2020

MUELLER INDUSTRIES

2020 ANNUAL REPORT – 2021 PROXY STATEMENT

RESULTS AT A GLANCE

SUMMARY OF OPERATIONS (Dollars in thousands except per share data)	**2020** **($)**	**2019** **($)**	**2018** **($)**	**2017** **($)**	**2016** **($)**
Net Sales	2,398,043	2,430,616	2,507,878	2,266,073	2,055,622
Operating income	245,838	191,403	172,969	150,807	154,401
Net income	139,493	100,972	104,459	85,598	99,727
Diluted earnings per share	2.47	1.79	1.82	1.49	1.74
Dividends per share	0.40	0.40	0.40	8.40[2]	0.38

SUMMARY OF CASH FLOW (Dollars in thousands)	**2020** **($)**	**2019** **($)**	**2018** **($)**	**2017** **($)**	**2016** **($)**
Cash Flow from Operations	245,073	200,544	167,892	43,995	157,777
Capital Expenditures	43,885	31,162	38,481	46,131	37,497
Free Cash Flow[1]	201,188	169,382	129,411	(2,136)	120,280

BALANCE SHEET (Dollars in thousands except per share data)	**2020** **($)**	**2019** **($)**	**2018** **($)**	**2017** **($)**	**2016** **($)**
Cash and cash equivalents	119,075	97,944	72,616	120,269	351,317
Total Assets	1,528,568	1,370,940	1,369,549	1,320,173	1,447,476
Total Debt	327,876	386,254	496,698	465,072	227,364
Ratio of current assets to current liabilities	2.4 to 1	3.0 to 1	3.0 to 1	3.1 to 1	4.1 to 1
Book value per share	13.61	11.30	9.67	9.03	15.66

2020

24%

$290.7M

EBITDA[3]

38%

$2.47M

EPS

19%

$201.2M

FREE CASH FLOW

(1) Free cash flow is a non-GAAP financial measure, which represents cash flow from operations minus capital expenditures. Both cash flow from operations and capital expenditures presented above are as reported in the Company's Annual Report on Form 10-K for the years presented.

(2) Includes special dividend of $8.00 per share paid on March 9, 2017.

(3) EBITDA is a non-GAAP financial measure. See Appendix A for a reconciliation of EBITDA to our results reported under GAAP.

MESSAGE FROM OUR CHAIRMAN

Dear Stockholders:

Just over a year ago, the COVID-19 pandemic triggered an unprecedented global health crisis and stopped the world in its tracks. Above all, we would like to extend our deepest gratitude to the first responders and medical personnel whose heroism and sacrifice have assisted so many communities impacted by this terrible virus. We are also grateful for and proud of our own employees who stepped up to the plate, adapting to new and rapidly evolving conditions to keep our businesses running, so that we could provide the many products that have proven so critical to our national and global infrastructure during this difficult period.

Despite the disruption caused by the pandemic, Mueller delivered solid results in 2020. After adjusting for the one-time gain of $22.1 million stemming from our claim in the Deepwater Horizon settlement, which was recorded during the first quarter, Mueller still achieved double digit growth over its prior year results in each of these key metrics: earnings, earnings per share (EPS), and cash generation.

These improvements over 2019 were driven by a combination of higher gross margins and SG&A cost containment. As value added products comprised a greater percentage of our overall revenues, and manufacturing costs decreased by 5.6% on a year over year basis, our gross margins improved by 1.7%. Moreover, when news of the pandemic first broke, we undertook aggressive cost-cutting measures, which proved instrumental in reducing costs in all areas of our business. As a result, on a comparative basis, our SG&A expenses declined by 6.4%.

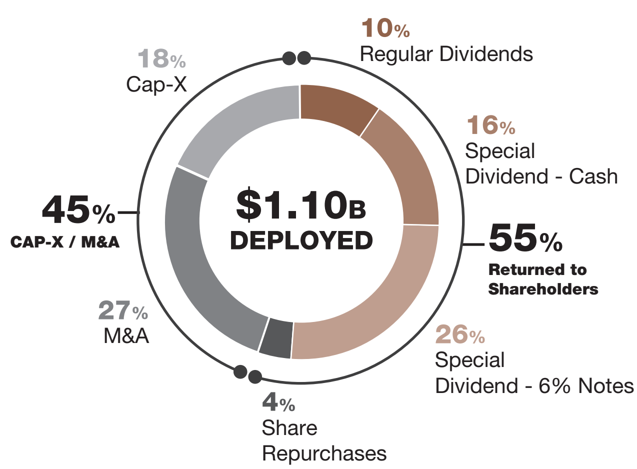
Continued reinvestment in our manufacturing platform enabled our plants to be more agile and adapt to the downturn in demand.

Capital Deployment

Manufacturing is the backbone of our Company, and as such, strategic investment in our operations is not only critical to both workplace safety and product quality, but is also a key component of our core pursuit to be the low cost producer. In 2020, capital project spending totaled $43.9 million, and it was deployed with the care and sense of responsibility that have long characterized our approach to fiscal management. Excluding the $11 million purchase of our headquarters building in Collierville, Tennessee, our spending was slightly below our customary level of capital spending, and well below depreciation. Investment in environmental, health and safety initiatives totaled $8.4 million, and helped us reduce emissions, conserve more water and energy, and increase the amount of recycled material used in production. Of the remaining spend, $14.4 million was directed at two projects that will support our long term strategic plan and help deliver meaningful efficiencies in future years.

In 2020, we deployed $72.6 million to complete two strategic acquisitions. Integral to our growth strategy is the pursuit of acquisitions that are complementary to businesses we know and operate, including the two acquisitions we closed this past year.

2016-2020 CAPITAL ALLOCATION



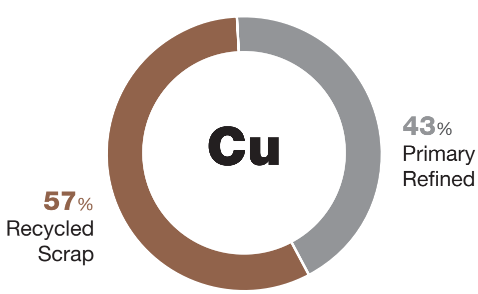
Sustainability

Our strong financial and operating performance aside, the measure of any company's success extends well beyond the numbers. Increasingly, we also evaluate our Company's progress based on its contribution to the sustainability of the local communities in which we operate, and the world at large. Sustainability has many components, and we view the associated risks and opportunities through the widest lens. Looking inward, we take the necessary actions to ensure we provide a safe and healthy working environment for our people, as well as opportunities for professional growth and development. Looking outward, we consider how our decisions both impact and contribute to the communities in which we operate. We also consider how our decisions affect the various systems, both natural and technological, that sustain our living planet, and the impact the continued functioning of these systems may have on our ability to operate long term.

We are happy to report that in 2020, we again made positive strides in the environmental, social and governance (ESG) measures that are of increasing importance to our stockholders. Importantly, we greatly improved our safety performance, achieving a 16% reduction in accidents per man hour worked, with zero "major" OSHA recordable incidences. Since we began measuring them in 2010, we have reduced OSHA recordable incidences by 65% in our core businesses. Accounting for acquisitions during this same timeframe, our incidence rate has decreased by 35%.

As an industrial manufacturer, we devote a great amount of attention to environmental compliance. In 2020, our North American operations reduced greenhouse gas emissions by 9.5% on a per unit basis, and reduced energy consumption by 15.6% on a per unit basis. Moreover, we continue to utilize a majority of recycled scrap in our manufacturing process, 66% in 2019 and 57% in 2020.

RECYCLED CONTENT



We continue to seek alternative processing methodologies to increase our consumption percent of recycled materials. Using recycled copper significantly reduces the energy and water consumption that results from the mining process, and also mitigates the related environmental impacts that are otherwise incurred when raw material imports and unconsumed scrap exports must travel long distances.

Financial Conditions

At the close of 2020, the Company's market capitalization was $1.98 billion. This equates to 6.8 times EBITDA and 8.0 times cash from operations. We held $119 million in cash, and had a total debt balance of $327 million. We recently announced our plan to redeem the $284 million in outstanding debentures due in 2027, along with a 30% increase in our dividend. At this time, I am pleased to report that the Company is in excellent financial shape and has ample liquidity and cash flows not only to operate our businesses, but also to pursue our continued growth plans both organically and through acquisitions.

Going Forward

The pandemic has impacted all global economies. With the arrival of vaccines, in record time, we anticipate that we will see re-openings and a return of demand in almost all businesses in the near future. In particular, residential building markets on a global basis remain underserved, and we expect expansion in home construction to help drive economic recoveries. Construction is an important determinant of demand for many of our products.

In addition, we are optimistic that in 2021 and beyond, we will continue to see increased demand for products and technologies aimed at clean water distribution, indoor air quality and climate comfort, refrigeration and food preservation, and energy storage and transmission. These all are important end markets, and will remain a focus as we consider growth opportunities.

Our approach is to set lofty goals and drive hard to exceed them. Our 2024 Plan calls for double digit compounded annual growth in operating income over a six-year period. As it did in 2019, our operating income growth in 2020 has kept us on track to achieve that Plan. Given the unprecedented challenges we confronted, our results are a testament to the strength of our Company, and the adaptability of those who work tirelessly on its behalf.

We remain optimistic about the future and once again thank our valued employees, loyal customers and, of course, our stockholders for their continued support.

Very truly yours,

Greg Christopher
Chairman and Chief Executive Officer

NOTICE

of Annual Meeting of Stockholders

THURSDAY, MAY 6, 2021
10:00 A.M., Central Time

150 Schilling Boulevard,
Second Floor
Collierville, Tennessee 38017

REVIEW YOUR PROXY STATEMENT AND VOTE IN ONE OF FOUR WAYS:

BY INTERNET
http://www.proxyvote.com

BY TELEPHONE
Call the telephone number on your proxy card.

BY MAIL
Mark, date, sign and return your proxy card in the enclosed envelope.

IN PERSON
Attend the Annual meeting at the Company's headquarters.

It is important that your shares be represented at the Annual Meeting regardless of the size of your holdings. Whether or not you intend to be present at the meeting in person, we urge you to mark, date and sign the enclosed proxy card and return it in the enclosed self-addressed envelope, which requires no postage if mailed in the United States.

PURPOSE

To vote on three proposals:

1. To elect eight directors, each to serve on the Company's Board of Directors (the "Board"), until the next annual meeting of stockholders (tentatively scheduled for May 5, 2022), or until his or her successor is elected and qualified;
2. To consider and act upon a proposal to approve the appointment of Ernst & Young LLP, independent registered public accountants, as auditors of the Company for the fiscal year ending December 25, 2021; and
3. To conduct an advisory vote on the compensation of the Company's named executive officers ("NEOs").

To conduct and transact such other business as may properly be brought before the Annual Meeting and any adjournment thereof.

RECORD DATE

Only stockholders of record at the close of business on March 19, 2021, will be entitled to notice of and vote at the Annual Meeting or any adjournment(s) thereof. A complete list of stockholders entitled to vote at the Annual Meeting will be prepared and maintained at the Company's corporate headquarters at 150 Schilling Boulevard, Suite 100, Collierville, Tennessee 38017. This list will be available for inspection by stockholders of record during normal business hours for a period of at least 10 days prior to the Annual Meeting.

/s/ Christopher J. Miritello
Christopher J. Miritello
Corporate Secretary
April 1, 2021

TABLE OF CONTENTS

PROXY SUMMARY

THIS SUMMARY HIGHLIGHTS SELECTED INFORMATION IN THIS PROXY STATEMENT. PLEASE REVIEW THE ENTIRE PROXY STATEMENT AND OUR ANNUAL REPORT ON FORM 10-K BEFORE VOTING YOUR SHARES.

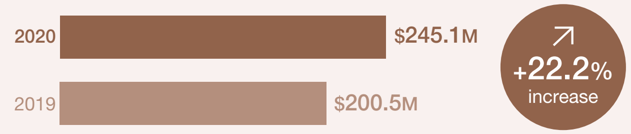
2020 PERFORMANCE

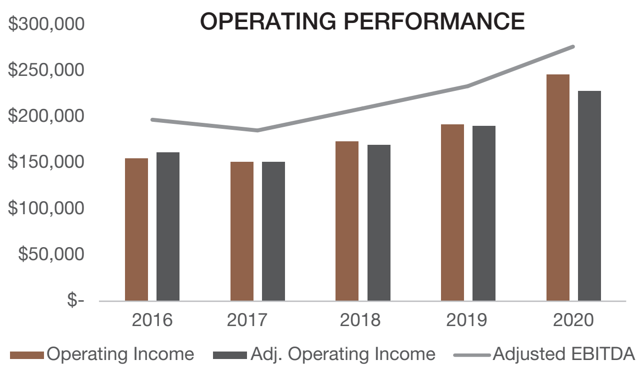
OPERATING INCOME GROWTH

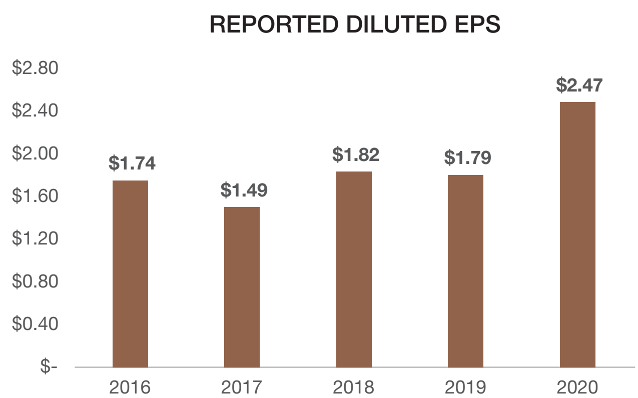
↑28.4% REPORTED OPERATING INCOME

↑18.9% ADJUSTED(1) OPERATING INCOME

CASH FLOW FROM OPERATIONS







Adjusted operating income and adjusted EBITDA are non-GAAP financial measures which exclude certain items in order to better reflect results of on-going operations. See Appendix A for a reconciliation of non-GAAP financial measures to our results reported under GAAP.

ANNUAL MEETING OF STOCKHOLDERS

Date and Time:
Thursday, May 6, 2021
10:00 A.M., Central Time

Place:
150 Schilling Boulevard
Second Floor
Collierville, Tennessee 38017

Record Date:
March 19, 2021

AGENDA AND VOTING MATTERS

We are asking you to vote on the following proposals at the Annual Meeting:

Proposal	Board Recommendation	Page Reference
Proposal 1 – Election of Directors	**FOR** each nominee	11
Proposal 2 – Approval of Auditor	**FOR**	21
Proposal 3 – Say-on-Pay	**FOR**	23

PROPOSAL 1: ELECTION OF DIRECTORS

The following table provides summary information about each director nominee. The Board of Directors believes that these nominees reflect an appropriate composition to effectively oversee the performance of management in the execution of the Company's strategy, and as such, recommends a vote "for" each of the eight nominees listed below.

Name	Age	Director Since	Primary Occupation	Independence	Committee Memberships	Current Other Public Boards
Gregory L. Christopher *Chairman and Chief Executive Officer*	59	2010	Chief Executive Officer, Mueller Industries, Inc.	N	None	None
Elizabeth Donovan	68	2019	Retired, Chicago Board Options Exchange	Y	NCG	None
Gennaro J. Fulvio	64	2002	Member, Fulvio & Associates, LLP	Y	A*	None
Gary S. Gladstein	76	2000	Private Investor, Consultant	Y	C*	None
Scott J. Goldman	68	2008	Chief Executive Officer, TextPower, Inc.	Y	A, C	None
John B. Hansen	74	2014	Retired Executive Vice President, Mueller Industries, Inc.	Y	A, NCG	None
Terry Hermanson *Lead Independent Director since January 1, 2019*	78	2003	Principal, Mr. Christmas Incorporated	Y	None	None
Charles P. Herzog, Jr.	64	2017	Co-Founder and Principal, Atadex LLC & Vypin LLC	Y	C, NCG*	None

A = Audit Committee
C = Compensation and Stock Option Committee
NCG = Nominating and Corporate Governance Committee
** = Chair*

PROPOSAL 2: RATIFICATION OF INDEPENDENT AUDITORS

We ask our stockholders to approve the selection of Ernst & Young LLP ("EY") as our independent registered public accounting firm for the fiscal year ending December 25, 2021. Below is summary information about fees paid to EY for services provided in 2020 and 2019:

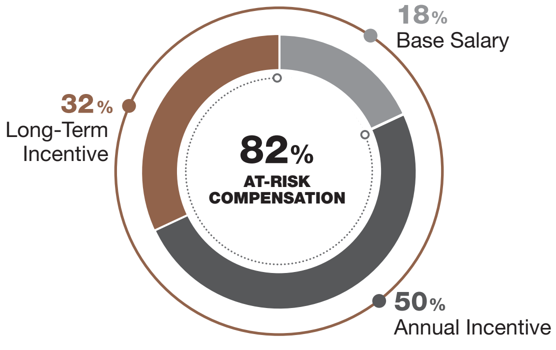
	2020	2019
Audit Fees	$ 2,749,755	$ 2,856,774
Audit-Related Fees	47,000	50,250
Tax Fees	406,000	422,350
All Other Fees	—	—
	$ 3,202,755	$ 3,329,374

PROPOSAL 3: ADVISORY VOTE TO APPROVE COMPENSATION OF NAMED EXECUTIVE OFFICERS

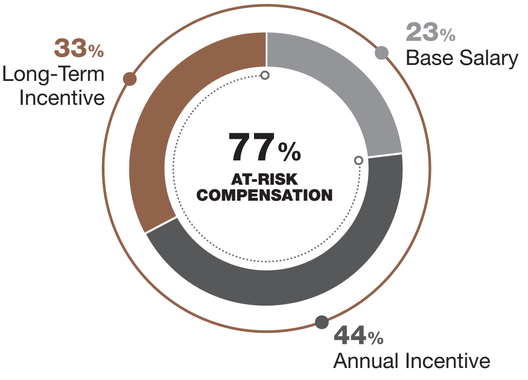
We are seeking your advisory vote to approve the compensation of our named executive officers as disclosed in this proxy statement. Our executive officers are responsible for achieving long-term strategic goals, and as such, their compensation is weighted toward rewarding long-term value creation for stockholders. Beyond base salary and traditional benefits, we maintain an annual cash incentive compensation program that is driven by a pay-for-performance philosophy and based on ambitious performance targets both at the Company and business line levels. We also maintain a long-term equity incentive compensation program, the primary objective of which is to motivate and retain top talent — a particularly vital goal given the uniquely competitive industry in which we operate. Accordingly, we utilize a combination of extended time-vesting schedules and performance-based vesting criteria to encourage executives and associates alike to enjoy lengthy tenures at the Company, develop industry expertise and relationships, and drive our long-term success.

Our emphasis on creating long-term stockholder value is best illustrated in the following charts, which show that long-term incentive compensation accounts for the largest percentage of the NEOs' overall compensation for 2020. Moreover, a majority of the NEOs' compensation — consisting of target long-term and short-term incentive compensation combined — is performance-based or "at risk."

CEO



OTHER NEOs



PROXY STATEMENT

PROPOSAL 1: ELECTION OF DIRECTORS

Eight director nominees will be elected at the Annual Meeting, each to serve until the next annual meeting (tentatively scheduled for May 5, 2022), or until the election and qualification of their successors. At the recommendation of the Nominating and Corporate Governance Committee, the Board has nominated the following persons to serve as directors for the term beginning at the Annual Meeting: Gregory L. Christopher, Elizabeth Donovan, Gennaro J. Fulvio, Gary S. Gladstein, Scott J. Goldman, John B. Hansen, Terry Hermanson and Charles P. Herzog, Jr. (collectively, the "Nominees").

Directors are elected by a plurality of the votes cast, which means that the individuals who receive the greatest number of votes cast "For" are elected as directors up to the maximum number of directors to be chosen at the Annual Meeting. Consequently, any shares not voted "For" a particular director (whether as a result of a direction to withhold or a broker non-vote) will not be counted in such director's favor.

The Board of Directors has adopted a majority vote policy in uncontested elections. An uncontested election means any stockholders meeting called for purposes of electing any director(s) in which (i) the number of director nominees for election is equal to the number of positions on the Board of Directors to be filled through the election to be conducted at such meeting, and/or (ii) proxies are being solicited for the election of directors solely by the Company.

The election of directors solicited by this Proxy Statement is an uncontested election. In the event that a nominee for election in an uncontested election receives a greater number of votes "Withheld" for his or her election than votes "For" such election, such nominee will tender an irrevocable resignation to the Nominating and Corporate Governance Committee, which will decide whether to accept or reject the resignation and submit such recommendation for prompt consideration by the Board of Directors no later than ninety (90) days following the uncontested election.

SELECTING NOMINEES TO THE BOARD

The Nominating and Corporate Governance Committee considers, among other things, the following criteria in selecting and reviewing director nominees:

- personal and professional integrity, and the highest ethical standards;
- skills, business experience and industry knowledge useful to the oversight of the Company based on the perceived needs of the Company and the Board at any given time;
- the ability and willingness to devote the required amount of time to the Company's affairs, including attendance at Board and committee meetings;
- the interest, capacity and willingness to serve the long-term interests of the Company; and
- the lack of any personal or professional relationships that would adversely affect a candidate's ability to serve the best interests of the Company and its stockholders.

The Nominating and Corporate Governance Committee also assesses the contributions of the Company's incumbent directors in connection with their potential re-nomination. In identifying and recommending director nominees, the Committee members take into account such factors as they determine appropriate, including recommendations made by the Board of Directors.

As reflected in its formal charter, the Nominating and Corporate Governance Committee considers the diversity of the Company's Board and employees to be a tremendous asset. The Company is committed to maintaining a highly qualified and diverse Board, and as such, all candidates are considered regardless of their age, gender, race, color of skin, ethnic origin, political affiliation, religious preference, sexual orientation, country of origin, physical handicaps or any other category. These efforts to promote diversity are assessed annually to assure that the Board contains a balanced and effective mix of individuals capable of advancing the Company's long-term interests.

The Nominating and Corporate Governance Committee does not consider individuals nominated by stockholders for election to the Board. The Board believes that this is an appropriate policy because the Company's Restated Certificate of Incorporation and Amended and Restated By-laws ("Bylaws") allow a qualifying stockholder to nominate an individual for election to the Board, said nomination of which can be brought directly before a meeting of stockholders. Procedures and deadlines for doing so are set forth in the Company's Bylaws, the applicable provisions of which may be obtained, without charge, on the Company's website or upon written request to the Secretary of the Company at the address set forth herein.

The presiding officer of the meeting may refuse to acknowledge the nomination of any person not made in compliance with the procedures set forth in the Bylaws. See "Stockholder Nominations for Board Membership and Other Proposals for 2021 Annual Meeting."

DIRECTOR NOMINEE BIOGRAPHIES

✔ THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS **VOTE** THEIR SHARES **FOR** EACH OF THE NOMINEES.

GREGORY L. CHRISTOPHER

Chairman of the Board and Chief Executive Officer

Age 59

Director Since 2010

Mr. Christopher has served as Chairman of the Board of Directors since January 1, 2016. Mr. Christopher has served as Chief Executive Officer of the Company since October 30, 2008. Prior to that, he served as the Company's Chief Operating Officer.

ELIZABETH DONOVAN

Age 68

Director Since 2019

Ms. Donovan was an early member, and at the time, one of the few women on the Chicago Board Options Exchange. She subsequently became an independent broker representing major institutional options orders and has been retired from employment for more than five years.

Ms. Donovan was nominated to serve as a director of the Company because of her knowledge of market dynamics and institutional trading practices, knowledge acquired through her 18-year tenure as a fiduciary representative amidst an array of market conditions. She currently serves on the Nominating and Corporate Governance Committee.

GENNARO J. FULVIO

Age 64

Director Since 2002

Mr. Fulvio, a Certified Public Accountant, has been a member of Fulvio & Associates, LLP, a CPA firm, since 1987.

Mr. Fulvio was nominated to serve as a director of the Company because of his strength in the area of accounting, combined with his financial acumen, and his knowledge of and experience with tax and audit matters. He currently serves as Chairman of the Audit Committee.

GARY S. GLADSTEIN

Age 76

Director Since 2000

Mr. Gladstein served as Chairman of the Board of Directors of the Company from 2013 to 2015, and was previously a director of the Company from 1990 to 1994. Mr. Gladstein is currently an independent investor and consultant. From the beginning of 2000 to August 31, 2004, Mr. Gladstein was a Senior Consultant at Soros Fund Management. He was a partner and Chief Operating Officer at Soros Fund Management from 1985 until his retirement at the end of 1999. During the past five years, Mr. Gladstein also served as a director of Inversiones y Representaciones Sociedad Anónima, Darien Rowayton Bank and a number of private companies.

Mr. Gladstein was nominated to serve as a director of the Company because of his financial and accounting expertise, combined with his years of experience providing strategic advisory services to complex organizations. In addition, having been a member of the compensation, audit and other committees of public company boards, Mr. Gladstein is deeply familiar with corporate governance issues. He currently serves as Chairman of the Compensation and Stock Option Committee.

SCOTT J. GOLDMAN

Age 68

Director Since 2008

For the past ten years, Mr. Goldman has served as Chief Executive Officer of TextPower, Inc., a company he also co-founded. TextPower provides software-integrated text messaging alerts to various institutions. Mr. Goldman also speaks, writes and educates regarding cybersecurity issues, and has assisted Fortune 1000 companies in licensing, developing, building and operating wireless technologies and systems around the world.

Mr. Goldman was nominated to serve as a director of the Company because of his extensive experience with cybersecurity, advanced technologies and global market strategies. He currently serves on the Audit and Compensation and Stock Option Committees.

JOHN B. HANSEN

Age 74 **Director Since 2014**	Prior to his retirement as an Executive Vice President of the Company in 2014, Mr. Hansen served the Company in a variety of roles, including President-Plumbing Business, President-Manufacturing Operations and Senior Vice President – Strategy and Industry Relations. *Mr. Hansen was nominated to serve as a director because of his extensive industry experience and deep knowledge of the Company, its full array of operations and the global markets it serves. He currently serves on the Audit and Nominating and Corporate Governance Committees.*

TERRY HERMANSON

Lead Independent Director

Age 78 **Director Since 2003**	Mr. Hermanson has been the principal of Mr. Christmas Incorporated, a wholesale merchandising company, since 1978, and serves as its Chairman. *Mr. Hermanson was nominated to serve as a director of the Company because of his extensive experience in management and strategic planning, as well as his thorough knowledge of wholesale merchandising and international business issues.*

CHARLES P. HERZOG, JR.

Age 64 **Director Since 2017**	Since 2010, Mr. Herzog has been a principal at Atadex LLC, a firm he co-founded. He co-founded a second firm, Vypin LLC, in 2016. Atadex and Vypin provide advanced technological and data delivery solutions to support the transportation logistics industry. *Mr. Herzog was nominated to serve as a director of the Company based on his extensive knowledge of the transportation logistics industry, and the developing technologies that support it. He currently serves on the Compensation and Stock Option Committee, and as Chairman of the Nominating and Corporate Governance Committee.*

CORPORATE GOVERNANCE

The Company adheres to an established set of Corporate Governance Guidelines for purposes of defining director independence, assigning responsibilities, setting high standards of professional and personal conduct, and ensuring compliance with such responsibilities and standards. Such Guidelines are periodically reviewed in light of evolving trends in corporate governance standards, regulations and related disclosure requirements, particularly as adopted by the NYSE and (with respect to the Audit Committee (the SEC)).

DIRECTOR INDEPENDENCE

In order for a director to qualify as "independent," our Board of Directors must affirmatively determine, consistent with NYSE rules, that the director has no material relationship with the Company that would impair the director's independence. Our Board of Directors undertook its annual review of director independence in February 2021. In applying the NYSE standards for independence, and after considering all relevant facts and circumstances, the Board of Directors has affirmatively determined that the Company's current "independent" directors are: Elizabeth Donovan, Gennaro J. Fulvio, Gary S. Gladstein, Scott J. Goldman, John Hansen, Terry Hermanson and Charles P. Herzog, Jr. In the course of the Board of Directors' determination regarding the independence of each non-management director, the Board considered for:

- Mr. Hansen, the fact that while he was previously an executive officer of the Company (until his retirement on April 30, 2014), more than five years have lapsed since the termination of his employment relationship with the Company.

BOARD OF DIRECTORS AND ITS COMMITTEES

The Board of Directors and its committees meet regularly throughout the year, and may also hold special meetings and act by written consent from time to time. In 2020, the Board of Directors held four regularly scheduled meetings and one special meeting. During this time, our directors attended 100% of our Board of Directors meetings and meetings of the committees on which they served. The Company's Corporate Governance Guidelines provide that the Company's non-management directors shall hold annually at least two formal meetings independent from management. Our Lead Independent Director presides at these executive sessions of the Board of Directors.

Three standing committees have been convened to assist the Board of Directors with various functions: the Audit Committee, the Compensation and Stock Option Committee, and the Nominating and Corporate Governance Committee. Each committee operates pursuant to a formal charter that may be obtained, free of charge, at the Company's website at www.muellerindustries.com, or by requesting a print copy from our Corporate Secretary at the address listed herein.

AUDIT COMMITTEE

Current Members:	
Gennaro J. Fulvio (Chairman) Scott J. Goldman John B. Hansen **Meetings in 2020:** 6	The Audit Committee assists the Board of Directors in fulfilling its oversight functions with respect to matters involving financial reporting, independent and internal audit processes, disclosure controls and procedures, internal controls over financial reporting, related-party transactions, employee complaints, cybersecurity and risk management. In particular, the Audit Committee is responsible for: • appointing, retaining, compensating and evaluating the Company's independent auditors; • reviewing and discussing with management and the independent auditors the Company's annual and quarterly financial statements, and accounting policies; • reviewing the effectiveness of the Company's internal audit procedures and personnel; • reviewing, evaluating and assessing the Company's risk management programs, including with respect to cybersecurity; • reviewing the Company's policies and procedures for compliance with disclosure requirements concerning conflicts of interest and the prevention of unethical, questionable or illegal payments; and • making such other reports and recommendations to the Board of Directors as it deems appropriate. The Board of Directors has determined that each Audit Committee member meets the standards for independence required by the New York Stock Exchange (the "NYSE") and applicable SEC rules. Moreover, it has determined (i) that all members of the Audit Committee are financially literate; and (ii) that Gennaro J. Fulvio possesses accounting and related financial management expertise within the meaning of the listing standards of the NYSE, and therefore is an audit committee financial expert within the meaning of applicable SEC rules. In accordance with the rules and regulations of the SEC, the above paragraph regarding the independence of the members of the Audit Committee shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C of the Exchange Act or to the liabilities of Section 18 of the Exchange Act and shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended (the "Securities Act"), or the Exchange Act, notwithstanding any general incorporation by reference of this Proxy Statement into any other filed document.

COMPENSATION AND STOCK OPTION COMMITTEE

Current Members:	
Gary S. Gladstein (Chairman) Scott J. Goldman Charles P. Herzog, Jr. **Meetings in 2020:** 4	The Compensation and Stock Option Committee is responsible for: • providing assistance to the Board of Directors in discharging the Board of Directors' responsibilities related to management organization, performance, compensation and succession; and • making such recommendations to the Board of Directors as it deems appropriate. The Board of Directors has determined that each member of the Compensation and Stock Option Committee meets the NYSE's standards for independence.

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE

Current Members:	
Charles P. Herzog, Jr. (Chairman) Elizabeth Donovan John B. Hansen **Meetings in 2020:** 2	The Nominating and Corporate Governance Committee is responsible for: • recommending director nominees to the Board of Directors; • recommending committee assignments and responsibilities to the Board of Directors; • overseeing the evaluation of the Board of Directors and management effectiveness; • developing and recommending to the Board of Directors corporate governance guidelines; • reviewing and discussing with management the Company's implementation of procedures for identifying, assessing, monitoring, managing and reporting on the environmental, social and governance (ESG) and sustainability risks and opportunities related to the Company's business; and • generally advising the Board of Directors on corporate governance and related matters. The Board of Directors has determined that each member of the Nominating and Corporate Governance Committee meets the NYSE's standards for independence.

BOARD LEADERSHIP STRUCTURE

The Board of Directors has currently implemented a leadership structure in which Mr. Christopher serves as both Chief Executive Officer and Chairman of the Board. The Board has determined that having Mr. Christopher serve in this dual capacity is in the best interest of stockholders at this time. The Company believes that this structure currently allows ultimate leadership and accountability to reside in a single individual, who has both extensive knowledge of the Company's business and critical relationships with the Company's customer base.

In order to coordinate the activities of the independent members of the Board of Directors, and to liaise between such directors and the Chairman of the Board, the Company has currently designated Mr. Hermanson to serve as Lead Independent Director. The Lead Independent Director's responsibilities are set forth in a formal charter, which can be obtained free of charge from the Company's website at www.muellerindustries.com, or may be requested in print by any stockholder.

BOARD'S ROLE IN RISK OVERSIGHT

The Board of Directors is actively involved in oversight of risks that could affect the Company. These efforts can be summarized as follows:

Board of Directors

Oversees the full range of generalized risks affecting the Company, including strategic, reputational and operational risks, combined with the risk management activities of management and the Board Committees

Audit Committee

Oversees risk management processes related to financial reporting, internal controls and financial risks, including cybersecurity

Compensation and Stock Option Committee

Oversees risks stemming from compensation policies and practices, including the retention of organizational talent and culture and management succession risks

Nominating and Corporate Governance Committee

Oversees risks related to Board composition and succession, as well as environmental, social, and governance (ESG) matters

Management

Handles day-to-day risk management at the Company

STANDARDS OF CONDUCT

The Board of Directors has adopted various policies, including a comprehensive set of Corporate Governance Guidelines, by which the Company is governed. These policies are designed to promote sound corporate governance and prudent stewardship of the Company, both by the Board of Directors and management.

Anti-Pledging Policy

The Corporate Governance Guidelines include amendments adopted in February 2020 that prohibit the future pledging of the Company's common stock as security under any obligation by our directors and executive officers.

Insider Trading and Anti-Hedging Policy

The Company maintains a policy which mandates compliance with insider trading laws and institutes safeguards to mitigate the risk of insider trading. Further, the Corporate Governance Guidelines prohibit any director, officer or employee of the Company from engaging in short sales, transactions in derivative securities (including put and call options), or other forms of hedging and monetization transactions, such as zero-cost collars, equity swaps, exchange funds and forward sale contracts, that allow the holder to limit or eliminate the risk of a decrease in the value of the Company's securities.

Clawback Policy

Under the Corporate Governance Guidelines, if the Company is required to restate its financial results due to material noncompliance with financial reporting requirements under the securities laws as a result of an executive's (i.e., a President or Vice President level officer's) willful, knowing or intentional misconduct or gross negligence (as determined by the Compensation and Stock Option Committee), the Company may take action to recoup from the executive all or any portion of an incentive award received by the executive, the amount of which had been determined in whole or in part upon specific performance targets relating to the restated financial results. In such an event, the Company shall be entitled to recoup up to the amount, if any, by which the incentive award actually received by the executive exceeded the payment that would have been received based on the restated financial results, as determined by the Compensation and Stock Option Committee. The Company's right of recoupment pursuant to this policy applies to incentive awards received during the three-year period preceding the date on which the Company is required to prepare the restatement, based on the determination of the Company's independent registered public accounting firm.

Code of Business Conduct and Ethics

The Company has adopted a Code of Business Conduct and Ethics, which is designed to help officers, directors and employees resolve ethical issues in an increasingly complex business environment. The Code of Business Conduct and Ethics is applicable to all of the Company's officers, directors and employees, including the Company's principal executive officer, principal financial officer, principal accounting officer or controller and other persons performing similar functions. The Code of Business Conduct and Ethics covers topics, including but not limited to, conflicts of interest, confidentiality of information and compliance with laws and regulations.

Director Responsibilities

It is the duty of the Board of Directors to serve as prudent fiduciaries for stockholders and to oversee the management of the Company's business. Accordingly, the Corporate Governance Guidelines include specifications for director qualification and responsibility, attendance, access to officers and employees, compensation, orientation, continuing education and self-evaluation.

The Company's policy is that all members of the Board of Directors attend annual meetings of stockholders, except where the failure to attend is due to unavoidable circumstances or conflicts discussed in advance with the Chairman of the Board. Because of travel restrictions and safety concerns related to the COVID-19 pandemic, the Chairman excused all non-management members of the Board of Directors from attending the 2020 annual meeting of stockholders in person.

Where to Find Our Key Governance Policies: The Corporate Governance Guidelines and Code of Business Conduct and Ethics can be obtained free of charge from the Company's website at www.muellerindustries.com, or may be requested in print by any stockholder.

COMMUNICATION WITH THE BOARD OF DIRECTORS

Any stockholder or interested party who wishes to communicate with the Board of Directors, or specific individual directors, including the non-management directors as a group, may do so by directing a written request addressed to such directors or director in care of the Chairman of the Nominating and Corporate Governance Committee, Mueller Industries, Inc., 150 Schilling Boulevard, Suite 100, Collierville, Tennessee 38017. Communication(s) directed to the Chairman will be relayed to him, except to the extent that it is deemed unnecessary or inappropriate to do so pursuant to the procedures established by a majority of the independent directors. Communications directed to non-management directors will be relayed to the intended director except to the extent that doing so would be contrary to the instructions of the non-management directors. Any communication so withheld will nevertheless be made available to any non-management director who wishes to review it.

RELATED PARTY TRANSACTIONS

Related party transactions may present potential or actual conflicts of interest, and create the appearance that Company decisions are based on considerations other than the best interests of the Company and its stockholders. Management carefully reviews all proposed related party transactions (if any), other than routine banking transactions, to determine if the transaction is on terms comparable to those that could be obtained in an arms-length transaction with an unrelated third party. Management reports to the Audit Committee, and then to the Board of Directors on all proposed material related party transactions. Upon the presentation of a proposed related party transaction to the Audit Committee or the Board of Directors, the related party is excused from participation in discussion and voting on the matter.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) RISK MANAGEMENT AND SUSTAINABILITY

The Company assesses and manages environmental, social and governance (“ESG”) considerations that may be material to the long-term sustainability of our business. In February 2021, the Nominating and Corporate Governance Committee’s charter was formally amended to include the management of ESG risk within the Committee’s jurisdiction. In that spirit, the Nominating and Corporate Governance Committee shall be responsible for reviewing and discussing with management the Company’s implementation of procedures for identifying, assessing, monitoring, managing and reporting on the ESG and sustainability risks and opportunities related to the Company’s business. Among other matters, we focus on such issues as workplace health and safety, environmental stewardship, business ethics and compliance, supply chain management and the development of human capital. We also focus outwardly on the communities in which we operate, including through a foundation that makes charitable contributions to various causes and organizations. ESG-related risks and opportunities are integral to our strategic decision-making. Such matters are addressed by senior management and subject to the oversight of the Nominating and Corporate Governance Committee and the full Board of Directors. The Company is also prioritizing the enhanced reporting and disclosure of the ESG-related risks and opportunities relating to its business and associated metrics, and has published its first sustainability report, which is available on the Company’s website.

2020 DIRECTOR COMPENSATION

ELEMENTS OF DIRECTOR COMPENSATION

Our non-employee director compensation for 2020 was awarded in a combination of cash and equity, as shown below.*

Annual fee for the Lead Independent Director.	For serving as Lead Independent Director, Mr. Hermanson received an annual fee of $90,000.
Annual fee for other directors	All other non-employee directors received an annual fee of $62,000.
Discretionary Bonus	All non-employee directors received a discretionary bonus of $10,000.
Meeting fees	• $3,000 per full Board meeting attended • $3,000 per Audit Committee meeting attended • $1,000 per Compensation and Stock Option Committee, Nominating and Corporate Governance Committee or special meeting attended
Annual fees for Committee Chairs	• $25,000 for the Audit Committee Chair • $6,000 each for the chairs of the Compensation and Stock Option and Nominating and Corporate Governance Committees
Annual equity award	• All non-employee directors received a grant of options to purchase 4,000 shares of our common stock, $.01 par value per share ("Common Stock") (fully vested as of the date of grant), and were granted 2,000 shares of restricted stock.

