952 shares related to the second quarter of fiscal 2020 grant was forfeited in conjunction with the termination of employment of non-executive members of management of the Company.

In January 2021, restricted stock in the amount of 4,409 shares of common stock was forfeited in conjunction with the termination without cause of a now former executive of the Company.

In February 2021, a performance and service-based restricted stock grant totaling 521 shares, and a time-vesting restricted stock grant in the amount of 261 shares, was granted in conjunction with the appointment of a new executive

In thousands, except share and per share amounts

of the Company. The restricted shares vest on the same terms as those granted under the 2021 LTIP in September 2020. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

In the fourth quarter of 2021, restricted stock in the amount of 447 shares related to the second quarter of fiscal 2020 grant was forfeited in conjunction with the termination of employment of non-executive members of management of the Company.

In August 2021, the Board of Directors of the Company approved the fiscal year 2022 LTIP for the executive officers and other members of management. The 2022 LTIP is an equity-based plan with a grant date of September 1, 2021 and contains the following equity components: (a) a performance and service-based stock grant of 3,304 shares in the aggregate, subject to adjustment based on fiscal 2022 results, with a vesting date of August 31, 2024, for which compensation expense is recognized on a ratable basis over the vesting period based on quarterly probability assessments; and (b) a time-based restricted stock grant of 6,280 shares in the aggregate, with a vesting date of August 31, 2024, for which compensation expense is recognized on a ratable basis over the vesting period.

In the first and second quarters of fiscal 2022, restricted stock in the amount of 437 and 570 shares, respectively, related to the fiscal 2020 grant was forfeited in conjunction with the termination of employment of non-executive members of management of the Company.

In February 2022 (the second quarter of fiscal 2022), the Board of Directors of the Company approved an equity retention agreement with the Company's Treasurer and Chief Financial Officer that included a restricted stock award in the amount of 5,332 shares with a vesting date of January 31, 2025. Compensation expense is recognized over the period of the award consistent with the vesting terms.

In the second and third quarters of fiscal 2022, restricted stock in the amount of 559 and 298 shares, respectively, related to the fiscal 2022 grant was forfeited in conjunction with the termination of employment of non-executive members of management of the Company.

During the fourth quarter of fiscal 2021, one additional grant totaling 641 shares of restricted stock was issued to a non-executive member of management, with vesting dates of July 27, 2022. Compensation expense was recognized on a ratable basis over the vesting period.

In the fourth quarter of fiscal 2022, restricted stock in the amount of 299, 461, and 407 shares related to the fiscal 2019, 2020, and 2021 grant, respectively, was forfeited in conjunction with the termination of employment of non-executive members of management of the Company.

Non-employee Consultants and Advisors

In February 2021, restricted stock in the amount of 2,306 shares was granted to a consultant of the Company, with a two-year vesting term including continued service requirements. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

Non-employee Board of Directors

In February 2019, as part of their standard compensation for board service, non-employee members of the Board received a total grant of 4,599 shares of restricted stock for service for the period from January 31, 2019 through January 31, 2020. The shares of restricted stock vested at the conclusion of this service period. Compensation was recognized on a ratable basis over the twelve-month vesting period.

In February 2020, as part of their standard compensation for board service, non-employee members of the Board received a total grant of 4,906 shares of restricted stock for service for the period from January 31, 2020 through

In thousands, except share and per share amounts

January 31, 2021. The shares of restricted stock vested at the conclusion of this service period. Compensation was recognized on a ratable basis over the twelve-month vesting period.

In December 2020, restricted stock in the amount of 110 shares were granted to certain non-employee members of the board of directors in relation to their service on the board. These shares vested during the second fiscal quarter of 2021.

In February 2021, as part of their standard compensation for board service, non-employee members of the Board received a total grant of 4,525 shares of restricted stock for service for the period from January 31, 2021 through January 31, 2022. The shares of restricted stock will vest at the conclusion of this service period. Compensation is being recognized on a ratable basis over the twelve-month vesting period.

In February 2022, as part of their standard compensation for board service, non-employee members of the Board received a total grant of 5,000 shares of restricted stock for service for the period from January 31, 2022 through January 31, 2023. The shares of restricted stock will vest at the conclusion of this service period. Compensation is being recognized on a ratable basis over the twelve-month vesting period.

In July 2022, as part of the standard compensation for board service, a non-employee member of the Board received a grant of 456 shares of restricted stock for service on the board. These shares of restricted stock will vest on January 31, 2023. Compensation is being recognized on a ratable basis over the twelve-month vesting period.

A summary of the transactions of the Company's restricted stock plans for the years ended August 31, 2022, 2021 and 2020 is presented below:

	Non Employee Directors	Weighted Average Grant Date Fair Value	Non Employee Consultants and Advisors	Weighted Average Grant Date Fair Value	Officers and Employees	Weighted Average Grant Date Fair Value
Unvested restricted stock at August 31, 2019	4,599	\$ 101.92		_	44,355	\$ 67.18
Granted	4,906	95.59	_	_	43,841	108.47
Vested	(4,599)	101.92	_	_	(25,195)	61.51
Forfeited or cancelled		_		_	(3,126)	123.19
Unvested restricted stock at August 31, 2020	4,906	95.59	_	_	59,875	97.72
Granted	4,635	104.09	2,306	\$ 108.42	9,499	98.10
Vested	(5,016)	95.59	_	_	(19,978)	80.13
Forfeited or cancelled		_		_	(6,195)	103.86
Unvested restricted stock at August 31, 2021	4,525	104.09	2,306	108.42	43,201	107.31
Granted	5,456	93.48	_	_	18,190	105.16
Vested	(4,525)	104.04	_	_	(16,804)	100.22
Forfeited or cancelled	` <u> </u>	_	_	_	(3,031)	111.84
Unvested restricted stock at August 31, 2022	5,456	93.48	2,306	108.42	41,556	109.02

Stock Options

In August 2017, the Board of Directors of the Company approved the fiscal year 2018 LTIP for the executive officers and other members of management. The 2018 LTIP is an equity-based plan with a grant date of September 1, 2017 and included options to purchase 9,622 shares of common stock in the aggregate with an exercise price of \$93.50 per share. The options vested in three equal annual installments ending on August 31, 2020. Of the options granted,

In thousands, except share and per share amounts

4,591 options will expire on August 31, 2027, and 5,031 options will expire on September 1, 2027. Compensation expense was recognized over the period of the award consistent with the vesting terms.

During the third quarter of fiscal 2018, an additional grant of options to purchase 606 shares of common stock with an exercise price of \$104.00 was issued to a non-executive member of management. The options vested in three equal annual installments ending on August 31, 2020 and will expire on March 1, 2028. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2018, the Board of Directors of the Company approved the fiscal year 2019 LTIP for the executive officers and other members of management. The 2019 LTIP was an equity-based plan with a grant date of September 1, 2018 and included options to purchase 8,603 shares of common stock in the aggregate with an exercise price of \$123.95 per share. The options vested in three equal annual installments ending on August 31, 2021. Of the options granted, 3,927 options will expire on August 31, 2028, and 4,676 options will expire on September 1, 2028. Compensation expense was recognized over the period of the award consistent with the vesting terms.

During the fourth quarter of fiscal 2019, an additional grant of 483 options to purchase shares of common stock with an exercise price of \$99.38 per share was made related to the 2019 LTIP grant and in conjunction with an amendment to the equity compensation program for a promotion of an employee. The options vested in three equal installments on August 31, 2019, 2020 and 2021, and will expire on August 31, 2028. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2019, the Board of Directors of the Company approved the fiscal year 2020 LTIP for the executive officers and other members of management. The 2020 LTIP was an equity-based plan with a grant date of September 1, 2019 and included options to purchase 13,418 shares of common stock in the aggregate with an exercise price of \$100.22 per share. The options vest in three equal annual installments ending on August 31, 2022. Of the options granted, 6,218 options will expire on August 31, 2029, and 7,200 options will expire on September 1, 2029. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

In August 2019, the Board of Directors of the Company also approved equity retention agreements with certain executive officers. The equity-based retention agreements have a grant date of September 1, 2019 and contain stock options to purchase 53,642 shares of common stock in the aggregate with an exercise price of \$100.22 per share. The options vested on August 31, 2022 and will expire on August 31, 2029. Compensation expense was recognized on a ratable basis over the vesting period.