*In his capacity as Chairman of the Board of Directors, Mr. Christopher received neither a retainer nor any meeting fees.

In addition, each director received reimbursement for such director's expenses incurred in connection with any such Board or Committee meeting, and each Committee fee was paid whether or not such committee meeting was held in conjunction with a Board of Directors meeting.

2020 NON-EMPLOYEE DIRECTOR COMPENSATION

The table below summarizes the total compensation we paid to our non-employee directors for the fiscal year ended December 26, 2020.

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(1)	All Other Compensation ($)(2)	Total ($)
Elizabeth Donovan	77,000	48,660	27,230	10,800	163,690
Paul J. Flaherty	38,000	—	—	32,600	70,600
Gennaro J. Fulvio	118,000	48,660	27,230	10,800	204,690
Gary S. Gladstein	84,000	48,660	27,230	10,800	170,690
Scott J. Goldman	96,000	48,660	27,230	10,800	182,690
John B. Hansen	95,000	48,660	27,230	10,800	181,690
Terry Hermanson	103,000	48,660	27,230	10,800	189,690
Charles P. Herzog, Jr.	86,000	48,660	27,230	10,800	172,690

(1) Represents the aggregate grant date fair value of awards granted to our directors in 2020, determined under Financial Accounting Standards Board Accounting Standards Codification 718. For information on the valuation assumptions with respect to awards made, refer to Note 17 - Stock-Based Compensation to the Company's Consolidated Financial Statements filed with its Annual Report on Form 10-K for the fiscal year ended December 26, 2020. The amounts above reflect the Company's aggregate expense for these awards and do not necessarily correspond to the actual value that will be recognized by the directors. As of December 26, 2020, the aggregate number of shares of our Common Stock subject to outstanding options held by our non-employee directors was as follows: Ms. Donovan, 10,000 shares, Mr. Fulvio, 35,555 shares, Mr. Gladstein, 45,333 shares, Mr. Goldman, 40,444 shares, Mr. Hansen, 25,778 shares, Mr. Hermanson, 16,000 shares, and Mr. Herzog, 14,000 shares. All non-employee directors each held 2,000 shares of non-vested restricted stock.

(2) Other cash compensation included (i) a $10,000 cash award provided to our non-employee directors (with the exception of Mr. Flaherty, who retired from the Board effective May 7, 2020) in recognition of the support they provided amidst the unprecedented challenges posed by the COVID-19 pandemic (which included participation in special conference calls for which they otherwise received no compensation), and (ii) $800 in cash dividends. Included in Mr. Flaherty's other compensation is $31,800 in fees pursuant to a consulting agreement in which Mr. Flaherty provides services to the Company in the areas of customer and industry relations. The term of the agreement is July 1, 2020 through June 30, 2021, subject to extension upon the mutual agreement of the parties.

STOCK OWNERSHIP POLICY FOR DIRECTORS

To further align the Company's goal of aligning directors' economic interests with those of stockholders, the Company has adopted stock ownership guidelines for its non-employee directors recommending that they hold equity interests of the Company (including vested and unvested interests, provided that with respect to options, only vested options that are exercisable within 60 days of the applicable measurement date will be counted) with a value equal to three times the annual cash director fee payable to each such director. All directors are expected to comply with the stock ownership guidelines within five years of being elected to the Board of Directors, and current directors should comply as soon as practicable. Director compliance with the stock ownership guidelines is monitored on an ongoing basis by the Company's General Counsel.

PROPOSAL 2

APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee has reappointed Ernst & Young LLP ("EY") to audit and certify the Company's financial statements for the fiscal year ending December 25, 2021, subject to ratification by the Company's stockholders, which requires the affirmative vote of a majority of the outstanding shares of the Company present in person or by proxy at the Annual Meeting. If the appointment of EY is not so ratified, the Audit Committee will reconsider its action and will appoint auditors for the 2021 fiscal year without further stockholder action. Notwithstanding, the Audit Committee may at any time in the future in its discretion reconsider the appointment without submitting the matter to a vote of stockholders. Representatives of EY are expected to attend the Annual Meeting to answer questions and make a statement if they so choose.

Fees for EY's audit and other services for each of the two fiscal years ended December 26, 2020 and December 28, 2019 are set forth below:

	2020	2019
Audit Fees *(professional services rendered for the audit of (i) the Company's consolidated annual and interim/quarterly financial statements, and (ii) internal controls over financial reporting)*	$ 2,749,755	$ 2,856,774
Audit-Related Fees *(assurance and other services, including international accounting and reporting compliance)*	47,000	50,250
Tax Fees *(tax compliance, advice and planning)*	406,000	422,350
All Other Fees	—	—
	$3,202,755	**$3,329,374**

The Audit Committee's policy is to pre-approve all audit and non-audit services provided by the independent auditors. Pre-approval is generally provided for up to one year, and any such pre-approval is detailed as to the particular service or category of services. The Audit Committee has delegated pre-approval authority to its Chairman when expedition of services is necessary. The independent auditors and management are required periodically to report to the full Audit Committee regarding the extent of services provided by the independent auditors in accordance with this pre-approval, and the fees for the services performed to date. All of the services provided by the independent auditors during fiscal years 2020 and 2019, respectively, under the categories Audit Fees, Audit-Related Fees, Tax Fees and All Other Fees described above were pre-approved.

✔ THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS **VOTE** THEIR SHARES **FOR** THE APPROVAL OF ERNST & YOUNG LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM.

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee oversees the Company's financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal controls. In fulfilling its oversight responsibilities, the Audit Committee reviewed the audited financial statements in the Annual Report on Form 10-K with management, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in the financial statements.

The Audit Committee reviewed with the independent auditors, who are responsible for expressing an opinion on the conformity of those audited financial statements with generally accepted accounting principles, their judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the Audit Committee under Public Company Accounting Oversight Board's (PCAOB) Auditing Standard No. 1301. In addition, the Audit Committee discussed with the independent auditors the auditors' independence from management and the Company, including the matters in the written disclosures required by Public Company Accounting Oversight Board's Rule 3526, and considered the compatibility of non-audit services provided by the independent auditors with the auditor's independence.

The Audit Committee discussed with the Company's internal and independent auditors the overall scope and plans for their respective audits. The Audit Committee meets with the internal and independent auditors, with and without management present, to discuss the results of their examinations, their evaluations of the Company's internal controls, and the overall quality of the Company's financial reporting.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors (and the Board of Directors has approved) that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 26, 2020 for filing with the SEC. The Audit Committee and the Board has re-appointed, subject to stockholder approval, Ernst & Young LLP, independent auditors, to audit the consolidated financial statements of the Company for the fiscal year ending December 25, 2021.

The Audit Committee is governed by a formal charter which can be accessed from the Company's website at www.muellerindustries.com, or may be requested in print by any stockholder. The members of the Audit Committee are considered independent because they satisfy the independence requirements for Board members prescribed by the NYSE listing standards and Rule 10A-3 of the Exchange Act.

Gennaro J. Fulvio, Chairman
Scott J. Goldman
John B. Hansen

(1) This Section is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof, and irrespective of any general incorporation language in any such filing.

PROPOSAL 3

ADVISORY VOTE ON APPROVAL OF THE COMPENSATION OF THE COMPANY'S NAMED EXECUTIVE OFFICERS

In accordance with Section 14A of the Exchange Act, stockholders are being asked to vote on an advisory, non-binding basis, on the compensation of the Company's named executive officers. Specifically, the following resolution will be submitted for a stockholder vote at the Annual Meeting, the approval of which will require the affirmative vote of a majority of the outstanding shares of the Company present in person or by proxy at the Annual Meeting and entitled to vote thereon:

> "RESOLVED, that the stockholders of the Company approve, on an advisory basis, the compensation of the Company's named executive officers listed in the 2020 Summary Compensation Table included in the proxy statement for the 2021 Annual Meeting, as such compensation is disclosed pursuant to Item 402 of Regulation S-K in this proxy statement under the section titled "Compensation Discussion and Analysis," as well as the compensation tables and other narrative executive compensation disclosures thereafter."

Although the stockholder vote is not binding on either the Board of Directors or the Company, the views of stockholders on these matters are valued and will be taken into account in addressing future compensation policies and decisions.

The Company's Compensation and Stock Option Committee is comprised of knowledgeable and experienced independent directors, who are committed to regular review and effective oversight of our compensation programs. The Company's executive compensation program is grounded in a pay for performance philosophy, and accordingly, has been designed to motivate the Company's key employees to achieve the Company's strategic and financial goals, and to support the creation of long-term value for stockholders. Moreover, given the particularly competitive markets in which we operate and nature of our business, a principal goal underlying the Company's long-term incentive compensation program specifically is the long-term retention and motivation of critical executives and business leaders. The Company's success depends upon their leadership, judgment and experience, and as such, our compensation program is designed to promote their enduring commitment to the Company. We encourage stockholders to read the Executive Compensation section of this proxy statement, including the Compensation Discussion and Analysis (CD&A) and compensation tables, for a more detailed discussion of the Company's compensation programs and policies, and how they are appropriate and effective in promoting growth, creating value, and retaining key members of our team.

✔ THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS **VOTE** THEIR SHARES **FOR** THE APPROVAL, ON AN ADVISORY BASIS, OF THE COMPENSATION OF THE COMPANY'S NAMED EXECUTIVE OFFICERS.

COMPENSATION DISCUSSION AND ANALYSIS

TABLE OF CONTENTS

EXECUTIVE SUMMARY

This Compensation Discussion and Analysis ("CD&A") provides an overview of how our named executive officers were compensated in 2020, as well as how this compensation furthers our established compensation philosophy and objectives.

Our Named Executive Officers

The Company's NEOs for fiscal year 2020 were:

GREGORY L. CHRISTOPHER
Chief Executive Officer & Chairman

JEFFREY A. MARTIN
Chief Financial Officer & Treasurer

STEFFEN SIGLOCH
Chief Manufacturing Officer

CHRISTOPHER J. MIRITELLO
Vice President, General Counsel & Secretary

GARY WESTERMEYER
President – Refrigeration

Our Compensation Philosophy and Guiding Principles

We believe in a pay for performance philosophy, such that a material portion of a named executive officer's compensation is dependent upon both the short-term and long-term strategic and financial performance of the Company, considered in light of general economic and specific Company, industry, and competitive conditions. For 2020, we continued to reward named executive officers in a manner consistent with this philosophy by setting annual incentive targets based on the Company's achievement of certain levels of operating income. While also rooted in a pay for performance philosophy, our long-term equity incentive compensation focused primarily on promoting the retention of key executives and business leaders in our industry, where the competition for leadership talent is a foremost concern. Accordingly, we continued to grant equity awards, such that any long-term compensation opportunity will be directly tied to stock performance, and will only be received by key executives and business leaders who remain with and make long-term commitments to the Company's success. The Compensation and Stock Option Committee (hereinafter referred to as "the Committee" for purposes of this CD&A section) evaluates, on an annual basis, the overall structure and design of our program, and believes it has and continues to reflect the best balance of the Company's priorities.

OUR COMPENSATION PHILOSOPHY AND GUIDING PRINCIPLES

ALIGN COMPENSATION WITH STOCKHOLDER INTEREST

We emphasize long-term stockholder value creation by utilizing performance-based restricted stock units and stock options to deliver long-term compensation incentives while minimizing risk-taking behaviors that could undermine long-term objectives.

PAY FOR PERFORMANCE

Each executive has clear performance expectations and must contribute to the overall success of the Company, as opposed to solely objectives within his or her primary area of responsibility.

ATTRACT AND RETAIN TALENT

The attraction and retention of key executives and business leaders is a core objective of our long-term incentive compensation program. In addition to performance-based criterion, our equity awards vest on longer time horizons to incentivize key executives to make longstanding commitments to the Company.

TRANSPARENCY AND SIMPLICITY OF DESIGN

The three main elements of our compensation program — base salary, annual cash incentive compensation and long-term equity incentive compensation — reflects an appropriate blend of goals and are based on easily understood objectives.

Our Compensation Practices At a Glance

Our pay and equity programs are designed to align executives' interests with those of our stockholders, and to motivate and retain critical leaders. Below is a snapshot of our compensation practices:

WHAT WE DO
✓ We maintain a fully independent Compensation and Stock Option Committee.
✓ A higher percentage of our executives' compensation is variable than fixed.
✓ We utilize varying performance metrics under our short-term and long-term incentive plans.
✓ Our annual incentive program is based on earnings performance and capped for maximum payouts.
✓ Our equity awards include extended vesting schedules and performance-based criteria.
✓ We have a clawback policy applicable to all senior employees, including all President and Vice President level personnel.

WHAT WE DON'T DO
✗ We do not provide for single trigger severance upon a change in control.
✗ We do not permit gross-up payments to cover excise taxes.
✗ We do not permit the pledging or hedging of our common stock.
✗ We do not support compensation programs or policies that reward material or excessive risk taking.
✗ We do not maintain any supplemental executive retirement plans.

2020 Say-on-Pay Vote and Stockholder Engagement

At our 2020 Annual Meeting, we held our annual non-binding stockholder advisory vote on executive compensation. Approximately 77% of our shares voted (excluding abstentions and broker non-votes) were in favor of the compensation of our named executive officers as disclosed in the proxy statement for the 2020 Annual Meeting.

Last year, in response to stockholder feedback, the Company not only endeavored to more clearly and fully present its compensation program, but also to dramatically revamp the look, format and substance of the 2020 proxy statement. Our goal in doing so was to provide a more useful tool to assist stockholders in evaluating our compensation program, including pay-for-performance alignment and whether it serves the vital strategic goal of attracting and retaining key executives in the competitive markets in which we participate. We were gratified that last year's stockholder advisory vote on executive compensation reflected an improvement in support, but it was clear that there was more work to do in this regard.

Accordingly, we continued to engage with stockholders regarding the Company's compensation practices and the philosophies underlying them. Those discussions afforded stockholders the opportunity to raise questions and concerns regarding the executive compensation program as presented in last year's proxy solicitation. One specific aspect of the compensation program that was a particular focus was our long-term equity incentive program, and how the performance-based criterion underlying those equity awards were chosen to emphasize long-term strategic growth and to serve as a complement to the Company's ambitious targets underlying its annual cash incentive program in an effort to create a balanced and well-rounded incentive structure. In response to that feedback, the Company implemented two reforms in 2020:

(1) The Company revised the performance metric underlying the equity incentive awards given to Mr. Christopher and other key executive officers of the Company. Since the performance-based awards were implemented in 2016, the growth targets underlying such awards were based on 3.5% compounded annual growth rates in either total shareholder return (TSR) or earnings per share (EPS). In response to stockholder feedback regarding the appropriateness of these metrics, the Company reviewed the metrics utilized by industry peers and determined that for a business such as ours, operational based metrics would be a more effective gauge of our executives' performance and driver of strategic growth. Accordingly, in 2020, the Company shifted to performance metrics based on growth in adjusted earnings before income tax, depreciation and amortization (EBITDA) and average return on invested capital, each as compared with specified targets and weighted on a 50%-50% basis. (For more details on the new performance metrics, please see the section entitled "Performance Criteria for Performance-Based Restricted Stock.")

(2) As previously discussed by the Company, for the first time in 2020, the long-term equity incentive awards given to operational business leaders was tied to achievement of the ambitious targets set forth in the Company's 2024 Strategic Growth Plan (the awards given to these members of the management team previously had no performance component). The Company believes that these revised criteria will serve as an effective motivator for our operational business leaders to drive their respective businesses and contribute toward the Company's overall long-term strategic growth objectives.

The Committee will consider the outcome of this year's stockholder advisory vote on executive compensation as it makes future compensation decisions.

DETERMINATION OF EXECUTIVE COMPENSATION

Guided by the philosophy and design outlined above, the Committee determines the compensation of our Chief Executive Officer. In turn, our Chief Executive Officer makes recommendations to the Committee regarding all components of our other NEOs' compensation, including base salary, annual cash incentive compensation, and long-term equity incentive compensation. The Committee considers and acts upon those recommendations in setting the compensation of our other NEOs.

In determining compensation, we generally do not rely upon hierarchical or seniority-based levels or guidelines, nor did the Committee formally benchmark executive compensation (or any component thereof) against any particular peer group. Instead, we utilize a more flexible approach that allows us to adapt components and levels of compensation to motivate and reward individual executives within the context of our broader strategic and financial goals. This requires that we consider subjective factors including, but not limited to the following:

- The nature of the executive's position;
- The performance record of the executive, combined with the value of the executive's skills and capabilities in supporting the long-term performance of the Company;
- The Company's overall operational and financial performance; and
- Whether each executive's total compensation potential and structure is sufficient to ensure the retention of the executive officer when considering the compensation potential that may be available elsewhere.

In making compensation decisions, the Committee relies on the members' general knowledge of our industry, supplemented by advice from our Chief Executive Officer based on his knowledge of our industry and the markets in which we participate. From time to time, we conduct informal analyses of compensation practices and our Compensation and Stock Option Committee may review broad-based third-party surveys to obtain a general understanding of current compensation practices.

The Committee has chosen incentive operating income targets as the metric to measure performance for each named executive officer. The compensation of Messrs. Christopher, Martin and Miritello is based upon their oversight of and responsibility for the entire Company. Accordingly, their compensation levels are reflective of the scope and breadth of their management responsibility, and the performance of the Company on a consolidated basis. For Messrs. Sigloch and Westermeyer, a portion of their compensation is based upon the performance of specific business lines within their purviews. Notwithstanding the foregoing, a portion of their compensation is still based upon consolidated Company performance to discourage parochialism and align their interests with those of our stockholders.

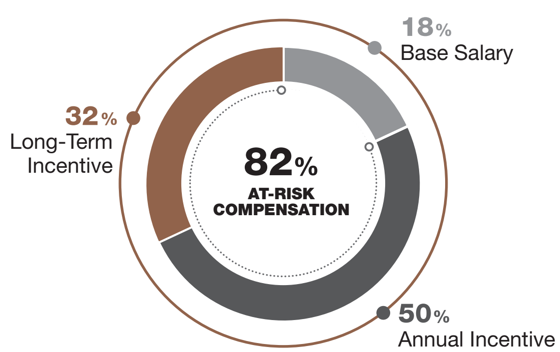
ELEMENTS OF COMPENSATION

As outlined below, our compensation program for our NEOs is comprised of three primary elements: (i) base salary and traditional benefits, (ii) annual incentive compensation, and (iii) long-term equity incentive compensation. Each element plays an integral role in our overall compensation strategy. Moreover, the Committee has approved certain executive perquisites and post-employment change-in-control compensation to our NEOs for purposes of motivating them and retaining their services.

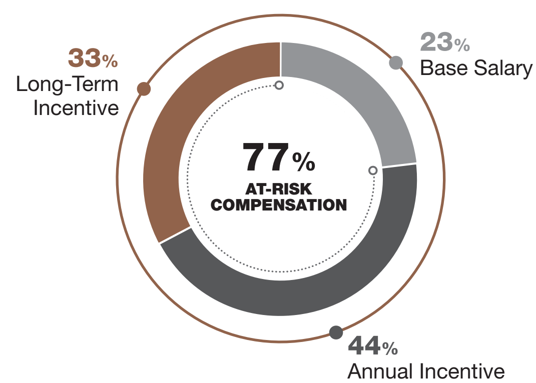
Element of Compensation	Purpose/Description	Form/Timing of Payment
Base Salary and traditional benefits	Provide a base level of compensation for services performed, to encourage the continued service of our executive officers and to attract additional talented executive officers when necessary	Cash/throughout the fiscal year
Annual Incentive Compensation	To attract, motivate and reward executives to achieve and surpass key performance target goals	Cash/typically in February based upon the prior fiscal year's performance
Long-Term Equity Incentive Compensation	To attract, motivate and reward executives to increase stockholder value, and encourage them to make long-term commitments to serve the Company	Restricted stock units with performance and time vesting criterion/following the release of second quarter earnings

Pay-for-Performance and At-Risk Compensation

CEO



OTHER NEOs



Base Salary and Traditional Benefits

Base salaries paid to our NEOs are set forth in the "Summary Compensation Table for 2020." Base salary adjustments are determined by making reasoned subjective determinations about current economic conditions such as general wage inflation as well as the executive's qualifications, experience, responsibilities, and past performance. In addition to base salaries, we provide traditional benefits such as group health, disability, and life insurance benefits, as well as matching contributions to our 401(k) plan.

Annual Incentive Compensation

Each of our NEOs received annual incentive compensation for 2020, based upon the actual performance of the Company and, for Messrs. Sigloch and Westermeyer, the performance of the business lines which they oversee, relative to the performance targets (as described below) established by the Committee on February 5, 2020 (as reviewed and revised on July 31, 2020). The table below shows the target annual incentive award for each of our NEOs.

For 2020, the amount of incentive compensation payable to each of our named executive officers was calculated as follows:

BASE SALARY X **INCENTIVE GRADE LEVEL FACTOR** X **PERFORMANCE FACTOR** = **ANNUAL INCENTIVE**

INCENTIVE GRADE LEVEL FACTOR

Set forth below are the incentive grade level factors for each of our NEOs:

NEO	Multiple of Base Salary
Mr. Christopher	125%
Mr. Martin	90%
Mr. Sigloch	90%
Mr. Miritello	75%
Mr. Westermeyer	75%

PERFORMANCE FACTOR

Set forth below are the corresponding payout percentages tied to various levels of achievement above or below pre-approved operating income performance targets. To promote alignment between pay and performance, incentive compensation amounts are not paid to NEOs when the achievement level of the operating income performance target is less than 80%.

Performance to Target	Payout Percentage
< 80%	0%
80-84%	40%
85-89%	55%
90-94%	70%
95-99%	85%
100-102%	100%
103-105%	115%
106-109%	130%
110%	150%

Based on their incentive grade level factors, certain NEOs are entitled to an additional payout percentage of 10% for each additional percentage of achievement between 111% and 115% of the target, thereby resulting in a maximum payout percentage of 200%. For more information, please see the "2020 Grants of Plan Based Awards Table."

The performance factor applicable to each of the NEOs was determined based on the achievement level of the consolidated Company incentive operating income target, as shown in the following table:

Name	Incentive Operating Income Performance Criteria[1]	Incentive Operating Income Performance Target	Weighting	Performance	2020 Achievement Level	2020 Performance Factor
Gregory L. Christopher	Consolidated Company	$164.9 million	100%	$217.1 million	131%	200%
Jeffrey A. Martin	Consolidated Company	$164.9 million	100%	$217.1 million	131%	200%
Steffen Sigloch	Consolidated Company	$164.9 million	75%	$217.1 million	131%	200%
	Blended Business Lines Weighted Average Performance	$15.9 million	25%	$17.0 million	107%	130%
Christopher J. Miritello	Consolidated Company	$164.9 million	100%	$217.1 million	131%	200%
Gary Westermeyer	Consolidated Company	$164.9 million	25%	$217.1 million	131%	150%
	Blended Business Lines Weighted Average Performance	$17.8 million	75%	$20.1 million	113%	150%

(1) Incentive operating income is the performance criteria metric used for all bonus plans. Incentive operating income includes adjustments to operating income as presented in the Company's audited financial statements for purposes of defining the performance criteria, such as: (i) certain standard adjustments made annually, including expenses associated with phantom shares granted to personnel in our European businesses, and FIFO variances; and (ii) certain adjustments made when applicable, including impairment charges, certain gains or losses on the sale of assets, certain gains stemming from claim recoveries, consolidation related expenses and purchase accounting adjustments.

The performance targets applicable to our NEOs were established by the Committee on February 5, 2020, before the onset of the COVID-19 pandemic, and reflected a continuation of the execution of our growth strategy over the last several years. However, following the onset of the COVID-19 pandemic, the Company continued to evaluate its financial performance, as well as employees' contributions across the organization, and measured those against the key objectives of our executive compensation program, including pay for performance, alignment with stockholders' interests, and motivation and retention of key talent, which includes maintaining a program that is a fair reflection of corporate and individual performance. Thus, in light of these key objectives, which are intended to position the Company for long term profitable growth, and the extraordinary circumstances caused by the COVID-19 pandemic, in July 2020, the Company recommended to the Committee that the incentive operating income targets that were originally established in February be adjusted to keep all employees, including our NEOs, motivated and focused on continuing to work towards advancing the Company's long-term goals for the remainder of 2020. On that basis, the Committee determined to adjust the consolidated company and business line incentive operating income targets applicable to the NEOs down by 15%, which, in the Committee's view, were challenging but achievable levels, such that, based on performance expectations at the time of the July adjustment (which, due in large part to the extraordinary circumstances caused by COVID-19 pandemic, were trending below 2019 levels) the minimum incentive payout percentage could reasonably be attained.

From a financial performance standpoint in 2020, our NEOs and employees contributed to significant improvements in our third and fourth quarter earnings, and we concluded the year with results that were significantly better than our performance expectations at the onset of the COVID-19 pandemic and at the time of the July adjustment. As a result, notwithstanding the adjustment, which the Committee believes served the purpose of effectively motivating the Company's NEOs and employees to overcome the unique challenges posed by the COVID-19 pandemic, overall incentive payments as a percentage of the Company's earnings were generally consistent with prior years.

2020 NEO ANNUAL INCENTIVE CALCULATIONS

As a result of 2020 performance, the annual incentive payments for the NEOs were calculated as follows:

NEO	TARGET AWARD(1)	X	WEIGHTED PERFORMANCE FACTOR	=	ANNUAL INCENTIVE PAYOUT AS A % OF BASE SALARY
MR. CHRISTOPHER	$1,562,500	X	200%	=	250%
MR. MARTIN	$360,113	X	200%	=	180%
MR. SIGLOCH	$309,759	X	183%	=	165%
MR. MIRITELLO	$247,500	X	200%	=	150%
MR. WESTERMEYER	$198,750	X	150%	=	113%

(1) The target award is determined by multiplying the NEO's base salary by the applicable incentive grade level factor.

Long-Term Equity Incentive Compensation Program

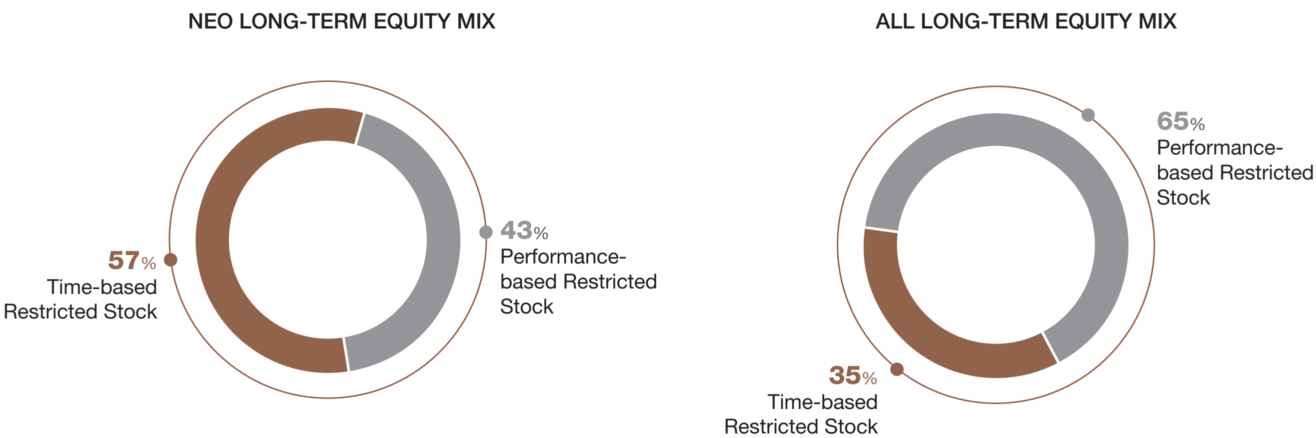
OVERVIEW

Our long-term equity-based incentive compensation program serves three goals:

1. Aligning our NEOs' financial interests with the interests of our stockholders;
2. Retaining the services of talented and seasoned executives, and motivating them to make deep, long-term commitments to the Company; and
3. Rewarding our NEOs for advancing our long-term financial success and increasing stockholder value.

The Committee has made the retention of executives and key employees a particular focus of the long-term equity incentive compensation program in recent years.

The Committee has decided that the best way to meet the objectives of our long-term incentive program is to award a combination of time-based restricted stock and performance-based restricted stock, allocated as shown below. To promote our goal of executive and key employee retention, time-based restricted stock awards vest over the course of a five-year period, on one of two vesting schedules: (i) 30% after three years; 30% after four years; and 40% after five years, or (ii) 100% cliff vesting after five years. Performance-based restricted stock is also awarded, and cliff vests after periods of either three or five years, provided performance criteria are met over the applicable performance period. All unvested shares are forfeited if the recipient leaves the Company's employ prior to the vesting date.

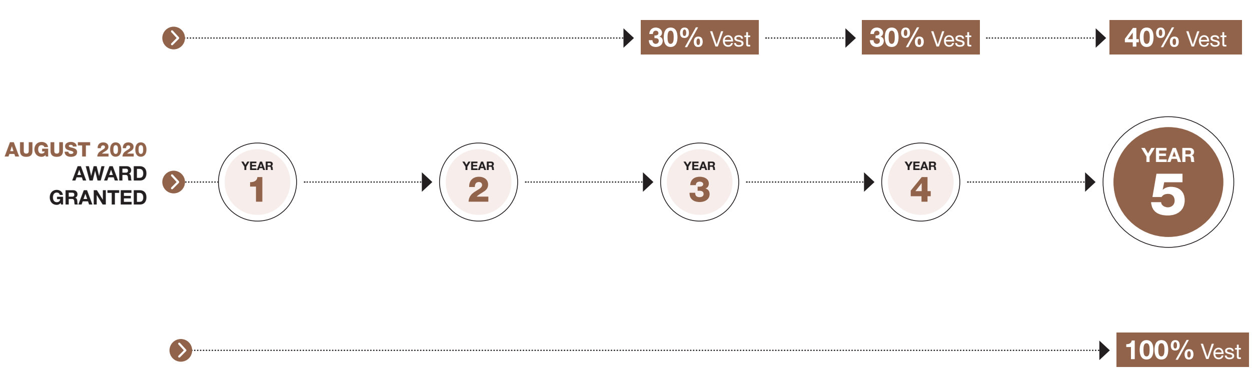


The Committee believes that the extended and cliff vesting schedules, and performance criteria described below will motivate our NEOs and key employees to remain with the Company and make long-term contributions to stockholder value generation.

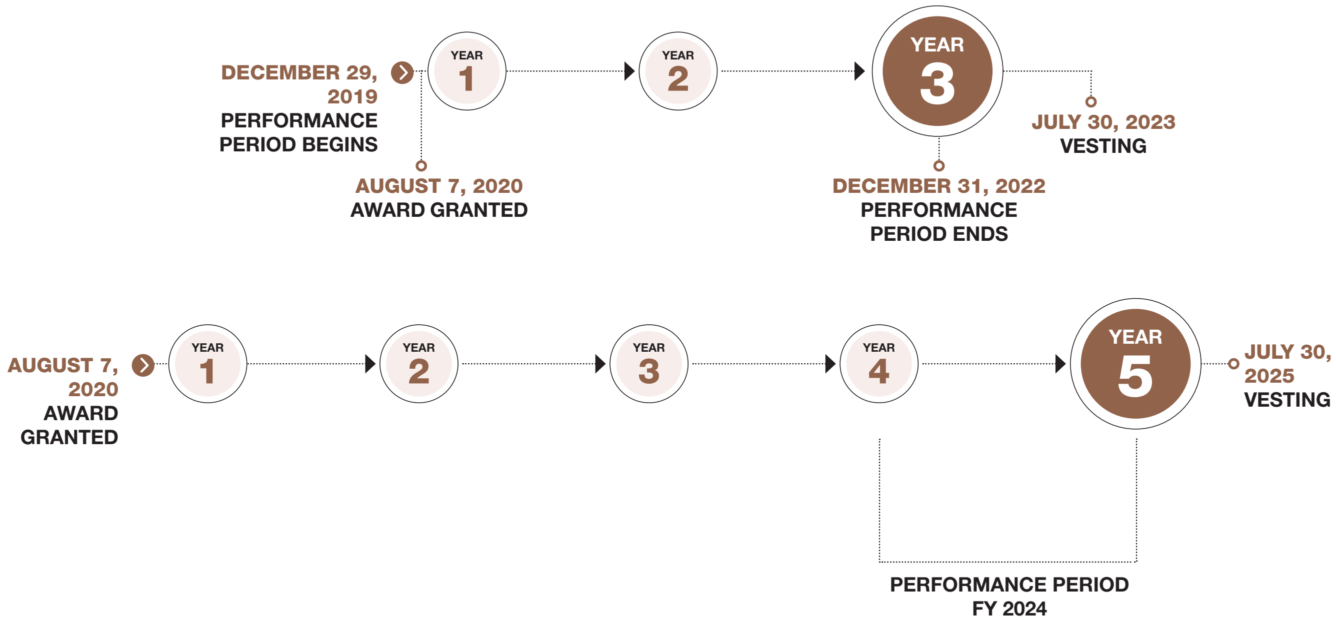
VESTING SCHEDULE FOR TIME-BASED AND PERFORMANCE-BASED RESTRICTED STOCK

To foster retention, the 2020 time-based restricted stock awards vest over the course of a five-year period (i.e., either (i) 30% after three years; 30% after four years; and 40% after five years, or (ii) 100% after five years). For performance-based awards given to certain NEOs in 2020 (i.e., Messrs. Christopher, Martin, Sigloch and Miritello), the performance period is three years, and vesting occurs three years from the grant date. For the performance-based awards given to Mr. Westermeyer and various operational business leaders in 2020, the performance period is the fiscal year ending December 28, 2024, and vesting occurs approximately four and a half years from the grant date. No portion of the equity awards granted to our executives or employees vest in less than three years. The Committee elected to use a long-term vesting schedule to promote executive retention in our competitive industry and to incentivize performance. However, given the importance of long-term equity incentive awards in our compensation program, the Committee provided for accelerated vesting in the event of death, disability or a change in control (as explained in more detail in the "2020 Grant of Plan Based Awards Table"). The Committee believes that accelerated vesting would be appropriate in those circumstances to encourage our executives to focus on the potential benefits of a change in control transaction for our stockholders without harboring concerns for their financial security.

2020 TIME-BASED RESTRICTED STOCK AWARDS
Five-Year Vesting Schedule
(35% of total awards)



2020 PERFORMANCE-BASED RESTRICTED STOCK AWARDS
Three & Five Year Vesting Schedule
(65% of total awards)



PERFORMANCE CRITERIA FOR PERFORMANCE-BASED RESTRICTED STOCK

A portion of the long-term equity awards granted to Messrs. Christopher, Martin, Sigloch and Miritello are performance-based, and vesting is contingent upon the Company's performance on two metrics: (i) adjusted earnings before interest, taxes, depreciation and amortization (EBITDA), and (ii) average return on invested capital (ROIC). As discussed above in the section entitled "2020 Say-on-Pay Vote and Stockholder Engagement," the Company adopted these operational metrics in response to stockholder outreach regarding the appropriateness of the metrics historically used by the Company. Using these two metrics ensures that performance-based awards to these NEOs will only vest based upon the achievement of specified growth targets over a three-year performance period, which for the 2020 grants, was December 29, 2019 to December 31, 2022. For this purpose, the adjusted EBITDA metric means the average adjusted EBITDA achieved by the Company during each of the three fiscal years during the performance period, as compared with an adjusted EBITDA target of $204.0 million. The average ROIC metric means the average ROIC achieved by the Company during each of the three fiscal years during the performance period, as compared with an average ROIC target of 11.0%. For purposes of the average ROIC metric, ROIC means, in respect of a given fiscal year, the quotient obtained by dividing the Company's after-tax operating income for such fiscal year by average invested capital in respect of such fiscal year (with invested capital being the average of beginning and ending long-term debt and equity in respect of such fiscal year).

The degree to which the performance-based equity awards granted to Messrs. Christopher, Martin, Sigloch and Miritello vest is contingent upon the Company's actual performance as compared with the adjusted EBITDA and average ROIC targets, each weighted on a 50%-50% basis. The tables below illustrate the applicable achievement levels and corresponding vesting percentages for each metric. In both tables, the vesting percentages reflect the 50%-50% weighting of the two metrics. As for each metric, if the achievement percentage is less than 80%, the vesting percentage is 0%. Moreover, if the achievement percentage is between the specified levels, the vesting percentage is determined by linear interpolation.

ADJUSTED EBITDA METRIC

Achievement Percentage	Vesting Percentage
80%	25%
110%	100%

AVERAGE ROIC METRIC

Achievement Percentage	Vesting Percentage
80%	25%
110%	100%

For the performance-based equity awards granted to Mr. Westermeyer in 2020, the performance metric is the actual combined operating income of various businesses overseen by Mr. Westermeyer, as compared to a combined operating income target of $35.0 million during the fiscal year ending December 28, 2024. This performance period aligns with the final fiscal year of our ambitious 2024 Strategic Growth Plan. The table below sets forth the various achievement percentages and corresponding vesting percentages. If the achievement percentage is less than 50%, the vesting percentage is 0%. Moreover, if the achievement percentage is between the specified levels, the vesting percentage is determined without linear interpolation.

Performance to Target	Payout Percentage
50%	25%
60%	40%
70%	55%
80%	70%
90%	85%
100%	100%

To be clear, the growth targets established for our performance-based equity grants are just one of a number of different, yet complementary performance metrics utilized by the Company in its efforts to design an overall compensation program that is appropriately balanced and furthers its underlying aims. For example, the Company's performance-based compensation program also incorporates the ambitious short and long-term operating targets that underlie the Company's annual cash incentive compensation program and long-term aspirations for strategic growth.

The Company has traditionally maintained, and will continue to maintain lofty expectations and goals with respect to stockholder value creation. Nevertheless, given the primary retention aim of the long-term equity incentive compensation program, the Committee has concluded that the performance-based criterion for the equity awards granted to our NEOs are appropriate in the context of our well-balanced overall executive compensation program.

TIMING OF LONG-TERM EQUITY AWARD GRANTS

Long-term equity incentive awards to our Chief Executive Officer and other NEOs are traditionally granted annually, typically following the release of the Company's second quarter and six-month operating results, and are based on the determinations of the Committee. Our Chief Executive Officer makes recommendations to the Committee regarding awards for other NEOs and members of the management team. In 2020, the NEOs received their annual grants in August.

In granting long-term equity awards to our NEOs, the Committee applied no set formula for allocating awards, and instead made reasoned, subjective determinations based upon their performance, the importance of retaining their services, and their role in helping us achieve our long-term goals. In 2020, we granted shares of restricted stock to our NEOs covering an aggregate of 141,000 shares.

Perquisites

We offer perquisites to our NEOs, which we view as an added element of our executive compensation program designed not only to attract, retain and reward our NEOs, but also to facilitate the performance of their duties on behalf of the Company. The perquisites we provided to our NEOs in fiscal year 2020 are set forth in the "Summary Compensation Table for 2020", and included, among others, estate and tax planning, personal use of our Company airplane, and reimbursement of the income tax liabilities associated with certain perquisites. Estate and tax planning is provided to certain NEOs to complement our various compensation elements for the purpose of ensuring the NEOs understand the complexity of the long-term equity incentives and are thereby able to maximize the value of such benefits. We maintain a Company-owned airplane primarily to provide efficient transportation for executives, employees and customers to our geographically dispersed operations. From time to time, when our plane is not being used for business purposes, we allow certain NEOs to use the plane for personal travel. We have also provided executive physicals as a risk management tool and to ensure our NEOs are mindful of their personal health. Certain club memberships are provided, and serve the primary aim of facilitating networking with customers.