In August 2020, the Board of Directors of the Company approved the fiscal year 2021 LTIP for the executive officers and other members of management. The 2021 LTIP is an equity-based plan with a grant date of September 1, 2020 and included options to purchase 14,845 shares of common stock in the aggregate with an exercise price of \$97.57 per share. The options vest in three equal annual installments ending on August 31, 2023. Of the options granted, 6,730 options will expire on August 31, 2030, and 8,115 options will expire on September 1, 2030. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

In January 2021, options to purchase 18,129 shares of common stock were forfeited in conjunction with the termination without cause of a now former executive of the Company. Options to purchase an additional 306 shares of common stock were forfeited in April 2021 related to this same termination.

In February 2021, options to purchase 749 shares of common stock with an exercise price of \$104.04 per share were granted in conjunction with the appointment of a new executive of the Company. The stock options vest on the same terms as those granted in September 2020 under the 2021 LTIP. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

In thousands, except share and per share amounts

In August 2021, the Board of Directors of the Company approved the fiscal year 2022 LTIP for the executive officers and other members of management. The 2022 LTIP is an equity-based plan with a grant date of September 1, 2021 and included options to purchase 12,942 shares of common stock in the aggregate with an exercise price of \$114.50 per share. The options vest in three equal installments ending on August 31, 2024. Of the options granted, 5,804 options will expire on August 31, 2031, and 7,138 options will expire on September 1, 2031. Compensation expense is being recognized over the period of the award consistent with the vesting terms.

In February 2022, the Board of Directors of the Company also approved an equity retention agreement with the Treasurer and Chief Financial Officer. The agreement included an award to purchase 14,480 shares of common stock with a grant date of February 1, 2022 and an exercise price of \$94.88 per share. The options will vest on January 31, 2025 and will expire on February 1, 2032. Compensation expense is being recognized on a ratable basis over the vesting period.

In April 2022, options to purchase, 836 shares of common stock were forfeited in conjunction with the termination without cause of a now former employee of the Company.

In July 2022, options to purchase, 2,351 shares of common stock were forfeited in conjunction with the termination without cause of a now former employee of the Company.

The following table summarizes information about stock options outstanding as of August 31, 2022:

		Options Outstanding							Opt	ions Exerci	isable	
1	Exercise Prices	Number Outstanding	Weighted Avg. Remaining Contractual Life		Weighted Average ercise Price		Aggregate Intrinsic Value	Number Exercisable	A	Veighted Average Exercise Price		Aggregate Intrinsic Value
\$	29.72	10,925	1.0	\$	29.72	\$	638	10,925	\$	29.72	\$	638
\$	35.50	13,372	2.0	\$	35.50	\$	704	13,372	\$	35.50	\$	704
\$	39.50	12,753	3.0	\$	39.50	\$	621	12,753	\$	39.50	\$	621
\$	64.37	32,920	4.0	\$	64.37	\$	783	32,920	\$	64.37	\$	783
\$	93.50	8,704	5.0	\$	93.50	\$	_	8,704	\$	93.50	\$	_
\$	94.88	14,480	9.4	\$	94.88	\$		_	\$	94.88	\$	_
\$	97.57	12,705	8.0	\$	97.57	\$	_	8,615	\$	97.57	\$	_
\$	100.22	49,689	7.0	\$	100.22	\$		49,689	\$	100.22	\$	_
\$	104.00	606	5.5	\$	104.00	\$	_	606	\$	104.00	\$	_
\$	104.04	749	8.0	\$	104.04	\$		499	\$	104.04	\$	_
\$	114.50	10,964	9.0	\$	114.50	\$	_	3,655	\$	114.50	\$	_
\$	123.95	8,144	6.0	\$	123.95	\$	_	8,144	\$	123.95	\$	_
		176,011	5.7	\$	80.88	\$	2,746	149,882	\$	77.39	\$	2,746

Options are granted with an exercise price that is equal to the closing market value of the Company's common stock on the day preceding the grant date, which is determined not to be materially different from the opening market value on the date of grant.

In thousands, except share and per share amounts

A summary of the transactions of the Company's stock option plans for the years ended August 31, 2022, 2021 and 2020 is presented below:

	Officers and Employees	Weighted Average Exercise Price
Options outstanding at August 31, 2019	101,254	\$ 57.18
Granted	67,060	\$ 100.22
Exercised	(3,618)	\$ 34.21
Forfeited or cancelled		\$
Options outstanding at August 31, 2020	164,696	\$ 75.21
Granted	15,594	\$ 97.88
Exercised	(7,546)	\$ 38.79
Forfeited or cancelled	(18,435)	\$ 100.62
Options outstanding at August 31, 2021	154,309	\$ 76.24
Granted	27,422	\$ 104.14
Exercised	(2,533)	\$ 16.00
Forfeited or cancelled	(3,187)	108.36
Options outstanding at August 31, 2022	176,011	\$ 80.88
Options exercisable at August 31, 2022	149,882	\$ 77.39

The weighted average grant date fair value of options granted in the years ended August 31, 2022, 2021 and 2020 was \$37.71, \$34.45 and \$29.79 per share, respectively.

The total pretax intrinsic value of stock options exercised was \$195, \$558 and \$311 for the years ended August 31, 2022, 2021, and 2020, respectively.

Excluding the effects of common stock reserved for issuance upon exercise of the 176,011 outstanding options, there were 924,767 shares of common stock available for future issuance under the Company's Amended and Restated 2013 Equity Incentive Plan on August 31, 2022. Based on historic experience, management estimates all outstanding stock options will vest.

The income tax benefit realized from stock options exercised, vesting of restricted stock and issuance of stock pursuant to grants of restricted stock units was \$20, \$114 and \$149 for the years ended August 31, 2022, 2021 and 2020, respectively.

As of August 31, 2022, unrecognized expense related to all stock-based compensation described above was \$3,200 (including \$2,568 for restricted stock and \$632 for stock options), which will be recognized over the next four fiscal years.

In thousands, except share and per share amounts

Note 11—Segment Data

The Company is organized into three reportable operating segments: Adhesives, Sealants and Additives; Industrial Tapes; and Corrosion Protection and Waterproofing. The segments are distinguished by the nature of the products manufactured and how they are delivered to their respective markets.

The Adhesives, Sealants and Additives segment offers innovative and specialized product offerings consisting of both end-use products and intermediates that are generally used in, or integrated into, another company's products. Demand for the segment's product offerings is typically dependent upon general economic conditions. This segment leverages the core specialty chemical competencies of the Company, and serves diverse markets and applications. The segment sells predominantly into the transportation, appliances, medical, general industrial and environmental market verticals. The segment's products include moisture protective coatings and customized sealant and adhesive systems for electronics, polymeric microspheres, polyurethane dispersions and superabsorbent polymers. Beginning September 1, 2020, the Adhesives, Sealants and Additives segment includes the acquired operations of ABchimie, within the electronic and industrial coatings product line and beginning February 5, 2021, the acquired operations of ETi, within the functional additives product line.

The Industrial Tapes segment features wire and cable materials, specialty tapes, and other laminated and coated products. The segment derives its competitive advantage through its proven chemistries, diverse specialty offerings and the reliability its supply chain offers to end customers. These products are generally used in the assembly of other manufacturers' products, with demand typically dependent upon general economic conditions. This segment sells mostly to established markets, with some exposure to growth opportunities through further development of existing products. Markets served include cable manufacturing, utilities and telecommunications, and electronics packaging. The segment's offerings include insulating and conducting materials for wire and cable manufacturers, laminated durable papers, laminates for the packaging and industrial laminate markets, custom manufacturing services, pulling and detection tapes used in the installation, measurement and location of fiber optic cable and water and natural gas lines, and cover tapes essential to delivering semiconductor components via tape and reel packaging.

The Corrosion Protection and Waterproofing segment is principally composed of project-oriented product offerings that are primarily sold and used as "Chase" branded products. End markets include new and existing infrastructure projects on oil, gas, water and wastewater pipelines, highways and bridge decks, water and wastewater containment systems, and commercial buildings. The segment's products include protective coatings for pipeline applications, coating and lining systems for waterproofing and liquid storage applications, adhesives and sealants used in architectural and building envelope waterproofing applications, high-performance polymeric asphalt additives, and expansion joint systems for waterproofing applications in transportation and architectural markets. With sales generally dependent on outdoor project work, the segment experiences highly seasonal sales patterns.