COMPENSATION RISK MANAGEMENT

In connection with its continued appraisal of our compensation program, management, with oversight from the Committee, reviews our compensation policies and practices, and the overall compensation program with respect to our risk management practices and any potential risk-taking incentives. This assessment includes a review of the primary elements of our compensation in light of potential risks:

COMPENSATION PROGRAM RISK CONSIDERATIONS

Pay Mix	• Compensation program includes an appropriately balanced mix of short and long-term incentives, which mitigates the risk of undue focus on short-term targets while rewarding performance in areas that are key to our long-term success • Base salaries are set at competitive levels to promote stability and give executives an element of compensation that is not at risk.
Performance Metrics and Goals	• Distinct performance metrics are used in both our short-term and long-term incentive plans. • Our annual incentive compensation program includes a payout scale (and cap) reflective of a pay for performance philosophy.
Long-term Incentives	• Our long-term equity incentive program is designed to retain key executives and business leaders and to align their interests with those of our stockholders.

As previously detailed (see page 17), the Company has adopted a series of policies, including bans on pledging and hedging, and a clawback policy, to further mitigate risk taking behaviors. Beyond our Company clawback policy, which applies to all President and Vice President-level executives, our Chief Executive Officer and Chief Financial Officer are subject to clawback provisions under the Sarbanes Oxley Act of 2002.For these reasons, we believe that our compensation policies and practices are not likely to have a material adverse effect on the Company.

Tax Considerations

Section 162(m) of the Internal Revenue Code (the "Code") generally disallows a tax deduction to public companies for compensation in excess of $1,000,000 paid to certain executive officers, subject historically to an exception for qualifying "performance-based compensation." The Tax Cuts and Jobs Act, enacted on December 22, 2017, substantially modified Section 162(m) of the Code and, among other things, eliminated the performance-based exception to the $1,000,000 deduction limit effective as of January 1, 2018. As a result, as of 2018, compensation paid to certain executive officers in excess of $1,000,000 is nondeductible, whether or not it is performance-based. In addition, beginning in 2018, the executive officers subject to Section 162(m) of the Code (the "Covered Employees") will include any individual who served as the Chief Executive Officer and Chief Financial Officer at any time during the taxable year and the three other most highly compensated officers (other than the Chief Executive Officer and Chief Financial Officer) for the taxable year, and once an individual becomes a Covered Employee for any taxable year beginning after December 31, 2016, that individual will remain a Covered Employee for all future years, including following any termination of employment.

The Tax Cuts and Jobs Act includes a transition rule under which the changes to Section 162(m) of the Code described above will not apply to compensation payable pursuant to a written binding contract that was in effect on November 2, 2017 and is not materially modified after that date. To the extent applicable to our existing contracts and awards, we may avail ourselves of this transition rule. However, because of uncertainties as to the application and interpretation of the transition rule, no assurances can be given at this time that our existing contracts and awards, even if in place on November 2, 2017, will meet the requirements of the transition rule. Moreover, to maintain flexibility in compensating executive officers in a manner designed to promote varying corporate goals in the best interest of the company, we do not limit our actions with respect to executive compensation to preserve deductibility under Section 162(m) of the Code if we determine that doing so is in the best interests of the Company and its stockholders.

REPORT OF THE COMPENSATION AND STOCK OPTION COMMITTEE OF THE BOARD OF DIRECTORS ON EXECUTIVE COMPENSATION

The Compensation and Stock Option Committee has reviewed and discussed with the Company's management the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K. Based on such review and discussions, the Compensation and Stock Option Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

Gary S. Gladstein, Chairman
Scott J. Goldman
Charles P. Herzog, Jr.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During fiscal year 2020, Gennaro J. Fulvio, Scott J. Goldman and Charles P. Herzog, Jr. served on the Compensation and Stock Option Committee. No member of the Compensation and Stock Option Committee was, during fiscal year 2020, an officer or employee of the Company or was formerly an officer of the Company. In addition, no member of the Compensation and Stock Option Committee, during fiscal year 2020, had any relationship requiring disclosure by the Company as a related party transaction under Item 404 of Regulation S-K. No executive officer of the Company served on any board of directors or compensation committee of any other company for which any of the Company's directors served as an executive officer at any time during fiscal year 2020.

EXECUTIVE COMPENSATION TABLES

SUMMARY COMPENSATION TABLE FOR 2020

The following table shows compensation of our principal executive officer, our principal financial officer, and other named executive officers for the 2020, 2019 and 2018 fiscal years, as applicable.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)[(1)]	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Gregory L. Christopher Chief Executive Officer & Chairman	2020	1,250,000[(2)]	300,000[(3)]	2,220,750	3,125,000	337,398[(4)]	7,233,148
	2019	1,250,000	—	4,168,400	2,031,250	615,056	8,064,706
	2018	1,117,308	—	3,873,600	1,815,625	543,480	7,350,013
Jeffrey A. Martin Chief Financial Officer & Treasurer	2020	400,125[(2)]	300,000[(3)]	681,030	720,225	85,802[(5)]	2,187,182
	2019	390,462	—	490,770	456,840	202,895	1,540,967
	2018	359,873	—	581,040	421,052	68,553	1,430,518
Steffen Sigloch Chief Manufacturing Officer	2020	344,177[(2)]	—	651,420	516,266	127,321[(6)]	1,639,184
	2019	339,085	—	627,095	326,921	242,766	1,535,867
	2018	328,693	—	807,000	384,571	227,048	1,747,312
Christopher J. Miritello Vice President, General Counsel & Secretary[(7)]	2020	330,000[(2)]	325,000[(3)]	177,660	495,000	34,680[(8)]	1,362,340
Gary Westermeyer President – Refrigeration[(9)]	2020	265,000[(2)]	—	444,150	268,313	15,180[(10)]	992,643
	2019	263,558	60,000	272,650	195,197	17,015	808,420

(1) This column represents the aggregate grant date fair value of awards granted to our NEOs and assuming, for purposes of any awards subject to performance-based vesting criteria, the probable outcome of the performance conditions. For information on the valuation assumptions with respect to these awards, refer to Note 17 - Stock-Based Compensation to the Company's Consolidated Financial Statements filed with its Annual Report on Form 10-K for the fiscal year ended December 26, 2020. The amounts above reflect the Company's aggregate expense for these awards and do not necessarily correspond to the actual value the named executive officers will recognize.

(2) Effective December 21, 2020, Mr. Martin's, Mr. Sigloch's and Mr. Westermeyer's base salaries were increased by 6.3%, 6.1% and 5.7% respectively. Mr. Miritello's base salary was increased by 10.0% effective January 1, 2020. Mr. Christopher did not receive any base salary increase in 2020.

(3) Represents cash bonuses awarded to Messrs. Christopher, Martin and Miritello in recognition of their outstanding leadership and service, particularly as it related to the Company's successful claim in the Deepwater Horizon settlement, which resulted in the Company's collection of an approximately $22.1 million award.

(4) Mr. Christopher's other compensation includes $230,480 in restricted stock dividends, including the Special Dividend (as discussed below) in respect of shares of restricted stock that were unvested at the time the Special Dividend was declared and that vested in 2020. Other compensation also includes $18,315 in premiums on a life insurance policy maintained on his behalf; a $15,803 reimbursement of the income tax liabilities associated with certain perquisites; $9,774 in club memberships; $12,253 in personal tax and estate planning; a $191 executive health physical; $3,238 in travel expenses for Company-sponsored events; and an $11,400 matching contribution to the Company's 401(k) plan. In addition, Mr. Christopher's other compensation includes the incremental cost of $35,944 incurred by the Company in connection with Mr. Christopher's personal use of the Company aircraft, calculated based on the cost of fuel, crew travel, trip-related maintenance and other similar variable costs. Fixed costs, which do not change based on usage, are excluded as the Company's aircraft is used predominantly for business purposes.

(5) Mr. Martin's other compensation includes $73,105 in restricted stock dividends, including the Special Dividend in respect of shares of restricted stock that were unvested at the time the Special Dividend was declared and that vested in 2020. Other compensation also includes a $511 reimbursement of the income tax liabilities associated with certain perquisites; an $11,400 matching contribution to the Company's 401(k) plan; and the incremental cost of $787 incurred by the Company in connection with Mr. Martin's personal use of the Company aircraft (see Note 4 above for an explanation of the calculation of such cost).

(6) Mr. Sigloch's other compensation includes $106,445 in restricted stock dividends, including the Special Dividend in respect of shares of restricted stock that were unvested at the time the Special Dividend was declared and that vested in 2020. Other compensation also includes an $11,400 matching contribution to the Company's 401(k) plan, $5,700 in relocation expenses and a $3,729 reimbursement of the income tax liabilities associated with certain perquisites.

(7) Mr. Miritello was not a NEO in 2018 or 2019. Accordingly, only his compensation for 2020 is listed on this table.
(8) Mr. Miritello's other compensation includes $23,280 in restricted stock dividends, including the Special Dividend in respect of shares of restricted stock that were unvested at the time the Special Dividend was declared and that vested in 2020. Other compensation also includes an $11,400 matching contribution to the Company's 401(k) plan.
(9) Mr. Westermeyer was not a NEO in 2018. Accordingly, only his compensation for 2019 and 2020 is listed on this table.
(10) Mr. Westermeyer's other compensation includes $3,780 in restricted stock dividends, including the Special Dividend in respect of shares of restricted stock that were unvested at the time the Special Dividend was declared and that vested in 2020. Other compensation also includes an $11,400 matching contribution to the Company's 401(k) plan.

Pay Ratio

In 2020, the total compensation of Mr. Christopher, our Chief Executive Officer, was $7,233,148, as reported in the "Summary Compensation Table for 2020." Based on the methodology described below, we determined that the median employee in terms of total 2020 compensation of all of our employees (other than Mr. Christopher) received an estimated $36,810 in total compensation for 2020. Therefore, the estimated ratio of 2020 total compensation of Mr. Christopher to the median employee was 197:1.

In general, we offer employees base salary, company retirement plan contributions, the opportunity to receive incentive awards for performance, and other benefits. In accordance with SEC rules, the median employee compensation provided above reflects company retirement plan contributions, incentive awards for 2020 performance and other benefits, but does not reflect benefits relating to group life or health plans generally available to all salaried employees.

To determine median employee compensation, we took the following steps:

- We identified our employee population as of December 26, 2020, which consisted of approximately 5,007 employees.
- For each employee (other than Mr. Christopher), we determined the sum of his or her base salary for 2020, and incentive awards for 2020. Comparing the sums, we identified an employee whose compensation best reflects the Company employees' median 2020 compensation, taking into account whether their compensation likely would reflect median employee compensation in future years.
- In accordance with SEC rules, we then determined that employee's 2020 total compensation was $36,810 using the approach required by the SEC when calculating our named executive officers' compensation, as reported in the Summary Compensation Table.

2020 GRANTS OF PLAN BASED AWARDS TABLE

The following table sets forth summary information regarding all grants of plan-based awards made to our named executive officers for the fiscal year ended December 26, 2020.

		Estimated Future Payouts Under Non-Equity Incentive Plan Awards[(1)]			Estimated Future Payouts Under Equity Incentive Plan Awards[(2)]			All Other Stock Awards: Number of Shares of Stock or Units	Grant Date Fair Value of Stock Awards
Name	**Grant Date**	**Threshold ($)**	**Target ($)**	**Maximum ($)**	**Threshold (#)**	**Target (#)**	**Maximum (#)**	**(#)[(3)]**	**($)**
Gregory L. Christopher	—	625,000	1,562,500	3,125,000	—	—	—	—	—
	8/7/2020	—	—	—	—	30,000	—	45,000	2,220,750
Jeffrey A. Martin	—	144,045	360,113	720,225	—	—	—	—	—
	8/7/2020	—	—	—	—	8,000	—	15,000	681,030
Steffen Sigloch	—	123,904	309,759	619,519	—	—	—	—	—
	8/7/2020	—	—	—	—	10,000	—	12,000	651,420
Christopher J. Miritello	—	99,900	247,500	495,000	—	—	—	—	—
	8/7/2020	—	—	—	—	2,000	—	4,000	177,660
Gary Westermeyer	—	79,500	198,750	298,125	—	—	—	—	—
	8/7/2020	—	—	—	—	10,000	—	5,000	444,150

(1) Represents annual cash incentive awards that could have been earned based on performance in 2020. These columns show awards that were possible at the threshold, target and maximum levels of performance for each NEO in 2020, determined by multiplying each named executive officer's actual base salary paid during 2020, by the named executive officer's incentive grade level factor, and then by a performance factor of 40% for the threshold level (for 80% achievement of the applicable performance criteria), 100% for the target level (for 100% achievement of the applicable performance criteria), capped at 200% (or, in the case of Mr. Westermeyer, 150%) for the maximum level (for 115% achievement of the applicable performance criteria).

(2) The vesting of shares of performance-based restricted stock granted to Messrs. Christopher, Martin, Sigloch and Miritello in 2020 is conditioned upon the Company's actual performance as compared with certain adjusted EBITDA and average ROIC targets, each weighted on a 50%-50% basis, over a three-year reference period (December 29, 2019 to December 31, 2022). Subject to this performance condition, these shares will vest on July 20, 2023. The vesting of shares of performance-based restricted stock granted to Mr. Westermeyer in 2020 is conditioned upon the operating income performance of various businesses overseen by Mr. Westermeyer as compared to an operating income target during the fiscal year ending December 28, 2024. Subject to this performance condition, these shares will vest on February 28, 2025. For more information on the performance-based criteria, please see the section entitled "Performance Criteria for Performance-Based Restricted Stock."

(3) Shares of time-based restricted stock granted to Messrs. Christopher and Martin will vest 30% on each of July 30, 2023 and July 30, 2024, and 40% on July 30, 2025. Shares of time-based restricted stock granted to Messrs. Sigloch, Miritello and Westermeyer will vest 100% on July 30, 2025. They are subject to earlier vesting in connection with a change in control, or a termination of employment due to death or disability. Mr. Christopher's grants also vest upon a termination of employment without cause or resignation for good reason.

Narrative Disclosure to Summary Compensation Table and Grant of Plan Based Awards Table

Employment Agreement with Mr. Christopher

On March 15, 2018, we entered into an indefinite term employment agreement (the "Employment Agreement") with Mr. Christopher, pursuant to which he will continue to serve as the Company's Chief Executive Officer, reporting directly to the Board. The Employment Agreement replaced Mr. Christopher's prior employment agreement and, in so doing, eliminated the "single-trigger" severance to which Mr. Christopher would have been entitled upon the occurrence of a change in control of the Company.

The Employment Agreement provides that Mr. Christopher will receive a base salary of not less than $1,100,000 per year and will be eligible to receive an annual bonus award. For each fiscal year, Mr. Christopher's target annual bonus will be 125% of his base salary upon achievement of target performance levels, and he will be eligible for a maximum annual bonus of 250% of base salary when performance equals or exceeds 125% of the applicable performance objectives. The actual annual bonus payable to Mr. Christopher will be based upon the actual level of achievement of annual Company and individual performance objectives for the applicable year, as determined by the Committee. In addition, during the term of Mr. Christopher's employment, the Company will maintain a term life insurance policy for him with a face value of at least $5 million, and Mr. Christopher will have the right to name the beneficiary of such term life insurance policy.

In the event that Mr. Christopher's employment is terminated for any reason (other than by the Company for "cause" (as defined in the Employment Agreement)), he will, subject to his execution of a general release in favor of the Company and his continued compliance with certain restrictive covenants (the "Conditions"), be entitled to receive the following: (i) any accrued but unpaid compensation and benefits; (ii) any unpaid annual bonus with respect to the previously completed fiscal year; (iii) subject to achievement of the applicable performance objectives for the fiscal year in which the termination occurs, payment of a prorated annual bonus for such fiscal year; and (iv) continued medical, dental and hospitalization coverage (or payment in lieu of coverage if coverage is not permitted by applicable law or the terms of the applicable plan) for Mr. Christopher, his spouse and covered dependents until the latest of Mr. Christopher's 70th birthday, his spouse's 70th birthday, and the 3rd anniversary of such termination.

Additionally, if Mr. Christopher's employment is terminated by the Company without "cause" or by Mr. Christopher for "good reason" (as defined in the Employment Agreement), and there has not been a "change in control" (as defined in the Employment Agreement) in the past 24 months, Mr. Christopher will, subject to the Conditions, be entitled to (i) continued payment of his base salary for 36 months; and (ii) an amount equal to 3 times Mr. Christopher's target annual bonus in respect of the fiscal year in which such termination occurs (or prior fiscal year, if greater), such amount to be paid in equal installments over the 3-year period following such termination at the same time such amounts would otherwise have been paid had no termination occurred. If Mr. Christopher's employment is terminated by the Company without "cause" or by Mr. Christopher for "good reason" within 24 months of a "change in control," Mr. Christopher will, subject to the Conditions, be entitled to (i) payment of his base salary for 36 months in a lump sum on the first regularly-scheduled payroll date following the 60th day following such termination; and (ii) an amount equal to 3 times Mr. Christopher's target annual bonus in respect of the fiscal year in which such termination occurs (or prior fiscal year, if greater), paid in a lump sum on the first regularly-scheduled payroll date following the 60th day following such termination. The Employment Agreement does not provide for any "single-trigger" severance payments or benefits.

The Employment Agreement does not provide any gross-up or tax assistance on the severance benefits. Instead, the Employment Agreement contains a "modified cutback" provision, which would act to reduce the benefits payable to Mr. Christopher to the extent necessary to avoid a "golden parachute excise tax," but only if such reduction would result in Mr. Christopher retaining a larger after-tax amount.

Mr. Christopher is subject to certain restrictive covenants during the term of his employment and thereafter, including customary non-compete restrictions that apply for one year post-termination and customary non-solicitation restrictions with respect to current and prospective employees that apply for one year post-termination. In addition, during the term of his employment and for one year thereafter, Mr. Christopher is prohibited from contacting any customer or prospective customer of the Company, or any representative of the same, for the purpose of providing any service or product competitive with any service or product sold or provided by the Company.

Change in Control Agreements with Messrs. Martin, Sigloch and Miritello

On July 26, 2016, the Company entered into change in control agreements with certain key members of the management team, including Messrs. Martin and Sigloch. The Company entered into a substantially similar change in control agreement with Mr. Miritello on January 3, 2017. Pursuant to those agreements, if, upon or within two years following a "change in control", the executive's employment is terminated by the Company without "cause" (other than on account of death or Disability), or by the executive for "good reason", subject to execution of a general release of claims, the executive will be entitled to: (i) an amount equal to two times the executive's base salary (as in effect immediately prior to the change in control or, if greater, the date of such termination); and (ii) an amount equal to two times the average annual bonus paid to the executive (including, for this purpose only, any amounts deferred) in respect of the three calendar years immediately preceding the calendar year in which the change in control occurs (or the three calendar years immediately preceding the calendar year of such termination, if greater). The terms "change in control" and "cause" are defined in the 2014 Incentive Plan and the term "good reason" is defined in each executive's change in control agreement. The agreements also provide that for two years following termination under the circumstances described above, each of Messrs. Martin, Sigloch and Miritello will receive (subject to the executive's election of COBRA continuation coverage under the Company's group health plan) continued coverage under the Company's group health plan at the Company's cost (or at the direction of the Company, reimbursement for COBRA premiums) for two years following such termination. We are not party to an employment or change in control agreement with Mr. Westermeyer.

2019 and 2014 Incentive Plans

In 2020, we maintained the 2019 Incentive Plan and 2014 Incentive Plan (together, the "Plans"), which were approved by our stockholders at our Annual Meetings held in May 2019 and May 2014 respectively. The Committee administers the Plans and is authorized to, among other things, designate participants, grant awards, including cash-based awards that historically were intended to qualify as performance-based compensation for purposes of Section 162(m) of the Internal Revenue Code, determine the number of shares of Common Stock to be covered by awards and determine the terms and conditions of any awards, and construe and interpret the Plans and award agreements issued pursuant thereto. The 2014 Incentive Plan reserved 1,500,000 shares of our Common Stock for issuance, subject to adjustment in the event of any change in the outstanding Common Stock or the capital structure of the Company or any other similar corporate transaction or event. The 2019 Plan reserved 2,000,000 shares of our Common Stock for issuance, subject to adjustments under similar circumstances.

OUTSTANDING EQUITY AWARDS AT FISCAL 2020 YEAR-END

The following table sets forth summary information regarding the outstanding equity awards held by our named executive officers as of December 26, 2020.

		Option Awards[1]				Stock Awards			
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)[2][3]	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units, or Other Rights That Have Not Vested ($)
Gregory L. Christopher[4]	07/28/2016	—	—	—	—	24,000	837,840	10,000	349,100
	07/27/2017	—	—	—	—	42,000	1,466,220	8,000	279,280
	07/26/2018	—	—	—	—	70,000	2,443,700	50,000	1,745,500
	07/25/2019	—	—	—	—	70,000	2,443,700	66,000	2,304,060
	08/07/2020	—	—	—	—	45,000	1,570,950	30,000	1,047,300
Jeffrey A. Martin	07/24/2015[5]	—	—	—	—	7,000	244,370	—	—
	07/28/2016[6]	—	—	—	—	4,000	139,640	8,000	279,280
	07/27/2017[7]	—	—	—	—	7,000	244,370	7,000	244,370
	07/26/2018[8]	—	—	—	—	12,000	418,920	6,000	209,460
	08/08/2019[10]	—	—	—	—	12,000	418,920	6,000	209,460
	08/07/2020[12]	—	—	—	—	15,000	523,650	8,000	279,280
Steffen Sigloch	07/24/2015[5]	—	—	—	—	9,000	314,190	—	—
	07/28/2016[6]	—	—	—	—	6,000	209,460	12,000	418,920
	07/27/2017[7]	—	—	—	—	10,500	366,555	10,000	349,100
	07/26/2018[8]	—	—	—	—	15,000	523,650	10,000	349,100
	08/08/2019[10]	—	—	—	—	13,000	453,830	10,000	349,100
	08/07/2020[13]	—	—	—	—	12,000	418,920	10,000	349,100
Christopher J. Miritello	09/14/2015	14,666	—	24.58	09/14/2025	—	—	—	—
	07/28/2016[6]	—	—	—	—	800	27,928	2,000	69,820
	07/27/2017[7]	—	—	—	—	1,400	48,874	2,000	69,820
	07/26/2018[9]	—	—	—	—	4,500	157,095	—	—
	08/08/2019[11]	—	—	—	—	2,500	87,275	2,500	87,275
	08/07/2020[13]	—	—	—	—	4,000	139,640	2,000	69,820
Gary Westermeyer	07/25/2014	6,111	—	23.56	07/25/2024	—	—	—	—
	07/24/2015	6,111	—	26.52	07/24/2025	—	—	—	—
	11/22/2016[6]	—	—	—	—	2,800	97,748	—	—
	07/27/2017[7]	—	—	—	—	2,100	73,311	3,000	104,730
	07/26/2018[8]	—	—	—	—	4,000	139,640	3,000	104,730
	08/08/2019[11]	—	—	—	—	5,000	174,550	5,000	174,550
	08/07/2020[13]					5,000	174,550	10,000	349,100

(1) The options granted to Mr. Miritello in 2015, and those granted to Mr. Westermeyer in 2014 and 2015 are fully vested. All outstanding vested options are exercisable until they expire on the tenth anniversary of the grant date, subject to earlier cancellation. All outstanding options were adjusted in March 2017 due to payment of the Special Dividend. The amount of outstanding options and the exercise prices shown in the above table are post-adjustment.

(2) The vesting of shares of performance-based restricted stock granted to all NEOs during 2016 through 2019 is conditioned upon the Company's achievement of a 3.5% compounded annual growth rate in total stockholder return or diluted earnings per share over a defined reference period, and subject to earlier vesting in connection with a change in control or a termination of employment due to death, disability or a qualifying retirement (subject, in the case of a qualifying retirement, to achievement of the performance criteria, measured through the last day of the fiscal year preceding the year in which such qualifying retirement occurs). For the performance-based restricted stock granted to these executives on July 28, 2016, the vesting date is February 28, 2022, and the reference period is December 26, 2015 to the last day of the 2021 fiscal year. For the performance-based restricted sock granted to these executives on July 27, 2017, the vesting date is February 28, 2023, and the reference period is December 31, 2016 to the last day of the 2022 fiscal year. For the performance-based restricted stock granted to these executives on July 26, 2018, the vesting date is February 28, 2023, and the reference period is December 30, 2017 to the last day of the 2022 fiscal year. For the performance-based restricted stock granted to these executives on August 8, 2019 (or in the case of Mr. Christopher, July 25, 2019), the vesting date is February 28, 2024, and the reference period is December 30, 2018 to the last day of the 2023 fiscal year.

(3) The vesting of shares of performance-based restricted stock granted to Messrs. Christopher, Martin, Sigloch and Miritello in 2020 is conditioned upon the Company's actual performance as compared with certain adjusted EBITDA and average ROIC targets, each weighted on a 50%-50% basis, over a three-year reference period (December 29, 2019 to December 31, 2022). Subject to this performance condition, these shares will vest on July 20, 2023. The vesting of shares of performance-based restricted stock granted to Mr. Westermeyer in 2020 is conditioned upon the operating income performance of various businesses overseen by Mr. Westermeyer as compared to an operating income target during the fiscal year ending December 28, 2024. Subject to this performance condition, these shares will vest on February 28, 2025. For more information on the performance-based criteria, please see the section entitled "Performance Criteria for Performance-Based Restricted Stock."

(4) Shares of time-based restricted stock granted to Mr. Christopher will vest 30% on each of the third and fourth anniversaries of the vesting commencement date (July 30 of the year of grant), and 40% on the fifth anniversary of the vesting commencement date, in each case, subject to earlier vesting in connection with a change in control or a termination of employment due to death, disability, by us without cause or by Mr. Christopher for good reason.

(5) Shares of time-based restricted stock will vest 30% on each of July 30, 2018, and July 30, 2019, and 40% on July 30, 2020, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(6) Shares of time-based restricted stock will vest 30% on each of July 30, 2019, and July 30, 2020, and 40% on July 30, 2023, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(7) Shares of time-based restricted stock will vest 30% on each of July 30, 2020, and July 30, 2021, and 40% on July 30, 2022, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(8) Shares of time-based restricted stock will vest 30% on each of July 30, 2021, and July 30, 2022, and 40% on July 30, 2023, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(9) Shares of time-based restricted stock will vest 100% on July 30, 2023, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(10) Shares of time-based restricted stock will vest 30% on each of July 30, 2022, and July 30, 2023, and 40% on July 30, 2024, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(11) Shares of time-based restricted stock will vest 100% on July 30, 2024, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(12) Shares of time-based restricted stock will vest 30% on each of July 30, 2023, and July 30, 2024, and 40% on July 30, 2025, subject to earlier vesting in connection with a change in control or a termination of employment due to death or disability.

(13) Shares of time-based restricted stock will vest 100% on July 30, 2025, subject to earlier vesting in connection with a termination of employment due to death or disability. Shares of time-based restricted stock granted to Messrs. Sigloch and Miritello are also subject to earlier vesting in connection with a change in control.

2020 STOCK VESTED AND OPTIONS EXERCISED

The following table sets forth the value realized by each of our named executive officers as a result of the vesting of restricted stock and exercise of stock options during the fiscal year ended December 26, 2020.

	Option Awards		Stock Awards	
Name	**Number of Shares Acquired on Exercise (#)**	**Value Realized on Exercise ($)(1)**	**Number of Shares Acquired on Vesting (#)**	**Value Realized on Vesting ($)(2)**
Gregory L. Christopher	—	—	61,600	1,739,584
Jeffrey A. Martin	5,533	149,116	16,600	520,444
Steffen Sigloch	—	—	24,400	755,476
Christopher J. Miritello	—	—	5,200	149,688
Gary Westermeyer	—	—	1,500	42,360

(1) The amounts shown in the Value Realized on Exercise Column equals the number of options exercised multiplied by the market value of the Company's stock on the exercise date less the option exercise price.

(2) The amounts shown in the Value Realized on Vesting Column equal the number of shares vested multiplied by the market value of the Company's stock on the vesting date.

POTENTIAL PAYMENTS UPON TERMINATION OF EMPLOYMENT OR CHANGE IN CONTROL AS OF THE END OF 2020

Pursuant to the employment agreement with our Chief Executive Officer, and the equity award and change in control agreements with our other named executive officers (other than Mr. Westermeyer), upon a change in control or certain terminations of employment, our named executive officers are entitled to payments of compensation and benefits and/or accelerated vesting of equity awards, in each case as described below. The table below reflects the amount of compensation and benefits payable to each named executive officer in the event of (i) a change in control, (ii) an involuntary termination without cause or a resignation for good reason (specifically, for Messrs. Martin, Sigloch and Miritello, the occurrence of such a termination upon or within two years following a change in control), and (iii) a termination by reason of death or disability. The named executive officers are not entitled to any payments in connection with a termination for cause.

The amounts shown assume the applicable triggering event occurred on December 26, 2020, and are estimates of the amounts that would be paid to the named executive officers upon the occurrence of such triggering event.

Name	Triggering Event	Salary & Bonus ($)	Benefits ($)	Accelerated Vesting of Equity Awards ($)	Total ($)
Gregory L. Christopher	*Termination Without Cause or for Good Reason*	11,562,500(1)	296,257(3)	9,417,627(4)	21,276,384
	Termination Due to Death or Disability	3,125,000(2)	296,257(3)	15,142,867(4)	18,564,124
	Change in Control	—	—	15,142,867(4)	15,142,867
	Termination Without Good Reason	—	296,257(3)	—	296,257
Jeffrey A. Martin	*Termination Without Cause or for Good Reason following a Change in Control*	1,915,411(5)	36,544(5)	3,477,712(4)	5,429,667
	Termination Due to Death or Disability	—	—	3,477,712(4)	3,477,712
	Change in Control	—	—	3,477,712)(4)	3,477,712
Steffen Sigloch	*Termination Without Cause or for Good Reason following a Change in Control*	1,548,505(5)	36,544(5)	4,475,550(4)	6,060,599
	Termination Due to Death or Disability	—	—	4,475,550(4)	4,475,550
	Change in Control	—	—	4,475,550(4)	4,475,550
Christopher J. Miritello	*Termination Without Cause or for Good Reason following a Change in Control*	1,310,657(5)	15,945(5)	801,364(4)	2,127,966
	Termination Due to Death or Disability			801,364(4)	801,364
	Change in Control			801,364(4)	801,364
Gary Westermeyer(6)	*Termination Without Cause or for Good Reason following a Change in Control*	—	—	1,537,429(4)	1,537,429
	Termination Due to Death or Disability	—	—	1,537,429(4)	1,537,429
	Change in Control	—	—	1,537,429(4)	1,537,429

(1) Includes the value of continuation of base salary and annual incentive compensation (determined based upon Mr. Christopher's 2020 target bonus) for three years post-termination. Also includes the value of a pro-rata bonus for the year of termination, determined based on actual performance, which is payable upon a termination for any reason (other than by the Company for cause). The pro-rata bonus amount listed represents Mr. Christopher's 2020 bonus paid pursuant to our 2020 annual incentive program. If Mr. Christopher is terminated without cause or resigns for good reason during the 24-month period following a change in control, the amounts will be paid in a lump sum within 60 days following termination.

(2) Includes the value of a pro-rata bonus for the year of termination. The pro-rata bonus amount listed represents Mr. Christopher's 2020 bonus paid pursuant to our 2020 annual incentive program.

(3) Includes the value of continued participation in the Company's benefit plans following termination of employment until Mr. Christopher's spouse's 70th birthday, which Mr. Christopher is entitled to following a termination for any reason (other than by the Company for cause).

(4) Includes the value of accelerated vesting of unvested shares of restricted stock as of December 26, 2020, based on a per share value of $34.91. Unvested shares of restricted stock granted to NEOs will vest automatically in connection with a termination due to death or disability or a change in control. Mr. Christopher is also entitled to accelerated vesting of certain of his awards upon an involuntary termination without cause or a resignation for good reason. Payments to which named executive officers are entitled upon the accelerated vesting of restricted stock included payments associated with declared dividends and interest.

(5) Includes the value of: (i) two times the executive's base salary as in effect on December 26, 2020; (ii) two times the average annual bonus actually paid to the executive for the three calendar years preceding December 26, 2020; and (iii) the value of continued participation in Company's group health plan for a period of two years. All amounts are payable on an involuntary termination without cause or upon a resignation by the executive for good reason that occurs upon or within two years following a change in control. Messrs. Martin, Sigloch and Miritello are not entitled to any amounts in connection with such an involuntary termination that occurs outside of this two-year, post-change in control window.

(6) Mr. Westermeyer is not party to a change in control agreement or an employment agreement.

PRINCIPAL STOCKHOLDERS

As of March 19, 2021, the following parties were known by the Company to be the “beneficial owner” of more than five percent of the Common Stock:

Name and Address of Beneficial Owner	Shares Beneficially Owned	Percent of Class
BlackRock, Inc. 55 East 52nd Street New York, NY 10055	8,682,635(1)	15.2%(2)
GAMCO Investors, Inc. One Corporate Center Rye, NY 10580	5,777,728(3)	10.1%(2)
The Vanguard Group, Inc. 100 Vanguard Blvd. Malvern, PA 19355	5,747,985(4)	10.0%(2)
Wells Fargo & Company 420 Montgomery Street San Francisco, CA 94163	4,099,287(5)	7.2%(2)

(1) This information is based on a Schedule 13G/A filed by BlackRock, Inc. with the Securities and Exchange Commission (“SEC”) on January 26, 2021. BlackRock filed this Schedule 13G/A on its own behalf and on behalf of certain of its subsidiaries. The Schedule 13G/A reported that BlackRock has sole voting and dispositive power with respect to 8,580,344 and 8,682,635, respectively, of the shares shown. The Schedule 13G/A also reported that BlackRock Fund Advisors owned 5% or greater of the security class being reported on the Schedule 13G/A.

(2) The percent of class shown was based on the shares of Common Stock reported on the Schedule 13G/A and the total number of shares outstanding as of December 26, 2020. The difference in the total number of shares outstanding on December 26, 2020 and March 19, 2021 does not materially affect the percentage of ownership of the class.

(3) This information is based on a Schedule 13D/A filed by GAMCO Investors Inc. (“GBL”) and certain of its affiliates (collectively, the “Gabelli Reporters”) on August 25, 2020. The Schedule 13D/A reported that GAMCO Asset Management, Inc. (“GAMCO”) beneficially owns 3,440,528 of the shares reported; Gabelli Funds, LLC (“Gabelli Funds”) beneficially owns 2,203,500 of the shares reported; Gabelli & Company Investment Advisers, Inc. beneficially owns 3,000 of the shares reported; GGCP, Inc. beneficially owns 22,000 of shares reported; Mario J. Gabelli (“Gabelli”) beneficially owns 500 of the shares reported; Gabelli Foundation, Inc. beneficially owns 7,000 of the shares reported; MJG Associates, Inc. beneficially owns 97,200 of the shares reported; and Associated Capital Group, Inc. beneficially owns 4,000 of the shares reported. In addition, the Schedule 13D/A reported that each Gabelli Reporter (and certain executives, directors and other related persons as disclosed on the Schedule 13D/A) has the sole power to vote or direct the vote and sole power to dispose or to direct the disposition of the Common Stock reported for it, either for its own benefit or for the benefit of its investment clients or its partners, as the case may be, except that (i) GAMCO does not have authority to vote 256,800 of the reported shares, (ii) Gabelli Funds, a wholly-owned subsidiary of GBL, has sole dispositive and voting power with respect to the shares of the Company held by certain funds (the “Funds”) for which it provides advisory services, so long as the aggregate voting interest of all joint filers does not exceed 25% of their total voting interest in the Company and, in that event, the Proxy Voting Committee of each Fund shall respectively vote that Fund’s shares, (iii) at any time, the Proxy Voting Committee of each such Fund may take and exercise in its sole discretion the entire voting power with respect to the shares held by such fund under special circumstances such as regulatory considerations, and (iv) the power of Gabelli, Associated, GBL, and GGCP is indirect with respect to Common Stock beneficially owned directly by other Gabelli Reporters.

(4) This information is based on a Schedule 13G/A filed by The Vanguard Group, Inc. (“VGI”) with the SEC on March 10, 2021. According to the Schedule 13G/A, VGI has sole dispositive power with respect to 5,645,950 of the shares shown. VGI also has shared voting power with respect to 56,923 of the shares shown, and shared dispositive power with respect to 102,035 of the shares shown.

(5) This information is based on a Schedule 13G filing by Wells Fargo & Company on February 12, 2021. Wells Fargo filed this Schedule 13G on its own behalf and on behalf of certain of its subsidiaries. The Schedule 13G reported that Wells Fargo has sole voting and dispositive power with respect to 137,841 of the shares shown. The Schedule 13G also reported that Wells Fargo has shared voting and shared dispositive power with respect to 722,965 and 3,961,446, respectively, of the shares shown. Further, the Schedule 13G reported that Wells Capital Management Incorporated owned 5% or greater of the security class being reported on the Schedule 13G.

BENEFICIAL OWNERSHIP OF COMMON STOCK BY INSIDERS

The following table sets forth, as of the close of business on March 19, 2021, information about the 1,674,471 shares of Common Stock (calculated based on 57,120,304 shares outstanding) beneficially owned by each of the Company's current directors, nominees for director, executive officers and named executive officers. The "named executive officers" are those individuals set forth in the "Summary Compensation Table for 2020" included herein. Unless otherwise indicated, all directors, nominees for director, executive officers and named executive officers have sole voting and investment power with respect to the shares of Common Stock reported. The table and the accompanying footnotes set forth the foregoing persons' current positions with the Company, principal occupations and employment over the preceding five years, age and directorships held in certain other publicly-owned companies.

Principal Occupation, Employment, etc.	Common Stock Beneficially Owned as of March 19, 2021	Percent of Class
Chairman and Chief Executive Officer		
Gregory L. Christopher(1)	689,965	1.2%
Independent Directors		
Elizabeth Donovan(2)	14,000	*
Gennaro J. Fulvio(3)	64,754	*
Gary S. Gladstein(4)	160,296	*
Scott J. Goldman(5)	55,544	*
John B. Hansen(6)	84,885	*
Terry Hermanson(7)	49,126	*
Charles P. Herzog, Jr.(8)	31,048	*
Section 16 Officers		
Devin Malone	37,083	*
President - Streamline since January 1, 2019; age 39(9)		
Jeffrey A. Martin	166,246	*
Chief Financial Officer and Treasurer since February 14, 2013; age 54(10)		
Mark Millerchip	—	—
Executive Director – European Operations since May 28, 2010; age 54(11)		
Christopher J. Miritello	41,340	*
Vice President, General Counsel and Secretary since January 1, 2017; age 38(12)		
Christopher A. Mitchell	27,000	*
President – Brass & Aluminum since January 1, 2020; age 47(13)		
Steffen Sigloch	159,846	*
Chief Manufacturing Officer since May 4, 2017; age 52(14)		
Anthony J. Steinriede	27,725	*
Vice President – Corporate Controller since April 23, 2015; age 44(15)		
Gary Westermeyer	65,613	*
President – Refrigeration of the Company since May 4, 2017; age 56(16)		
SECTION 16 OFFICERS AND DIRECTORS AS A GROUP	**1,674,471**	**2.9%****

* Less than 1%

** Includes 226,830 shares of Common Stock which are subject to currently exercisable stock options and 767,400 shares of non-vested restricted stock held by executive officers and directors of the Company.