In thousands, except share and per share amounts

The following tables summarize information about the Company's segments:

		Years Ended August 31,						
		2022		2021		2020		
Revenue								
Adhesives, Sealants and Additives	\$	135,770	\$	126,864	\$	96,208		
Industrial Tapes		143,954		120,873		118,960		
Corrosion Protection and Waterproofing		45,936		45,599		45,994		
Total	\$	325,660	\$	293,336	\$	261,162		
Income before income taxes								
Adhesives, Sealants and Additives	\$	37,657 (a) ¢	36,520 (c)	¢	25,953		
	\$	41,387))	37,407	Ф	31,237 (f)		
Industrial Tapes		17,415		15,913 (d)		16,638 (g)		
Corrosion Protection and Waterproofing	_				_			
Total for reportable segments		96,459	.)	89,840		73,828		
Corporate and common costs	Φ.	(37,861)(b		(31,246)(e)		(28,508)(h)		
Total	\$	58,598	\$	58,594	\$	45,320		
Includes the following costs by segment:								
Adhesives, Sealants and Additives								
Interest	\$	170	\$	116	\$	98		
Depreciation		924		1,065		994		
Amortization		10,466		10,685		9,313		
Industrial Tapes								
Interest	\$	170	\$	83	\$	111		
Depreciation		1,568		1,718		1,746		
Amortization		1,280		1,537		1,800		
Corrosion Protection and Waterproofing								
Interest	\$	85	\$	98	\$	37		
Depreciation	Ą	516	Φ	588	Φ	615		
Amortization		5		636		463		
AIIIUI IIZAIIUII		3		030		403		

⁽a) Includes a \$432 loss on the upward adjustment of the performance-based earn-out contingent consideration associated with the September 2020 acquisition of ABchimie, \$463 in operation optimization costs related to the move from Woburn, MA to O'Hara Township, PA and \$147 of operations optimization costs related to the move from Newark, CA to Hickory, NC,

⁽b) Includes \$232 of operations optimization costs related to the Company's move to the new corporate headquarters within Westwood, MA and \$4,000 of acquisition-related expense attributable to NuCera

⁽c) Includes \$1,664 in loss on the upward adjustment of the performance-based earn out contingent consideration associated with the September 2020 acquisition of ABchimie and \$977 in exit costs related to the movement of the sealants system business out of the Newark, CA location and into the Hickory, NC location during fiscal 2021

⁽d) Includes expense of \$100 for the write-down of certain assets under construction

⁽e) Includes \$128 in acquisition-related expense attributable to the February 2021 acquisition of the operations of ETi

⁽f) Includes \$559 in exit costs related to the movement of the pulling and detection business out of the Granite Falls, NC location and into the Hickory, NC location during the first six months of fiscal 2020

⁽g) Includes \$170 gain on the refund of a payment made in fiscal 2019 related to engineering studies performed to assess potential operational changes and further plant rationalization and consolidation and an expense of \$405 for the write-down of certain assets under construction

⁽h) Includes \$150 of expense related to exploratory IT work performed to assess potential future upgrades to the Company's companywide ERP system, a \$760 gain related to the April 2020 sale of the Company's Pawtucket, RI location, a \$1,791 gain related to the August 2020 sale of the Company's Randolph, MA property, \$183 in severance expense related to the May 2020 reduction in force, \$85 in expenses related to the final transition out of the Pawtucket, RI facility, \$155 of pension-related settlement costs due to the timing of lump-sum distribution and \$274 in acquisition-related costs attributable to the September 2020 (fiscal 2021) acquisition of ABchimie

In thousands, except share and per share amounts

	A	August 31, 2022	A	August 31, 2021		
Total Assets						
Adhesives, Sealants and Additives	\$	153,784	\$	161,968		
Industrial Tapes		87,751		72,301		
Corrosion Protection and Waterproofing		33,037		31,067		
Total for reportable segments		274,572		265,336		
Corporate and common assets		337,008		138,823		
Total	\$	611,580	\$	404,159		

Note 12—Export Sales and Foreign Operations

Export sales from continuing domestic operations to unaffiliated third parties were \$36,305, \$33,439 and \$30,067 for the years ended August 31, 2022, 2021 and 2020, respectively. The increase in export sales from fiscal 2022 to fiscal 2021 is reflective of the company-wide year-over-year increase in revenue attributed to a combination of sales price and demand-driven increases.

The Company's products are sold worldwide. Revenue for the years ended August 31, 2022, 2021 and 2020, are attributed to operations located in the following countries:

		Years Ended August 31,							
	20:	22	2021		2020				
Revenue									
United States	\$ 28	1,754 \$	245,476	\$	226,690				
United Kingdom	2	2,295	24,846		20,543				
All other foreign (1)	2	1,611	23,014		13,929				
Total	\$ 32	5,660 \$	293,336	\$	261,162				

⁽¹⁾ Inclusive of sales originated from the Company's French locations (including ABchimie for fiscal 2021), royalty revenue attributable to our licensed manufacturer in Asia, and Chase foreign manufacturing operations.

In thousands, except share and per share amounts

As of August 31, 2022 and 2021, the Company had long-lived assets (defined as tangible assets providing the Company with a future economic benefit beyond the current year or operating period, including buildings, equipment and leasehold improvements) and goodwill and intangible assets, less accumulated amortization in the following countries:

	August 31, 2022		A	august 31, 2021
Long-Lived Assets		,		
United States				
Property, plant and equipment, net	\$	21,300	\$	20,990
Goodwill and Intangible assets, less accumulated amortization		105,216		115,936
United Kingdom				
Property, plant and equipment, net		1,832		2,174
Goodwill and Intangible assets, less accumulated amortization		3,318		3,905
All other foreign				
Property, plant and equipment, net		1,116		1,103
Goodwill and Intangible assets, less accumulated amortization		20,287		24,979
Total				
Property, plant and equipment, net	\$	24,248	\$	24,267
Goodwill and Intangible assets, less accumulated amortization	\$	128,821	\$	144,820

Note 13—Supplemental Cash Flow Data

Supplemental cash flow information for the years ended August 31, 2022, 2021 and 2020 is as follows:

	2022		2021	2020
Income taxes paid	\$	15,017	\$ 17,074	\$ 11,186
Interest paid	\$	282	\$ 245	\$ 230
Noncash Investing and Financing Activities				
Common stock received for payment of stock option exercises	\$	40	\$ 206	\$ 123
Property, plant and equipment additions included in accounts payable	\$	146	\$ 256	\$ 92

In thousands, except share and per share amounts

Supplemental cash flow information as related to acquisitions and divestitures for the years ended August 31, 2022, 2021 and 2020 is as follows:

	2022	2021		2020
Acquisition of Emerging Technologies, Inc (ETi)				
Accounts receivable	\$	481		
Inventory		919		
Prepaids and other current assets		8		
Property, plant & equipment		7		
Goodwill		2,451		
Intangible assets		6,650		
Accounts payable and accrued liabilities		(519)		
Other liabilities (due to sellers)		(1,000)		
Payments for acquisitions		(8,997)		
Acquisition of ABchimie				
Accounts receivable	\$	697		
Inventory		239		
Prepaids and other current assets		696		
Property, plant & equipment		245		
Goodwill		13,055		
Intangible assets		12,055		
Operating lease right-of-use asset		473		
Deferred tax liability		(3,387)		
Accounts payable and accrued liabilities		(431)		
Operating lease liabilities (inclusive of short- and long-term)		(473)		
Other liabilities (due to sellers)		(928)		
Payments for acquisitions, net of cash received		(22,241)		
Sale of Randolph, MA Property				
Asset held for sale			\$	(14)
Gain on sale of real estate			Ψ	(1,791)
Cash received from sale of real estate, net				1,805
Cash received from said of real estate, net				1,000
Sale of Pawtucket, RI Location				
Asset held for sale			\$	(1,050)
Gain on sale of real estate				(760)
Cash received from sale of real estate, net				1,810

Note 14—Acquisitions

Fiscal 2022

Definitive Agreement to acquire NuCera Solutions

On July 15, 2022, the Company entered into a Stock Purchase Agreement by and among Chase, NuCera Holdings Inc., and NuCera Solutions Holdco LP, to acquire NuCera Solutions ("NuCera"). NuCera is a recognized global leader in the production and development of highly differentiated specialty polymers and polymerization technologies serving demanding applications, offering products critical to enabling end-product functionality,

In thousands, except share and per share amounts

performance and reliability. The transaction closed on September 1, 2022 (first day of fiscal 2023). Given the timing of this acquisition, the Company is in the process of completing the purchase price accounting. See Note 23 to the consolidated financial statement for additional information related to this subsequent event.

Fiscal 2021

Acquisition of Emerging Technologies, Inc. ("ETi")

On February 5, 2021, the Company acquired certain assets of Emerging Technologies, Inc. ("ETi"), a superabsorbent polymers solutions provider, located in Greensboro, NC. The business was acquired for a purchase price of \$9,997, comprising \$8,997 paid on February 5, 2021 and \$1,000 paid on August 4, 2022 (eighteen months after the purchase), subsequent to final working capital adjustments, and excluding acquisition-related costs. As part of this transaction, Chase acquired substantially all working capital and fixed assets of the business and entered a multi-year lease at ETi's existing location. The Company expensed \$128 of acquisition-related costs in fiscal 2021 associated with this acquisition. The purchase was funded with available cash on hand. ETi is a solutions provider and formulator of absorbent polymers for use in the packaging, recreational, consumer, and sanitation markets. The acquisition broadens the Company's superabsorbent polymers product offerings and formulation capabilities while expanding its market reach. The Company finalized purchase accounting during the first quarter of fiscal 2022, with no significant change to amounts initially recorded. Since the effective date of the acquisition, the financial results of ETi's acquired operations have been included in the Company's financial statements within the functional additives product line, contained within the Adhesives, Sealants and Additives operating segment. The ETi acquisition does not represent a significant business combination so pro forma financial information is not provided.

The excess of the purchase price over the net tangible and intangible assets acquired resulted in preliminary goodwill of \$2,451 that is largely attributable to the synergies and economies of scale from combining the operations, technologies and research and development capabilities of ETi and Chase, particularly as they pertain to the expansion of the Company's product and service offerings, the established workforce and marketing efforts. This goodwill is deductible for income tax purposes.

Acquisition of ABchimie

On September 1, 2020 (first day of fiscal 2021), the Company acquired all the capital stock of ABchimie for €18,654 (approximately \$22,241 at the time of the transaction) net of cash acquired, subsequent to final working capital adjustments, excluding acquisition-related costs totaling \$274 recognized in fiscal 2020 and with a performance-based earn out (measured over four years post-acquisition) potentially worth an additional €7,000 (approximately \$8,330 at the time of the transaction). The Company accrued \$2,584 at August 31, 2022 within Other liabilities on the consolidated balance sheet related to its current estimate of the earn out. Following its initial recording at the acquisition date, a \$432 and \$1,664 increase in the performance-based earn out accrual was recorded within Loss on contingent consideration in the consolidated statement of operations for the year ended August 31, 2022 and August 31, 2021, respectively. See Note 16 to the consolidated financial statements for additional information on the estimate of contingent consideration payable.

ABchimie is a Corbelin, France headquartered solutions provider for the cleaning and protection of electronic assemblies, with further formulation, production, and research and development capabilities. The transaction was funded with available cash on hand. The financial results of the business are included in the Company's fiscal 2021 financial statements within the Adhesives, Sealants and Additives operating segment in the electronic and industrial coatings product line. The Company finalized purchase accounting during the fourth quarter of fiscal 2021, with no significant change to amounts initially recorded. The ABchimie acquisition does not represent a significant business combination so pro forma financial information is not provided.

In thousands, except share and per share amounts

The excess of the purchase price over the net tangible and intangible assets acquired resulted in goodwill preliminarily measured at \$13,055 that is largely attributable to the synergies and economies of scale from combining the operations, technologies and research and development capabilities of ABchimie and Chase, particularly as they pertain to the expansion of the Company's product and service offerings, the established workforce and marketing efforts. A portion of this goodwill is deductible in the U.S. for calculation of GILTI period costs but is nondeductible for French income tax purposes.

Note 15—Revenue from Contracts with Customers

This revenue is generated from the manufacture of specialty chemical products including coatings, linings, adhesives, sealants, specialty tapes, polymers and laminates. Certain of these manufactured products can incorporate customerowned materials. The Company also recognizes, to a lesser extent, revenue through royalties and commissions from licensed manufacturers and from providing custom manufacturing-related services. The Company's revenue recognition policies require the Company to make significant judgments and estimates. In applying the Company's revenue recognition policy, determinations must be made as to when control of products passes to the Company's customers, which can be either at a point in time or over time based on contractual terms with customers. Revenue is generally recognized at a point in time when control passes upon either shipment to or receipt by the customer of the Company's products, while revenue is generally recognized over time when control of the Company's products transfers to customers during the manufacturing process. The Company analyzes several factors, including but not limited to, the nature of the products being sold and contractual terms and conditions in contracts with customers to help the Company make such judgments about revenue recognition.

Contract Balances

The Company's contract assets primarily relate to unbilled revenue for products currently in production at the Company's facilities and which incorporate customer-owned material. Revenue is recognized in advance of billing to the customer in these specific circumstances, whereas billing is typically performed at the time of shipment to or receipt by the customer. Contract assets are included in prepaid expenses and other current assets on the Company's consolidated balance sheet. The following table presents contract assets by reportable operating segment as of August 31, 2022 and 2021:

	U	August 31, 2022		
Contract Assets				
Adhesives, Sealants and Additives	\$	55	\$	21
Industrial Tapes		123		82
Corrosion Protection and Waterproofing		3		25
Total	\$	181	\$	128

The Company did not have any contract liabilities as of August 31, 2022 and 2021.

In thousands, except share and per share amounts

Disaggregated Revenue

The Company disaggregates revenue from customers by geographic region, as it believes this disclosure best depicts how the nature, amount, timing and uncertainty of the Company's revenue and cash flows are affected by economic factors. Disaggregated revenue by geographical region for the years ended August 31, 2022, 2021 and 2020 was as follows:

Year Ended August 31, 2022

			Teal Ellucu	ar Ended August 31, 2022						
		sives, Sealants		Industrial		sion Protection	Consolidated			
	and	d Additives		Tapes	and V	Vaterproofing		Revenue		
Revenue										
North America	\$	87,249	\$	127,988	\$	40,282	\$	255,519		
Asia\Middle East		25,917		7,430		3,022		36,369		
Europe		21,910		6,168		2,511		30,589		
All other foreign		694		2,368		121		3,183		
Total Revenue	\$	135,770	\$	143,954	\$	45,936	\$	325,660		
				Year Ended		,				
		Adhesives, Sealants and Additives		Industrial Tapes		sion Protection Vaterproofing	Consolidated Revenue			
Revenue										
North America	\$	76,388	\$	106,084	\$	37,879	\$	220,351		
Asia\Middle East		28,033		7,903		4,933		40,869		
Europe		21,846		4,657		2,591		29,094		
All other foreign		597		2,229		196		3,022		
Total Revenue	\$	126,864	\$	120,873	\$	45,599	\$	293,336		
		Year Ended August 31, 2020								
		sives, Sealants d Additives		Industrial Tapes		sion Protection Waterproofing		onsolidated Revenue		
Revenue										
North America	\$	64,711	\$	105,911	\$	36,252	\$	206,874		
Asia		17,877		7,150		6,361		31,388		
Europe		13,201		3,286		3,047		19,534		
All other foreign		419		2,613		334		3,366		
Total Revenue	\$	96,208	\$	118,960	\$	45,994	\$	261,162		

Practical Expedients and Policy Elections

Shipping and Handling Policy Election — the Company has made an accounting policy election to record shipping and handling activities occurring after control has passed to the customer to be treated as a fulfillment cost rather than as a distinct performance obligation. Shipping and handling expenses consist primarily of costs incurred to deliver products to customers and internal costs related to preparing products for shipment and are recorded within cost of products and services sold. Amounts billed to customers as shipping and handling are classified as revenue when services are performed.

Considering Existence of a Significant Financing Component — as a practical expedient, an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between when the entity transfers a promised good or service to the customer and when the customer pays for that good or service will be one year or less. Given the time between the Company transferring a promised good or service to the customer and the customer paying for that good or service is less than one

In thousands, except share and per share amounts

year based on the terms of arrangements with customers, the Company does not adjust the promised amount of consideration for effects of a significant financing component.

Note 16—Fair Value Measurements

The Company defines fair value as the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date. The Company uses a three-tier fair value hierarchy, which classifies the inputs used in measuring fair values. These tiers are: Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The Company utilizes the best available information in measuring fair value. Financial assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurement. The financial assets classified as Level 1 and Level 2 as of August 31, 2022 and 2021 represent investments that are restricted for use in nonqualified retirement savings plans for certain key employees and directors.