(1) The number of shares of Common Stock beneficially owned by Mr. Christopher includes (i) 415,000 shares of non-vested restricted stock, (ii) 123,500 shares owned by a trust in which his wife is beneficiary, (iii) 83,500 shares owned by a trust in which he is beneficiary and (iv) 6,800 shares of Common Stock which are owned by Mr. Christopher's children.

(2) The number of shares of Common Stock beneficially owned by Ms. Donovan includes (i) 10,000 shares of Common Stock which are subject to currently exercisable stock options, (ii) 2,000 shares of Common stock which are owned by Ms. Donovan's spouse and (iii) 2,000 shares of non-vested restricted stock.

(3) The number of shares of Common Stock beneficially owned by Mr. Fulvio includes (i) 35,555 shares of Common Stock which are subject to currently exercisable stock options, (ii) 27,199 shares of Common Stock which are owned by Mr. Fulvio's spouse and (iii) 2,000 shares of non-vested restricted stock.

On June 27, 2017, pursuant to an Offer of Settlement, and without admitting or denying the findings contained therein, the PCAOB issued an Order Instituting Disciplinary Proceedings, Making Findings and Imposing Sanctions against Fulvio & Associates LLP (the "Firm"), Mr. Fulvio and certain other named affiliates of the Firm (collectively, "Respondents") for Respondents' having allegedly "violated PCAOB rules and standards in connection with their audit and examination engagement for a broker-dealer client, for the fiscal year ending June 30, 2014." See PCAOB Release No. 105-2017-029 dated June 27, 2017. The Firm is currently registered with the PCAOB, and Mr. Fulvio may participate in audits pursuant to PCAOB standards.

(4) The number of shares of Common Stock beneficially owned by Mr. Gladstein includes (i) 45,333 shares of Common Stock which are subject to currently exercisable stock options and (ii) 2,000 shares of non-vested restricted stock.

(5) The number of shares of Common Stock beneficially owned by Mr. Goldman includes (i) 40,444 shares of Common Stock which are subject to currently exercisable stock options and (ii) 2,000 shares of non-vested restricted stock.

(6) The number of shares of Common Stock beneficially owned by Mr. Hansen includes (i) 25,778 shares of Common Stock which are subject to currently exercisable stock options, (ii) 13,000 shares of Common Stock owned by a trust where his wife and children serve as beneficiaries and (iii) 2,000 shares of non-vested restricted stock.

(7) The number of shares of Common Stock beneficially owned by Mr. Hermanson includes (i) 16,000 shares of Common Stock which are subject to currently exercisable stock options and (ii) 2,000 shares of non-vested restricted stock.

(8) The number of shares of Common Stock beneficially owned by Mr. Herzog includes (i) 14,000 shares of Common Stock which are subject to currently exercisable stock options, (ii) 9,000 shares of Common Stock owned by a trust of which Mr. Herzog's children are beneficiaries; and (iii) 2,000 shares of non-vested restricted stock.

(9) Mr. Malone served (i) as Director of Marketing – Copper Tube and Line Sets from January 1, 2013 until February 3, 2015, (ii) as General Manager of Howell Metal Company from February 3, 2015 until July 4, 2017, and (iii) as Vice President-General Manager of Streamline from July 4, 2017 until January 1, 2019. The number of shares of Common Stock beneficially owned by Mr. Malone includes (i) 5,499 shares of Common Stock which are subject to currently exercisable stock options, and (ii) 29,300 shares of non-vested restricted stock.

(10) Mr. Martin served (i) as Interim Chief Financial Officer of the Company from October 26, 2012 until February 14, 2013, (ii) as Vice President - Corporate Development of the Company from January 11, 2011 until October 26, 2012, (iii) as Vice President-Finance & Corporate Development from August 1, 2008 until January 11, 2011, and (iv) as Vice President-Operations, Standard Products Division prior to August 1, 2008. The number of shares of Common Stock beneficially owned by Mr. Martin includes (i) 74,246 shares of Common Stock owned jointly between Mr. Martin and his wife and (ii) 92,000 shares of non-vested restricted stock.

(11) Mr. Millerchip served as Managing Director – Mueller Primaflow Limited prior to May 28, 2010.

(12) Mr. Miritello served as Deputy General Counsel of the Company from September 15, 2015 to December 31, 2016. Prior to joining the Company, he was associated with the New York office of Willkie Farr & Gallagher LLP. The number of shares of Common Stock owned by Mr. Miritello includes (i) 14,666 shares of Common Stock which are subject to currently exercisable stock options and (ii) 21,700 shares of non-vested restricted stock.

(13) Mr. Mitchell served (i) as Vice President-General Manager of Great Lakes Copper, Inc. (n/k/a Great Lakes Copper Ltd.) from July 1, 2013 until January 1, 2019 and (ii) as President – Canadian Operations from January 1, 2019 until October 22, 2019. The number of shares of Common Stock beneficially owned by Mr. Mitchell includes 27,000 shares of non-vested restricted stock.

(14) Mr. Sigloch served as (i) President – Piping Systems North America of the Company from May 5, 2016 until May 4, 2017; (ii) President – Extruded Products of the Company from January 1, 2013 until May 5, 2016, (iii) Corporate Vice President – Engineering and Manufacturing of the Company from January 1, 2012 until January 1, 2013, and (iv) Vice President – Engineering and Manufacturing of Mueller Europe, Ltd, from July 1, 2011 until January 1, 2012. Prior to joining the Company on July 1, 2011, Mr. Sigloch served as Chief Executive Officer of Wieland Copper Products, LLC. The number of shares of Common Stock beneficially owned by Mr. Sigloch includes 117,500 shares of non-vested restricted stock.

(15) Mr. Steinriede served as (i) Director of Finance at the Company from April 1, 2014 until April 23, 2015, (ii) Assistant Corporate Controller from September 1, 2010 until April 1, 2014, and (iii) Corporate Accounting Manager prior to September 1, 2010. The number of shares of Common Stock beneficially owned by Mr. Steinriede includes (i) 9,777 shares of Common Stock which are subject to currently exercisable stock options and (ii) 11,000 shares of non-vested restricted stock.

(16) Mr. Westermeyer previously served as General Manager of Westermeyer Industries, Inc., a company he established in 2001, and which was acquired by the Company on August 16, 2012. In 2017, he also assumed duties as General Manager of Turbotec Products, Inc., another wholly-owned subsidiary acquired by the Company in 2015. The number of shares of Common Stock beneficially owned by Mr. Westermeyer includes (i) 9,778 shares of Common Stock which are subject to currently exercisable stock options, (ii) 5,785 shares of Common Stock which are beneficially owned by Mr. Westermeyer's spouse, and (iii) 39,900 shares of non-vested restricted stock.

DELINQUENT SECTION 16(a) REPORTS

Based solely upon its review of Forms 3 and 4 received by it, and written representations from certain reporting persons about whether any Form 5 filings were required, the Company believes that during 2020, all filing requirements applicable to its officers, directors and ten percent stockholders were complied with, except as follows:

- On May 18, 2020, Mr. Goldman made a gift of 100 shares of Common Stock requiring a Form 5 report, but a Form 5 was not timely filed (a Form 5 reporting the transaction was filed on February 24, 2021).

INFORMATION ABOUT VOTING AND THE ANNUAL MEETING

We are providing you with these proxy materials in connection with the solicitation by the Board of Directors of Mueller Industries, Inc. (the "Company") of proxies for our 2021 Annual Meeting of Stockholders (the "Annual Meeting"), which will be held at 10:00 A.M., Central time on Thursday, May 6, 2021, at our corporate headquarters located at 150 Schilling Boulevard, Collierville, Tennessee 38017, in the second floor conference room.

We intend to hold our Annual Meeting in person. However, we are actively monitoring the coronavirus (COVID-19); we are sensitive to the public health and travel concerns our shareholders may have and the protocols that federal, state, and local governments may impose. In the event it is not possible or advisable to hold our Annual Meeting in person, we will announce alternative arrangements for the meeting as promptly as practicable, which may include holding the meeting solely by means of remote communication. Please monitor our Annual Meeting website at www.muellerindustries.com for updated information. If you are planning to attend our meeting, please check the website one week prior to the meeting date. As always, we encourage you to vote your shares prior to the Annual Meeting.

This Proxy Statement, together with the Company's Annual Report for the fiscal year ended December 26, 2020, is first being mailed to stockholders on or about April 1, 2021. Pursuant to rules adopted by the Securities and Exchange Commission, the Company is providing access to its proxy materials over the Internet at http://www.proxyvote.com.

Record Date: **March 19, 2021**

When a proxy card is returned properly signed, the shares represented thereby will be voted in accordance with the stockholder's directions appearing on the card. If the proxy card is signed and returned without directions, the shares will be voted for the nominees named herein and in accordance with the recommendations of the Company's Board of Directors as set forth herein. A stockholder giving a proxy may revoke it at any time before it is voted at the Annual Meeting by giving written notice to the secretary of the Annual Meeting or by casting a ballot at the Annual Meeting. Votes cast by proxy or in person at the Annual Meeting will be tabulated by election inspectors appointed for the Annual Meeting. The election inspectors will also determine whether a quorum is present. The holders of a majority of the shares of common stock, $.01 par value per share ("Common Stock"), outstanding and entitled to vote who are present either in person or represented by proxy will constitute a quorum for the Annual Meeting.

The cost of soliciting proxies will be borne by the Company. In addition to solicitation by mail, directors, officers and employees of the Company may solicit proxies by telephone or otherwise. The Company will reimburse brokers or other persons holding stock in their names or in the names of their nominees for their charges and expenses in forwarding proxies and proxy material to the beneficial owners of such stock.

VOTING SECURITIES

At the close of business on the Record Date, there were 57,120,304 shares of Common Stock outstanding, which are the only shares entitled to be voted at the Annual Meeting. Each share of Common Stock is entitled to one vote. Only stockholders of record at the close of business on the Record Date will be entitled to notice of, and to vote at, the Annual Meeting. The Bylaws do not provide for cumulative voting for the election of directors.

On March 9, 2017, the Company paid a special dividend (the "Special Dividend") consisting of $3.00 in cash and $5.00 in principal amount of the Company's 6% Subordinated Debentures due 2027 (the "Debentures", which have been called for full redemption on April 15, 2021) for each share of Common Stock outstanding as of the close of business on February 28, 2017. In connection with the Special Dividend, in accordance with the Company's outstanding stock option plans and agreements, the Company adjusted the shares subject to and the per share exercise price with respect to outstanding options. This adjustment resulted in an increase in the number of shares subject to each outstanding option and an adjustment to the option purchase price designed to maintain the option holders' intrinsic value following issuance of the Special Dividend. References in this Proxy Statement to beneficial stock ownership or outstanding options for periods following March 9, 2017 reflect the equitable adjustment made to options outstanding on February 28, 2017.

STOCKHOLDER NOMINATIONS FOR BOARD MEMBERSHIP AND OTHER PROPOSALS FOR THE 2022 ANNUAL MEETING

It is anticipated that the next Annual Meeting after the one scheduled for May 6, 2021 will be held on or about May 5, 2022. The Company's Bylaws require that, for nominations of directors or other business to be properly brought before an Annual Meeting, written notice of such nomination or proposal for other business must be furnished to the Company. Such notice must contain certain information concerning the nominating or proposing stockholder and information concerning the nominee and must be furnished by the stockholder (who must be entitled to vote at the meeting) to the Secretary of the Company, in the case of the Annual Meeting to be held in 2022, no earlier than December 6, 2021 and no later than January 5, 2022. A copy of the applicable provisions of the Bylaws may be obtained by any stockholder, without charge, upon written request to the Secretary of the Company at the address set forth below.

In addition to the foregoing, and in accordance with the rules of the SEC, in order for a stockholder proposal, relating to a proper subject, to be considered for inclusion in the Company's proxy statement and form of proxy relating to the Annual Meeting to be held in 2022, such proposal must be received by the Secretary of the Company by December 2, 2021 in the form required under and subject to the other requirements of the applicable rules of the SEC. If the date of the Annual Meeting to be held in 2022 is changed to a date more than 30 days earlier or later than May 5, 2022, the Company will inform the stockholders in a timely fashion of such change and the date by which proposals of stockholders must be received for inclusion in the proxy materials. Any such proposal should be submitted by certified mail, return receipt requested, or other means, including electronic means, that allow the stockholder to prove the date of delivery.

ADDITIONAL INFORMATION

If any matter not described herein should properly come before the Annual Meeting, the persons named in the proxy will vote the shares represented by them as they deem appropriate. At the date of this Proxy Statement, the Company knew of no other matters which might be presented for stockholder action at the Annual Meeting.

Consolidated financial statements for the Company are included in the Annual Report to Stockholders for the year ended December 26, 2020 that accompanies this Proxy Statement. These financial statements are also on file with the SEC, 100 F Street, N.E., Washington, D.C. 20549 and with the NYSE. The Company's SEC filings are also available at the Company's website at www.muellerindustries.com or the SEC's website at www.sec.gov.

A COPY OF THE COMPANY'S ANNUAL REPORT ON FORM 10-K AS FILED FOR THE YEAR ENDED DECEMBER 26, 2020 (EXCLUDING EXHIBITS) OR, AS NOTED HEREIN, ANY OF THE COMPANY'S BOARD COMMITTEE CHARTERS, CORPORATE GOVERNANCE GUIDELINES, OR CODE OF ETHICS WILL BE FURNISHED, WITHOUT CHARGE, BY WRITING TO CHRISTOPHER J. MIRITELLO, CORPORATE SECRETARY, MUELLER INDUSTRIES, INC., AT THE COMPANY'S PRINCIPAL PLACE OF BUSINESS (150 SCHILLING BOULEVARD, SUITE 100, COLLIERVILLE, TENNESSEE 38017). UPON RECEIPT BY WRITING TO THE FOREGOING ADDRESS, THE COMPANY WILL ALSO FURNISH ANY OTHER EXHIBIT OF THE ANNUAL REPORT ON FORM 10-K UPON ADVANCE PAYMENT OF THE REASONABLE OUT-OF-POCKET EXPENSES OF THE COMPANY RELATED TO THE COMPANY'S FURNISHING OF SUCH EXHIBIT.

NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE 2021 ANNUAL MEETING TO BE HELD ON MAY 6, 2021

The Proxy Statement and Annual Report are available at: http://www.proxyvote.com

You will need the Control Number included on your proxy card. For the date, time, and location of the Annual General Meeting, please refer to "Solicitation of Proxies." For information on how to attend and vote in person at the Annual General Meeting, an identification of the matters to be voted upon at the Annual General Meeting and the Board's recommendations regarding those matters, please refer to "Solicitation of Proxies," "Election of Directors," "Appointment of Independent Registered Accounting Firm", and "Approval of the Compensation of the Company's Named Executive Officers."

HOUSEHOLDING OF ANNUAL MEETING MATERIALS

The SEC has enacted a rule that allows multiple investors residing at the same address the convenience of receiving a single copy of annual reports, proxy statements, prospectuses and other disclosure documents if they consent to do so. This is known as "Householding." Please note, if you do not respond, Householding will start 60 days after the mailing of this notice. We will allow Householding only upon certain conditions. Some of those conditions are:

- You agree to or do not object to the Householding of your materials,
- You have the same last name and exact address as another investor(s).

If these conditions are met, and SEC regulations allow, your household will receive a single copy of annual reports, proxy statements, prospectuses and other disclosure documents.

You may revoke a prior Householding consent at any time by contacting Broadridge, either by calling toll-free at (800) 542-1061, or by writing to Broadridge, Householding Department, 51 Mercedes Way, Edgewood, New York, 11717. We will remove you from the Householding program within 30 days of receipt of your response, following which you will receive an individual copy of our disclosure document.

By order of the Board of Directors

Christopher J. Miritello
Corporate Secretary

MUELLER INDUSTRIES

2020 FORM 10-K

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

FORM 10-K

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

For the fiscal year ended December 26, 2020

OR

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

For the transition period from ______ to ______

Commission file number 1-6770

MUELLER INDUSTRIES

MUELLER INDUSTRIES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**25-0790410**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

150 Schilling Boulevard	**Suite 100**	
Collierville	**Tennessee**	**38017**
(Address of principal executive offices)		(Zip Code)

Registrant's telephone number, including area code: **(901) 753-3200**

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.01 Par Value	MLI	New York Stock Exchange

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

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

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

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the Registrant's most recently completed second fiscal quarter was $1,346,053,993.

The number of shares of the Registrant's common stock outstanding as of February 19, 2021 was 57,115,648 excluding 23,067,356 treasury shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following document are incorporated by reference into this Report: Registrant's Definitive Proxy Statement for the 2021 Annual Meeting of Stockholders, scheduled to be mailed on or about March 25, 2021 (Part III).

MUELLER INDUSTRIES, INC.

As used in this report, the terms “we,” “us,” “our,” “Company,” “Mueller,” and “Registrant” mean Mueller Industries, Inc. and its consolidated subsidiaries taken as a whole, unless the context indicates otherwise.

TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS

Introduction

Mueller Industries, Inc. (the Company) is a leading manufacturer of copper, brass, aluminum, and plastic products. The range of products we manufacture is broad: copper tube and fittings; line sets; PEX plastic tube and fittings; steel nipples; brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; compressed gas valves; refrigeration valves and fittings; fabricated tubular products; pressure vessels; coaxial heat exchangers; insulated flexible duct systems; brazed manifolds; headers; and distributor assemblies. We also resell brass and plastic plumbing valves, plastic fittings, malleable iron fittings, faucets, and plumbing specialty products. Our operations are located throughout the United States and in Canada, Mexico, Great Britain, South Korea, the Middle East, and China. The Company was incorporated in Delaware on October 3, 1990.

Each of our reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered. These are the Piping Systems, Industrial Metals, and Climate segments.

Certain administrative expenses and expenses related primarily to retiree benefits at inactive operations are combined into the Corporate and Eliminations classification.

Financial information concerning segments and geographic information appears under "Note 3 – Segment Information" in the Notes to Consolidated Financial Statements, which is incorporated herein by reference.

New housing starts and commercial construction are important determinants of our sales to the heating, ventilation, and air-conditioning (HVAC), refrigeration, and plumbing markets because the principal end use of a significant portion of our products is in the construction of single and multi-family housing and commercial buildings. Repairs and remodeling projects are also important drivers of underlying demand for these products. In addition, our products are used in various transportation, automotive, and industrial applications.

Piping Systems Segment

The Piping Systems segment is composed of Domestic Piping Systems Group, Great Lakes Copper (Great Lakes), Pexcor Manufacturing Company and Heatlink Group Inc. (collectively, Heatlink Group), Die-Mold Tool Limited (Die-Mold), European Operations, Trading Group, and Jungwoo Metal Ind. Co., LTD (Jungwoo-Mueller).

The Domestic Piping Systems Group manufactures and distributes copper tube, fittings, line sets, and pipe nipples, and resells steel pipe, brass and plastic plumbing valves, malleable iron fittings and faucets, and plumbing specialties. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Our copper tube ranges in size from 1/8 inch to 8 1/8 inch diameter and is sold in various straight lengths and coils. We are a market leader in the air-conditioning and refrigeration service tube markets and we also supply a variety of water tube in straight lengths and coils used for plumbing applications in virtually every type of construction project. Our copper fittings, line sets, and related components are produced for the plumbing and heating industry to be used in water distribution systems, heating systems, air-conditioning, and refrigeration applications, and drainage, waste, and vent systems.

Great Lakes manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Heatlink Group manufactures a complete line of products for PEX plumbing and radiant systems in Canada and sells these products in Canada and the U.S. Die-Mold manufactures PEX and other plumbing-related fittings and plastic injection tooling in Canada and sells these products in Canada and the U.S. European Operations manufactures copper tube in the United Kingdom, which is sold throughout Europe. The Trading Group manufactures steel pipe nipples and resells brass and plastic plumbing valves, malleable iron fittings, faucets, and plumbing specialty products to plumbing wholesalers, distributors to the manufactured housing and recreational vehicle industries, and building materials retailers in North America. Jungwoo-Mueller, our South Korean joint venture, manufactures copper-based joining products that are sold worldwide.

We acquired a 60 percent equity interest in Jungwoo-Mueller on April 26, 2016, Heatlink Group on May 31, 2017, Die-Mold on March 31, 2018 and Kessler Sales and Distribution on August 2, 2020. These acquisitions complement our existing copper tube, line sets, copper fittings, and plastics businesses in the Piping Systems segment.

We disposed of Jiangsu Mueller-Xingrong Copper Industries Limited (Mueller-Xingrong), the Company's Chinese joint venture, on June 21, 2017. This business manufactured engineered copper tube primarily for air-conditioning applications in China.

The segment sells products to wholesalers in the plumbing and refrigeration markets, distributors to the manufactured housing and recreational vehicle industries, building material retailers, and air-conditioning original equipment manufacturers (OEMs). It markets primarily through its own sales and distribution organization, which maintains sales offices and distribution centers throughout the United States and in Canada, Mexico, Europe, China, and South Korea. Additionally, products are sold and marketed through a complement of agents, which, when combined with our sales organization, provide the Company broad geographic market representation.

The total amount of order backlog for the Piping Systems segment as of December 26, 2020 was not significant.

We compete with various companies, depending on the product line. In the U.S. copper tube business, domestic competition includes Cerro Flow Products LLC, and Cambridge-Lee Industries LLC (a subsidiary of Industrias Unidas S.A. de C.V.), as well as many actual and potential foreign competitors. In the European copper tube business, we compete with several European-based manufacturers of copper tube as well as other foreign-based manufacturers. In the Canadian copper tube business, our competitors include foreign-based manufacturers. In the copper fittings market, our domestic competitors include Elkhart Products Company (a subsidiary of Aalberts Industries N.V.) and NIBCO, Inc. We also compete with several foreign manufacturers. Additionally, our copper tube and fittings businesses compete with a large number of manufacturers of substitute products made from other metals and plastic.

Industrial Metals Segment

The Industrial Metals segment is composed of Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products.

Brass Rod & Copper Bar Products manufactures a broad range of brass rod, copper bar, and copper alloy shapes, as well as a wide variety of end products including plumbing brass, valves, and fittings sold primarily to OEMs in the industrial, HVAC, plumbing, and refrigeration industries. We extrude brass, bronze, and copper alloy rod in sizes ranging from 3/8 inches to 4 inches in diameter. These alloys are used in applications that require a high degree of machinability, wear and corrosion resistance, as well as electrical conductivity.

Impacts & Micro Gauge manufactures cold-form aluminum and copper products for automotive, industrial, and recreational components, as well as high-volume machining of aluminum, steel, brass, and cast iron impacts and castings for automotive applications. It sells its products primarily to OEMs in the U.S., serving the automotive, military ordnance, aerospace, and general manufacturing industries. Typical applications for impacts are high strength ordnance, high-conductivity electrical components, builders' hardware, hydraulic systems, automotive parts, and other uses where toughness must be combined with varying complexities of design and finish.

Brass Value-Added Products manufactures brass and aluminum forgings; brass, aluminum, and stainless steel valves; fluid control solutions; and gas train assembles. Our forgings are used in a wide variety of products, including automotive components, brass fittings, industrial machinery, valve bodies, gear blanks, and computer hardware. Our valves, fluid control systems, and gas train assemblies are used in the compressed gas, pharmaceutical, construction, and gas appliance markets.

The segment sells its products primarily to domestic OEMs in the industrial, construction, HVAC, plumbing, and refrigeration markets. The total amount of order backlog for the Industrial Metals Segment as of December 26, 2020 was not significant.

Competitors, primarily in the brass rod market, include Wieland Chase, LLC, a subsidiary of Wieland-Werke AG and others, both domestic and foreign.

Climate Segment

The Climate segment is composed of Refrigeration Products, Fabricated Tube Products, Westermeyer Industries, Inc. (Westermeyer), Turbotec Products, Inc. (Turbotec), ATCO Rubber Products, Inc. (ATCO), Linesets, Inc., and Shoals Tubular, Inc. (Shoals).

Refrigeration Products designs and manufactures valves, protection devices, and brass fittings for various OEMs in the commercial HVAC and refrigeration markets. Fabricated Tube Products manufactures tubular assemblies and fabrications for

OEMs in the HVAC and refrigeration markets. Westermeyer designs, manufactures, and distributes high-pressure components and accessories for the air-conditioning and refrigeration markets. Turbotec manufactures coaxial heat exchangers and twisted tubes for the HVAC, geothermal, refrigeration, swimming pool heat pump, marine, ice machine, commercial boiler, and heat reclamation markets. ATCO manufactures and distributes insulated HVAC flexible duct systems. Shoals Tubular manufactures brazed manifolds, headers, and distributor assemblies.

We acquired ATCO on July 2, 2018 and Shoals on January 17, 2020. These acquisitions complement our existing businesses in the Climate segment.

The segment's sales are approximately evenly split between the OEM and wholesale channels in the HVAC and refrigeration markets in the U.S. The total amount of order backlog for the Climate segment as of December 26, 2020 was not significant.

Human Capital Resources

As of December 26, 2020, the Company employed approximately 5,007 employees, of which approximately 1,678 were represented by various unions. Those union contracts will expire as follows:

Location	Expiration Date
Port Huron, Michigan (Local 218 IAM)	May 7, 2023
Wynne, Arkansas (MCTP)	November 30, 2024
Port Huron, Michigan (Local 44 UAW)	June 26, 2022
Wynne, Arkansas (B&K LLC)	June 28, 2021
North Wales, Pennsylvania	July 31, 2021
Belding, Michigan	September 17, 2021
Fulton, Mississippi	October 2, 2021
Waynesboro, Tennessee	November 3, 2021

The union agreements at the Company's U.K. and Mexico operations are renewed annually. The Company expects to renew its union contracts without material disruption to its operations. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing, and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain, and motivate selected employees and directors through the granting of stock-based compensation awards. The health and safety of our employees is our high priority and in particular, in response to the COVID-19 pandemic. We have taken additional measures to limit possible infections at the workplace.

Furthermore, we expect that our employees and members of our Board of Directors will conduct themselves ethically and properly as a matter of course and comply with the guidelines set forth on our Code of Business Conduct and Ethics.

Raw Material and Energy Availability

A substantial portion of our base metal requirements (primarily copper) is normally obtained through short-term supply contracts with competitive pricing provisions (for cathode) and the open market (for scrap). Other raw materials used in the production of brass, including brass scrap, zinc, tin, and lead are obtained from zinc and lead producers, open-market dealers, and customers with brass process scrap. Raw materials used in the fabrication of aluminum and plastic products are purchased in the open market from major producers.

Adequate supplies of raw material have historically been available to us from primary producers, metal brokers, and scrap dealers. Sufficient energy in the form of natural gas, fuel oils, and electricity is available to operate our production facilities. While temporary shortages of raw material and fuels may occur occasionally, to date they have not materially hampered our operations.

Our copper tube facilities can accommodate both refined copper and certain grades of copper scrap as the primary feedstock. The Company has commitments from refined copper producers for a portion of its metal requirements for 2021. Adequate quantities of copper are currently available. While we will continue to react to market developments, resulting pricing volatility or supply disruptions, if any, could nonetheless adversely affect the Company.

Environmental Proceedings

Compliance with environmental laws and regulations is a matter of high priority for the Company. Mueller's provision for environmental matters related to all properties was $4.2 million for 2020, $1.7 million for 2019, and $2.0 million for 2018. The reserve for environmental matters was $24.0 million at December 26, 2020 and $20.9 million at December 28, 2019. Environmental expenses related to non-operating properties are presented below operating income in the Consolidated Statements of Income, and costs related to operating properties are included in cost of goods sold. We currently anticipate that we will need to make expenditures of approximately $4.3 million for compliance activities related to existing environmental matters during the next three fiscal years.

For a description of material pending environmental proceedings, see "Note 14 – Commitments and Contingencies" in the Notes to Consolidated Financial Statements, which is incorporated herein by reference.

Other Business Factors

Our business is not materially dependent on patents, trademarks, licenses, franchises, or concessions held. In addition, expenditures for Company-sponsored research and development activities were not material during 2020, 2019, or 2018. No material portion of our business involves governmental contracts.

Seasonality

Our net sales typically moderate in the fourth quarter as a result of the seasonal construction markets and customer shutdowns for holidays, year-end plant maintenance, and physical inventory counts. Also, our working capital typically increases in the first quarter in preparation for the construction season.

SEC Filings

We make available through our internet website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). To retrieve any of this information, you may access our internet home page at www.muellerindustries.com, select Investors, and then select SEC Filings.

ITEM 1A. RISK FACTORS

The Company is exposed to risk as it operates its businesses. To provide a framework to understand our operating environment, we are providing a brief explanation of the more significant risks associated with our businesses. Although we have tried to identify and discuss key risk factors, others could emerge in the future. These risk factors should be considered carefully when evaluating the Company and its businesses.

Increases in costs and the availability of energy and raw materials used in our products could impact our cost of goods sold and our distribution expenses, which could have a material adverse impact on our operating margins.

Both the costs of raw materials used in our manufactured products (copper, brass, zinc, aluminum, and plastic resins) and energy costs (electricity, natural gas and fuel) have been volatile during the last several years, which has resulted in changes in production and distribution costs. For example, recent and pending climate change regulation and initiatives on the state, regional, federal, and international levels that have focused on reducing greenhouse gas (GHG) emissions from the energy and utility sectors may affect energy availability and costs in the near future. While we typically attempt to pass costs through to our customers or to modify or adapt our activities to mitigate the impact of increases, we may not be able to do so successfully. Failure to fully pass increases to our customers or to modify or adapt our activities to mitigate the impact could have a material adverse impact on our operating margins. Additionally, if we are for any reason unable to obtain raw materials or energy, our ability to manufacture our products would be impacted, which could have a material adverse impact on our operating margins.

The unplanned departure of key personnel could disrupt our business.

We depend on the continued efforts of our senior management. The unplanned loss of key personnel, or the inability to hire and retain qualified executives, could negatively impact our ability to manage our business.

Economic conditions in the housing and commercial construction industries, as well as changes in interest rates, could have a material adverse impact on our business, financial condition, and results of operations.

Our business is sensitive to changes in general economic conditions, particularly in the housing and commercial construction industries. Prices for our products are affected by overall supply and demand in the market for our products and for our competitors' products. In particular, market prices of building products historically have been volatile and cyclical, and we may be unable to control the timing and extent of pricing changes for our products. Prolonged periods of weak demand or excess supply in any of our businesses could negatively affect our revenues and margins and could result in a material adverse impact on our business, financial condition, and results of operations.

The markets that we serve, including, in particular, the housing and commercial construction industries, are significantly affected by movements in interest rates and the availability of credit. Significantly higher interest rates could have a material adverse effect on our business, financial condition, and results of operations. Our businesses are also affected by a variety of other factors beyond our control, including, but not limited to, employment levels, foreign currency exchange rates, unforeseen inflationary pressures, and consumer confidence. Since we operate in a variety of geographic areas, our businesses are subject to the economic conditions in each such area. General economic downturns or localized downturns in the regions where we have operations could have a material adverse effect on our business, financial condition, and results of operations.

The impact of economic conditions on the operations or liquidity of any party with which we conduct our business, including our suppliers and customers, may adversely impact our business.

Competitive conditions, including the impact of imports and substitute products and technologies, could have a material adverse effect on the demand for our products as well as our margins and profitability.

The markets we serve are competitive across all product lines. Some consolidation of customers has occurred and may continue, which could shift buying power to customers. In some cases, customers have moved production to low-cost countries such as China, or sourced components from there, which has reduced demand in North America for some of the products we manufacture. These conditions could have a material adverse impact on our ability to maintain margins and profitability. The potential threat of imports and substitute products is based upon many factors, including raw material prices, distribution costs, foreign exchange rates, production costs, and the development of emerging technologies and applications. The end use of alternative import and/or substitute products could have a material adverse effect on our business, financial condition, and results of operations. Likewise, the development of new technologies and applications could result in lower demand for our products and have a material adverse effect on our business.

Our exposure to exchange rate fluctuations on cross border transactions and the translation of local currency results into U.S. dollars could have an adverse impact on our results of operations or financial position.

We conduct our business through subsidiaries in several different countries and export our products to many countries. Fluctuations in currency exchange rates could have a significant impact on the competitiveness of our products as well as the reported results of our operations, which are presented in U.S. dollars. A portion of our products are manufactured in or acquired from suppliers located in lower cost regions. Cross border transactions, both with external parties and intercompany relationships, result in increased exposure to foreign exchange fluctuations. The strengthening of the U.S. dollar could expose our U.S. based businesses to competitive threats from lower cost producers in other countries such as China. Lastly, our sales are translated into U.S. dollars for reporting purposes. The strengthening of the U.S. dollar could result in unfavorable translation effects when the results of foreign operations are translated into U.S. dollars. Accordingly, significant changes in exchange rates, particularly the British pound sterling, Mexican peso, Canadian dollar, and South Korean won, could have an adverse impact on our results of operations or financial position.

The exit by the United Kingdom (U.K.) from the European Union (EU) (Brexit) could adversely affect our business.

The U.K. left the EU on January 31, 2020 pursuant to the terms of a withdrawal agreement concluded between the UK government and the EU Council (Withdrawal Agreement). The Withdrawal Agreement allowed for a transition period during which the U.K.'s trading relationship with the EU remained largely unchanged while the future terms of that relationship were being negotiated. That transition period has now ended. On December 24, 2020, the U.K. and the EU announced that they had struck a new bilateral trade and cooperation deal governing the future relationship between the U.K. and the EU (Trade and Cooperation Agreement), which sets out the principles of the relationship between the EU and the U.K. following the end of the transition period. The Trade and Cooperation Agreement was formally approved by the 27 Member States of the EU on December 29, 2020, and was formally approved by the U.K. Parliament on December 30, 2020. As of the date of this Annual

Report on Form 10-K, the European Commission has proposed to apply the Trade and Cooperation Agreement on a provisional basis for a limited time until February 28, 2021, by which time the Trade and Cooperation Agreement must be approved by the European Parliament.

The Trade and Cooperation Agreement provides clarity in respect of the intended shape of the future relationship between the U.K. and the EU and some detailed matters of trade and cooperation. However, as of the date of this Annual Report on Form 10-K, there remain unavoidable uncertainties related to Brexit, and the new relationship between the U.K. and EU, which will continue to be developed and defined.

As a result of Brexit, we may be negatively impacted by increased volatility in exchange rates and interest rates and disruptions affecting our relationships with our existing and future customers, suppliers and employees. Brexit and its implementation could also adversely affect European or worldwide political, regulatory, economic or market conditions and could contribute to instability in global political institutions, regulatory agencies and financial markets. Any of these effects of Brexit, and others we cannot anticipate, could adversely affect our business, results of operations and financial condition.

We are subject to claims, litigation, and regulatory proceedings that could have a material adverse effect on us.

We are, from time-to-time, involved in various claims, litigation matters, and regulatory proceedings. These matters may include contract disputes, personal injury claims, environmental claims and administrative actions, Occupational Safety and Health Administration inspections or proceedings, other tort claims, employment and tax matters and other litigation including class actions that arise in the ordinary course of our business. Although we intend to defend these matters vigorously, we cannot predict with certainty the outcome or effect of any claim or other litigation matter, and there can be no assurance as to the ultimate outcome of any litigation or regulatory proceeding. Litigation and regulatory proceedings may have a material adverse effect on us because of potential adverse outcomes, defense costs, the diversion of our management's resources, availability of insurance coverage and other factors.

A strike, other work stoppage or business interruption, or our inability to renew collective bargaining agreements on favorable terms, could impact our cost structure and our ability to operate our facilities and produce our products, which could have an adverse effect on our results of operations.

We have a number of employees who are covered by collective bargaining or similar agreements. If we are unable to negotiate acceptable new agreements with the unions representing our employees upon expiration of existing contracts, we could experience strikes or other work stoppages. Strikes or other work stoppages could cause a significant disruption of operations at our facilities, which could have an adverse impact on us. New or renewal agreements with unions representing our employees could call for higher wages or benefits paid to union members, which would increase our operating costs and could adversely affect our profitability. Higher costs and/or limitations on our ability to operate our facilities and manufacture our products resulting from increased labor costs, strikes or other work stoppages could have a material adverse effect on our results of operations.

In addition, unexpected interruptions in our operations or those of our customers or suppliers due to such causes as weather-related events or acts of God, such as earthquakes, could have an adverse effect on our results of operations. For example, the Environmental Protection Agency has found that global climate change would be expected to increase the severity and possibly the frequency of severe weather patterns such as hurricanes. Although the financial impact of such future events is not reasonably estimable at this time, should they occur, our operations in certain coastal and flood-prone areas or operations of our customers and suppliers could be adversely affected.

We are subject to environmental, health, and safety laws and regulations and future compliance may have a material adverse effect on our results of operations, financial position, or cash flows.

The nature of our operations exposes us to the risk of liabilities and claims with respect to environmental, health, and safety matters. While we have established accruals intended to cover the cost of environmental remediation at contaminated sites, the actual cost is difficult to determine and may exceed our estimated reserves. Further, changes to, or more rigorous enforcement or stringent interpretation of environmental or health and safety laws could require significant incremental costs to maintain compliance. Recent and pending climate change regulation and initiatives on the state, regional, federal, and international levels may require certain of our facilities to reduce GHG emissions. While not reasonably estimable at this time, this could require capital expenditures for environmental control facilities and/or the purchase of GHG emissions credits in the coming years. In addition, with respect to environmental matters, future claims may be asserted against us for, among other things, past acts or omissions at locations operated by predecessor entities, or alleging damage or injury or seeking other relief in connection with environmental matters associated with our operations. Future liabilities, claims, and compliance costs may have a material adverse effect on us because of potential adverse outcomes, defense costs, diversion of our resources, availability of insurance coverage, and other factors. The overall impact of these requirements on our operations could increase our costs and diminish our ability to compete with products that are produced in countries without such rigorous standards; the long run impact could negatively impact our results and have a material adverse effect on our business.

If we do not successfully execute or effectively operate, integrate, leverage and grow acquired businesses, our financial results may suffer.

Our strategy for long-term growth, productivity and profitability depends in part on our ability to make prudent strategic acquisitions and to realize the benefits we expect when we make those acquisitions. In furtherance of this strategy, over the past several years, we have acquired businesses in Europe, Canada, South Korea, the Middle East, and the United States.

While we currently anticipate that our past and future acquisitions will enhance our value proposition to customers and improve our long-term profitability, there can be no assurance that we will realize our expectations within the time frame we have established, if at all, or that we can continue to support the value we allocate to these acquired businesses, including their goodwill or other intangible assets.

We may be subject to risks relating to our information technology systems.

We rely on information technology systems to process, transmit and store electronic information and manage and operate our business. The incidence of cyber attacks, computer hacking, computer viruses, worms, and other disruptive software, denial of service attacks, and other malicious cyber activities are on the rise worldwide. A breach of our information technology systems or those of our commercial partners could expose us, our customers, our suppliers, and our employees to risks of misuse or improper disclosure of data, business information (including intellectual property) and other confidential information. We operate globally, and the legal rules governing data storage and transfers are often complex, unclear, and changing. A breach could also result in manipulation and destruction of data, production downtimes and operations disruptions. Any such breaches or events could expose us to legal liability and adversely affect our reputation, competitive position, business or results of operations.

The novel coronavirus (COVID-19) and other possible pandemics and similar outbreaks, could result in material adverse effects on our business, financial position, results of operations and cash flows.

The novel coronavirus (COVID-19) pandemic, and the various governmental, industry and consumer actions related thereto, are having and could continue to have negative impacts on our business and have created or could create conditions in our other risk factors noted above. These impacts include, without limitation, potential significant volatility or decreases in the demand for our products, changes in customer and consumer behavior and preferences, disruptions in or closures of our manufacturing operations or those of our customers and suppliers, disruptions within our supply chain, limitations on our employees' ability to work and travel, potential financial difficulties of customers and suppliers, significant changes in economic or political conditions, and related financial and commodity volatility, including volatility in raw material and other input costs.

It is uncertain what the impact of various legislation and other responses being taken in the U.S. and other countries will have on the economy, international trade, our industries, our businesses and the businesses of our customers and suppliers.

Despite our efforts to manage the impacts, the degree to which COVID-19 and related actions ultimately impact our business, financial position, results of operations and cash flows will depend on factors beyond our control including the duration, spread and severity of the outbreak, the actions taken to contain COVID-19 and mitigate its public health effects, the impact on the U.S. and global economies and demand for our products, and how quickly and to what extent normal economic and operating conditions resume.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Information pertaining to our major operating facilities is included below. Except as noted, we own all of the principal properties. In addition, we own and/or lease other properties used as distribution centers and corporate offices. Our plants are in satisfactory condition and are suitable for the purpose for which they were designed and are now being used.

Location of Facility	Building Space (Sq. Ft.)	Primary Use	Owned or Leased
Piping Systems Segment			
Fulton, MS	778,065	Manufacturing, Packaging, & Distribution	Owned
New Market, VA	413,120	Manufacturing & Distribution	Owned
Bilston, England	402,500	Manufacturing	Owned
Wynne, AR	400,000	Manufacturing & Distribution	Owned
Yangju City, Gyeonggi Province, South Korea	343,909	Manufacturing	Owned
Cedar City, UT	260,000	Manufacturing & Distribution	Owned
Woodbridge, NJ	247,000	Distribution	Leased
London, Ontario, Canada	200,400	Manufacturing	Owned
North Wales, PA	174,000	Manufacturing	Owned
Covington, TN	159,500	Manufacturing	Owned
Monterrey, Mexico	152,000	Manufacturing	Leased
Monterrey, Mexico	132,000	Manufacturing	Leased
Ennis, TX	109,700	Distribution	Leased
University Park, IL	90,100	Distribution	Leased
Ansonia, CT	89,396	Manufacturing & Distribution	Owned
Kansas City, MO	85,000	Distribution	Leased
St Thomas, Ontario Canada	73,124	Warehouse	Leased
Shelby, OH	61,750	Distribution	Leased
Atlanta, GA	60,293	Distribution	Leased
Dallas, TX	55,585	Distribution	Leased
Ontario, CA	54,209	Distribution	Leased
Jacksonville, FL	48,000	Distribution	Leased
Glendale Heights, IL	43,295	Distribution	Leased
Calgary, Alberta, Canada	22,084	Manufacturing	Leased
Calgary, Alberta, Canada	21,117	Manufacturing	Leased
Georgetown, Ontario, Canada	20,000	Manufacturing	Leased
Calgary, Alberta, Canada	20,000	Office Space	Leased
Calgary, Alberta, Canada	12,100	Warehouse	Leased
Industrial Metals Segment			
Port Huron, MI	450,000	Manufacturing	Owned
Belding, MI	293,068	Manufacturing	Owned
Brooklyn, OH	163,200	Manufacturing	Leased
Marysville, MI	81,500	Manufacturing	Owned
Brighton, MI	65,000	Machining	Leased
Waynesboro, TN	57,000	Manufacturing	Leased
Middletown, OH	55,000	Manufacturing	Owned
Pittsburgh, PA	5,760	Office Space	Leased
Climate Segment			
Plainville, GA	313,835	Manufacturing & Distribution	Owned

Location of Facility	Building Space (Sq. Ft.)	Primary Use	Owned or Leased
Fort Worth, TX	266,485	Manufacturing	Owned
Cartersville, GA	260,924	Manufacturing	Owned
Phoenix, AZ	250,250	Manufacturing & Distribution	Owned
Tampa , FL	202,614	Manufacturing & Distribution	Owned
Crawsfordville, IN	153,600	Manufacturing & Distribution	Owned
Fort Worth, TX	153,374	Manufacturing	Owned
Vineland, NJ	136,000	Manufacturing & Distribution	Owned
Guadalupe, Mexico	130,110	Manufacturing	Leased
Sacramento, CA	121,240	Manufacturing & Distribution	Owned
Bluffs, IL	107,000	Manufacturing	Owned
Fort Worth, TX	103,125	Manufacturing & Distribution	Owned
Hickory, NC	100,000	Manufacturing	Owned
Hartsville, TN	78,000	Manufacturing	Owned
Houston, TX	72,000	Manufacturing & Distribution	Owned
Carthage, TN	67,520	Manufacturing	Owned
Baltimore, MD	62,500	Manufacturing & Distribution	Owned
Florence, AL	62,000	Manufacturing	Leased
Springdale, AR	57,600	Manufacturing & Distribution	Owned
Gordonsville, TN	48,736	Manufacturing	Leased
Lawrenceville, GA	42,000	Manufacturing	Leased
Xinbei District, Changzhou, China	33,940	Manufacturing	Leased
Kansas City, MO	30,500	Manufacturing	Leased
Ansonia, CT	24,000	Manufacturing	Leased
Carrollton, TX	13,700	Office	Leased

ITEM 3. LEGAL PROCEEDINGS

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business. Additionally, we may realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Consolidated Financial Statements.

For a description of material pending legal proceedings, see "Note 14 – Commitments and Contingencies" in the Notes to Consolidated Financial Statements, which is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Our common stock is listed on the New York Stock Exchange (NYSE) under the symbol "MLI." As of February 19, 2021, the number of holders of record of Mueller's common stock was 653.

During fiscal 2019 and 2020, we paid a quarterly cash dividend of $0.10 per share of common stock.

Payment of dividends in the future is dependent upon the Company's financial condition, cash flows, capital requirements, earnings, and other factors.

Issuer Purchases of Equity Securities

The Company's Board of Directors has extended, until July 2021, the authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. The Company may cancel, suspend, or extend the time period for the purchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. The Company may hold any shares repurchased in treasury or use a portion of the repurchased shares for its stock-based compensation plans, as well as for other corporate purposes. From its initial authorization in 1999 through December 26, 2020, the Company has repurchased approximately 6.4 million shares under this authorization. Below is a summary of the Company's stock repurchases for the quarter ended December 26, 2020.

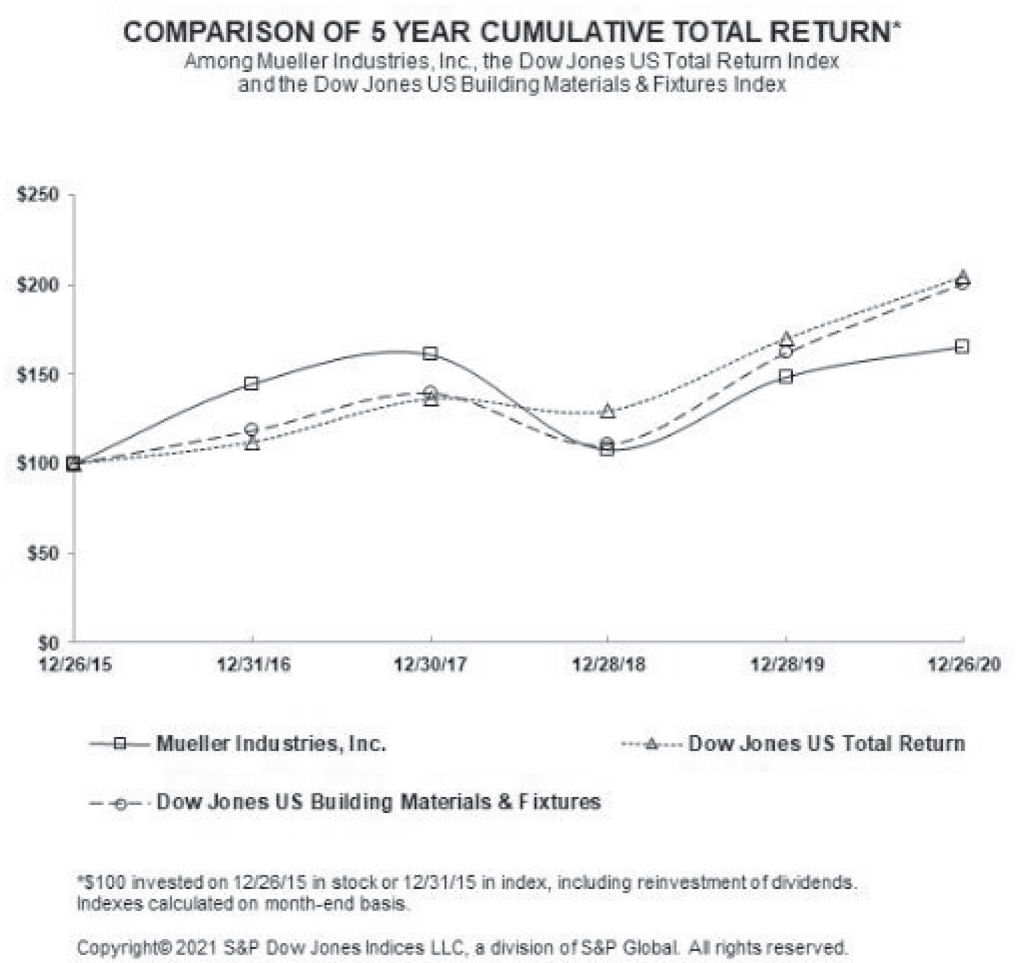
	(a) Total Number of Shares Purchased [(1)]	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number of Shares That May Yet Be Purchased Under the Plans or Programs [(2)]
September 27, 2020 – October 24, 2020	—	—	—	13,575,058
October 25, 2020 – November 21, 2020	8,150	34.11	—	13,575,058
November 22, 2020 – December 26, 2020	15,338	35.71	—	13,575,058
Total	23,488		—	

(1) Includes shares tendered to the Company by holders of stock-based awards in payment of the purchase price and/or withholding taxes upon exercise and/or vesting.

(2) Shares available to be purchased under the Company's 20 million share repurchase authorization until July 2021. The extension of the authorization was announced on October 21, 2020.

Company Stock Performance

The following graph compares total stockholder return since December 26, 2015 to the Dow Jones U.S. Total Return Index (Total Return Index) and the Dow Jones U.S. Building Materials & Fixtures Index (Building Materials Index). Total return values for the Total Return Index, the Building Materials Index and the Company were calculated based on cumulative total return values assuming reinvestment of (i) regular quarterly dividends paid by the Company, (ii) the cash paid by the Company in conjunction with the special dividend and (iii) the proceeds of an assumed sale at par of the Debentures paid by the Company in connection with the special dividend.



	2015	2016	2017	2018	2019	2020
Mueller Industries, Inc.	100.00	144.36	160.77	107.78	148.17	165.29
Dow Jones U.S. Total Return Index	100.00	112.25	136.38	129.60	169.96	204.63
Dow Jones U.S. Building Materials & Fixtures Index	100.00	118.45	139.59	110.61	161.86	200.83

ITEM 6. SELECTED FINANCIAL DATA

(In thousands, except per share data)	2020	2019	2018	2017	2016
For the fiscal year: [(1)]					
Net sales	$ 2,398,043	$ 2,430,616	$ 2,507,878	$ 2,266,073	$ 2,055,622
Operating income [(2)]	245,838	191,403	172,969	150,807	154,401
Net income attributable to Mueller Industries, Inc.	139,493 [(3)]	100,972 [(4)]	104,459 [(5)]	85,598	99,727 [(6)]
Diluted earnings per share	2.47	1.79	1.82	1.49	1.74
Cash dividends per share	0.40	0.40	0.40	3.40	0.38
At year-end:					
Total assets	1,528,568	1,370,940	1,369,549	1,320,173	1,447,476
Long-term debt	286,593	378,724	489,597	448,592	213,709

(1) *Includes activity of acquired businesses from the following purchase dates: Kessler Sales & Distribution, August 3, 2020; Shoals Tubular, Inc., January 17, 2020; ATCO Rubber Products, Inc., July 2, 2018; Die-Mold Tool Limited, March 31, 2018; Pexcor Manufacturing Company Inc. and Heatlink Group Inc., May 31, 2017; Jungwoo Metal Ind. Co., LTD, April 26, 2016.*

(2) *Adjusted retroactively to reflect adoption of ASU 2017-07 that occurred during 2018. The components of net periodic benefit cost (income) other than the service cost component are included in other income (expense), net in the Consolidated Statements of Income.*

(3) *Includes litigation settlement gain of $22.1 million resulting from the Deepwater Horizon Economic and Property Damage Settlement, offset by charges of $17.8 million resulting from the termination of the U.S. defined benefit pension plan, and pre-tax impairment charges of $3.8 million on fixed assets.*

(4) *Includes net expense of $3.6 million resulting from the change in fair value of contingent consideration.*

(5) *Includes a pre-tax insurance recovery gain of $3.7 million related to the losses incurred due to the 2017 fire at the brass rod mill in Port Huron, Michigan.*

(6) *Includes pre-tax impairment charges of $6.8 million on fixed assets.*

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

Management's discussion and analysis of financial condition and results of operations is contained under the caption "Financial Review" submitted as a separate section of this Annual Report on Form 10-K commencing on page F-2.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Quantitative and qualitative disclosures about market risk are contained under the caption "Financial Review" submitted as a separate section of this Annual Report on Form 10-K commencing on page F-2.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial Statements required by this item are contained in a separate section of this Annual Report on Form 10-K commencing on page F-17.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures designed to ensure information required to be disclosed in Company reports filed 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 SEC's rules and forms. Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed in Company reports filed under the Exchange Act is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures pursuant to Rule 13a-15(e) of the Exchange Act as of December 26, 2020. Based on that evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures are effective as of December 26, 2020 to ensure that information required to be disclosed in Company reports filed under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to management, including the Company's principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Pursuant to the rules and regulations of the SEC, internal control over financial reporting is a process designed by, or under the supervision of, the Company's principal executive and principal financial officers, and effected by the Company's 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 accounting principles generally accepted in the United States and includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the Company's assets; (ii) 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 issuer are being made only in accordance with authorizations of the Company's management and directors; and (iii) 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. Due to inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Further, because of changes in conditions, effectiveness of internal control over financial reporting may vary over time.

The Company acquired Shoals Tubular, Inc. and Kessler Sales & Distribution during 2020 and has excluded these businesses from management's assessment of internal controls. The total value of assets for these businesses represents five percent of the Company's consolidated total assets at December 26, 2020. Net sales and operating income from the dates of acquisition represent three percent of the Company's consolidated net sales and less than one percent of operating income of the Company for 2020. Accordingly, these acquired businesses are not included in the scope of this report.

As required by Rule 13a-15(c) under the Exchange Act, the Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting as of December 26, 2020 based on the control criteria established in a report entitled *Internal Control—Integrated Framework*, (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on such evaluation, management has concluded that our internal control over financial reporting was effective as of December 26, 2020.

Ernst & Young LLP, the independent registered public accounting firm that audited the Company's financial statements included in this Annual Report on Form 10-K, has issued an attestation report on the Company's internal control over financial reporting, which is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the Company's fiscal quarter ended December 26, 2020, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Mueller Industries, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Mueller Industries, Inc.'s internal control over financial reporting as of December 26, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Mueller Industries, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 26, 2020, based on the COSO criteria**.**

As indicated in the accompanying Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Shoals Tubular, Inc. and Kessler Sales & Distribution, which are included in the 2020 consolidated financial statements of the Company and constituted 5% of total assets as of December 26, 2020 and 3% and 0% of net sales and operating income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Shoals Tubular, Inc. and Kessler Sales & Distribution.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 26, 2020 and December 28, 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 26, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a) and our report dated February 24, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

Ernst & Young LLP

Memphis, Tennessee
February 24, 2021

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

The information required by Item 10 is contained under the captions "Ownership of Common Stock by Directors and Executive Officers and Information about Director Nominees," "Corporate Governance," "Report of the Audit Committee of the Board of Directors," and "Section 16(a) Beneficial Ownership Compliance Reporting" in the Company's Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the SEC on or about March 25, 2021, which is incorporated herein by reference.

The Company has adopted a Code of Business Conduct and Ethics that applies to its chief executive officer, chief financial officer, and other financial executives. We have also made the Code of Business Conduct and Ethics available on the Company's website at www.muellerindustries.com.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 is contained under the caption "Compensation Discussion and Analysis," "Summary Compensation Table for 2020," "2020 Grants of Plan Based Awards Table," "Outstanding Equity Awards at Fiscal 2020 Year-End," "2020 Option Exercises and Stock Vested," "Potential Payments Upon Termination of Employment or Change in Control as of the End of 2020," "2020 Director Compensation," "Report of the Compensation Committee of the Board of Directors on Executive Compensation" and "Corporate Governance" in the Company's Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the SEC on or about March 25, 2021, which is incorporated herein by reference.

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

Equity Compensation Plan Information

The following table discloses information regarding the securities to be issued and the securities remaining available for issuance under the Registrant's stock-based incentive plans as of December 26, 2020 (shares in thousands):

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants, and rights	(b) Weighted average exercise price of outstanding options, warrants, and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	793	$ 26.81	1,635
Equity compensation plans not approved by security holders	—	—	—
Total	793	$ 26.81	1,635

Other information required by Item 12 is contained under the captions "Principal Stockholders" and "Ownership of Common Stock by Directors and Executive Officers and Information about Director Nominees" in the Company's Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the SEC on or about March 25, 2021, which is incorporated herein by reference.

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

The information required by Item 13 is contained under the caption “Corporate Governance” in the Company’s Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the SEC on or about March 25, 2021, which is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 14 is contained under the caption “Appointment of Independent Registered Public Accounting Firm” in the Company’s Proxy Statement for its 2021 Annual Meeting of Stockholders to be filed with the SEC on or about March 25, 2021, which is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

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

1. Financial Statements: the financial statements, notes, and report of independent registered public accounting firm described in Item 8 of this Annual Report on Form 10-K are contained in a separate section of this Annual Report on Form 10-K commencing on page F-1.

2. Financial Statement Schedule: the financial statement schedule described in Item 8 of this report is contained in a separate section of this Annual Report on Form 10-K commencing on page F-1.

3. Exhibits:

Certificate of Incorporation and Bylaws

3.a Restated Certificate of Incorporation of the Registrant dated February 8, 2007 (Incorporated herein by reference to Exhibit 3.1 of the Registrant's Annual Report on Form 10-K, dated February 28, 2007, for the fiscal year ended December 30, 2006).

3.b Amended and Restated By-laws of the Registrant, effective as of January 15, 2016 (Incorporated herein by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K, dated January 19, 2016).

Long-Term Debt Instruments

4.1 Indenture, dated March 9, 2017, among the Registrant (as issuer) and Regions Bank (as trustee) (Incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, dated March 13, 2017).

4.2 Form of 6% Subordinated Debenture due 2027 (Incorporated herein by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, dated March 13, 2017).

4.3 Certain instruments with respect to long-term debt of the Registrant have not been filed as Exhibits to this Report since the total amount of securities authorized under any such instruments does not exceed 10 percent of the total assets of the Registrant and its subsidiaries on a consolidated basis. The Registrant agrees to furnish a copy of each such instrument upon request of the SEC.

4.4 Description of securities

Consulting, Employment, and Compensatory Plan Agreements

10.1 Mueller Industries, Inc. 2002 Stock Option Plan Amended and Restated as of February 16, 2006 (Incorporated herein by reference to Exhibit 10.20 of the Registrant's Annual Report on Form 10-K, dated February 28, 2007, for the fiscal year ended December 30, 2006).

10.2 Mueller Industries, Inc. 2009 Stock Incentive Plan (Incorporated by reference from Appendix I to the Company's 2009 Definitive Proxy Statement with respect to the Company's 2009 Annual Meeting of Stockholders, as filed with the Securities and Exchange Commission on March 26, 2009).

10.3 Mueller Industries, Inc. 2014 Stock Incentive Plan (Incorporated by reference from Appendix I to the Company's 2014 Definitive Proxy Statement with respect to the Company's 2014 Annual Meeting of Stockholders, as filed with the Securities and Exchange Commission on March 19, 2014).

10.4 Amendment to the Mueller Industries, Inc. 2002 Stock Option Plan, dated July 11, 2011 (Incorporated herein by reference to Exhibit 10.16 of the Registrant's Annual Report on Form 10-K, dated February 28, 2012, for the fiscal year ended December 31, 2011).

10.5 Amendment to the Mueller Industries, Inc. 2009 Stock Incentive Plan, dated July 11, 2011 (Incorporated herein by reference to Exhibit 10.17 of the Registrant's Annual Report on Form 10-K, dated February 28, 2012, for the fiscal year ended December 31, 2011).

10.6	2019 Incentive Plan (incorporated by reference to Annex 1 to the Company's definitive proxy statement filed with the SEC on March 28, 2019).
10.7	Mueller Industries, Inc. 2011 Annual Bonus Plan (Incorporated herein by reference to Exhibit 10.18 of the Registrant's Annual Report on Form 10-K, dated February 28, 2012, for the fiscal year ended December 31, 2011).
10.8	Summary description of the Registrant's 2021 incentive plan for certain key employees.
10.9	Change in Control Agreement, effective July 26, 2016 by and between the Registrant and Brian K. Barksdale (Incorporated herein by reference to Exhibit 10.3 of the Registrant's Quarterly Report on Form 10-Q, for the period ended July 2, 2016, dated July 28, 2016).
10.10	Change in Control Agreement, effective July 26, 2016 by and between the Registrant and Jeffrey A. Martin (Incorporated herein by reference to Exhibit 10.5 of the Registrant's Quarterly Report on Form 10-Q, for the period ended July 2, 2016, dated July 28, 2016).
10.11	Change in Control Agreement, effective July 26, 2016 by and between the Registrant and Mark Millerchip (Incorporated herein by reference to Exhibit 10.6 of the Registrant's Quarterly Report on Form 10-Q, for the period ended July 2, 2016, dated July 28, 2016).
10.12	Change in Control Agreement, effective July 26, 2016 by and between the Registrant and Nicholas W. Moss (Incorporated herein by reference to Exhibit 10.7 of the Registrant's Quarterly Report on Form 10-Q, for the period ended July 2, 2016, dated July 28, 2016).
10.13	Change in Control Agreement, effective July 26, 2016 by and between the Registrant and Steffen Sigloch (Incorporated herein by reference to Exhibit 10.8 of the Registrant's Quarterly Report on Form 10-Q, for the period ended July 2, 2016, dated July 28, 2016).
10.14	Change in Control Agreement, effective January 3, 2017 by and between the Registrant and Christopher J. Miritello (Incorporated herein by reference to Exhibit 10.25 of the Registrant's Annual Report on Form 10-K, dated March 1, 2017, for the fiscal year ended December 31, 2016).
10.15	Employment Agreement, dated as of March 15, 2018, by and between Mueller Industries, Inc. and Gregory L. Christopher (Incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K, dated March 19, 2018).

Financing Agreements

10.16	Credit Agreement, dated as of December 6, 2016 among the Registrant (as borrower), Bank of America (as agent), and certain lenders named therein (Incorporated herein by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K, dated December 12, 2016).
10.17	Amendment No. 1 to Credit Agreement among the Registrant (as borrower), Bank of America, N.A. (as agent), and certain lenders named therein dated April 22, 2019 (Incorporated herein by reference to Exhibit 10.17 of the Registrant's Annual Report on Form 10-K, dated February 26, 2020, for the fiscal year ended December 28, 2019).

Other Exhibits

21.0	Subsidiaries of the Registrant.
23.0	Consent of Independent Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase

101.INS	XBRL Instance Document
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Presentation Linkbase Document
101.SCH	XBRL Taxonomy Extension Schema

ITEM 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 24, 2021.

MUELLER INDUSTRIES, INC.

/s/ Gregory L. Christopher

Gregory L. Christopher, Chief Executive Officer
(Principal Executive Officer) and Chairman of the Board

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 date indicated.

Signature	Title	Date
/s/ Gregory L. Christopher Gregory L. Christopher	Chief Executive Officer (Principal Executive Officer) and Chairman of the Board	February 24, 2021
/s/ Terry Hermanson Terry Hermanson	Lead Independent Director	February 24, 2021
/s/ Elizabeth Donovan Elizabeth Donovan	Director	February 24, 2021
/s/ Gary S. Gladstein Gary S. Gladstein	Director	February 24, 2021
/s/ Gennaro J. Fulvio Gennaro J. Fulvio	Director	February 24, 2021
/s/ Scott J. Goldman Scott J. Goldman	Director	February 24, 2021
/s/ John B. Hansen John B. Hansen	Director	February 24, 2021
/s/ Charles P. Herzog, Jr. Charles P. Herzog, Jr.	Director	February 24, 2021

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 date indicated.

Signature and Title	Date
/s/ Jeffrey A. Martin Jeffrey A. Martin Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 24, 2021
/s/ Anthony J. Steinriede Anthony J. Steinriede Vice President – Corporate Controller	February 24, 2021

MUELLER INDUSTRIES, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

FINANCIAL STATEMENT SCHEDULE

Schedule for the years ended December 26, 2020, December 28, 2019, and December 29, 2018

FINANCIAL REVIEW

The Financial Review section of our Annual Report on Form 10-K consists of the following: Management's Discussion and Analysis of Results of Operations and Financial Condition (MD&A), the Consolidated Financial Statements, and Other Financial Information, all of which include information about our significant accounting policies, practices, and the transactions that impact our financial results. The following MD&A describes the principal factors affecting the results of operations, liquidity and capital resources, contractual cash obligations, and the critical accounting estimates of the Company. The discussion in the Financial Review section should be read in conjunction with the other sections of this Annual Report, particularly "Item 1: Business" and our other detailed discussion of risk factors included in this MD&A.

OVERVIEW

We are a leading manufacturer of copper, brass, aluminum, and plastic products. The range of products we manufacture is broad: copper tube and fittings; line sets; brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; PEX plastic tube and fittings; refrigeration valves and fittings; compressed gas valves; fabricated tubular products; pressure vessels; coaxial heat exchangers; steel nipples; insulated flexible duct systems; and brazed manifolds, headers, and distributor assemblies. We also resell brass and plastic plumbing valves, plastic fittings, malleable iron fittings, faucets and plumbing specialty products. Mueller's operations are located throughout the United States and in Canada, Mexico, Great Britain, South Korea, the Middle East, and China.

Each of the reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

- Piping Systems: The Piping Systems segment is composed of Domestic Piping Systems Group, Great Lakes Copper, Heatlink Group, Die-Mold, European Operations, Trading Group, and Jungwoo-Mueller (our South Korean joint venture). The Domestic Piping Systems Group manufactures and distributes copper tube, fittings, and line sets. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Great Lakes Copper manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Heatlink Group manufactures a complete line of products for PEX plumbing and radiant systems in Canada and sells these products in Canada and the U.S. Die-Mold manufactures PEX and other plumbing-related fittings and plastic injection tooling in Canada and sells these products in Canada and the U.S. European Operations manufacture copper tube in the United Kingdom, which is sold throughout Europe. The Trading Group manufactures pipe nipples and sources products for import distribution in North America. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment sells products to wholesalers in the plumbing and refrigeration markets, distributors to the manufactured housing and recreational vehicle industries, building material retailers, and air-conditioning original equipment manufacturers (OEMs).

- Industrial Metals: The Industrial Metals segment is composed of Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. The segment manufactures and sells brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; and gas valves and assemblies. The segment manufactures and sells its products primarily to domestic OEMs in the industrial, transportation, construction, heating, ventilation, and air-conditioning, plumbing, refrigeration, and energy markets.

- Climate: The Climate segment is composed of Refrigeration Products, Fabricated Tube Products, Westermeyer, Turbotec, ATCO, Linesets, Inc., and Shoals. The segment manufactures and sells refrigeration valves and fittings, fabricated tubular products, high pressure components, coaxial heat exchangers, insulated HVAC flexible duct systems, line sets, brazed manifolds, headers, and distributor assemblies. The segment sells its products primarily to the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

New housing starts and commercial construction are important determinants of our sales to the heating, ventilation, and air-conditioning, refrigeration, and plumbing markets because the principal end use of a significant portion of our products is in the construction of single and multi-family housing and commercial buildings. Repairs and remodeling projects are also important drivers of underlying demand for these products. In addition, our products are used in various transportation, automotive, and industrial applications.

According to the U.S. Census Bureau, actual housing starts in the U.S. were 1.38 million in 2020, which compares to 1.29 million in 2019 and 1.25 million in 2018. Mortgage rates remain at historically low levels, as the average 30-year fixed mortgage rate was approximately 3.11 percent in 2020 and 3.94 percent in 2019. The private nonresidential construction sector, includes offices, industrial, health care, and retail projects. According to the U.S. Census Bureau, the value of private nonresidential construction put in place was $471.7 billion in 2020, $486.3 billion in 2019, and $465.5 billion in 2018.

Profitability of certain of our product lines depends upon the "spreads" between the cost of raw material and the selling prices of our products. The open market prices for copper cathode and copper and brass scrap, for example, influence the selling price of copper tube and brass rod, two principal products manufactured by the Company. We attempt to minimize the effects on profitability from fluctuations in material costs by passing through these costs to our customers; however margins of our businesses that account for inventory on a FIFO basis may be impacted in periods of significant fluctuations in material costs. Our earnings and cash flow are dependent upon these spreads that fluctuate based upon market conditions.

Earnings and profitability are also impacted by unit volumes that are subject to market trends, such as substitute products, imports, technologies, and market share. In our core product lines, we intensively manage our pricing structure while attempting to maximize profitability. From time-to-time, this practice results in lost sales opportunities and lower volume. For plumbing systems, plastics are the primary substitute product; these products represent an increasing share of consumption. For certain air-conditioning and refrigeration applications, aluminum-based systems are the primary substitution threat. We cannot predict the acceptance or the rate of switching that may occur. U.S. consumption of copper tube and brass rod is still predominantly supplied by U.S. manufacturers. In recent years, brass rod consumption in the U.S. has declined due to the outsourcing of many manufactured products from offshore regions.

RESULTS OF OPERATIONS

Consolidated Results

The following table compares summary operating results for 2020, 2019, and 2018:

				Percent Change	
(In thousands)	2020	2019	2018	2020 vs. 2019	2019 vs. 2018
Net sales	$ 2,398,043	$ 2,430,616	$ 2,507,878	(1.3)%	(3.1)%
Operating income	245,838	191,403	172,969	28.4	10.7
Net income	139,493	100,972	104,459	38.2	(3.3)

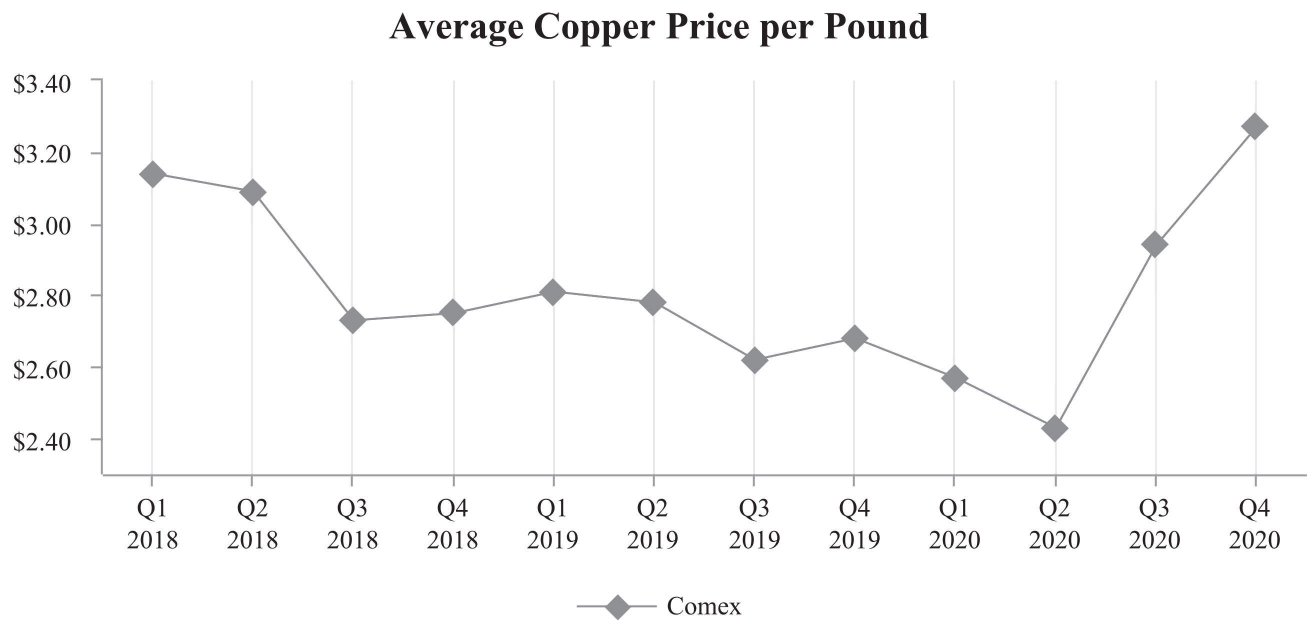
The following are components of changes in net sales compared to the prior year:

	2020 vs. 2019	2019 vs. 2018
Net selling price in core product lines	1.6 %	(3.7)%
Unit sales volume in core product lines	(5.4)	(4.4)
Acquisitions	2.8	4.2
Other	(0.3)	0.8
	(1.3)%	(3.1)%

The decrease in net sales in 2020 was primarily due to lower unit sales volume of $130.9 million in our core product lines, primarily brass rod and copper tube. Lower unit sales volume was due in part to the impacts of the COVID-19 pandemic on demand for our products, particularly in the second quarter of 2020. This decrease was partially offset by (i) sales of $54.9 million recorded by Kessler, acquired in August 2020, (ii) higher net selling prices of $38.1 million in our core product lines, primarily copper tube, and (iii) sales of $12.2 million recorded by Shoals, acquired in January 2020.

The decrease in net sales in 2019 was primarily due to (i) lower unit sales volume of $110.3 million in our core product lines, primarily brass rod and copper tube, and (ii) lower net selling prices of $91.7 million in our core product lines. These decreases were partially offset by (i) incremental sales of $100.1 million recorded by ATCO, acquired in July 2018, (ii) an increase in sales in our non-core product lines of $22.4 million, and (iii) incremental sales of $4.0 million of recorded by Die-Mold, acquired in March 2018.

Net selling prices generally fluctuate with changes in raw material costs. Changes in raw material costs are generally passed through to customers by adjustments to selling prices. The following graph shows the Comex average copper price per pound by quarter for the most recent three-year period:



The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2020, 2019, and 2018:

(In thousands)	2020	2019	2018
Cost of goods sold	$ 1,966,161	$ 2,035,610	$ 2,150,400
Depreciation and amortization	44,843	42,693	39,555
Selling, general, and administrative expense	159,483	162,358	148,888
Litigation settlement, net	(22,053)	—	—
Gain on sale of assets, net	—	(963)	(253)
Impairment charges	3,771	—	—
Insurance recovery	—	(485)	(3,681)
Operating expenses	$ 2,152,205	$ 2,239,213	$ 2,334,909

	2020	2019	2018
Cost of goods sold	82.0 %	83.7 %	85.7 %
Depreciation and amortization	1.9	1.8	1.6
Selling, general, and administrative expense	6.6	6.6	5.9
Litigation settlement, net	(0.9)	—	—
Gain on sale of assets, net	—	—	—
Impairment charges	0.1	—	—
Insurance recovery	—	—	(0.1)
Operating expenses	89.7 %	92.1 %	93.1 %

The decrease in cost of goods sold in 2020 was primarily due to the decrease in sales volume in our core product lines. This was partially offset by the increase in sales volume resulting from the acquisitions of Kessler and Shoals and an increase in the average cost of copper, our principal raw material. Gross margin as a percentage of sales was 18.0 percent compared with 16.3 percent in the prior year. This improvement was primarily due to an increased mix of sales from higher margin products, lower manufacturing costs, and lower employee healthcare costs. The decrease in cost of goods sold in 2019 was primarily due to the decrease in sales volume in our core product lines and the decrease in the average cost of copper. This was partially offset by the increase in sales volume resulting from the acquisition of ATCO.

Depreciation and amortization increased in 2020 and 2019 as a result of long-lived assets of businesses acquired.

Selling, general, and administrative expenses decreased in 2020 primarily due to (i) expense for contingent consideration arrangements associated with businesses acquired of $5.7 million recognized in the prior year, (ii) a decrease in travel and entertainment expense of $3.9 million, (iii) a decrease in employment costs of $3.0 million, and (iv) a decrease in lease expense of $1.5 million. These decreases were partially offset by (i) expenses of $7.4 million associated with Kessler and Shoals, (ii) income of $2.1 million recognized in the prior year as a result of the reduction of contingent consideration arrangements associated with businesses acquired, (iii) an increase in bad debt expense of $1.1 million, and (iv) plant consolidation costs of $0.9 million. The increase in selling, general, and administrative expenses in 2019 was primarily due to (i) expense recognized for contingent consideration arrangements associated with businesses acquired of $5.7 million, (ii) an increase in employment costs, including employee healthcare, of $4.9 million, (iii) incremental expenses of $4.7 million associated with ATCO and Die-Mold, (iv) a reduction of $3.5 million in fees received for services provided under certain third-party sales and distribution arrangements, and (v) an increase in product liability costs of $1.6 million. These increases were partially offset by (i) income of $2.1 million recognized as a result of the reduction of contingent consideration arrangements associated with businesses acquired, (ii) a decrease in legal and professional fees of $1.4 million, (iii) higher foreign currency transaction gains of $1.4 million, (iv) a reduction of $0.8 million in fees received for services provided under certain equipment transfer and licensing agreements, and (v) a decrease in supplies and utilities of $0.5 million.

During 2020, we recognized a gain of $22.1 million for the settlement of our claim under the Deepwater Horizon Economic and Property Damage Settlement Program and asset impairment charges of $3.8 million related to production equipment that was idled.

During 2019, we recognized a net gain of $1.0 million on the sale of real property. We also recognized an insurance recovery gain of $0.5 million related to the losses incurred due to the 2017 fire at our brass rod mill in Port Huron, Michigan.

During 2018, we recognized a gain of $2.7 million on the sale of real property and a gain of $0.7 million on the sale of manufacturing equipment, which were offset by a loss of $3.1 million on the sale of a corporate aircraft. We also recognized an insurance recovery gain of $3.7 million related to the losses incurred due to the 2017 fire at our brass rod mill in Port Huron, Michigan.

Interest expense decreased in 2020 primarily as a result of lower principal outstanding and reduced interest rates associated with our unsecured $350.0 million revolving credit facility. The increase in 2019 was primarily as a result of increased borrowing costs associated with our unsecured $350.0 million revolving credit facility.

Environmental expense for our non-operating properties was higher in 2020 than in 2019 or 2018 primarily as a result of ongoing remediation activities.

During 2020, we recognized a $17.8 million expense to terminate our U.S. defined benefit pension plan, which consisted of an $11.6 million non-cash charge and $6.2 million in federal excise tax on surplus assets returned to the Company.

Other income, net, was higher in 2020 primarily as a result of a curtailment gain related to our benefit plans, and lower in 2019 primarily as a result of lower net periodic benefit income for our benefit plans.

Income tax expense was $55.3 million in 2020, representing an effective tax rate of 26.4 percent. This rate was higher than what would be computed using the U.S. statutory federal rate primarily due to (i) the provision for state and local income taxes, net of the federal benefit, of $5.9 million, and (ii) the effect of foreign statutory rates different from the U.S. federal rate of $2.8 million, and (iii) other adjustments of $3.0 million. These increases were partially offset by the impact of investments in unconsolidated affiliates of $0.4 million.