The following table sets forth the Company's financial assets that were accounted for at fair value on a recurring basis as of August 31, 2022 and 2021:

	Fair value measurement category										
	Fair value measurement date			Total		Quoted prices in active markets (Level 1)		obse	nificant other rvable inputs (Level 2)		Significant bservable inputs (Level 3)
Assets:											
Restricted investments	August 31, 2022	\$	2,367	\$	2,125	\$	242	\$	_		
Restricted investments	August 31, 2021	\$	2,260	\$	2,016	\$	244	\$	_		

The following table presents the fair value of the Company's liabilities that are accounted for at fair value on a recurring basis as of August 31, 2022 and 2021:

				Fair value measurement category										
	Fair value measurement date					•	gnificant other servable inputs (Level 2)	Significant unobservable inputs (Level 3)						
Liabilities:					_									
Long-term debt	August 31, 2022	\$	180,000	\$	_	\$	180,000	\$	_					
Contingent consideration	August 31, 2022	\$	2,584	\$	_	\$	_	\$	2,584					
Long-term debt	August 31, 2021	\$	_	\$	_	\$	_	\$	_					
Contingent consideration	August 31, 2021	\$	2,537	\$	_	\$		\$	2,537					

The long-term debt (including any current portion of long-term debt) had a \$180,000 and \$0 balance as of August 31, 2022 and 2021, respectively. The carrying value of the long-term debt approximates its fair value and has an interest rate of 5.5%. The interest rate is set based on the movement of the underlying market rates. See Note 6 to the consolidated financial statements for additional information on long-term debt.

In connection with accounting for the ABchimie acquisition on September 1, 2020, the Company recorded a contingent consideration liability included within Other liabilities on the consolidated balance sheet of €780 (approximately \$928) on the acquisition date, representing the then fair value of contingent consideration payable upon

In thousands, except share and per share amounts

the achievement of a performance-based target. The contingent consideration liability was valued using a Monte Carlo simulation model in an option pricing framework based on key inputs that are not all observable in the market, which

represents a Level 3 measurement within the fair value hierarchy. The Company assesses the fair value of the contingent consideration liability at each reporting period. Any subsequent changes in the estimated fair value of the liability are reflected in Loss on contingent consideration on the consolidated statement of operations until the liability is settled. As of August 31, 2022, the liability increased to \$2,584 predominantly due to changes in non-market data assumptions as well as a shorter period to the payment date. See Note 14 to the consolidated financial statements for additional information on the acquisition of ABchimie.

Note 17—Net Income Per Share

The determination of earnings per share under the two-class method is as follows:

	Years Ended August 31,								
		2022	2021			2020			
Net income	\$	44,671	\$	44,920	\$	34,157			
Less: Allocated to participating securities		297		309		273			
Available to common shareholders	\$	44,374	\$	44,611	\$	33,884			
Basic weighted average shares outstanding		9,399,085	9	9,383,085		9,359,940			
Additional dilutive common stock equivalents		35,256		45,331		79,810			
Diluted weighted average shares outstanding		9,434,341	9,428,416		9,439,750				
Net income available to common shareholders, per common and common equivalent share					-				
Basic	\$	4.72	\$	4.75	\$	3.62			
Diluted	\$	4.70	\$	4.73	\$	3.59			

For the years ended August 31, 2022, 2021 and 2020, stock options to purchase 96,912, 59,508 and 11,183 shares of common stock were outstanding but were not included in the calculation of diluted net income per share because their inclusion would be antidilutive. Included in the calculation of dilutive common stock equivalents are the unvested portion of restricted stock and stock options.

In thousands, except share and per share amounts

Note 18—Accumulated Other Comprehensive Income

The changes in accumulated other comprehensive income (loss), net of tax, were as follows:

	 tricted stments				ign Currency ranslation djustment	Total
Balance at August 31, 2020	\$ 269	\$	(8,317)	\$	(5,044)	\$ (13,092)
Other comprehensive gains (losses) before	• • •		(4.50)		4.00-	
reclassifications	297		(159)		1,295	1,433
Reclassifications to net income of previously deferred						
(gains) losses	 (48)		497			449
Other comprehensive income (loss)	 249		338		1,295	1,882
Balance at August 31, 2021	\$ 518	\$	(7,979)	\$	(3,749)	\$ (11,210)
Balance at August 31, 2021	\$ 518	\$	(7,979)	\$	(3,749)	\$ (11,210)
Other comprehensive gains (losses) before						
reclassifications	(282)		330		(9,582)	(9,534)
Reclassifications to net income of previously deferred						
(gains) losses	(72)		449		_	377
Other comprehensive income (loss)	(354)		779		(9,582)	(9,157)
•	 					
Balance at August 31, 2022	\$ 164	\$	(7,200)	\$	(13,331)	\$ (20,367)

The following table summarizes the reclassifications from accumulated other comprehensive income (loss) to the consolidated statements of income:

	Co	mount of (Reclassif Accumula omprehen (Loss) int	ied fr ted O sive I	om ther ncome	Location of Gain (Loss) Reclassified from Accumulated Other Comprehensive
		Ended 31, 2022	Year Ended August 31, 2021		Income (Loss) into Income
Gains on Restricted Investments:	August	31, 2022	Aug	ust 51, 2021	into income
Realized loss (gain) on sale of restricted investments	\$	(96)	\$	(65)	Selling, general and administrative expenses
Tax expense (benefit)		24		17	
Gain net of tax	\$	(72)	\$	(48)	
Loss on Funded Pension Plan adjustments: Amortization of prior pension service costs and unrecognized					
losses	\$	596	\$	659	Other income (expense)
Settlement and curtailment loss		_		_	Other income (expense)
Tax expense (benefit)		(147)		(162)	
Loss net of tax	\$	449	\$	497	
Total net loss reclassified for the period	\$	377	\$	449	

In thousands, except share and per share amounts

Note 19—Sale of Real Estate

Sale of Randolph, MA Property

In August 2020, the Company finalized the sale of its Randolph, MA property for net proceeds of \$1,805. This transaction resulted in a gain of \$1,791, which was recorded during the fourth quarter of fiscal 2020.

Sale of Pawtucket, RI Location

In April 2020, the Company finalized the sale of its Pawtucket, RI location for net proceeds of \$1,810. This transaction resulted in a gain of \$760, which was recorded during the third quarter of fiscal 2020.

Note 20—Operations Optimization Costs

Relocation of Chase Corporate Headquarters

The Company completed the relocation of its corporate headquarters to another location within Westwood, MA during the year ended August 31, 2022. The move, part of the Company's ongoing consolidation and optimization initiative, capitalizes on the hybrid work model utilized by many of Chase's corporate and administrative employees and is expected to provide future operational cost savings. The new facility also consolidates and houses research and development operations previously conducted at the previous Westwood, MA and Woburn, MA locations. Operations optimization costs related to the Westwood move of \$232 were expensed in fiscal 2022. No future costs related to the move are anticipated.

Relocation of Adhesives Systems Manufacturing to O'Hara Township, PA

During the third quarter of fiscal 2021, Chase announced to the employees at its Woburn, MA location that its adhesives systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, would be consolidating into the Company's existing O'Hara Township, PA location. This rationalization and consolidation initiative-related announcement aligns with the second quarter announcement of the Company's plan to move its sealant systems production from Newark, CA to Hickory, NC, described in more detail below. Chase Corporation obtained both the adhesive and sealants systems as part of its fiscal 2017 acquisition of the operations of Resin Designs. The Company expensed \$463 and \$0 in fiscal 2022 and 2021, related to the move, and future costs related to this move are not anticipated to be significant to the consolidated financial statements.

Relocation of Sealants Systems Manufacturing to Hickory, NC

During the second quarter of fiscal 2021, Chase began moving the sealant systems operations, part of the Adhesives, Sealants and Additives segment's electronic and industrial coatings product line, from its Newark, CA location to its Hickory, NC facility. This is in line with the Company's ongoing initiative to consolidate its manufacturing plants and streamline its existing processes. The sealant systems operations and Newark, CA location came to Chase Corporation as part of the fiscal 2017 acquisition of the operations of Resin Designs, and the Company's lease in Newark, CA terminated in fiscal 2021. The Company recognized \$977 in expense related to the move in the year ended August 31, 2021 and \$147 in expense during the year ended August 31, 2022. The project is now substantially completed and any future costs related to this move are not anticipated to be significant to the consolidated financial statements.

In thousands, except share and per share amounts

Strategic Actions Taken Related to COVID-19

Fiscal 2020 saw the global spread of the coronavirus pandemic (COVID-19), which grew to create significant volatility, uncertainty and global economic disruption. During the third fiscal quarter of 2020, the Company implemented changes to its cost structure designed to address market changes brought on by COVID-19 and demonstrate its commitment to fiscal prudence: (a) the Company made a targeted reduction in its global workforce, contemplated prepandemic but catalyzed by COVID-19, which resulted in the recognition of \$183 in severance costs during the period; and (b) the Company also instituted a temporary 20% reduction in the base salaries of its named executive officers and select members of senior management, as well as the cash compensation of the non-employee members of its Board of Directors. The reduction in force, which impacted operations in the Company's U.S. facilities, and the adjustments in compensation, were both effective May 2020. The temporary executive and Board of Director compensation reductions were lifted on December 1, 2020, retroactive to September 1, 2020.