Income tax expense was $35.3 million in 2019, representing an effective tax rate of 21.2 percent. This rate was higher than what would be computed using the U.S. statutory federal rate primarily due to (i) the provision for state and local income taxes, net of the federal benefit, of $3.2 million, and (ii) the impact of investments in unconsolidated affiliates of $0.5 million. These increases were partially offset by other adjustments of $3.3 million.

Income tax expense was $31.0 million in 2018, representing an effective tax rate of 20.6 percent. This rate was lower than what would be computed using the U.S. statutory federal rate primarily due to (i) a reduction of the calculation of federal tax on the Company's accumulated foreign earnings under the Tax Cuts and Jobs Act of $4.4 million and (ii) a reduction for the impact of investments in unconsolidated affiliates of $2.8 million. These reductions were partially offset by (i) the provision for state and local income taxes, net of the federal benefit, of $3.5 million and (ii) other adjustments of $3.1 million.

During 2020, we recognized losses of $10.2 million on our investments in unconsolidated affiliates, net of foreign tax, compared to losses of $24.6 million in 2019. The loss on these investments for 2020 included net losses of $10.4 million for Tecumseh and net gains of $0.2 million for Mueller Middle East. Our Tecumseh investment showed improvement in 2020 due to a pre-tax gain of $11.6 million from a land sale and the early impacts of ongoing restructuring activities.

During 2019, we recognized losses of $24.6 million on our investments in unconsolidated affiliates, net of foreign tax, compared to losses of $12.6 million in 2018. The loss on these investments for 2019 included net losses of $22.0 million for Tecumseh and net losses of $2.6 million for Mueller Middle East. Included in the losses for Tecumseh were $6.4 million of severance and restructuring expenses and a product liability settlement of $3.4 million. These expenses were offset by a gain on the sale of land of $1.8 million.

During 2018, we recognized losses of $12.6 million on our investments in unconsolidated affiliates, net of foreign tax. The loss of these investments included net losses of $14.0 million and charges of $3.0 million related to certain labor claim contingencies, offset by a gain of $7.0 million related to a settlement with the Brazilian Federal Revenue Agency for Tecumseh. It also includes net losses of $2.6 million for Mueller Middle East.

Piping Systems Segment

The following table compares summary operating results for 2020, 2019, and 2018 for the businesses comprising our Piping Systems segment:

				Percent Change	
(In thousands)	2020	2019	2018	2020 vs. 2019	2019 vs. 2018
Net sales	$ 1,583,002	$ 1,542,456	$ 1,645,633	2.6 %	(6.3)%
Operating income	165,719	131,879	122,829	25.7	7.4

The following are components of changes in net sales compared to the prior year:

	2020 vs. 2019	2019 vs. 2018
Net selling price in core product lines	2.5 %	(4.4)%
Unit sales volume in core product lines	(3.2)	(2.3)
Acquisitions	3.6	0.3
Other	(0.3)	0.1
	2.6 %	(6.3)%

The increase in net sales in 2020 was primarily attributable to (i) sales of $54.9 million recorded by Kessler and (ii) higher net selling prices of $38.1 million in the segment's core product lines, primarily copper tube. These increases were partially offset by lower unit sales volume of $48.7 million in the segment's core product lines.

The decrease in net sales in 2019 was primarily attributable to (i) lower net selling prices of $70.6 million in the segment's core product lines, primarily copper tube, and (ii) lower unit sales volume of $37.3 million in the segment's core product lines. These decreases were partially offset by incremental sales of $4.0 million recorded by Die-Mold.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2020, 2019, and 2018:

(In thousands)	2020	2019	2018
Cost of goods sold	$ 1,311,697	$ 1,313,980	$ 1,426,729
Depreciation and amortization	23,071	22,621	23,304
Selling, general, and administrative expense	78,744	75,170	74,864
Gain on sale of assets, net	—	(1,194)	(2,093)
Impairment charges	3,771	—	—
Operating expenses	$ 1,417,283	$ 1,410,577	$ 1,522,804

	2020	2019	2018
Cost of goods sold	82.9 %	85.2 %	86.7 %
Depreciation and amortization	1.5	1.5	1.4
Selling, general, and administrative expense	4.9	4.9	4.5
Gain on sale of assets, net	—	(0.1)	(0.1)
Impairment charges	0.2	—	—
Operating expenses	89.5 %	91.5 %	92.5 %

Gross margin as a percentage of sales was 17.1 percent compared with 14.8 percent in the prior year. This improvement was primarily due to an increased mix of sales from higher margin products, lower manufacturing costs, and lower employee healthcare costs. The decrease in cost of goods sold in 2019 was primarily due to the decrease in the average cost of copper and the decrease in sales volume in the segment's core product lines.

Depreciation and amortization increased in 2020 as a result of long-lived assets of businesses acquired. The decrease in 2019 was a result of several long-lived assets becoming fully depreciated.

Selling, general, and administrative expenses increased for 2020, primarily due to (i) expenses of $5.5 million associated with Kessler, (ii) income of $2.1 million recognized in the prior year as a result of the reduction of contingent consideration arrangements associated with businesses acquired, and (iii) higher foreign currency transaction losses of $0.7 million. These increases were partially offset by (i) a reduction in employment costs of $2.2 million, (ii) a decrease in travel and entertainment expense of $2.0 million, (iii) a decrease in marketing expenses of $0.9 million, and (iv) a decrease in supplies and utilities of $0.6 million. The slight increase in 2019 was primarily due to (i) a reduction of $3.5 million in fees received for services provided under certain third-party sales and distribution arrangements, (ii) higher employment costs, including employee healthcare, of $0.9 million, and (iii) incremental expenses associated with Die-Mold of $0.6 million. These increases were partially offset by (i) income of $2.1 million recognized as a result of the reduction of contingent consideration arrangements associated with businesses acquired, (ii) higher foreign currency transaction gains of $1.4 million, and (iii) a decrease in supplies and utilities of $0.6 million.

During 2020, we recognized asset impairment charges of $3.8 million related to production equipment that was idled.

During 2019, we recognized a gain of $1.2 million on the sale of real property.

During 2018, we recognized a gain of $1.4 million on the sale of real property and a gain of $0.7 million on the sale of manufacturing equipment.

Industrial Metals Segment

The following table compares summary operating results for 2020, 2019, and 2018 for the businesses comprising our Industrial Metals segment:

(In thousands)	2020	2019	2018	Percent Change 2020 vs. 2019	Percent Change 2019 vs. 2018
Net sales	$ 472,159	$ 554,372	$ 651,061	(14.8)%	(14.9)%
Operating income	54,065	61,724	75,607	(12.4)	(18.4)

The following are components of changes in net sales compared to the prior year:

	2020 vs. 2019	2019 vs. 2018
Net selling price in core product lines	— %	(3.3)%
Unit sales volume in core product lines	(15.2)	(11.4)
Other	0.4	(0.2)
	(14.8)%	(14.9)%

The decrease in net sales in 2020 was primarily due to (i) lower unit sales volume of $82.3 million in the segment's core product lines, primarily brass rod. Lower unit sales volume was due in part to the impacts of the COVID-19 pandemic on demand for our products, particularly in the second quarter of 2020.

The decrease in net sales during 2019 was primarily due to (i) lower unit sales volume of $73.0 million and (ii) lower net selling prices of $21.0 million in the segment's core product lines.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2020, 2019, and 2018:

(In thousands)	2020	2019	2018
Cost of goods sold	$ 398,000	$ 473,010	$ 559,367
Depreciation and amortization	7,528	7,489	7,568
Selling, general, and administrative expense	12,566	12,359	13,501
Loss (gain) on sale of assets, net	—	275	(1,301)
Insurance recovery	—	(485)	(3,681)
Operating expenses	$ 418,094	$ 492,648	$ 575,454

	2020	2019	2018
Cost of goods sold	84.3 %	85.3 %	85.9 %
Depreciation and amortization	1.6	1.4	1.2
Selling, general, and administrative expense	2.6	2.3	2.1
Loss (gain) on sale of assets, net	—	—	(0.2)
Insurance recovery	—	(0.1)	(0.6)
Operating expenses	88.5 %	88.9 %	88.4 %

The decrease in cost of goods sold in 2020 was primarily due to the decrease in sales volume in the segment's core product lines. The decrease in cost of goods sold in 2019 was primarily related to the decrease in sales volume in the segment's core product lines and the decrease in the average cost of copper.

Depreciation and amortization in 2020 was consistent with 2019 and 2018.

Selling, general, and administrative expense in 2020 was consistent with 2019. The decrease in 2019 was primarily due to lower employment costs, including incentive compensation, of $0.7 million.

During 2019, we recognized a loss of $0.3 million on the sale of real property and an insurance recovery gain of $0.5 million related to the losses incurred due to the 2017 fire at our brass rod mill in Port Huron, Michigan.

During 2018, we recognized a gain of $1.3 million on the sale of real property and an insurance recovery gain of $3.7 million related to the losses incurred due to the 2017 fire at our brass rod mill in Port Huron, Michigan.

Climate Segment

The following table compares summary operating results for 2020, 2019, and 2018 for the businesses comprising our Climate segment:

				Percent Change	
(In thousands)	2020	2019	2018	2020 vs. 2019	2019 vs. 2018
Net sales	$ 370,131	$ 356,216	$ 229,069	3.9 %	55.5 %
Operating income	56,802	42,727	24,118	32.9	77.2

Net sales for 2020 increased primarily as a result of sales of $12.2 million recorded by Shoals. Net sales for 2019 increased primarily as a result of incremental sales of $100.1 million recorded by ATCO.

The following tables compare cost of goods sold and operating expenses as dollar amounts and as a percent of net sales for 2020, 2019, and 2018:

(In thousands)	2020	2019	2018
Cost of goods sold	$ 276,274	$ 273,850	$ 182,456
Depreciation and amortization	10,249	9,298	5,569
Selling, general, and administrative expense	26,806	30,385	16,926
Gain on sale of assets, net	—	(44)	—
Operating expenses	$ 313,329	$ 313,489	$ 204,951

	2020	2019	2018
Cost of goods sold	74.6 %	76.9 %	79.7 %
Depreciation and amortization	2.8	2.6	2.4
Selling, general, and administrative expense	7.3	8.5	7.4
Gain on sale of assets, net	—	—	—
Operating expenses	84.7 %	88.0 %	89.5 %

Cost of goods sold increased in 2020. Gross margin as a percentage of sales was 25.4 percent compared with 23.1 percent in the prior year. This improvement was primarily the result of improved spreads, an increased mix of sales from higher margin businesses, and lower operating costs. The increase in cost of goods sold in 2019 was related to the increase in volume and change in product mix within the segment primarily resulting from the ATCO acquisition. Depreciation and amortization increased in 2020 and 2019 primarily as a result of depreciation and amortization of the long-lived assets acquired at ATCO and Shoals. Selling, general, and administrative expenses decreased in 2020 as a result of expense of $5.7 million for a contingent consideration arrangement associated with an acquired business recognized in the prior year. This was partially offset by expenses associated with Shoals of $1.9 million. Selling, general, and administrative expenses increased in 2019 as a result of (i) expense of $5.7 million recognized for a contingent consideration arrangement associated with an acquired business, (ii) incremental expenses of $4.6 million associated with ATCO, (iii) an increase in employment costs of $1.7 million, (iv) an increase in agent commissions of $0.5 million, and (v) an increase in supplies, utilities, and rent costs of $0.4 million.

LIQUIDITY AND CAPITAL RESOURCES

The following table presents selected financial information for 2020, 2019, and 2018:

(In thousands)	2020	2019	2018
Increase (decrease) in:			
Cash, cash equivalents, and restricted cash	$ 29,334	$ 20,904	$ (49,425)
Property, plant, and equipment, net	13,444	(7,505)	66,312
Total debt	(58,378)	(110,444)	31,626
Working capital, net of cash and current debt	38,855	(35,231)	11,228
Net cash provided by operating activities	245,073	200,544	167,892
Net cash used in investing activities	(125,622)	(40,457)	(187,096)
Net cash used in financing activities	(92,264)	(139,694)	(28,269)

Cash Provided by Operating Activities

During 2020, net cash provided by operating activities was primarily attributable to (i) consolidated net income of $143.6 million, (ii) an increase in current liabilities of $74.1 million, (iii) depreciation and amortization of $45.2 million, (iv) a decrease in other assets of $20.6 million, (v) a non-cash charge related to the termination of the U.S. pension plan of $11.6 million, (vi) losses from unconsolidated affiliates of $10.2 million, (vii) stock-based compensation expense of $8.6 million, and (viii) a decrease in inventories of $5.2 million. These cash increases were partially offset by an increase in accounts receivable of $76.4 million.

During 2019, net cash provided by operating activities was primarily attributable to (i) consolidated net income of $106.2 million, (ii) depreciation and amortization of $43.0 million, (iii) a decrease in inventories of $39.6 million, (iv) losses from unconsolidated affiliates of $24.6 million, (v) stock-based compensation expense of $8.7 million, and (vi) a decrease in accounts receivable of $6.6 million. These cash increases were offset by (i) an increase in other assets of $15.6 million, (ii) a decrease in other liabilities of $7.9 million, and (iii) a decrease in current liabilities of $7.1 million. The fluctuations in accounts receivable and inventories were primarily due to decreased selling prices and sales volume in certain businesses and changes in working capital needs in 2019.

During 2018, net cash provided by operating activities was primarily attributable to (i) consolidated net income of $106.8 million, (ii) depreciation and amortization of $39.9 million, (iii) a decrease in inventories of $27.5 million, (iv) a decrease in other assets of $14.4 million, (v) losses from unconsolidated affiliates of $12.6 million, and (vi) stock-based compensation expense of $8.0 million. These cash increases were offset by (i) a decrease in current liabilities of $15.7 million, (ii) a decrease in other liabilities of $14.8 million, and (iii) an increase in accounts receivable of $11.1 million. The decrease in inventories was primarily driven by the use of excess inventory built at the end of 2017 due to a casting outage in our brass rod mill that impaired our ability to melt scrap returns. The fluctuations in accounts receivable and current liabilities were primarily due to increased selling prices and sales volume in certain businesses and additional working capital needs in 2018. The changes in other assets and liabilities are primarily attributable to the change in estimate of the one-time transition tax liability on accumulated foreign earnings under the the Tax Cuts and Jobs Act.

Cash Used in Investing Activities

The major components of net cash used in investing activities in 2020 included (i) the $72.6 million for the purchases of Kessler and Shoals, net of cash acquired, (ii) capital expenditures of $43.9 million, and (iii) the issuance of notes receivable of $9.3 million.

The major components of net cash used in investing activities in 2019 included (i) capital expenditures of $31.2 million and (ii) investments in our unconsolidated affiliates, Tecumseh and Mueller Middle East, of $16.0 million. These uses of cash were offset by (i) the $3.5 million working capital settlement received from the previous owners for the ATCO acquisition and (ii) proceeds on the sale of properties of $3.2 million.

The major components of net cash used in investing activities in 2018 included (i) $167.7 million for the purchases of ATCO and Die-Mold, net of cash acquired, and (ii) capital expenditures of $38.5 million. These uses of cash were offset by proceeds on the sale of properties of $18.7 million.

Cash Used in Financing Activities

For 2020, net cash used in financing activities consisted primarily of (i) $245.0 million used to reduce the debt outstanding under our Credit Agreement, (ii) $22.3 million used for the payment of regular quarterly dividends to stockholders of the Company, (iii) $7.0 million used for payment of contingent consideration related to ATCO, and (iv) $5.6 million used to repurchase common stock. These uses of cash were offset by the issuance of debt under our Credit Agreement of $190.0 million.

For 2019, net cash used in financing activities consisted primarily of (i) $205.0 million used to reduce the debt outstanding under our Credit Agreement, (ii) $22.3 million used for the payment of regular quarterly dividends to stockholders of the Company, (iii) $4.3 million used for repayment of debt by Jungwoo-Mueller, (iv) $3.2 million used for the payment of contingent consideration related to ATCO, and (v) $1.8 million used to repurchase common stock. These uses of cash were offset by the issuance of debt under our Credit Agreement of $100.0 million.

For 2018, net cash used in financing activities consisted primarily of (i) $165.0 million used to reduce the debt outstanding under our Credit Agreement, (ii) $33.6 million used to repurchase common stock, (iii) $22.7 million used for the payment of regular quarterly dividends to stockholders of the Company, and (iv) $2.9 million used for repayment of debt by Jungwoo-Mueller. These uses of cash were offset by the issuance of debt under our Credit Agreement of $200.0 million.

Liquidity and Outlook

We believe that cash provided by operations, funds available under the Credit Agreement, and cash on hand will be adequate to meet our liquidity needs, including working capital, capital expenditures, and debt payment obligations. Our current ratio was 2.4 to 1 as of December 26, 2020.

As of December 26, 2020, $92.8 million of our cash and cash equivalents were held by foreign subsidiaries. The undistributed earnings of most of the foreign subsidiaries are considered to be permanently reinvested. These earnings could be remitted to the U.S. with a minimal tax cost. Accordingly, no additional income tax liability has been accrued with respect to these earnings or on any additional outside basis differences that may exist with respect to these entities.

We believe that cash held domestically, funds available through the Credit Agreement, and cash generated from U.S. based operations will be adequate to meet the future needs of our U.S. based operations.

Fluctuations in the cost of copper and other raw materials affect the Company's liquidity. Changes in material costs directly impact components of working capital, primarily inventories, accounts receivable, and accounts payable. The price of copper has fluctuated significantly and averaged approximately $2.80 in 2020, $2.72 in 2019, and $2.93 in 2018.

We have significant environmental remediation obligations which we expect to pay over future years. Approximately $1.1 million was spent during 2020 for environmental matters. As of December 26, 2020, we expect to spend $2.7 million in 2021, $0.8 million in 2022, $0.8 million in 2023, $0.9 million in 2024, $0.8 million in 2025, and $18.0 million thereafter for ongoing projects.

Cash used to fund pension and other postretirement benefit obligations was $0.7 million in 2020 and $0.8 million in 2019. We anticipate making contributions of approximately $1.0 million to these plans in 2021.

The Company declared and paid a quarterly cash dividend of 10.0 cents per common share during each quarter of 2018, 2019, and 2020. Payment of dividends in the future is dependent upon our financial condition, cash flows, capital requirements, and other factors.

Capital Expenditures

During 2020 our capital expenditures were $43.9 million. We anticipate investing approximately $30.0 million to $40.0 million for capital expenditures in 2021.

Long-Term Debt

The Company's Credit Agreement provides for an unsecured $350.0 million revolving credit facility which matures on December 6, 2021. Funds borrowed under the Credit Agreement may be used for working capital purposes and other general corporate purposes. In addition, the Credit Agreement provides a sublimit of $50.0 million for the issuance of letters of credit, a sublimit of $25.0 million for loans and letters of credit made in certain foreign currencies, and a swing line loan sublimit of $15.0 million. Outstanding letters of credit and foreign currency loans reduce borrowing availability under the Credit Agreement. Total borrowings under the Credit Agreement were $35.0 million at December 26, 2020.

The Debentures distributed as part of our special dividend are subordinated to all other funded debt of the Company and are callable, in whole or in part, at any time at the option of the Company, subject to declining call premiums during the first five years. The Debentures also grant each holder the right to require the Company to repurchase such holder's Debentures in the event of a change in control at declining repurchase premiums during the first five years. Interest is payable semiannually on September 1 and March 1. Total Debentures outstanding as of December 26, 2020 were $284.5 million.

Jungwoo-Mueller has several secured revolving credit arrangements with a total borrowing capacity of KRW 25.8 billion (or approximately $23.5 million). Borrowings are secured by the real property and equipment of Jungwoo-Mueller and were bearing interest at a rate of 1.90 percent as of December 26, 2020. Total borrowings at Jungwoo-Mueller were $5.8 million as of December 26, 2020.

As of December 26, 2020, the Company's total debt was $327.9 million or 29.0 percent of its total capitalization.

Covenants contained in the Company's financing obligations require, among other things, the maintenance of minimum levels of tangible net worth and the satisfaction of certain minimum financial ratios. As of December 26, 2020, we were in compliance with all of our debt covenants.

Share Repurchase Program

The Company's Board of Directors has extended, until July 2021, its authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. We may cancel, suspend, or extend the time period for the repurchase of shares at any time. Any repurchases will be funded primarily through existing cash and cash from operations. The Company may hold any shares repurchased in treasury or use a portion of the repurchased shares for stock-based compensation plans, as well as for other corporate purposes. From its initial authorization in 1999 through December 26, 2020, the Company had repurchased approximately 6.4 million shares under this authorization.

CONTRACTUAL CASH OBLIGATIONS

The following table presents payments due by the Company under contractual obligations with minimum firm commitments as of December 26, 2020:

		Payments Due by Year			
(In millions)	Total	2021	2022-2023	2024-2025	Thereafter
Total debt	$ 328.1	$ 41.3	$ 0.4	$ 0.4	$ 286.0
Operating and capital leases	34.7	8.3	12.6	6.4	7.4
Heavy machinery and equipment	8.6	8.6	—	—	—
Purchase commitments [(1)]	831.5	830.7	0.6	0.2	—
Transition tax on accumulated foreign earnings	1.9	—	—	1.9	—
Interest payments [(2)]	107.1	17.6	34.1	34.1	21.3
Total contractual cash obligations	$ 1,311.9	$ 906.5	$ 47.7	$ 43.0	$ 314.7

(1) *This includes contractual supply commitments totaling $724.7 million at year-end prices; these contracts contain variable pricing based on Comex and the London Metals Exchange quoted prices. These commitments are for purchases of raw materials, primarily copper cathode and brass scrap, that are expected to be consumed in the ordinary course of business.*

(2) *These payments represent interest on long-term debt based on balances and rates in effect at December 26, 2020.*

The above obligations will be satisfied with existing cash, funds available under the Credit Agreement, and cash generated by operations. The Company has no off-balance sheet financing arrangements.

MARKET RISKS

The Company is exposed to market risks from changes in raw material and energy costs, interest rates, and foreign currency exchange rates. To reduce such risks, we may periodically use financial instruments. Hedging transactions are authorized and executed pursuant to policies and procedures. Further, we do not buy or sell financial instruments for trading purposes. A discussion of the Company's accounting for derivative instruments and hedging activities is included in "Note 1 - Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements.

Cost and Availability of Raw Materials and Energy

Raw materials, primarily copper and brass, represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond our control. Significant increases in the cost of metal, to the extent not reflected in prices for our finished products, or the lack of availability could materially and adversely affect our business, results of operations and financial condition.

The Company occasionally enters into forward fixed-price arrangements with certain customers. We may utilize futures contracts to hedge risks associated with these forward fixed-price arrangements. We may also utilize futures contracts to manage price risk associated with inventory. Depending on the nature of the hedge, changes in the fair value of the futures contracts will either be offset against the change in fair value of the inventory through earnings or recognized as a component of accumulated other comprehensive income (AOCI) in equity and reflected in earnings upon the sale of inventory. Periodic value fluctuations of the contracts generally offset the value fluctuations of the underlying fixed-price transactions or inventory. At December 26, 2020, we held open futures contracts to purchase approximately $5.4 million of copper over the next 12 months related to fixed-price sales orders and to sell approximately $49.4 million of copper over the next five months related to copper inventory.

We may enter into futures contracts or forward fixed-price arrangements with certain vendors to manage price risk associated with natural gas purchases. The effective portion of gains and losses with respect to positions are deferred in equity as a component of AOCI and reflected in earnings upon consumption of natural gas. Periodic value fluctuations of the futures contracts generally offset the value fluctuations of the underlying natural gas prices. There were no open futures contracts to purchase natural gas at December 26, 2020.

Interest Rates

The Company had variable-rate debt outstanding of $41.1 million at December 26, 2020 and $97.0 million at December 28, 2019. At this borrowing level, a hypothetical 10 percent increase in interest rates would have had an insignificant unfavorable impact on our pre-tax earnings and cash flows. The primary interest rate exposure on variable-rate debt is based on LIBOR.

Foreign Currency Exchange Rates

Foreign currency exposures arising from transactions include firm commitments and anticipated transactions denominated in a currency other than an entity's functional currency. The Company and its subsidiaries generally enter into transactions denominated in their respective functional currencies. We may utilize certain futures or forward contracts with financial institutions to hedge foreign currency transactional exposures. Gains and losses with respect to these positions are deferred in equity as a component of AOCI and reflected in earnings upon collection of receivables or payment of commitments. At December 26, 2020, we had open forward contracts with a financial institution to sell approximately 22.7 million Swedish kronor and 10.0 million Norwegian kroner through April 2021.

The Company's primary foreign currency exposure arises from foreign-denominated revenues and profits and their translation into U.S. dollars. The primary currencies to which we are exposed include the Canadian dollar, the British pound sterling, the Mexican peso, and the South Korean won. The Company generally views its investments in foreign subsidiaries with a functional currency other than the U.S. dollar as long-term. As a result, we generally do not hedge these net investments. The net investment in foreign subsidiaries translated into U.S. dollars using the year-end exchange rates was $406.5 million at December 26, 2020 and $397.1 million at December 28, 2019. The potential loss in value of the Company's net investment in foreign subsidiaries resulting from a hypothetical 10 percent adverse change in quoted foreign currency exchange rates at December 26, 2020 and December 28, 2019 amounted to $40.7 million and $39.7 million, respectively. This change would be reflected in the foreign currency translation component of AOCI in the equity section of our Consolidated Balance Sheets until the foreign subsidiaries are sold or otherwise disposed.

We have significant investments in foreign operations whose functional currency is the British pound sterling, the Mexican peso, the Canadian dollar, and the South Korean won. During 2020, the value of the British pound increased approximately four percent, the Mexican peso decreased approximately five percent, the Canadian dollar increased approximately two percent, and the South Korean won increased approximately five percent, relative to the U.S. dollar. The resulting net foreign currency translation gains were included in calculating net other comprehensive loss for the year ended December 26, 2020 and were recorded as a component of AOCI.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's accounting policies are more fully described in "Note 1 - Summary of Significant Accounting Policies" in the Notes to Consolidated Financial Statements. As disclosed in Note 1, the preparation of financial statements in conformity with general accepted accounting principles in the United States requires management to make estimates and assumptions about future events that affect amounts reported in the financial statements and accompanying notes. Actual results could differ significantly from those estimates. Management believes the following discussion addresses our most critical accounting policies, which are those that are most important to the portrayal of the Company's financial condition and results of operations and require management's most difficult, subjective, and complex judgments.

Inventory Valuation Reserves

Our inventories are valued at the lower-of-cost-or-market. The market price of copper cathode and scrap are subject to volatility. During periods when open market prices decline below net realizable value, the Company may need to provide an allowance to reduce the carrying value of its inventory. In addition, certain items in inventory may be considered excess or obsolete and, as such, we may establish an allowance to reduce the carrying value of those items to their net realizable value. Changes in these estimates related to the value of inventory, if any, may result in a materially adverse impact on our reported financial position or results of operations. The Company recognizes the impact of any changes in estimates, assumptions, and judgments in income in the period in which they are determined.

As of December 26, 2020 and December 28, 2019, our inventory valuation reserves were $7.1 million and $6.3 million, respectively. The expense recognized in each of these periods was immaterial to our Consolidated Financial Statements.

Impairment of Goodwill

As of December 26, 2020, we had $167.8 million of recorded goodwill from our business acquisitions, representing the excess of the purchase price over the fair value of the net assets we have acquired. During 2020 we recorded $13.7 million in additional goodwill associated with our Kessler and Shoals acquisitions.

Goodwill is subject to impairment testing, which is performed annually as of the first day of the fourth quarter unless circumstances indicate the need to accelerate the timing of the tests. These circumstances include a significant change in the business climate, operating performance indicators, competition, or sale or disposition of a significant portion of one of our businesses. In our evaluation of goodwill impairment, we perform a qualitative assessment at the reporting unit level that requires management judgment and the use of estimates to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment is not conclusive, management compares the fair value of a reporting unit with its carrying amount and will recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

We identify reporting units by evaluating components of our operating segments and combining those components with similar economic characteristics. Reporting units with significant recorded goodwill include Domestic Piping Systems, B&K LLC, Great Lakes, Heatlink Group, Die-Mold, European Operations, Jungwoo-Mueller, Westermeyer, Turbotec, ATCO, and Shoals.

The fair value of each reporting unit is estimated using a combination of the income and market approaches, incorporating market participant considerations and management's assumptions on revenue growth rates, operating margins, discount rates and expected capital expenditures. Estimates used by management can significantly affect the outcome of the impairment test. Changes in forecasted operating results and other assumptions could materially affect these estimates.

We evaluated each reporting unit during the fourth quarters of 2020 and 2019, as applicable. The estimated fair value of each of these reporting units exceeded its carrying values in 2020 and 2019, and we do not believe that any of these reporting units were at risk of impairment as of December 26, 2020.

Pension and Other Postretirement Benefit Plans

We sponsor several qualified and nonqualified pension and other postretirement benefit plans in the U.S. and certain foreign locations. We recognize the overfunded or underfunded status of the plans as an asset or liability in the Consolidated Balance Sheets with changes in the funded status recorded through comprehensive income in the year in which those changes occur. The obligations for these plans are actuarially determined and affected by assumptions, including discount rates, expected long-term return on plan assets for defined benefit pension plans, and certain employee-related factors, such as retirement age and mortality. We evaluate the assumptions periodically and makes adjustments as necessary.

The expected return on plan assets is determined using the market value of plan assets. Differences between assumed and actual returns are amortized to the market value of assets on a straight-line basis over the average remaining service period of the plan participants using the corridor approach. The corridor approach defers all actuarial gains and losses resulting from variances between actual results and actuarial assumptions. These unrecognized gains and losses are amortized when the net gains and losses exceed 10 percent of the greater of the market value of the plan assets or the projected benefit obligation. The amount in excess of the corridor is amortized over the average remaining service period of the plan participants. For 2020, the average remaining service period for the pension plans was 11.5 years.

Environmental Reserves

We recognize an environmental reserve when it is probable that a loss is likely to occur and the amount of the loss is reasonably estimable. We estimate the duration and extent of our remediation obligations based upon reports of outside consultants, internal and third party estimates and analyses of cleanup costs and ongoing monitoring costs, communications with regulatory agencies, and changes in environmental law. If we were to determine that our estimates of the duration or extent of our environmental obligations were no longer accurate, we would adjust our environmental reserve accordingly in the period that such determination is made. Estimated future expenditures for environmental remediation are not discounted to their present value.

Environmental expenses that relate to ongoing operations are included as a component of cost of goods sold. Environmental expenses related to non-operating properties are presented below operating income in the Consolidated Statements of Income.

Income Taxes

We estimate total income tax expense based on domestic and international statutory income tax rates in the tax jurisdictions where we operate, permanent differences between financial reporting and tax reporting, and available credits and incentives.

Deferred income tax assets and liabilities are recognized for the future tax effects of temporary differences between the treatment of certain items for financial statement and tax purposes using tax rates in effect for the years in which the differences are expected to reverse. Realization of certain components of deferred tax assets is dependent upon the occurrence of future events.

Valuation allowances are recorded when, in the opinion of management, it is more likely than not that all or a portion of the deferred tax assets will not be realized. These valuation allowances can be impacted by changes in tax laws, changes to statutory tax rates, and future taxable income levels, and are based on our judgment, estimates, and assumptions. In the event we were to determine that we would not be able to realize all or a portion of the net deferred tax assets in the future, we would increase the valuation allowance through a charge to income tax expense in the period that such determination is made. Conversely, if we were to determine that we would be able to realize our deferred tax assets in the future, in excess of the net carrying amounts, we would decrease the recorded valuation allowance through a decrease to income tax expense in the period that such determination is made.

We record liabilities for known or anticipated tax issues based on our analysis of whether, and the extent to which, additional taxes will be due. These unrecognized tax benefits are retained until the associated uncertainty is resolved. Tax benefits for uncertain tax positions that are recognized in the Consolidated Financial Statements are measured as the largest amount of benefit, determined on a cumulative probability basis, that is more likely than not to be realized upon ultimate settlement. To the extent we prevail in matters for which a liability for an uncertain tax position is established or are required to pay amounts in excess of the liability, our effective tax rate in a given period may be materially affected.

New Accounting Pronouncements

See "Note 1 – Summary of Significant Accounting Policies" in our Consolidated Financial Statements.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This Annual Report contains various forward-looking statements and includes assumptions concerning the Company's operations, future results, and prospects. These forward-looking statements are based on current expectations and are subject to risk and uncertainties, and may be influenced by factors that could cause actual outcomes and results to be materially different from those predicted. The forward-looking statements reflect knowledge and information available as of the date of preparation of the Annual Report, and the Company undertakes no obligation to update these forward-looking statements. We identify the forward-looking statements by using the words "anticipates," "believes," "expects," "intends" or similar expressions in such statements.

In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, the Company provides the following cautionary statement identifying important economic, political, and technological factors, among others, which could cause actual results or events to differ materially from those set forth in or implied by the forward-looking statements and related assumptions. In addition to those factors discussed under "Risk Factors" in this Annual Report on Form 10-K, such factors include: (i) the current and projected future business environment, including interest rates and capital and consumer spending; (ii) the domestic housing and commercial construction industry environment; (iii) availability and price fluctuations in commodities (including copper, natural gas, and other raw materials, including crude oil that indirectly affects plastic resins); (iv) competitive factors and competitor responses to the Company's initiatives; (v) stability of government laws and regulations, including taxes; (vi) availability of financing; and (vii) continuation of the environment to make acquisitions, domestic and foreign, including regulatory requirements and market values of candidates.

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF INCOME
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

(In thousands, except per share data)	2020	2019	2018
Net sales	$ 2,398,043	$ 2,430,616	$ 2,507,878
Cost of goods sold	1,966,161	2,035,610	2,150,400
Depreciation and amortization	44,843	42,693	39,555
Selling, general, and administrative expense	159,483	162,358	148,888
Litigation settlement, net	(22,053)	—	—
Gain on sale of assets, net	—	(963)	(253)
Impairment charges	3,771	—	—
Insurance recovery	—	(485)	(3,681)
Operating income	245,838	191,403	172,969
Interest expense	(19,247)	(25,683)	(25,199)
Environmental expense	(4,454)	(1,321)	(1,320)
Pension plan termination expense	(17,835)	—	—
Other income, net	4,887	1,684	3,967
Income before income taxes	209,189	166,083	150,417
Income tax expense	(55,321)	(35,257)	(30,952)
Loss from unconsolidated affiliates, net of foreign tax	(10,219)	(24,594)	(12,645)
Consolidated net income	143,649	106,232	106,820
Net income attributable to noncontrolling interests	(4,156)	(5,260)	(2,361)
Net income attributable to Mueller Industries, Inc.	$ 139,493	$ 100,972	$ 104,459
Weighted average shares for basic earnings per share	55,821	55,798	56,782
Effect of dilutive stock-based awards	569	545	487
Adjusted weighted average shares for diluted earnings per share	56,390	56,343	57,269
Basic earnings per share	$ 2.50	$ 1.81	$ 1.84
Diluted earnings per share	$ 2.47	$ 1.79	$ 1.82
Dividends per share	$ 0.40	$ 0.40	$ 0.40

See accompanying notes to consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

(In thousands)	2020	2019	2018
Consolidated net income	$ 143,649	$ 106,232	$ 106,820
Other comprehensive income (loss), net of tax:			
Foreign currency translation	10,350	7,409	(16,876)
Net change with respect to derivative instruments and hedging activities, net of tax of $(146), $(195), and $318	508	690	(1,173)
Net change in pension and postretirement obligation adjustments, net of tax of $(1,560), $(671), and $670	4,652	3,112	(3,339)
Attributable to unconsolidated affiliates, net of tax of $38, $244, and $2,522	(132)	(839)	(8,686)
Total other comprehensive income (loss), net	15,378	10,372	(30,074)
Consolidated comprehensive income	159,027	116,604	76,746
Comprehensive income attributable to noncontrolling interests	(5,647)	(4,610)	(1,579)
Comprehensive income attributable to Mueller Industries, Inc.	$ 153,380	$ 111,994	$ 75,167

See accompanying notes to consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONSOLIDATED BALANCE SHEETS
As of December 26, 2020 and December 28, 2019

(In thousands, except share data)	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	$ 119,075	$ 97,944
Accounts receivable, less allowance for doubtful accounts of $1,538 in 2020 and $770 in 2019	357,532	269,943
Inventories	315,002	292,107
Other current assets	33,752	33,778
Total current assets	825,361	693,772
Property, plant, and equipment, net	376,572	363,128
Operating lease right-of-use assets	29,301	26,922
Goodwill, net	167,764	153,276
Intangible assets, net	77,207	60,082
Investment in unconsolidated affiliates	37,976	48,363
Other noncurrent assets	14,387	25,397
Total Assets	$ 1,528,568	$ 1,370,940
Liabilities		
Current liabilities:		
Current portion of debt	$ 41,283	$ 7,530
Accounts payable	147,741	85,644
Accrued wages and other employee costs	46,299	41,673
Current portion of operating lease liabilities	6,259	5,250
Other current liabilities	98,061	94,190
Total current liabilities	339,643	234,287
Long-term debt, less current portion	286,593	378,724
Pension liabilities	13,552	9,126
Postretirement benefits other than pensions	13,289	13,082
Environmental reserves	21,256	19,972
Deferred income taxes	16,842	21,094
Noncurrent operating lease liabilities	21,602	22,388
Other noncurrent liabilities	14,731	10,131
Total liabilities	727,508	708,804
Equity		
Mueller Industries, Inc. stockholders' equity:		
Preferred stock - $1.00 par value; shares authorized 5,000,000; none outstanding	—	—
Common stock - $.01 par value; shares authorized 100,000,000; issued 80,183,004; outstanding 57,087,432 in 2020 and 56,949,246 in 2019	802	802
Additional paid-in capital	280,051	278,609
Retained earnings	1,019,694	903,070
Accumulated other comprehensive loss	(54,883)	(68,770)
Treasury common stock, at cost	(468,919)	(470,243)
Total Mueller Industries, Inc. stockholders' equity	776,745	643,468
Noncontrolling interests	24,315	18,668
Total equity	801,060	662,136
Commitments and contingencies	—	—
Total Liabilities and Equity	$ 1,528,568	$ 1,370,940

See accompanying notes to consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

(In thousands)	2020	2019	2018
Operating activities:			
Consolidated net income	$ 143,649	$ 106,232	$ 106,820
Reconciliation of consolidated net income to net cash provided by operating activities:			
Depreciation	38,715	37,337	35,118
Amortization of intangibles	6,128	5,356	4,437
Amortization of debt issuance costs	319	318	318
Loss from unconsolidated affiliates	10,219	24,594	12,645
Insurance proceeds - noncapital related	—	485	2,306
Change in the fair value of contingent consideration	—	3,625	—
Insurance recovery	—	(485)	(3,681)
Stock-based compensation expense	8,570	8,744	8,035
Provision for doubtful accounts receivable	1,208	(80)	(286)
Non-cash pension plan termination expense	11,642	—	—
Loss (gain) on disposals of assets	132	(963)	(253)
Impairment charges	3,771	—	—
Deferred income tax (benefit) expense	(4,046)	(428)	170
Changes in assets and liabilities, net of effects of businesses acquired:			
Receivables	(76,404)	6,585	(11,056)
Inventories	5,207	39,561	27,512
Other assets	20,609	(15,639)	14,353
Current liabilities	74,097	(7,076)	(15,680)
Other liabilities	(1,142)	(7,944)	(14,769)
Other, net	2,399	322	1,903
Net cash provided by operating activities	245,073	200,544	167,892
Investing activities:			
Proceeds from sale of assets, net of cash transferred	181	3,240	18,703
Acquisition of businesses, net of cash acquired	(72,648)	3,465	(167,677)
Capital expenditures	(43,885)	(31,162)	(38,481)
Issuance of notes receivable	(9,270)	—	—
Insurance proceeds - capital related	—	—	1,968
Investments in unconsolidated affiliates	—	(16,000)	(1,609)
Net cash used in investing activities	(125,622)	(40,457)	(187,096)
Financing activities:			
Dividends paid to stockholders of Mueller Industries, Inc.	(22,341)	(22,325)	(22,705)
Dividends paid to noncontrolling interests	—	(846)	(592)
Issuance of long-term debt	190,038	100,658	204,233
Repayments of long-term debt	(246,898)	(206,718)	(172,002)
Repayment of debt by consolidated joint ventures, net	(259)	(4,305)	(2,915)
Repurchase of common stock	(5,574)	(1,763)	(33,562)
Payment of contingent consideration	(7,000)	(3,170)	—
Net cash used to settle stock-based awards	(230)	(1,225)	(726)
Net cash used in financing activities	(92,264)	(139,694)	(28,269)
Effect of exchange rate changes on cash	2,147	511	(1,952)
Increase (decrease) in cash, cash equivalents, and restricted cash	29,334	20,904	(49,425)
Cash, cash equivalents, and restricted cash at the beginning of the year	98,042	77,138	126,563
Cash, cash equivalents, and restricted cash at the end of the year	$ 127,376	$ 98,042	$ 77,138

See accompanying notes to consolidated financial statements.