ERP System Upgrade

During the first quarter of fiscal 2020, the Company commissioned third party led studies regarding the potential upgrading of the Company's current worldwide ERP system. Chase Corporation reviewed the data and recommendations provided by the study and has made the decision to upgrade (beginning in fiscal 2023) from our current Oracle Legacy ERP System to the Oracle Fusion Cloud Platform. This upgrade will position us with a more advanced system to support business expansion, access to upgrades in functionality, and a more modern system for operations, all within the Oracle Ecosystem. Additionally, the upgrade will be a multi-year, phased in approach that will mitigate any disruptions to our business. The Company recognized \$150 in third party studies in fiscal 2020 and no costs were recognized in fiscal 2022 and 2021.

Engineering Studies Related to Facility Consolidation and Rationalization Initiative

During the fourth quarter of fiscal 2019, the Company commissioned engineering studies of certain legacy operations, machinery and locations related to the Company's facility rationalization and consolidation initiative. Chase Corporation completed its review of the data and recommendations provided by the study in the fourth quarter of fiscal 2020. The Company recognized a gain of \$170 in fiscal 2020, as certain amounts expensed in fiscal 2019 were refunded. Also in the fourth quarter of fiscal 2020 and related to the recommendations of the commissioned engineering studies, the Company wrote down the value of certain non-operating production assets related to the pipeline coatings product line, within the Corrosion Protection and Waterproofing segment. Given the nature and prospects of the equipment, the Company determined its then carrying value exceeded its fair value and recognized an expense of \$405 related to the machinery. The Company recognized an additional \$100 in the fourth quarter of fiscal 2021, to fully write-down the equipment's value. The Company may utilize third party engineering, IT and other professional services firms in the future for similar optimization-related work. Given the ongoing nature of the facility rationalization and consolidation initiative, an estimate of future costs cannot currently be determined.

Note 21—Commitments and Contingencies

The Company is involved from time to time in litigation incidental to the conduct of its business. Although the Company does not expect that the outcome in any of these matters, individually or collectively, will have a material adverse effect on its financial condition, results of operations or cash flows, litigation is inherently unpredictable. Therefore, judgments could be rendered, or settlements agreed to that could adversely affect the Company's operating results or cash flows in a particular period. The Company routinely assesses all its litigation and threatened litigation as to the probability of ultimately incurring a liability and records its best estimate of the ultimate loss in situations where we assess the likelihood of loss as probable.

In thousands, except share and per share amounts

Note 22—Valuation and Qualifying Accounts

The following table sets forth activity in the Company's accounts receivable and sales return reserve:

	Be	Beginning of Charges to			Deductions to		Ba	lance at
Year ended		Year	Op	erations	I	Reserves	End of Year	
August 31, 2022	\$	451	\$	953	\$	(794)	\$	610
August 31, 2021	\$	438	\$	751	\$	(738)	\$	451
August 31, 2020	\$	739	\$	921	\$	(1,222)	\$	438

The following table sets forth activity in the Company's warranty reserve (the warranty reserve is included within accrued expenses on the consolidated balance sheet):

Year ended	Balance at Beginning of Year		rges to	ctions to serves	nce at of Year
August 31, 2022	\$	_	\$ _	\$ _	\$ _
August 31, 2021	\$	_	\$ _	\$ _	\$ _
August 31, 2020	\$	37	\$ _	\$ (37)	\$ _

Note 23 – Subsequent Events

Acquisition of NuCera

On July 15, 2022, the Company signed a Stock Purchase Agreement by and among Chase, NuCera Holdings Inc., and NuCera Solutions Holdco LP, to acquire NuCera Solutions ("NuCera"). This transaction closed on September 1, 2022 (first day of fiscal 2023).

The Company acquired all of the capital stock of NuCera for a purchase price of \$250,000, net of debt, accrued income taxes, cash at closing, and pending any working capital adjustments. The purchase was funded by utilizing \$180,000 from the Company's existing revolving credit facility and the remaining \$70,000 from available cash on hand. The Company recorded transaction costs of \$4,000 in 2022 related to this acquisition which are excluded from the purchase price.

NuCera is a recognized global leader in the production and development of highly differentiated specialty polymers and polymerization technologies serving demanding applications, offering products critical to enabling end-product functionality, performance and reliability. Chase will continue to market under NuCera brands and the business will be integrated into Chase's Adhesives, Sealants and Additives reporting unit.

<u>Dividend</u>

On November 10, 2022, Chase announced a cash dividend of \$1.00 per share (totaling approximately \$9,494) to shareholders of record on November 30, 2022 and payable on December 9, 2022.

ITEM 9 - CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A - CONTROLS AND PROCEDURES

DISCLOSURE CONTROLS AND PROCEDURES

The Company maintains disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in the Company's reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

The Company carries out a variety of ongoing procedures, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, to evaluate the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based on the foregoing, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective at a reasonable assurance level as of the end of the period covered by this report.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by our Board of Directors, management and other personnel, 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.

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.

Under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, the Company conducted an evaluation of the effectiveness of the Company's internal control over financial reporting based on the framework in "Internal Control — Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, our management concluded that our internal control over financial reporting was effective as of August 31, 2022. Grant Thornton LLP, an independent registered public accounting firm, audited the effectiveness of our internal control over financial reporting as of August 31, 2022.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have not been any changes in the Company's internal control over financial reporting during the quarter ended August 31, 2022 that have materially affected, or are reasonably likely to materially affect, its internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders Chase Corporation

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Chase Corporation (a Massachusetts Corporation) and subsidiaries (the "Company") as of August 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework 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 August 31, 2022, based on criteria established in the 2013 Internal Control—Integrated Framework issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended August 31, 2022, and our report dated November 10, 2022 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 Controls 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/ GRANT THORNTON LLP

Boston, Massachusetts November 10, 2022

ITEM 9B – OTHER INFORMATION

Not applicable.

ITEM 9C – DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10 - DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 of Form 10-K, relating to Directors of the Company, compliance with the reporting obligations under Section 16(a) of the Exchange Act, the Company's code of ethics applicable to senior management, procedures for shareholder nominations to the Company's Board of Directors, and the Company's Audit Committee is incorporated by reference from the information contained in the Definitive Proxy Statement for the Annual Meeting of Stockholders, which is expected to be filed within 120 days after the Company's fiscal year ended August 31, 2022. Information regarding the Company's executive officers found in the section captioned "Information About Our Executive Officers" in Item 4A of Part I hereof is also incorporated by reference into this Item 10.

ITEM 11 – EXECUTIVE COMPENSATION

The information required by Item 11 of Form 10-K, relating to executive and director compensation and certain matters relating to the Company's Compensation and Management Development Committee, is incorporated by reference from the information contained in the Definitive Proxy Statement for the Annual Meeting of Stockholders, which is expected to be filed within 120 days after the Company's fiscal year ended August 31, 2022.

ITEM 12 – SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by Item 12 of Form 10-K, relating to the stock ownership of certain beneficial owners and management, is incorporated by reference from the information contained in the Definitive Proxy Statement for the Annual Meeting of Stockholders, which is expected to be filed within 120 days after the Company's fiscal year ended August 31, 2022.

The following table summarizes the Company's equity compensation plans as of August 31, 2022. Further details on the Company's equity compensation plans are discussed in the notes to the Consolidated Financial Statements. The adoption of each of the Company's equity compensation plans was approved by its shareholders.

	Number of shares of Chase common stock to be issued upon the exercise of outstanding options	Weighted average exercise price of outstanding options		Number of shares of Chase common stock remaining available for future issuance
2005 Incentive Plan	31,543	\$	34.42	_
Amended and Restated 2013 Equity Incentive Plan	144,468		91.02	912,638
Total	176,011	\$	80.88	912,638

ITEM 13 – CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Item 13 of Form 10-K, relating to transactions with related persons and the independence of members of the Company's Board of Directors, is incorporated by reference from the information contained in the Definitive Proxy Statement for the Annual Meeting of Stockholders, which is expected to be filed within 120 days after the Company's fiscal year ended August 31, 2022.

ITEM 14 - PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 of Form 10-K, relating to fees paid to the Company's independent registered public accounting firm and pre-approval policies of the Company's Audit Committee, is incorporated by reference from the information contained in the Definitive Proxy Statement for the Annual Meeting of Stockholders, which is expected to be filed within 120 days after the Company's fiscal year ended August 31, 2022.

PART IV

ITEM 15 - EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) and (2) <u>Financial Statements and Schedules</u>:

The financial statements are set forth under Item 8 of this Annual Report on Form 10-K. Financial statement schedules have been omitted since they are either not required, not applicable, or the information is otherwise included.