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

	2020		2019		2018	
(In thousands)	Shares	Amount	Shares	Amount	Shares	Amount
Common stock:						
Balance at beginning of year	80,183	$ 802	80,183	$ 802	80,183	$ 802
Balance at end of year	80,183	$ 802	80,183	$ 802	80,183	$ 802
Additional paid-in capital:						
Balance at beginning of year		$ 278,609		$ 276,849		$ 274,585
Issuance of shares under incentive stock option plans		(745)		(644)		(278)
Stock-based compensation expense		8,570		8,744		8,035
Issuance of restricted stock		(6,383)		(6,340)		(5,493)
Balance at end of year		$ 280,051		$ 278,609		$ 276,849
Retained earnings:						
Balance at beginning of year		$ 903,070		$ 824,737		$ 743,503
Net income attributable to Mueller Industries, Inc.		139,493		100,972		104,459
Dividends paid or payable to stockholders of Mueller Industries, Inc.		(22,869)		(22,639)		(23,009)
Reclassification of stranded effects of the Act		—		—		(556)
Other adjustments		—		—		340
Balance at end of year		$ 1,019,694		$ 903,070		$ 824,737
Accumulated other comprehensive loss:						
Balance at beginning of year		$ (68,770)		$ (79,792)		$ (51,056)
Total other comprehensive income (loss) attributable to Mueller Industries, Inc.		13,887		11,022		(29,292)
Reclassification of stranded effects of the Act		—		—		556
Balance at end of year		$ (54,883)		$ (68,770)		$ (79,792)

MUELLER INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(continued)
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

	2020		2019		2018	
(In thousands)	Shares	Amount	Shares	Amount	Shares	Amount
Treasury stock:						
Balance at beginning of year	23,234	$ (470,243)	23,480	$ (474,240)	22,373	$ (445,723)
Issuance of shares under incentive stock option plans	(71)	515	(94)	1,908	(57)	1,136
Repurchase of common stock	248	(5,574)	162	(4,251)	1,437	(35,146)
Issuance of restricted stock	(315)	6,383	(314)	6,340	(273)	5,493
Balance at end of year	23,096	$ (468,919)	23,234	$ (470,243)	23,480	$ (474,240)
Noncontrolling interests:						
Balance at beginning of year		$ 18,668		$ 14,904		$ 13,917
Dividends paid to noncontrolling interests		—		(846)		(592)
Net income attributable to noncontrolling interests		4,156		5,260		2,361
Foreign currency translation		1,491		(650)		(782)
Balance at end of year		$ 24,315		$ 18,668		$ 14,904

See accompanying notes to consolidated financial statements.

Notes to Consolidated Financial Statements

Note 1 – Summary of Significant Accounting Policies

Nature of Operations

The principal business of Mueller Industries, Inc. is the manufacture and sale of copper tube and fittings; line sets; PEX plastic tube and fittings; steel nipples; brass and copper alloy rod, bar, and shapes; aluminum and brass forgings; aluminum impact extrusions; compressed gas valves; refrigeration valves and fittings; fabricated tubular products; pressure vessels; coaxial heat exchangers; insulated flexible duct systems; brazed manifolds; headers; and distributor assemblies. The Company also resells brass and plastic plumbing valves, plastic fittings, malleable iron fittings, faucets, and plumbing specialty products. The Company markets its products to the HVAC, plumbing, refrigeration, hardware, and other industries. Mueller's operations are located throughout the United States and in Canada, Mexico, Great Britain, South Korea, the Middle East, and China.

Fiscal Years

The Company's fiscal year consists of 52 weeks ending on the last Saturday of December. These dates were December 26, 2020, December 28, 2019, and December 29, 2018.

Basis of Presentation

The Consolidated Financial Statements include the accounts of Mueller Industries, Inc. and its majority-owned subsidiaries. The noncontrolling interest represents a private ownership interest of 40 percent of Jungwoo Metal Ind. Co., LTD (Jungwoo-Mueller).

Revenue Recognition

Given the nature of the Company's business and product offerings, sales transactions with customers are generally comprised of a single performance obligation that involves delivery of the products identified in the contracts with customers. Performance obligations are generally satisfied at the point in time of shipment and payment is generally due within sixty days. Variable consideration is estimated for future rebates on certain product lines and product returns. The Company records variable consideration as an adjustment to the transaction price in the period it is incurred. Since variable consideration is settled within a short period of time, the time value of money is not significant. The cost of shipping product to customers is expensed as incurred as a component of cost of goods sold.

The Company's Domestic Piping Systems Group engages in certain transactions where it acts as an agent. Revenue from these transactions is recorded on a net basis.

See "Note 3 – Segment Information" for additional information on disaggregation of revenue from contracts with customers.

Acquisitions

Accounting for acquisitions requires the Company to recognize separately from goodwill the assets acquired and liabilities assumed at their acquisition date fair values. Goodwill is measured as the excess of the purchase price over the net amount allocated to the identifiable assets acquired and liabilities assumed. While management uses its best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date, the estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill. The operating results generated by the acquired businesses are included in the Consolidated Statements of Income from their respective dates of acquisition. Acquisition related costs are expensed as incurred. See "Note 2 – Acquisitions" for additional information.

Cash Equivalents and Restricted Cash

Temporary investments with original maturities of three months or less are considered to be cash equivalents. These investments are stated at cost. At December 26, 2020 and December 28, 2019, temporary investments consisted of money market mutual funds, commercial paper, bank repurchase agreements, and U.S. and foreign government securities totaling approximately $13.3 million and $0.5 million, respectively.

Amounts included in restricted cash relate to required deposits in brokerage accounts that facilitate the Company's hedging activities as well as imprest funds for the Company's self-insured workers' compensation program. See "Note 4 – Cash, Cash Equivalents, and Restricted Cash" for additional information.

Allowance for Doubtful Accounts

The Company routinely grants credit to many of its customers without collateral. The risk of credit loss in trade receivables is substantially mitigated by the credit evaluation process. The Company provides an allowance for receivables that may not be fully collected. In circumstances where the Company is aware of a customer's inability to meet their financial obligations (e.g., bankruptcy filings or substantial credit rating downgrades), it records an allowance for doubtful accounts against amounts due to reduce the net recognized receivable to the amount it believes most likely will be collected. For all other customers, the Company recognizes an allowance for doubtful accounts based on its historical collection experience and the impact of current economic conditions. If circumstances change (e.g., greater than expected defaults or an unexpected material change in a major customer's ability to meet their financial obligations), the Company could change its estimate of the recoverability of amounts due by a material amount. Historically, credit losses have been within management's expectations. The balance for uncollectible accounts was $1.5 million and $0.8 million as of December 26, 2020 and December 28, 2019, respectively.

Inventories

The Company's inventories are valued at the lower-of-cost-or-market. The material component of its U.S. copper tube and copper fittings inventories is valued on a LIFO basis and the non-material components of U.S. copper tube and copper fittings inventories are valued on a FIFO basis. The material component of its U.K. and Canadian copper tube inventories are valued on a FIFO basis. The material component of its brass rod and forgings inventories are valued on a FIFO basis. Certain inventories are valued on an average cost basis. Elements of cost in finished goods inventory in addition to the cost of material include depreciation, amortization, utilities, maintenance, production wages, and transportation costs.

The market price of copper cathode and scrap is subject to volatility. During periods when open market prices decline below net book value, the Company may need to provide an allowance to reduce the carrying value of its inventory. In addition, certain items in inventory may be considered obsolete and, as such, the Company may establish an allowance to reduce the carrying value of those items to their net realizable value. Changes in these estimates related to the value of inventory, if any, may result in a materially adverse impact on the Company's reported financial position or results of operations. The Company recognizes the impact of any changes in estimates, assumptions, and judgments in income in the period in which it is determined. See "Note 5 – Inventories" for additional information.

Leases

The Company leases certain manufacturing facilities, distribution centers, office space, and equipment. Leases with an initial term of twelve months or less are not recorded on the balance sheet; expense for these leases is recognized on a straight line-basis over the term of the lease. Most of the Company's leases include one or more options to renew up to five years and have remaining terms of one to 15 years. These options are not included in the Company's valuation of the right-of-use assets as the Company is not reasonably certain to exercise the options.

The Company has certain vehicle leases that are financing; however, these leases are deemed immaterial for disclosure. See "Note 8 – Leases" for additional information.

Property, Plant, and Equipment

Property, plant, and equipment is stated at cost less accumulated depreciation. Expenditures for major additions and improvements are capitalized, while minor replacements, maintenance, and repairs are charged to expense as incurred. Depreciation of buildings, machinery, and equipment is provided on the straight-line method over the estimated useful lives ranging from 20 to 40 years for buildings and five to 20 years for machinery and equipment. Leasehold improvements are amortized over the lesser of their useful life or the remaining lease term.

The Company continually evaluates these assets to determine whether events or changes in circumstances have occurred that may warrant revision of the estimated useful life or whether the remaining balance should be evaluated for possible impairment. See "Note 9 – Property, Plant, and Equipment, Net" for additional information.

Goodwill

Goodwill is recognized for the excess of the purchase price over the fair value of tangible and identifiable intangible net assets of businesses acquired. Several factors give rise to goodwill in business acquisitions, such as the expected benefit from synergies of the combination and the existing workforce of the acquired business. Goodwill is evaluated annually for possible impairment as of the first day of the fourth quarter unless circumstances indicate the need to accelerate the timing of the evaluation. In the evaluation of goodwill impairment, management performs a qualitative assessment to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment is not conclusive, management compares the fair value of a reporting unit with its carrying amount and will recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

Fair value for the Company's reporting units is determined using a combination of the income and market approaches (level 3 within the fair value hierarchy), incorporating market participant considerations and management's assumptions on revenue growth rates, operating margins, discount rates and expected capital expenditures. The market approach measures the fair value of a business through the analysis of publicly traded companies or recent sales of similar businesses. The income approach uses a discounted cash flow model to estimate the fair value of reporting units based on expected cash flows (adjusted for capital investment required to support operations) and a terminal value. This cash flow stream is discounted to its present value to arrive at a fair value for each reporting unit. Future earnings are estimated using the Company's most recent annual projections, applying a growth rate to future periods. Those projections are directly impacted by the condition of the markets in which the Company's businesses participate. The discount rate selected for the reporting units is generally based on rates of return available for comparable companies at the date of valuation. Fair value determinations may include both internal and third-party valuations. See "Note 10 – Goodwill and Other Intangible Assets" for additional information.

Investments in Unconsolidated Affiliates

The Company owns a 50 percent interest in an unconsolidated affiliate that acquired Tecumseh Products Company (Tecumseh). The Company also owns a 50 percent interest in a second unconsolidated affiliate that provides financing to Tecumseh. These investments are recorded using the equity method of accounting, as the Company can exercise significant influence but does not own a majority equity interest or otherwise control the respective entities. Under the equity method of accounting, these investments are stated at initial cost and are adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions.

The Company records its proportionate share of the investees' net income or loss, net of foreign taxes, one quarter in arrears as income (loss) from unconsolidated affiliates, net of foreign tax, in the Consolidated Statements of Income. The Company's proportionate share of the investees' other comprehensive income (loss), net of income taxes, is recorded in the Consolidated Statements of Comprehensive Income and Consolidated Statements of Changes in Equity. The U.S. tax effect of the Company's proportionate share of Tecumseh's income or loss is recorded in income tax expense in the Consolidated Statements of Income. In general, the equity investment in unconsolidated affiliates is equal to the current equity investment plus the investees' net accumulated losses.

The Company also owns a 40 percent interest in Mueller Middle East BSC.

The investments in unconsolidated affiliates are assessed periodically for impairment and written down when the carrying amount is not considered fully recoverable. See "Note 11 – Investments in Unconsolidated Affiliates" for additional information.

Self-Insurance Accruals

The Company is primarily self-insured for workers' compensation claims and benefits paid under certain employee health care programs. Accruals are primarily based on estimated undiscounted cost of claims, which includes incurred but not reported claims, and are classified as accrued wages and other employee costs.

Pension and Other Postretirement Benefit Plans

The Company sponsors several qualified and nonqualified pension and other postretirement benefit plans in the U.S. and certain foreign locations. The Company recognizes the overfunded or underfunded status of the plans as an asset or liability in the Consolidated Balance Sheets with changes in the funded status recorded through comprehensive income in the year in which those changes occur. The obligations for these plans are determined by actuaries and affected by the assumptions, including discount rates, expected long-term return on plan assets for defined benefit pension plans, and certain employee-related factors, such as retirement age and mortality. The Company evaluates its assumptions periodically and makes adjustments as necessary.

The expected return on plan assets is determined using the market value of plan assets. Differences between assumed and actual returns are amortized to the market value of assets on a straight-line basis over the average remaining service period of the plan participants using the corridor approach. The corridor approach defers all actuarial gains and losses resulting from variances between actual results and actuarial assumptions. These unrecognized gains and losses are amortized when the net gains and losses exceed 10 percent of the greater of the market value of the plan assets or the projected benefit obligation. The amount in excess of the corridor is amortized over the average remaining service period of the plan participants. For 2020, the average remaining service period for the pension plans was 11.5 years. See "Note 13 – Benefit Plans" for additional information.

Environmental Reserves and Environmental Expenses

The Company recognizes an environmental liability when it is probable the liability exists and the amount is reasonably estimable. The Company estimates the duration and extent of its remediation obligations based upon reports of outside consultants, internal and third party estimates and analyses of cleanup costs and ongoing monitoring costs, communications with regulatory agencies, and changes in environmental law. If the Company were to determine that its estimates of the duration or extent of its environmental obligations were no longer accurate, it would adjust environmental liabilities accordingly in the period that such determination is made. Estimated future expenditures for environmental remediation are not discounted to their present value.

Environmental expenses that relate to ongoing operations are included as a component of cost of goods sold. Environmental expenses related to non-operating properties are presented below operating income in the Consolidated Statements of Income. See "Note 14 – Commitments and Contingencies" for additional information.

Earnings Per Share

Basic earnings per share is computed based on the weighted average number of common shares outstanding. Diluted earnings per share reflects the increase in weighted average common shares outstanding that would result from the assumed exercise of outstanding stock options and vesting of restricted stock awards calculated using the treasury stock method. There were approximately 10 thousand stock-based awards excluded from the computation of diluted earnings per share for the year ended December 26, 2020, because they were antidilutive. There were no awards excluded from the computation of diluted earnings per share for the year ended December 28, 2019.

Income Taxes

Deferred income tax assets and liabilities are recognized when differences arise between the treatment of certain items for financial statement and tax purposes. Realization of certain components of deferred tax assets is dependent upon the occurrence of future events. The Company records valuation allowances to reduce its deferred tax assets to the amount it believes is more likely than not to be realized. These valuation allowances can be impacted by changes in tax laws, changes to statutory tax rates, and future taxable income levels and are based on the Company's judgment, estimates, and assumptions regarding those future events. In the event the Company was to determine that it would not be able to realize all or a portion of the net deferred tax assets in the future, it would increase the valuation allowance through a charge to income tax expense in the period that such determination is made. Conversely, if it was to determine that it would be able to realize its deferred tax assets in the future, in excess of the net carrying amounts, the Company would decrease the recorded valuation allowance through a decrease to income tax expense in the period that such determination is made.

The Company provides for uncertain tax positions and the related interest and penalties, if any, based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. Tax benefits for uncertain tax positions that are recognized in the financial statements are measured as the largest amount of benefit, determined on a cumulative probability basis, that is more likely than not to be realized upon ultimate settlement. To the extent the Company prevails in matters for which a liability for an uncertain tax position is established or is required to pay amounts in excess of the liability, the Company's effective tax rate in a given financial statement period may be affected.

These estimates are highly subjective and could be affected by changes in business conditions and other factors. Changes in any of these factors could have a material impact on future income tax expense. See "Note 15 – Income Taxes" for additional information.

Taxes Collected from Customers and Remitted to Governmental Authorities

Taxes assessed by a governmental authority that are directly imposed on a revenue producing transaction between the Company and its customers, primarily value added taxes in foreign jurisdictions, are accounted for on a net (excluded from revenues and costs) basis.

Stock-Based Compensation

The Company has in effect stock incentive plans under which stock-based awards have been granted to certain employees and members of its Board of Directors. Stock-based compensation expense is recognized in the Consolidated Statements of Income as a component of selling, general, and administrative expense based on the grant date fair value of the awards. See "Note 17 – Stock-Based Compensation" for additional information.

Concentrations of Credit and Market Risk

Concentrations of credit risk with respect to accounts receivable are limited due to the large number of customers comprising the Company's customer base, and their dispersion across different geographic areas and different industries, including HVAC, plumbing, refrigeration, hardware, automotive, OEMs, and others.

The Company minimizes its exposure to base metal price fluctuations through various strategies. Generally, it prices an equivalent amount of copper raw material, under flexible pricing arrangements it maintains with its suppliers, at the time it determines the selling price of finished products to its customers.

Derivative Instruments and Hedging Activities

The Company's earnings and cash flows are subject to fluctuations due to changes in commodity prices, foreign currency exchange rates, and interest rates. The Company uses derivative instruments such as commodity futures contracts, foreign currency forward contracts, and interest rate swaps to manage these exposures.

All derivatives are recognized in the Consolidated Balance Sheets at their fair value. On the date the derivative contract is entered into, it is either a) designated as a hedge of (i) a forecasted transaction or the variability of cash flow to be paid (cash flow hedge) or (ii) the fair value of a recognized asset or liability (fair value hedge), or b) not designated in a hedge accounting relationship, even though the derivative contract was executed to mitigate an economic exposure (economic hedge), as the Company does not enter into derivative contracts for trading purposes. Changes in the fair value of a derivative that is qualified, designated, and highly effective as a cash flow hedge are recorded in stockholders' equity within accumulated other comprehensive income (AOCI), to the extent effective, until they are reclassified to earnings in the same period or periods during which the hedged transaction affects earnings. Changes in the fair value of undesignated derivative instruments executed as economic hedges are reported in current earnings.

The Company documents all relationships between derivative instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivative instruments that are designated as fair value hedges to specific assets and liabilities in the Consolidated Balance Sheets and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

The Company also assesses, both at the hedge's inception and on an ongoing basis, whether the designated derivative instruments that are used in hedging transactions are highly effective in offsetting changes in cash flow or fair values of hedged items. When a derivative instrument is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable of occurring, hedge accounting is discontinued prospectively in accordance with the derecognition criteria for hedge accounting.

The Company primarily executes derivative contracts with major financial institutions. These counterparties expose the Company to credit risk in the event of non-performance. The amount of such exposure is limited to the fair value of the contract plus the unpaid portion of amounts due to the Company pursuant to terms of the derivative instruments, if any. If a downgrade in the credit rating of these counterparties occurs, management believes that this exposure is mitigated by provisions in the derivative arrangements which allow for the legal right of offset of any amounts due to the Company from the counterparties with any amounts payable to the counterparties by the Company. As a result, management considers the risk of loss from counterparty default to be minimal. See "Note 7 – Derivative Instruments and Hedging Activities" for additional information.

Fair Value of Financial Instruments

The carrying amounts for cash and cash equivalents, accounts receivable, and accounts payable approximate fair value due to the short-term maturity of these instruments.

The fair value of long-term debt at December 26, 2020 approximates the carrying value on that date. The estimated fair values were determined based on quoted market prices and the current rates offered for debt with similar terms and maturities. The fair value of long-term debt is classified as level 2 within the fair value hierarchy. This classification is defined as a fair value determined using market-based inputs other than quoted prices that are observable for the liability, either directly or indirectly.

Foreign Currency Translation

For foreign subsidiaries for which the functional currency is not the U.S. dollar, balance sheet accounts are translated at exchange rates in effect at the end of the year and income statement accounts are translated at average exchange rates for the year. Translation gains and losses are included in equity as a component of AOCI. Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are recognized in selling, general, and administrative expense in the Consolidated Statements of Income. Included in the Consolidated Statements of Income were net transaction losses of $0.5 million in 2020, gains of $0.2 million in 2019, and losses of $1.0 million in 2018.

Use of and Changes in Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (U.S. GAAP) requires management to make estimates, assumptions, and judgments that affect the amounts reported in the financial statements and accompanying notes. Management makes its best estimate of the ultimate outcome for these items based on historical trends and other information available when the financial statements are prepared. Changes in estimates are recognized in accordance with the accounting rules for the estimate, which is typically in the period when new information becomes available to management. Areas where the nature of the estimate makes it reasonably possible that actual results could materially differ from amounts estimated include but are not limited to: pension and other postretirement benefit plan obligations, tax liabilities, loss contingencies, litigation claims, environmental reserves, and impairment assessments of long-lived assets (including goodwill).

Recently Adopted Accounting Standards

In June 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Disclosure Framework- Measurement of Credit Losses on Financial Instruments*. The ASU significantly changes the current incurred credit loss model under U.S. GAAP, which delays the recognition of credit losses until it is probable a loss has been incurred, to a current expected credit losses model which requires immediate recognition of management estimates of credit losses. The Company adopted the ASU during the first quarter of 2020 using a retrospective approach. The adoption of the ASU did not have a material impact on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*. For employers that sponsor defined benefit pension and/or other postretirement benefit plans, the ASU eliminates requirements for certain disclosures that are no longer considered cost beneficial, requires new disclosures related to the weighted-average interest crediting rate for cash balance plans and explanations for significant gains and losses related to changes in benefit obligations, and clarifies the requirements for entities that provide aggregate disclosures for two or more plans. The Company adopted the ASU during the first quarter of 2020 using a retrospective approach. The adoption of the ASU did not have a material impact on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*. The ASU eliminates requirements to disclose the amount and reasons for transfers between level 1 and level 2 of the fair value hierarchy, but requires public companies to disclose changes in unrealized gains and losses for the period included in other comprehensive income (OCI) for recurring level 3 fair value measurements or instruments held at the end of the reporting period and the range and weighted average used to develop significant unobservable inputs for level 3 fair value measurements. The Company adopted the ASU during the first quarter of 2020. The guidance on changes in unrealized gains and losses for the period included in OCI for recurring level 3 measurements, the range and weighted average of significant unobservable inputs used to develop level 3 fair value measurements, and the narrative description of measurement uncertainty is applied prospectively. All other amendments are applied retrospectively. The adoption of the ASU did not have a material impact on the Company's Consolidated Financial Statements.

Note 2 – Acquisitions

2020 Acquisitions

Kessler

On August 3, 2020, the Company entered into an asset purchase agreement with Wieland-Kessler LLC, whereby the Company purchased the Kessler distribution business, which included inventory, manufacturing equipment, and related assets. The total purchase price was $57.2 million in cash paid at closing. The Company treated this as a business combination. The acquired business, Kessler Sales and Distribution, LLC (Kessler), is a distributor of residential and commercial plumbing products. It is reported within and complements the Company's existing businesses in the Piping Systems segment. For the year ended December 26, 2020, the Company's total net sales included $55.0 million of revenue recognized by Kessler from the date of acquisition.

Shoals

On January 17, 2020, the Company entered into a stock purchase agreement pursuant to which the Company acquired all of the outstanding stock of Shoals Tubular, Inc. (Shoals) for approximately $15.4 million in cash at closing, net of working capital adjustments. Shoals is a manufacturer of brazed manifolds, headers, and distributor assemblies used primarily by manufacturers of residential heating and air conditioning units. The acquired business is reported within and complements the Company's existing businesses in the Climate segment.

2018 Acquisitions

ATCO

On July 2, 2018, the Company entered into a stock purchase agreement pursuant to which the Company acquired all of the outstanding capital stock of ATCO Rubber Products, Inc. (ATCO) for approximately $158.1 million, net of working capital adjustments. The total purchase price consisted of $151.8 million in cash at closing and a contingent consideration arrangement which requires the Company to pay the former owner up to $12.0 million based on EBITDA growth of the acquired business. ATCO is an industry leader in the manufacturing and distribution of insulated HVAC flexible duct systems and will support the Company's strategy to grow its Climate Products businesses to become a more valuable resource to its HVAC customers. The acquired business is reported in the Company's Climate segment.

For the years ended December 26, 2020 and December 28, 2019, ATCO had net sales of approximately $196.5 million and $190.1 million, respectively. For the year ended December 29, 2018, the Company's total net sales included $90.0 million of revenue recognized by ATCO from the date of acquisition.

The following table presents condensed pro forma consolidated results of operations as if the ATCO acquisition has occurred at the beginning of 2018. The pro forma information does not purport to be indicative of the results that would have been obtained if the operations had actually been combined during the periods presented and is not necessarily indicative of operating results to be expected in future periods. The most significant pro forma adjustments to the historical results of operations relate to the application of purchase accounting and the financing structure.

	For the Year Ended
(In thousands, except per share data)	2018
Net sales	$ 2,595,454
Net income	111,482
Basic earnings per share	$ 1.96
Diluted earnings per share	1.95

Die-Mold

On March 31, 2018, the Company entered into a share purchase agreement pursuant to which the Company acquired all of the outstanding shares of Die-Mold Tool Limited (Die-Mold) for approximately $13.6 million, net of working capital adjustments. The total purchase price consisted of $12.4 million in cash at closing and a contingent consideration arrangement which requires the Company to pay the former owner up to $2.3 million based on EBITDA growth of the acquired business. Die-Mold, based out of Ontario, Canada, is a manufacturer of plastic PEX and other plumbing-related fittings and an integrated designer and manufacturer of plastic injection tooling. The business complements the Company's existing businesses within the Piping Systems segment.

Purchase Price Allocations

These acquisitions were accounted for using the acquisition method of accounting whereby the total purchase price was allocated to tangible and intangible assets acquired and liabilities assumed based on respective fair values.

The following table summarizes the allocation of the purchase price to acquire these businesses, which were financed by available cash balances, as well as the assets acquired and liabilities assumed at the respective acquisition dates. The purchase price allocations for Kessler and Shoals are provisional as of December 26, 2020 and subject to change upon the completion of the final valuation of long-lived assets during the measurement period.

(In thousands)	Kessler	Shoals	ATCO	Die-Mold
Total consideration	$ 57,233	$ 15,415	$ 158,100	$ 13,629
Allocated to:				
Accounts receivable	—	660	21,829	1,684
Inventories	25,106	1,809	31,666	1,833
Other current assets	—	26	1,051	267
Property, plant, and equipment	3,561	3,700	83,080	3,278
Operating lease right-of-use assets	10,526	—	—	—
Goodwill	11,710 [(1)]	1,964 [(1)]	17,236 [(1)]	4,239
Intangible assets	15,140	7,480	23,360	5,209
Other assets	—	—	224	—
Total assets acquired	66,043	15,639	178,446	16,510
Accounts payable	—	217	8,093	710
Current portion of operating lease liabilities	1,692	—	—	—
Other current liabilities	—	7	10,187	173
Long-term debt	—	—	2,066	—
Noncurrent operating lease liabilities	7,118	—	—	—
Other noncurrent liabilities	—	—	—	1,998
Total liabilities assumed	8,810	224	20,346	2,881
Net assets acquired	57,233	15,415	$ 158,100	$ 13,629

[(1)] *Tax-deductible goodwill*

The following details the total intangible assets identified in the allocation of the purchase price at the respective acquisition dates:

(In thousands)	Estimated Useful Life	Kessler	Shoals	ATCO	Die-Mold
Intangible asset type:					
Customer relationships	20 years	$ 11,180	$ 4,290	$ 6,550	$ 3,077
Non-compete agreements	3-5 years	—	150	—	70
Patents and technology	10-15 years	—	2,620	10,570	1,512
Trade names, licenses, and other	5-10 years	3,960	420	4,770	550
Supply contracts	5 years	—	—	1,470	—
Total intangible assets		$ 15,140	$ 7,480	$ 23,360	$ 5,209

Note 3 –Segment Information

The Company's reportable segments are Piping Systems, Industrial Metals, and Climate. Each of the reportable segments is composed of certain operating segments that are aggregated primarily by the nature of products offered as follows:

Piping Systems

Piping Systems is composed of the following operating segments: Domestic Piping Systems Group, Great Lakes Copper, Heatlink Group, Die-Mold, European Operations, Trading Group, and Jungwoo-Mueller (the Company's South Korean joint venture). The Domestic Piping Systems Group manufactures and distributes copper tube, fittings, and line sets. These products are manufactured in the U.S., sold in the U.S., and exported to markets worldwide. Outside the U.S., Great Lakes Copper manufactures copper tube and line sets in Canada and sells the products primarily in the U.S. and Canada. Heatlink Group produces a complete line of products for PEX plumbing and radiant systems in Canada and sells these products in Canada and the U.S. Die-Mold manufactures PEX and other plumbing-related fittings and plastic injection tooling in Canada and sells these products in Canada and the U.S. European Operations manufacture copper tube in the U.K. which is sold primarily in Europe. The Trading Group manufactures pipe nipples and resells brass and plastic plumbing valves, malleable iron fittings, faucets, and plumbing specialty products in the U.S. and Mexico. Jungwoo-Mueller manufactures copper-based joining products that are sold worldwide. The Piping Systems segment's products are sold primarily to plumbing, refrigeration, and air-conditioning wholesalers, hardware wholesalers and co-ops, building product retailers, and air-conditioning OEMs.

During 2020, the segment recognized fixed asset impairment charges for certain manufacturing equipment of $3.8 million.

During 2019, the segment recognized a gain of $1.2 million on the sale of real property.

During 2018, the segment recognized a gain of $1.4 million on the sale of real property and a gain of $0.7 million on the sale of manufacturing equipment.

Industrial Metals

Industrial Metals is composed of the following operating segments: Brass Rod & Copper Bar Products, Impacts & Micro Gauge, and Brass Value-Added Products. These businesses manufacture brass rod, impact extrusions, and forgings, as well as a wide variety of end products including plumbing brass, automotive components, valves, fittings, and gas assemblies. These products are manufactured in the U.S. and sold primarily to OEMs in the U.S., many of which are in the industrial, transportation, construction, heating, ventilation, and air-conditioning, plumbing, refrigeration, and energy markets.

During 2019, the segment recognized a loss of $0.3 million on the sale of real property and an insurance recovery gain of $0.5 million related to the losses incurred due to the 2017 fire at the brass rod mill in Port Huron, Michigan.

During 2018, the segment recognized a gain of $1.3 million on the sale of real property and an insurance recovery gain of $3.7 million related to the losses incurred due to the 2017 fire at the brass rod mill in Port Huron, Michigan.

Climate

Climate is composed of the following operating segments: Refrigeration Products, Fabricated Tube Products, Westermeyer, Turbotec, ATCO, Linesets, Inc. and Shoals. These domestic businesses manufacture and fabricate valves, assemblies, high pressure components, coaxial heat exchangers, insulated HVAC flexible duct systems, line sets, brazed manifolds, headers, and distributor assemblies primarily for the heating, ventilation, air-conditioning, and refrigeration markets in the U.S.

Performance of segments is generally evaluated by their operating income. Summarized product line, geographic, and segment information is shown in the following tables. Geographic sales data indicates the location from which products are shipped. Unallocated expenses include general corporate expenses, plus certain charges or credits not included in segment activity.

During 2020, 2019, and 2018, no single customer exceeded 10 percent of worldwide sales.

The following tables represent a disaggregation of revenue from contracts with customers, along with the reportable segment for each category:

	For the Year Ended December 26, 2020			
(In thousands)	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	$ 1,232,724	$ —	$ —	$ 1,232,724
Brass rod and forgings	—	356,547	—	356,547
OEM components, tube & assemblies	56,176	42,127	138,551	236,854
Valves and plumbing specialties	294,102	—	—	294,102
Other	—	73,485	231,580	305,065
	$ 1,583,002	$ 472,159	$ 370,131	$ 2,425,292
Intersegment sales				(27,249)
Net sales				$ 2,398,043

	For the Year Ended December 28, 2019			
(In thousands)	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	$ 1,271,558	$ —	$ —	$ 1,271,558
Brass rod and forgings	—	425,573	—	425,573
OEM components, tube & assemblies	29,103	48,104	133,651	210,858
Valves and plumbing specialties	241,795	—	—	241,795
Other	—	80,695	222,565	303,260
	$ 1,542,456	$ 554,372	$ 356,216	$ 2,453,044
Intersegment sales				(22,428)
Net sales				$ 2,430,616

Disaggregation of revenue from contracts with customers (continued):

	For the Year Ended December 29, 2018			
(In thousands)	Piping Systems	Industrial Metals	Climate	Total
Tube and fittings	$ 1,352,875	$ —	$ —	$ 1,352,875
Brass rod and forgings	—	501,472	—	501,472
OEM components, tube & assemblies	29,578	53,581	139,113	222,272
Valves and plumbing specialties	263,180	—	—	263,180
Other	—	96,008	89,956	185,964
	$ 1,645,633	$ 651,061	$ 229,069	$ 2,525,763
Intersegment sales				(17,885)
Net sales				$ 2,507,878

Summarized segment information is as follows:

	For the Year Ended December 26, 2020				
(In thousands)	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	$ 1,583,002	$ 472,159	$ 370,131	$ (27,249)	$ 2,398,043
Cost of goods sold	1,311,697	398,000	276,274	(19,810)	1,966,161
Depreciation and amortization	23,071	7,528	10,249	3,995	44,843
Selling, general, and administrative expense	78,744	12,566	26,806	41,367	159,483
Litigation settlement, net	—	—	—	(22,053)	(22,053)
Impairment charges	3,771	—	—	—	3,771
Operating income	165,719	54,065	56,802	(30,748)	245,838
Interest expense					(19,247)
Pension plan termination expense					(17,835)
Environmental expense					(4,454)
Other income, net					4,887
Income before income taxes					$ 209,189

Segment information (continued):

	For the Year Ended December 28, 2019				
(In thousands)	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	$ 1,542,456	$ 554,372	$ 356,216	$ (22,428)	$ 2,430,616
Cost of goods sold	1,313,980	473,010	273,850	(25,230)	2,035,610
Depreciation and amortization	22,621	7,489	9,298	3,285	42,693
Selling, general, and administrative expense	75,170	12,359	30,385	44,444	162,358
(Gain) loss on sale of assets, net	(1,194)	275	(44)	—	(963)
Insurance recovery	—	(485)	—	—	(485)
Operating income	131,879	61,724	42,727	(44,927)	191,403
Interest expense					(25,683)
Environmental expense					(1,321)
Other income, net					1,684
Income before income taxes					$ 166,083

	For the Year Ended December 29, 2018				
(In thousands)	Piping Systems	Industrial Metals	Climate	Corporate and Eliminations	Total
Net sales	$ 1,645,633	$ 651,061	$ 229,069	$ (17,885)	$ 2,507,878
Cost of goods sold	1,426,729	559,367	182,456	(18,152)	2,150,400
Depreciation and amortization	23,304	7,568	5,569	3,114	39,555
Selling, general, and administrative expense	74,864	13,501	16,926	43,597	148,888
Gain on sale of assets, net	(2,093)	(1,301)	—	3,141	(253)
Insurance recovery	—	(3,681)	—	—	(3,681)
Operating income	122,829	75,607	24,118	(49,585)	172,969
Interest expense					(25,199)
Environmental expense					(1,320)
Other income, net					3,967
Income before income taxes					$ 150,417

Summarized geographic information is as follows:

(In thousands)	2020	2019	2018
Net sales:			
United States	$ 1,765,810	$ 1,775,321	$ 1,820,857
United Kingdom	207,754	230,791	245,458
Canada	293,776	285,720	292,798
Asia	58,256	64,363	59,730
Mexico	72,447	74,421	89,035
	$ 2,398,043	$ 2,430,616	$ 2,507,878

(In thousands)	2020	2019	2018
Long-lived assets:			
United States	$ 289,508	$ 286,727	$ 295,735
United Kingdom	30,872	18,776	16,313
Canada	29,582	31,429	33,144
Asia	26,107	25,637	24,930
Mexico	503	559	511
	$ 376,572	$ 363,128	$ 370,633

(In thousands)	2020	2019	2018
Expenditures for long-lived assets (including those resulting from business acquisitions):			
Piping Systems	$ 39,209	$ 15,505	$ 31,362
Industrial Metals	5,968	9,101	8,066
Climate	5,521	3,845	85,471
General Corporate	448	2,711	37
	$ 51,146	$ 31,162	$ 124,936
Segment assets:			
Piping Systems	$ 977,937	$ 796,262	$ 818,303
Industrial Metals	152,683	161,904	173,725
Climate	258,668	249,853	246,851
General Corporate	139,280	162,921	130,670
	$ 1,528,568	$ 1,370,940	$ 1,369,549

Note 4 – Cash, Cash Equivalents, and Restricted Cash

(In thousands)	2020	2019
Cash & cash equivalents	$ 119,075	$ 97,944
Restricted cash included within other current assets	8,198	—
Restricted cash included within other assets	103	98
Total cash, cash equivalents, and restricted cash	$ 127,376	$ 98,042

Note 5 – Inventories

(In thousands)	2020	2019
Raw materials and supplies	$ 85,927	$ 85,769
Work-in-process	49,361	48,814
Finished goods	186,785	163,842
Valuation reserves	(7,071)	(6,318)
Inventories	$ 315,002	$ 292,107

Inventories valued using the LIFO method totaled $17.3 million at December 26, 2020 and $16.8 million at December 28, 2019. At December 26, 2020 and December 28, 2019, the approximate FIFO cost of such inventories was $108.1 million and $87.8 million, respectively. Additionally, the Company values certain inventories on an average cost basis.

At the end of 2020 and 2019, the FIFO value of inventory consigned to others was $6.4 million and $5.5 million, respectively.

Note 6 – Consolidated Financial Statement Details

Other Current Liabilities

Included in other current liabilities as of December 26, 2020 and December 28, 2019 were the following: (i) accrued discounts, allowances, and customer rebates of $56.0 million and $53.9 million, respectively, (ii) accrued interest of $5.4 million and $6.0 million, respectively, (iii) current taxes payable of $6.3 million and $4.7 million, respectively, (iv) current environmental liabilities of $2.7 million and $0.9 million, respectively, and (v) net loss positions on derivative contracts of $6.3 million and $0.2 million, respectively. In addition, as of December 26, 2020 and December 28, 2019 this included accruals for excise tax of $6.4 million resulting from the termination of the U.S. defined benefit pension plan and contingent consideration arrangements associated with acquired businesses of $7.0 million, respectively.