(a)(3) Exhibit Index:

Exhibit Number	Description
3.1.1	Articles of Organization of Chase Corporation (incorporated by reference from Exhibit 3.1 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2004, filed on November 24, 2004 (the "2004 Form 10-K")).
3.1.2	Articles of Amendment to Articles of Organization of Chase Corporation (incorporated by reference from Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended February 29, 2008, filed on April 9, 2008).
3.2	Amended and Restated By-Laws (incorporated by reference from Exhibit 3.1 to the Company's current report on Form 8-K filed on April 12, 2016).
4.1	Description of the Company's Capital Stock (incorporated by reference from Exhibit 4.1 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2019, filed on November 13, 2019).
10.1	Amended and Restated Stock Agreement dated as of August 31, 2004, between the Company and Peter R. Chase (incorporated by reference to Exhibit 10 to the Company's current report on Form 8-K filed on September 2, 2004).*
10.2	Chase Corporation Employee's Supplemental Pension Plan effective January 1, 2008 (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended May 31, 2008, filed on July 10, 2008). *
10.3.1	Chase Corporation Employee's Supplemental Savings Plan, as Amended and Restated Effective December 31, 2016 (incorporated by reference from Exhibit 10.3.1 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2021, filed on November 12, 2020).*
10.3.2	Amendment No. 1 to the Amended and Restated Chase Corporation Employee's Supplemental Savings Plan, dated July 15, 2020 (incorporated by reference from Exhibit 10.3.2 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2021, filed on November 12, 2020).*
10.3.3	Amendment No. 2 to the Chase Corporation Employee's Supplemental Savings Plan, dated April 6, 2021 (incorporated by reference to Exhibit 10.3.3 to the Company's Quarterly Report on Form 10Q for the quarter ended May 31, 2021, filed on July 12, 2021).*
10.4	Chase Corporation Non-Qualified Retirement Savings Plan for the Board of Directors, amended and restated effective January 1, 2009 (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended February 28, 2009, filed on April 9, 2009). *

10.5 Severance Agreement between the Company and Peter R. Chase dated July 10, 2006 (incorporated by reference from Exhibit 10.1 to the Company's Ouarterly Report on Form 10-O for the quarter ended May 31, 2006, filed on July 17, 2006).* 10.6 Amended and Restated Severance Agreement between the Company and Adam P. Chase dated January 2, 2018 (incorporated by reference from Exhibit 10.1 to the Company's current report on Form 8-K on January 8, 2018). * 10.7.1 Offer letter dated January 28, 2021 by and between the Company and Michael J. Bourque (incorporated by reference from Exhibit 10.1 to the Company's current report on Form 8-K filed on February 3, 2021). * 10.7.2 Severance Agreement between the Company and Michael J. Bourque dated January 27, 2021 (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the period ended May 31, 2021, filed on July 12, 2021).* 10.8.1 Offer letter dated July 6, 2020 by and between the Company and Jeffrey D. Haigh (incorporated by reference from Exhibit 10.8.3 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2021, filed on November 15, 2021). * 10.8.2 Severance Agreement between the Company and Jeffery D. Haigh dated November 11, 2021 (incorporated by reference from Exhibit 10.8.4 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2021, filed on November 15, 2021).* 10.9.1 2005 Equity Incentive Plan of Chase Corporation (incorporated by reference from Exhibit 10.1 to the Company's current report on Form 8-K filed on February 9, 2006).* 10.9.2 Amended and Restated 2013 Equity Incentive Plan (incorporated by reference from Appendix A to the Company's 2022 Proxy Statement filed on December 22, 2021).* 10.9.3 Form of restricted stock unit award issued for non-executive members of the Board of Directors (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the period ended February 28, 2007, filed on April 16, 2007).* 10.9.4 Form of restricted stock unit award issued for members of Executive Management (incorporated by reference from Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the period ended February 28, 2007, filed on April 16, 2007).* 10.9.5 Form of restricted stock agreement issued for 2013 Equity Incentive Plan (incorporated by reference from Exhibit 10.9.5 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2019, filed on November 13, 2019).* 10.9.6 Form of stock option award issued (incorporated by reference from Exhibit 10.11.6 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2009, filed on November 16, 2009). * 10.9.7 Form of stock option award issued to employees for Amended and Restated 2013 Incentive Plan.* 10.9.8 Form of restricted stock agreement for non-employee members of the Board of Directors for Amended and Restated 2013 Incentive Plan.* 10.9.9 Form of restricted stock agreement for employees or consultants for Amended and Restated 2013 Incentive Plan.*

10.10.10 Form of performance based restricted stock agreement of Executive Management for Amended and Restated 2013 Incentive Plan.* 10.10.1 Split Dollar Agreement between Chase Corporation and Peter R. Chase dated January 10, 2005 (incorporated by reference from Exhibit 10.2 to the Company's current report on Form 8-K filed on January 14, 2005).* 10.10.2 Split Dollar Endorsement dated January 10, 2005 (incorporated by reference from Exhibit 10.3 to the Company's current report on Form 8-K filed on January 14, 2005).* 10.11.1 FY 2022 Chase Corporation Annual Incentive Plan (incorporated by reference from Exhibit 10.11.3 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2022, filed November 15, 2021).* 10.11.2 FY 2022 Chase Corporation Long Term Incentive Plan (incorporated by reference from Exhibit 10.11.4 to the Company's Annual Report on Form 10-K for the fiscal year ended August 31, 2021).* 10.11.3 FY 2023 Chase Corporation Annual Incentive Plan (incorporated by reference from Exhibit 99.1 to the Company's current report on Form 8-K filed September 1, 2022).* FY 2023 Chase Corporation Long Term Incentive Plan (incorporated by reference to Exhibit 99.2 to 10.11.4 the Company's current report on Form 8-K filed September 1, 2022).* 10.12 Second Amended and Restated Credit Agreement, dated as of July 27, 2021 by and among Chase Corporation, NEPTCO Incorporated, the Guarantors, Bank of America, N.A., as administrative agent and Lenders party thereto (incorporated by reference from Exhibit 10.1 to the Company's current report on Form 8-K for filed on August 2, 2021). 10.13 Stock Purchase Agreement dated July 15, 2022 by and among the Company, NuCera Solutions Holdco LP and NuCera Holdings Inc. (incorporated by reference from Exhibit 10.1 to the Company's current report on Form 8-K filed July 19, 2022). 21 Subsidiaries of the Registrant 23 Consent of Independent Registered Public Accounting Firm - Grant Thornton LLP Certification of principal executive officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 31.1 31.2 Certification of principal financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 32.1 Certification of principal executive officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 32.2 Certification of principal financial officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 101 The following materials from the Chase Corporation Annual Report on Form 10-K for the fiscal year ended August 31, 2022 formatted in Inline Extensible Business Reporting Language (iXBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statement of Stockholders' Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to Consolidated Financial Statements.

Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101)

- (b) See (a)(3) above.
- (c) None.

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ITEM 16 – FORM 10-K SUMMARY

None.

^{*} Identifies management plan or compensatory plan or arrangement.

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.

Chase Corporation

By: /s/ Adam P. Chase

Adam P. Chase

President and Chief Executive Officer

November 10, 2022

By: /s/ Michael J. Bourque

Michael J. Bourque

Treasurer and Chief Financial Officer

November 10, 2022

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

Signature	Title	Date
/s/ Peter R. Chase Peter R. Chase	Executive Chairman	November 10, 2022
/s/ Adam P. Chase Adam P. Chase	Director, President and Chief Executive Officer (Principal Executive Officer)	November 10, 2022
/s/ Michael J. Bourque Michael J. Bourque	Treasurer and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 10, 2022
/s/ Mary Claire Chase Mary Claire Chase	Director	November 10, 2022
/s/ Thomas DeByle Thomas DeByle	Director	November 10, 2022
/s/ John H. Derby III John H. Derby III	Director	November 10, 2022
/s/ Chad A. McDaniel Chad A. McDaniel	Director	November 10, 2022
/s/ Dana Mohler-Faria Dana Mohler-Faria	Director	November 10, 2022
/s/ Ellen Rubin Ellen Rubin	Director	November 10, 2022
/s/ Joan Wallace-Benjamin Joan Wallace-Benjamin	Director	November 10, 2022
/s/ Thomas Wroe, Jr Thomas Wroe, Jr.	Director	November 10, 2022

CHASE Corporation Officers

Peter R. Chase Executive Chairman

Adam P. Chase President & Chief Executive Officer

Michael J. Bourque Treasurer & Chief Financial Officer

Jeffery D. Haigh Vice President, General Counsel and Corporate Secretary

Independent Registered Public Accounting Firm

Grant Thornton LLP 75 State Street, 13th floor Boston, MA 02109

Registrar & Transfer Agent

American Stock Transfer & Trust Company Operations Center 6201 15th Avenue Brooklyn, NY 11219

Corporate Headquarters

375 University Avenue Westwood, MA 02090 Phone (781) 332-0700 Fax (781) 332-0701 Toll Free (800) 323-4182

Operating Facilities

OXFORD, MA

24 Dana Road Oxford, MA 01540 Phone (508) 731-2710 Fax (508) 987-1092

PRODUCTS/SERVICES: Shielding & binding tapes for electronic & telecommunication cable. Laminated papers used for a variety of durable paper applications and RFID protection.

Specialty laminates for automotive, packaging and medical products.

Converting services include specialized laminating, slitting and traverse winding. Insulating, flame barrier, binder and semiconducting tapes for power and telecommunications.

PITTSBURGH, PA

201 Zeta Drive and 128 First Street Pittsburgh, PA 15238 Phone (412) 828-1500 Fax (412) 828-3487

PRODUCTS/SERVICES: HumiSeal® conformal coatings, protective coatings for underground gas, oil and water pipelines, waterproofing membranes, high-performance polymer additives for asphalt, expansion joints and accessories, and water blocking compounds for power and telecommunications.

EVANSTON, IL

1527 Lyons Street Evanston, IL 60201 Phone (847) 866-8500 Fax (847) 866-8596

PRODUCTS/SERVICES: Innovative products for the protection against corrosion for underground gas, oil and water pipelines and marine industries, waterproofing tapes, as well as private label manufacturing.

HOUSTON, TX

C.I.M. Industries, Inc. 6900 Nelms Street Houston, TX 77061 Phone (713) 242-9015

PRODUCTS/SERVICES: High performance industrial coatings and linings providing a seamless, impermeable, abrasion-resistant barrier against water and chemicals

WOBURN, MA

Resin Designs 11 State Street Woburn, MA 01801 Phone (781) 935-3133 Fax (781) 935-3144

PRODUCTS/SERVICES: Customized advanced adhesives and coatings for automotive and industrial applications that require specialized bonding, encapsulating, environmental protection, or thermal management functionality.

GREENVILLE, SC

9 Furman Hall Ct. Greenville, SC 29609 Phone (846) 232-3893

PRODUCTS/SERVICES: Polymeric microspheres, sold under the Dualite® brand, which are utilized for weight and density reduction and sound dampening across varied industries.

LENOIR, NC

NEPTCO, INC. 2012 Hickory Boulevard Lenoir, NC 28645 Phone (828) 728-5951 Fax (828) 728-5115

PRODUCTS/SERVICES: Laminated film foils for the electronics and cable industries and cover tapes essential to delivering semiconductor components via tape-and- reel packaging. Provider of coating, laminating and converting services for original equipment manufacturers.

GREENSBORO, NC

Emerging Technologies, Inc 402 Edwardia Drive Greensboro, NC 27409 Phone (336) 851-9097

PRODUCTS/SERVICES:

Superabsorbent polymers, which are utilized for water and liquid management and protection in diverse markets including packaging, recreational, consumer, and sanitation markets.

HICKORY, NC

1954 Main Avenue SE Hickory, NC 28602 Phone (828) 855-9316 Fax (828) 855-9319

PRODUCTS/SERVICES: Superabsorbent polymers, which are utilized for water and liquid management, remediation and protection in diverse markets including wire and cable, medical, environmental, infrastructure, energy and consumer products. Pulling and detection tapes used in the installation, measurement and location of fiber optic cables, water and natural gas lines. Customized advanced sealants and coatings for automotive and industrial applications that require specialized bonding, encapsulating, environmental protection, or thermal management functionality.

BARNSDALL, OK

NuCera Solutions 601 S. 5th Street Barnsdall, OK 74002 Phone: (918) 847-2252 Fax: (918) 847-2175

PRODUCTS/SERVICES: Specialized polymers and polymerization technologies for personal care, polymer additives, coatings, diversified consumer products and masterbatches markets.

SUZHOU, JIANGSU, CHINA NEPTCO, INC.

D-10#19 Datong Road Suzhou New District Processing Zone Suzhou, Jiangsu, China 215151 Phone 86-512-6269-6766 SKYPE 828-398-0641

PRODUCTS/SERVICES: Cover tapes essential to delivering semiconductor components via tape-and-reel packaging.

WINNERSH, WOKINGHAM, ENGLAND

505 Eskdale Road Winnersh, Wokingham, Berkshire RG41 5TU UK Phone +44 (0) 1189 442 333 Fax +44 (0) 1189 335 799

PRODUCTS/SERVICES: HumiSeal insulating conformal coatings, potting compounds and specialty accessory products for the protection of printed circuit assembly and electronic components.

PARIS, FRANCE

4/6 Avenue Eiffel 78420 Carrieres-Sur-Seine France Phone +33 (0) 1 30 09 86 86 Fax +33 (0) 1 09 86 87

PRODUCTS/SERVICES: HumiSeal insulating conformal coatings, potting compounds and specialty accessory products for the protection of printed circuit assembly and electronic components.

CORBELIN, FRANCE

ABchimie 1230 Route de la Porte ZA La Rivoire 38630 Corbelin, France Phone +44-1797-223561

PRODUCTS/SERVICES: Solutions provider for the cleaning and the protection of electronic assemblies, with further formulation, production, and research and development capabilities.

PUNE, INDIA

HumiSeal India Private Limited J-154, M.I.D.C. Bhosari, Pune-411 026 Maharashtra, India Phone +91 20 66308098

PRODUCTS/SERVICES: HumiSeal insulating conformal coatings, potting compounds and specialty accessory products for the protection of printed circuit assembly and electronic components.

RYE, EAST SUSSEX, ENGLAND

Harbour Road Rye, East Sussex TN31 7TE UK Phone +44 (0) 1797 223561 Fax +44 (0) 1797 224530

PRODUCTS/SERVICES: Waterproofing and corrosion protection systems for oil, gas and water pipelines as well as highperformance tapes, epoxies and cathodic protection accessory products.

SHAREHOLDER INFORMATION

Common Stock

Common Stock of Chase Corporation is traded on the NYSE American under the symbol "CCF".

Annual Meeting of Shareholders

The Annual Meeting of Shareholders will be held at 9:30 a.m. on Tuesday, February 7, 2023. This year's Annual Meeting is planned to be a held as both a virtual and an in person meeting of shareholders:

You will be able to attend the Annual Meeting, vote and submit your questions during the Annual Meeting via live webcast by visiting:

www.virtualshareholdermeeting.com/CCF2023

The in person portion of the meeting will be held at the Courtyard by Marriott Boston Dedham/Westwood Hotel, 64 University Avenue, Westwood, MA 02090.

When shares owned by one shareholder are held in different forms of the same name (e.g., John Doe, J. Doe) or when new accounts are established for shares purchased at different times, duplicate mailings of shareholder information may result. The Company, by law, is required to mail to each name on the shareholder list unless the shareholder requests that duplicate mailings be eliminated or consolidates all accounts into one. Such requests should be directed, in writing, to the Shareholder Services Department, American Stock Transfer & Trust Company, Operations Center, 6201 15th Avenue, Brooklyn, NY 11219.

Contact: <u>investorrelations@chasecorp.com</u> or ccf@alpha-ir.com























From left to right:

Joan Wallace-Benjamin

Founder and President J Wallace-Benjamin Consulting LLC

Thomas D. DeByle

Retired. Former Chief Financial Officer of Plastic Industries, Inc., Chairman of the Audit Committee of CHASE Corporation

Ellen Rubin

Chief Executive Officer and Founder of Causely

Adam P. Chase

President and Chief Executive Officer CHASE Corporation

John H. Derby III

President Derby Management

Thomas Wroe, Jr.

Retired. Former Chief Executive Officer of Sensata Technologies, Chairman of the Compensation and Management Development Committee of CHASE Corporation

Mary Claire Chase

President, Founder Chase Partners

Dana Mohler-Faria

President Emeritus, Bridgewater State University, Lead Independent Director and Chairman of the Nominating and Governance Committee of CHASE Corporation

Peter R. Chase

Executive Chairman CHASE Corporation

Chad A. McDaniel

Chief Administrative Officer of Axel Johnson, Inc.







At Chase Corporation we make a <u>material</u> difference by manufacturing protective <u>materials</u> that are used in a wide variety of applications where long lasting protection is critical to a product's success and is a <u>material</u> part of enhancing a product's value to its user.



CHASE CORPORATE HEADQUARTERS
AND GLOBAL OPERATIONS CENTER
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