Other Income, Net

(In thousands)	2020	2019	2018
Net periodic benefit income	$ 3,013	$ 465	$ 2,914
Interest income	1,101	722	624
Other	773	497	429
Other income, net	$ 4,887	$ 1,684	$ 3,967

Note 7 – Derivative Instruments and Hedging Activities

The Company's earnings and cash flows are subject to fluctuations due to changes in commodity prices, foreign currency exchange rates, and interest rates. The Company uses derivative instruments such as commodity futures contracts, foreign currency forward contracts, and interest rate swaps to manage these exposures.

Commodity Futures Contracts

Copper and brass represent the largest component of the Company's variable costs of production. The cost of these materials is subject to global market fluctuations caused by factors beyond the Company's control. The Company occasionally enters into forward fixed-price arrangements with certain customers; the risk of these arrangements is generally managed with commodity futures contracts. These futures contracts have been designated as cash flow hedges.

At December 26, 2020, the Company held open futures contracts to purchase approximately $5.4 million of copper over the next 12 months related to fixed price sales orders. The fair value of those futures contracts was a $1.2 million net gain position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy). In the next 12 months, the Company will reclassify into earnings realized gains or losses relating to cash flow hedges. At December 26, 2020, this amount was approximately $0.8 million of deferred net gains, net of tax.

The Company may also enter into futures contracts to protect the value of inventory against market fluctuations. At December 26, 2020, the Company held open futures contracts to sell approximately $49.4 million of copper over the next five months related to copper inventory. The fair value of those futures contracts was a $5.8 million net loss position, which was determined by obtaining quoted market prices (level 1 within the fair value hierarchy).

The Company presents its derivative assets and liabilities in the Consolidated Balance Sheets on a net basis by counterparty. The following table summarizes the location and fair value of the derivative instruments and disaggregates the net derivative assets and liabilities into gross components on a contract-by-contract basis:

	Asset Derivatives			Liability Derivatives		
		Fair Value			Fair Value	
(In thousands)	Balance Sheet Location	2020	2019	Balance Sheet Location	2020	2019
Commodity contracts - gains	Other current assets	$ 1,213	$ 1,435	Other current liabilities	$ 68	$ 50
Commodity contracts - losses	Other current assets	(8)	(12)	Other current liabilities	(5,863)	(159)
Total derivatives [(1)]		$ 1,205	$ 1,423		$ (5,795)	$ (109)

[(1)] *Does not include the impact of cash collateral provided to counterparties.*

The following table summarizes the effects of derivative instruments on the Consolidated Statements of Income:

(In thousands)	Location	2020	2019
Undesignated derivatives:			
(Loss) gain on commodity contracts (nonqualifying)	Cost of goods sold	$ (8,893)	$ 2,443

The following tables summarize amounts recognized in and reclassified from AOCI during the period:

(In thousands)	Year Ended December 26, 2020			
	Loss Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		Loss Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	$ (4,579)	Cost of goods sold		$ 5,091
Other	(4)	Other		—
Total	$ (4,583)	Total		$ 5,091

(In thousands)	Year Ended December 28, 2019			
	Gain Recognized in AOCI (Effective Portion), Net of Tax	Classification Gains (Losses)		Gain Reclassified from AOCI (Effective Portion), Net of Tax
Cash flow hedges:				
Commodity contracts	$ 1,161	Cost of goods sold		$ (486)
Other	15	Other		—
Total	$ 1,176	Total		$ (486)

The Company enters into futures and forward contracts that closely match the terms of the underlying transactions. As a result, the ineffective portion of the qualifying open hedge contracts through December 26, 2020 was not material to the Consolidated Statements of Income.

The Company primarily enters into International Swaps and Derivatives Association master netting agreements with major financial institutions that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the Company or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with the counterparty in the case of an event of default or a termination event. The Company does not offset fair value amounts for derivative instruments and fair value amounts recognized for the right to reclaim cash collateral. At December 26, 2020 and December 28, 2019, the Company had recorded restricted cash in other current assets of $7.6 million and $0.2 million, respectively, as collateral related to open derivative contracts under the master netting arrangements.

Note 8 – Leases

The Company leases certain facilities, vehicles, and equipment which expire on various dates through 2032. The following table includes supplemental information with regards to the Company's operating leases:

(In thousands, except lease term and discount rate)	December 26, 2020	December 28, 2019
Operating lease right-of-use assets	$ 29,301	$ 26,922
Current portion of operating lease liabilities	6,259	5,250
Noncurrent operating lease liabilities	21,602	22,388
Total operating lease liabilities	$ 27,861	$ 27,638
Weighted average discount rate	3.91%	5.82%
Weighted average remaining lease term (in years)	5.99	8.35

Some of the Company's leases include variable lease costs such as taxes, insurance, etc. These costs are immaterial for disclosure.

The following table presents certain information related to operating lease costs and cash paid during the period:

	For the Year Ended	
(In thousands)	December 28, 2019	December 28, 2019
Operating lease costs	$ 7,039	$ 6,818
Short term lease costs	4,734	4,951
Total lease costs	$ 11,773	$ 11,769
Cash paid for amounts included in the measurement of lease liabilities	$ 7,040	$ 6,703

Maturities of the Company's operating leases are as follows:

(In thousands)	Amount
2021	$ 7,353
2022	6,489
2023	4,553
2024	3,382
2025	2,376
2026 and thereafter	7,254
Total lease payments	31,407
Less imputed interest	(3,546)
Total lease obligations	27,861
Less current obligations	(6,259)
Noncurrent lease obligations	$ 21,602

Note 9 – Property, Plant, and Equipment, Net

(In thousands)	2020	2019
Land and land improvements	$ 33,602	$ 31,987
Buildings	218,319	203,762
Machinery and equipment	658,613	640,642
Construction in progress	28,631	18,920
	939,165	895,311
Less accumulated depreciation	(562,593)	(532,183)
Property, plant, and equipment, net	$ 376,572	$ 363,128

Depreciation expense for property, plant, and equipment was $38.7 million in 2020, $37.3 million in 2019, and $35.1 million in 2018.

Note 10 – Goodwill and Other Intangible Assets

Goodwill

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

(In thousands)	Piping Systems	Industrial Metals	Climate	Total
Goodwill	$ 168,700	$ 8,854	$ 22,186	$ 199,740
Accumulated impairment charges	(40,552)	(8,853)	—	(49,405)
Balance at December 29, 2018:	128,148	1	22,186	150,335
Additions [(1)]	1,999	—	—	1,999
Reductions [(2)]	—	—	(534)	(534)
Currency translation	1,476	—	—	1,476
Balance at December 28, 2019:	131,623	1	21,652	153,276
Additions	11,710	—	1,964	13,674
Currency translation	814	—	—	814
Balance at December 26, 2020:				
Goodwill	184,699	8,854	23,616	217,169
Accumulated impairment charges	(40,552)	(8,853)	—	(49,405)
Goodwill, net	$ 144,147	$ 1	$ 23,616	$ 167,764

[(1)] *Includes finalization of the purchase price allocation adjustment for Die-Mold of $2.0 million.*
[(2)] *Includes finalization of the purchase price allocation adjustment for ATCO of $0.5 million.*

Reporting units with recorded goodwill include Domestic Piping Systems Group, B&K LLC, Great Lakes, Heatlink Group, Die-Mold, European Operations, Jungwoo-Mueller, Westermeyer, Turbotec, ATCO, and Shoals. Several factors give rise to goodwill in the Company's acquisitions, such as the expected benefit from synergies of the combination and the existing workforce of the acquired businesses. There were no impairment charges resulting from the 2020, 2019, or 2018 annual impairment tests as the estimated fair value of each of the reporting units exceeded its carrying value.

Other Intangible Assets

The carrying amount of intangible assets at December 26, 2020 was as follows:

(In thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 61,068	$ (11,676)	$ 49,392
Non-compete agreements	2,689	(2,527)	162
Patents and technology	22,585	(5,672)	16,913
Trade names and licenses	14,631	(4,476)	10,155
Other	1,676	(1,091)	585
Other intangible assets	$ 102,649	$ (25,442)	$ 77,207

The carrying amount of intangible assets at December 28, 2019 was as follows:

(In thousands)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 44,832	$ (8,773)	$ 36,059
Non-compete agreements	2,499	(2,156)	343
Patents and technology	19,804	(4,060)	15,744
Trade names and licenses	10,155	(3,249)	6,906
Other	1,676	(646)	1,030
Other intangible assets	$ 78,966	$ (18,884)	$ 60,082

Amortization expense for intangible assets was $6.1 million in 2020, $5.4 million in 2019, and $4.4 million in 2018. Future amortization expense is estimated as follows:

(In thousands)	Amount
2021	$ 6,393
2022	6,311
2023	6,000
2024	5,769
2025	5,743
Thereafter	46,991
Expected amortization expense	$ 77,207

Note 11 – Investments in Unconsolidated Affiliates

Tecumseh

The Company owns a 50 percent interest in an unconsolidated affiliate that acquired Tecumseh. The Company also owns a 50 percent interest in a second unconsolidated affiliate that provides financing to Tecumseh. Tecumseh is a global manufacturer of hermetically sealed compressors for residential and specialty air conditioning, household refrigerators and freezers, and commercial refrigeration applications, including air conditioning and refrigeration compressors, as well as condensing units, heat pumps, and complete refrigeration systems.

The following tables present summarized financial information derived from the Company's equity method investees' combined consolidated financial statements, which are prepared in accordance with U.S. GAAP.

(In thousands)	2020	2019
Current assets	$ 167,451	$ 198,559
Noncurrent assets	78,241	87,218
Current liabilities	120,202	147,801
Noncurrent liabilities	50,020	51,219
Net sales	$ 384,919	$ 488,270
Gross profit	50,347	58,494
Net loss	(20,892)	(44,053)

The Company's loss from unconsolidated affiliates, net of foreign tax, for 2020 and 2019 included net losses of $10.4 million and $22.0 million, respectively, for Tecumseh.

Mueller Middle East

On December 30, 2015, the Company entered into a joint venture agreement with Cayan Ventures and Bahrain Mumtalakat Holding Company to build a copper tube mill in Bahrain. The business operates and brands its products under the Mueller Industries family of brands. The Company has invested approximately $5.0 million of cash to date and is the technical and marketing lead with a 40 percent ownership in the joint venture.

The Company's loss from unconsolidated affiliates, net of foreign tax, for 2020 and 2019 included net gains of $0.2 million and net losses of $2.6 million, respectively, for Mueller Middle East.

Mueller Middle East manufactures and sells copper coils to certain Mueller subsidiaries. For the year ended December 26, 2020, total sales to Mueller subsidiaries were approximately $37.4 million.

Note 12 – Debt

(In thousands)	2020	2019
Subordinated Debentures with interest at 6.00%, due 2027	$ 284,479	$ 284,479
Revolving Credit Facility with interest at 1.52%, due 2021	35,000	90,000
Jungwoo-Mueller credit facility with interest at 1.90%, due 2021	5,811	—
Jungwoo-Mueller credit facility with interest at 2.55%, due 2020	—	5,768
2001 Series IRB's with interest at 1.14%, due 2021	250	1,250
Other	2,555	5,295
	328,095	386,792
Less debt issuance costs	(219)	(538)
Less current portion of debt	(41,283)	(7,530)
Long-term debt	$ 286,593	$ 378,724

Subordinated Debentures

On March 9, 2017, the Company distributed a special dividend of $3.00 in cash and $5.00 in principal amount of the Company's 6% Subordinated Debentures (Debentures) due March 1, 2027 for each share of common stock outstanding. Interest on the Debentures is payable semiannually on September 1 and March 1.

The Debentures are subordinated to all other funded debt of the Company and are callable, in whole or in part, at any time at the option of the Company, subject to declining call premiums during the first five years. The Debentures also grant each holder the right to require the Company to repurchase such holder's Debentures in the event of a change in control at declining repurchase premiums during the first five years. The Debentures may be redeemed, subject to the conditions set forth above, at the following redemption price (expressed as a percentage of principal amount) plus any accrued but unpaid interest to, but excluding, the redemption date:

If redeemed during the 12-month period beginning March 9:

Year	Redemption Price
2020	103%
2021	102
2022 and thereafter	100

Revolving Credit Facility

The Company's Credit Agreement provides for an unsecured $350.0 million revolving credit facility (Revolving Credit Facility) that matures on December 6, 2021. Borrowings under the Revolving Credit Facility bear interest, at the Company's option, at LIBOR or Base Rate as defined by the Credit Agreement, plus a variable premium. LIBOR advances may be based upon the one, three, or six-month LIBOR. The variable premium is based upon the Company's debt to total capitalization ratio, and can range from 112.5 to 162.5 basis points for LIBOR based loans and 12.5 to 62.5 basis points for Base Rate loans. At December 26, 2020, the premium was 137.5 basis points for LIBOR loans and 37.5 basis points for Base Rate loans. Additionally, a commitment fee is payable quarterly on the total commitment less any outstanding loans or issued letters of credit, and varies from 15.0 to 30.0 basis points based upon the Company's debt to total capitalization ratio. Availability of funds under the Revolving Credit Facility is reduced by the amount of certain outstanding letters of credit, which are used to secure the Company's payment of insurance deductibles and certain retiree health benefits, totaling approximately $19.4 million at December 26, 2020. Terms of the letters of credit are generally renewable annually.

Jungwoo-Mueller

Jungwoo-Mueller has several secured revolving credit arrangements with a total borrowing capacity of KRW 25.8 billion (or approximately $23.5 million). Borrowings are secured by the real property and equipment of Jungwoo-Mueller.

Covenants contained in the Company's financing obligations require, among other things, the maintenance of minimum levels of tangible net worth and the satisfaction of certain minimum financial ratios. At December 26, 2020, the Company was in compliance with all debt covenants.

Aggregate annual maturities of the Company's debt are as follows:

(In thousands)	Amount
2021	$ 41,283
2022	222
2023	222
2024	222
2025	167
Thereafter	285,979
Long-term debt	$ 328,095

Net interest expense consisted of the following:

(In thousands)		2020		2019		2018
Interest expense	$	19,510	$	25,957	$	25,349
Capitalized interest		(263)		(274)		(150)
	$	19,247	$	25,683	$	25,199

Interest paid in 2020, 2019, and 2018 was $19.8 million, $25.4 million, and $25.2 million, respectively.

Note 13 – Benefit Plans

Pension and Other Postretirement Plans

The Company sponsors several qualified and nonqualified pension plans and other postretirement benefit plans for certain employees. The following tables provide a reconciliation of the changes in the most significant plans' benefit obligations and the fair value of the plans' assets for 2020 and 2019, and a statement of the plans' aggregate funded status:

	Pension Benefits				Other Benefits			
(In thousands)		2020		2019		2020		2019
Change in benefit obligation:								
Obligation at beginning of year	$	182,164	$	166,739	$	12,653	$	14,382
Service cost		—		—		212		260
Interest cost		3,260		5,972		430		609
Actuarial loss (gain)		10,790		17,061		422		(1,860)
Plan amendments		—		—		(26)		—
Benefit payments		(9,214)		(9,883)		(716)		(832)
Curtailment		—		—		(183)		—
Settlement [(1)]		(99,585)		—		—		(198)
Foreign currency translation adjustment		3,394		2,275		(10)		292
Obligation at end of year		90,809		182,164		12,782		12,653
Change in fair value of plan assets:								
Fair value of plan assets at beginning of year		183,486		164,603		—		—
Actual return on plan assets		13,313		26,734		—		—
Employer contributions		—		—		716		832
Benefit payments		(9,214)		(9,883)		(716)		(832)
Settlement [(1)]		(99,585)		—		—		—
Surplus assets [(1)]		(12,386)		—		—		—
Foreign currency translation adjustment		2,866		2,032		—		—
Fair value of plan assets at end of year		78,480		183,486		—		—
Funded (underfunded) status at end of year	$	(12,329)	$	1,322	$	(12,782)	$	(12,653)

[(1)] *In November 2019, the Company's Board of Directors approved the termination of the U.S. defined benefit pension plan. There were no impacts to consolidated results for 2019. Settlement accounting criteria was met in Q4 2020, therefore, all resulting settlement charges occurred in 2020. The plan termination resulted in incremental benefit payments of approximately $100.0 million and termination costs of $17.8 million, which consisted of an $11.6 million non-cash* *settlement charge and $6.2 million in federal excise tax on surplus assets returned to the Company of approximately $12.4 million, as of December 26, 2020.*

The following represents amounts recognized in AOCI (before the effect of income taxes):

(In thousands)	Pension Benefits 2020	Pension Benefits 2019	Other Benefits 2020	Other Benefits 2019
Unrecognized net actuarial loss (gain)	$ 26,476	$ 36,195	$ (1,187)	$ (1,609)
Unrecognized prior service credit	—	—	(2,401)	(5,485)

The Company sponsors one pension plan in the U.K. which comprised 100 and 43 percent of the above benefit obligation at December 26, 2020 and December 28, 2019, respectively, and 100 and 39 percent of the above plan assets at December 26, 2020 and December 28, 2019, respectively.

As of December 26, 2020, $0.9 million of the actuarial net loss and the remainder of the prior service credit will, through amortization, be recognized as components of net periodic benefit cost in 2021.

The aggregate status of all overfunded plans is recognized as an asset and the aggregate status of all underfunded plans is recognized as a liability in the Consolidated Balance Sheets. The amounts recognized as a liability are classified as current or long-term on a plan-by-plan basis. Liabilities are classified as current to the extent the actuarial present value of benefits payable within the next 12 months exceeds the fair value of plan assets, with all remaining amounts classified as long-term.

As of December 26, 2020 and December 28, 2019, the total funded status of the plans recognized in the Consolidated Balance Sheets was as follows:

(In thousands)	Pension Benefits 2020	Pension Benefits 2019	Other Benefits 2020	Other Benefits 2019
Long-term asset	$ —	$ 8,592	$ —	$ —
Current liability	—	—	(948)	(1,013)
Long-term liability	(12,329)	(7,270)	(11,834)	(11,640)
Total (underfunded) funded status	$ (12,329)	$ 1,322	$ (12,782)	$ (12,653)

The components of net periodic benefit cost (income) are as follows:

(In thousands)	2020	2019	2018
Pension benefits:			
Service cost	$ —	$ —	$ 88
Interest cost	3,260	5,972	5,745
Expected return on plan assets	(5,704)	(8,103)	(9,522)
Amortization of net loss	2,305	1,950	1,151
Settlement charge	11,642	—	—
Net periodic benefit cost (income)	$ 11,503	$ (181)	$ (2,538)
Other benefits:			
Service cost	$ 212	$ 260	$ 235
Interest cost	430	609	447
Amortization of prior service credit	(519)	(902)	(902)
Amortization of net (gain) loss	(193)	(88)	92
Curtailment gain	(2,591)	—	—
Settlement charge	—	(2)	38
Net periodic benefit income	$ (2,661)	$ (123)	$ (90)

During 2020, the Company recognized a curtailment gain of $2.6 million related to one of its postretirement benefit plans.

The components of net periodic benefit cost (income) other than the service cost component are included in other income, net in the Consolidated Statements of Income.

The weighted average assumptions used in the measurement of the Company's benefit obligations are as follows:

	Pension Benefits		Other Benefits	
	2020	2019	2020	2019
Discount rate	1.40 %	1.93 %	2.92 %	3.70 %
Expected long-term return on plan assets	4.69 %	3.84 %	N/A	N/A
Rate of compensation increases	N/A	N/A	5.00 %	5.00 %
Rate of inflation	3.20 %	3.20 %	N/A	N/A

The weighted average assumptions used in the measurement of the Company's net periodic benefit cost are as follows:

	Pension Benefits			Other Benefits		
	2020	2019	2018	2020	2019	2018
Discount rate	1.93 %	3.72 %	3.22 %	3.70 %	4.56 %	3.89 %
Expected long-term return on plan assets	3.84 %	5.05 %	5.27 %	N/A	N/A	N/A
Rate of compensation increases	N/A	N/A	N/A	5.00 %	5.00 %	5.00 %
Rate of inflation	3.20 %	3.40 %	3.30 %	N/A	N/A	N/A

The Company's Mexican postretirement plans use the rate of compensation increase in the benefit formulas. Past service in the U.K. pension plan will be adjusted for the effects of inflation. All other pension and postretirement plans use benefit formulas based on length of service.

The annual assumed rate of increase in the per capita cost of covered benefits (i.e., health care cost trend rate) is assumed to range from 4.3 to 8.7 percent for 2021, gradually decrease to 4.1 percent through 2040, and remain at that level thereafter. The health care cost trend rate assumption does not have a significant effect on the amounts reported.

Pension Assets

The weighted average asset allocation of the Company's pension fund assets are as follows:

	Pension Plan Assets	
Asset category	2020	2019
Fixed income securities (includes fixed income mutual funds)	— %	55 %
Equity securities (includes equity mutual funds)	66	25
Multi-asset securities	24	9
Cash and equivalents (includes money market funds)	1	7
Alternative investments	9	4
Total	100 %	100 %

At December 26, 2020, the long-term target allocation, by asset category, of assets of the Company's defined benefit pension plans was: (i) equity securities and multi-asset securities, including equity index funds – not less than 70 percent; and (ii) alternative investments – not more than 10 percent.

The pension plan obligations are long-term and, accordingly, the plan assets are invested for the long-term. Plan assets are monitored periodically. Based upon results, investment managers and/or asset classes are redeployed when considered necessary. None of the plans' assets are expected to be returned to the Company during the next fiscal year. The assets of the plans do not include investments in securities issued by the Company.

The estimated rates of return on plan assets are the expected future long-term rates of earnings on plan assets and are forward-looking assumptions that materially affect pension cost. Establishing the expected future rates of return on pension assets is a judgmental matter. The Company reviews the expected long-term rates of return on an annual basis and revises as appropriate. The expected long-term rate of return on plan assets was 4.69 percent for 2020 and 3.84 percent in 2019.

The Company's investments for its pension plans are reported at fair value. The following methods and assumptions were used to estimate the fair value of the Company's plan asset investments:

Cash and money market funds – Valued at cost, which approximates fair value.

Mutual funds – Valued at the net asset value of shares held by the plans at December 26, 2020 and December 28, 2019, respectively, based upon quoted market prices.

Limited partnerships – Limited partnerships include investments in various Cayman Island multi-strategy hedge funds. The plans' investments in limited partnerships are valued at the estimated fair value of the class shares owned by the plans based upon the equity in the estimated fair value of those shares. The estimated fair values of the limited partnerships are determined by the investment managers. In determining fair value, the investment managers of the limited partnerships utilize the estimated net asset valuations of the underlying investment entities. The underlying investment entities value securities and other financial instruments on a mark-to-market or estimated fair value basis. The estimated fair value is determined by the investment managers based upon, among other things, the type of investments, purchase price, marketability, current financial condition, operating results, and other information. The estimated fair values of substantially all of the investments of the underlying investment entities, which may include securities for which prices are not readily available, are determined by the investment managers or management of the respective underlying investment entities and may not reflect amounts that could be realized upon immediate sale. Accordingly, the estimated fair values may differ significantly from the values that would have been used had a ready market existed for these investments.

The following table sets forth by level, within the fair value hierarchy, the assets of the plans at fair value:

(In thousands)	Fair Value Measurements at December 26, 2020			
	Level 1	Level 2	Level 3	Total
Cash and money market funds	$ 492	$ —	$ —	$ 492
Mutual funds [(1)]	—	71,084	—	71,084
Limited partnerships	—	—	6,904	6,904
Total	$ 492	$ 71,084	$ 6,904	$ 78,480

(In thousands)	Fair Value Measurements at December 28, 2019			
	Level 1	Level 2	Level 3	Total
Cash and money market funds	$ 12,318	$ —	$ —	$ 12,318
Mutual funds [(2)]	—	163,253	—	163,253
Limited partnerships	—	—	7,915	7,915
Total	$ 12,318	$ 163,253	$ 7,915	$ 183,486

(1) *Approximately 76 percent of mutual funds are actively managed funds and approximately 24 percent of mutual funds are index funds. Additionally, 27 percent of the mutual funds' assets are invested in non-U.S. multi-asset securities and 73 percent in non-U.S. equities.*

(2) *Approximately 80 percent of mutual funds are actively managed funds and approximately 20 percent of mutual funds are index funds. Additionally, 10 percent of the mutual funds' assets are invested in non-U.S. multi-asset securities, 28 percent in non-U.S. equities, 62 percent in U.S. fixed income securities.*

The table below reflects the changes in the assets of the plan measured at fair value on a recurring basis using significant unobservable inputs (level 3 of fair value hierarchy) during the year ended December 26, 2020:

(In thousands)	Limited Partnerships
Balance, December 28, 2019	$ 7,915
Surplus assets	(1,104)
Net appreciation in fair value	93
Balance, December 26, 2020	$ 6,904

Contributions and Benefit Payments

The Company does not expect to contribute to the U.K. pension plan, other than to reimburse expenses, and expects to contribute $1.0 million to its other postretirement benefit plans in 2021. The Company expects future benefits to be paid from the plans as follows:

(In thousands)	Pension Benefits	Other Benefits
2021	$ 3,428	$ 947
2022	2,945	942
2023	3,050	1,016
2024	3,160	977
2025	3,273	974
2026-2030	18,210	4,700
Total	$ 34,066	$ 9,556

Multiemployer Plan

The Company contributes to the IAM National Pension Fund, National Pension Plan (IAM Plan), a multiemployer defined benefit plan. Participation in the IAM Plan was negotiated under the terms of two collective bargaining agreements in Port Huron, Michigan, the Local 218 IAM and Local 44 UAW that expire on May 7, 2023 and June 26, 2022, respectively. The Employer Identification Number for this plan is 51-6031295.

The risks of participating in multiemployer plans are different from single-employer plans in the following aspects: (i) assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers; (ii) if a participating employer stops contributing to the plan, the underfunded obligations of the plan may be borne by the remaining participating employers; (iii) if the Company chooses to stop participating in the plan, the Company may be required to pay the plan an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The Company makes contributions to the IAM Plan trusts that cover certain union employees; contributions by employees are not permitted. Contributions to the IAM Plan were approximately $1.2 million in 2020, $1.2 million in 2019, and $1.3 million in 2018. The Company's contributions are less than five percent of total employer contributions made to the IAM Plan indicated in the most recently filed Form 5500.

Under the Pension Protection Act of 2006, the IAM Plan's actuary must certify the plan's zone status annually. Plans in the red zone are generally less than 65 percent funded, plans in the yellow zone are less than 80 percent funded, and plans in the green zone are at least 80 percent funded. If a plan is determined to be in endangered status, red zone or yellow zone, the plan's trustees must develop a formal plan of corrective action, a Financial Improvement Plan and/or a Rehabilitation Plan. The IAM Plan remains well-funded at over 80 percent, for 2020, and has been certified in the green zone. In 2019, although the IAM Plan was well-funded at 89 percent, it was certified in the yellow zone due to a declining credit balance. However, as a result of a challenging investment environment and the decline of the IAM Plan's credit balance, the IAM National Pension Plan Board of Trustees voluntarily elected to place the IAM Plan in the red zone. The action was taken to protect the IAM Plan's participants' core retirement benefits and strengthen the IAM Plan's financial health over the long term.

401(k) Plans

The Company sponsors voluntary employee savings plans that qualify under Section 401(k) of the Internal Revenue Code of 1986. Compensation expense for the Company's matching contribution to the 401(k) plans was $5.7 million in 2020, $5.4 million in 2019, and $5.1 million in 2018. The Company match is a cash contribution. Participants direct the investment of their account balances by allocating among a range of asset classes including mutual funds (equity, fixed income, and balanced funds) and money market funds. The plans do not allow direct investment in securities issued by the Company.

UMWA Benefit Plans

In October 1992, the Coal Industry Retiree Health Benefit Act of 1992 (1992 Act) was enacted. The 1992 Act mandates a method of providing for postretirement benefits to the United Mine Workers of America (UMWA) current and retired employees, including some retirees who were never employed by the Company. In October 1993, beneficiaries were assigned to the Company and the Company began its mandated contributions to the UMWA Combined Benefit Fund, a multiemployer trust. Beginning in 1994, the Company was required to make contributions for assigned beneficiaries under an additional multiemployer trust created by the 1992 Act, the UMWA 1992 Benefit Plan. The ultimate amount of the Company's liability under the 1992 Act will vary due to factors which include, among other things, the validity, interpretation, and regulation of the 1992 Act, its joint and several obligation, the number of valid beneficiaries assigned, and the extent to which funding for this obligation will be satisfied by transfers of excess assets from the 1950 UMWA pension plan and transfers from the Abandoned Mine Reclamation Fund. Contributions to the plan were $57 thousand, $223 thousand, and $153 thousand for the years ended 2020, 2019, and 2018, respectively.

Note 14 – Commitments and Contingencies

Environmental

The Company is subject to federal, state, local, and foreign environmental laws and regulations. For all properties, the Company has provided and charged to expense $4.2 million in 2020, $1.7 million in 2019, and $2.0 million in 2018 for pending environmental matters. Environmental reserves totaled $24.0 million at December 26, 2020 and $20.9 million at December 28, 2019. As of December 26, 2020, the Company expects to spend $2.7 million in 2021, $0.8 million in 2022, $0.8 million in 2023, $0.9 million in 2024, $0.8 million in 2025, and $18.0 million thereafter for ongoing projects.

Non-operating Properties

Southeast Kansas Sites

The Kansas Department of Health and Environment (KDHE) has contacted the Company regarding environmental contamination at three former smelter sites in Kansas (Altoona, East La Harpe, and Lanyon). The Company is not a successor to the companies that operated these smelter sites, but is exploring possible settlement with KDHE and other potentially responsible parties (PRP) in order to avoid litigation.

Altoona. Another PRP conducted a site investigation of the Altoona site under a consent decree with KDHE and submitted a removal site evaluation report recommending a remedy. The remedial design plan, which covers both on-site and certain off-site cleanup costs, was approved by the KDHE in 2016. Construction of the remedy was completed in 2018.

East La Harpe. At the East La Harpe site, the Company and two other PRPs conducted a site study evaluation under KDHE supervision and prepared a site cleanup plan approved by KDHE. In 2016, the corporate parent (Peabody Energy) of a third party that the Company understands may owe indemnification obligations to one of the other PRPs (Blue Tee) in connection with the East La Harpe site filed for protection under Chapter 11 of the U.S. Bankruptcy Code. KDHE has extended the deadline for the PRPs to develop a repository design plan to allow for wetlands permitting to take place. In December 2018, KDHE provided a draft agreement which contemplates the use of funds KDHE obtained from two other parties (Peabody Energy and Blue Tee) to fund part of the remediation, and removes Blue Tee from the PRPs' agreement with KDHE. The Company is currently negotiating the terms of the draft agreement.

Lanyon. With respect to the Lanyon Site, in 2016, the Company received a general notice letter from the United States Environmental Protection Agency (EPA) asserting that the Company is a PRP, which the Company has denied. EPA issued an interim record of decision in 2017 and has been remediating properties at the site.

The Company's reserve for its proportionate share of the remediation costs associated with these three Southeast Kansas sites is $5.6 million.

Shasta Area Mine Sites

Mining Remedial Recovery Company (MRRC), a wholly owned subsidiary, owns certain inactive mines in Shasta County, California. MRRC has continued a program, begun in the late 1980s, of implementing various remedial measures, including sealing mine portals with concrete plugs in portals that were discharging water. The sealing program achieved significant reductions in the metal load in discharges from these adits; however, additional reductions are required pursuant to an order issued by the California Regional Water Quality Control Board (QCB). In response to a 1996 QCB Order, MRRC completed a feasibility study in 1997 describing measures designed to mitigate the effects of acid rock drainage. In December 1998, the QCB modified the 1996 order extending MRRC's time to comply with water quality standards. In September 2002, the QCB adopted a new order requiring MRRC to adopt Best Management Practices (BMP) to control discharges of acid mine drainage, and again extended the time to comply with water quality standards until September 2007. During that time, implementation of BMP further reduced impacts of acid rock drainage; however, full compliance has not been achieved. The QCB is presently renewing MRRC's discharge permit and will concurrently issue a new order. It is expected that the new 10-year permit will include an order requiring continued implementation of BMP through 2030 to address residual discharges of acid rock drainage. At this site, MRRC spent approximately $1.7 million from 2018 through 2020 for remediation, and currently estimates that it will spend between approximately $13.9 million and $18.0 million over the next 30 years and has accrued a reserve at the low end of this range.

Lead Refinery Site

U.S.S. Lead Refinery, Inc. (Lead Refinery), a non-operating wholly owned subsidiary of MRRC, has conducted corrective action and interim remedial activities (collectively, Site Activities) at Lead Refinery's East Chicago, Indiana site pursuant to the Resource Conservation and Recovery Act since December 1996. Although the Site Activities have been substantially concluded, Lead Refinery is required to perform monitoring and maintenance-related activities pursuant to a post-closure permit issued by the Indiana Department of Environmental Management effective as of March 2, 2013. Lead Refinery spent approximately $0.6 million from 2018 through 2020 with respect to this site. Approximate costs to comply with the post-closure permit, including associated general and administrative costs, are estimated at between $1.7 million and $2.4 million over the next 16 years. The Company has recorded a reserve at the low end of this range.

On April 9, 2009, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the U.S. Environmental Protection Agency (EPA) added the Lead Refinery site and surrounding properties to the National Priorities List (NPL). On July 17, 2009, Lead Refinery received a written notice from the EPA indicating that it may be a PRP under CERCLA due to the release or threat of release of hazardous substances including lead into properties surrounding the Lead Refinery NPL site. The EPA identified two other PRPs in connection with that matter. In November 2012, the EPA adopted a remedy for the surrounding properties and in September 2014, the EPA announced that it had entered into a settlement with the two other PRPs whereby they will pay approximately $26.0 million to fund the cleanup of approximately 300 properties surrounding the Lead Refinery NPL site (zones 1 and 3 of operable unit 1) and perform certain remedial action tasks.

On November 8, 2016, the Company, its subsidiary Arava Natural Resources Company, Inc. (Arava), and Arava's subsidiary MRRC each received general notice letters from the EPA asserting that they may be PRPs in connection with the Lead Refinery NPL site. The Company, Arava, and MRRC have denied liability for any remedial action and response costs associated with the Lead Refinery NPL site. In June 2017, the EPA requested that Lead Refinery conduct, and the Company fund, a remedial investigation and feasibility study of operable unit 2 of the Lead Refinery NPL site pursuant to a proposed administrative settlement agreement and order on consent. The Company and Lead Refinery entered into that agreement in September 2017. The Company has made a capital contribution to Lead Refinery to conduct the remedial investigation and feasibility study with respect to operable unit 2 and has provided financial assurance in the amount of $1.0 million. The remedial investigation and feasibility study remain ongoing. The EPA has also asserted its position that Mueller is a responsible party for the Lead Refinery NPL site, and accordingly is responsible for a share of remedial action and response costs at the site and in the adjacent residential area.

In January 2018, the EPA issued two unilateral administrative orders (UAOs) directing the Company, Lead Refinery, and four other PRPs to conduct soil and interior remediation of certain residences at the Lead Refinery NPL site (zones 2 and 3 of operable unit 1). The Company and Lead Refinery have reached agreement with the four other PRPs to implement these two UAOs, with the Company agreeing to pay, on an interim basis, (i) an estimated $4.5 million (subject to potential change through a future reallocation process) of the approximately $25.0 million the PRPs estimated it would cost to implement the UAOs, which estimate is subject to change, and (ii) $2.0 million relating to past costs incurred by other PRPs for work conducted at the site, as well as the possibility of up to $0.7 million in further payments for ongoing work by those PRPs. As of year-end, the Company has made payments of approximately $7.2 million related to the aforementioned agreement with the other PRPs. The Company disputes that it was properly named in the UAOs, and has reserved its rights to petition the EPA for reimbursement of any costs incurred to comply with the UAOs upon the completion of the work required therein. In October 2017 and March 2018, separate groups of private plaintiffs sued the Company, Arava, MRRC, and Lead Refinery, along with other defendants, in two civil tort actions relating to the site. The Company, Arava, and MRRC have been voluntarily dismissed from both litigations without prejudice, but Lead Refinery remains a party to each. At this juncture, the Company is unable to determine the likelihood of a material adverse outcome or the amount or range of a potential loss in excess of the current reserve with respect to any remedial action or litigation relating to the Lead Refinery NPL site, either at Lead Refinery's former operating site (operable unit 2) or the adjacent residential area (operable unit 1), including, but not limited to, EPA oversight costs for which EPA may attempt to seek reimbursement from the Company, and past costs for which other PRPs may attempt to seek contribution from the Company.

Bonita Peak Mining District

Following an August 2015 spill from the Gold King Mine into the Animas River near Silverton, Colorado, the EPA listed the Bonita Peak Mining District on the NPL. Said listing was finalized in September 2016. The Bonita Peak Mining District encompasses 48 mining sites within the Animas River watershed, including the Sunnyside Mine, the American Tunnel, and the Sunbank Group. On or about July 25, 2017, Washington Mining Company (Washington Mining) (a wholly-owned subsidiary of the Company's wholly-owned subsidiary, Arava), received a general notice letter from the EPA stating that Washington Mining may be a PRP under CERCLA in connection with the Bonita Peak Mining District site and therefore responsible for the remediation of certain portions of the site, along with related costs incurred by the EPA. Shortly thereafter, the Company received a substantively identical letter asserting that it may be a PRP at the site and similarly responsible for the cleanup of certain portions of the site. The general notice letters identify one other PRP at the site, and do not require specific action by Washington Mining or the Company at this time. At this juncture, the Company is unable to determine the likelihood of a materially adverse outcome or the amount or range of a potential loss with respect to any remedial action related to the Bonita Peak Mining District NPL site.

Operating Properties

Mueller Copper Tube Products, Inc.

In 1999, Mueller Copper Tube Products, Inc. (MCTP), a wholly owned subsidiary, commenced a cleanup and remediation of soil and groundwater at its Wynne, Arkansas plant to remove trichloroethylene, a cleaning solvent formerly used by MCTP. On August 30, 2000, MCTP received approval of its Final Comprehensive Investigation Report and Storm Water Drainage Investigation Report addressing the treatment of soils and groundwater from the Arkansas Department of Environmental Quality (ADEQ). The Company established a reserve for this project in connection with the acquisition of MCTP in 1998. Effective November 17, 2008, MCTP entered into a Settlement Agreement and Administrative Order by Consent to submit a Supplemental Investigation Work Plan (SIWP) and subsequent Final Remediation Work Plan (RWP) for the site. By letter dated January 20, 2010, ADEQ approved the SIWP as submitted, with changes acceptable to the Company. On December 16, 2011, MCTP entered into an amended Administrative Order by Consent to prepare and implement a revised RWP regarding final remediation for the Site. The remediation system was activated in February 2014. Costs to implement the work plans, including associated general and administrative costs, are estimated to approximate $0.9 million to $1.1 million over the next five years. The Company has recorded a reserve at the low end of this range.

United States Department of Commerce Antidumping Review

On December 24, 2008, the Department of Commerce (DOC) initiated an antidumping administrative review of the antidumping duty order covering circular welded non-alloy steel pipe and tube from Mexico for the November 1, 2007 through October 31, 2008 period of review. The DOC selected Mueller Comercial as a respondent in the review. On April 19, 2010, the DOC published the final results of the review and assigned Mueller Comercial an antidumping duty rate of 48.33 percent. On May 25, 2010, the Company appealed the final results to the U.S. Court of International Trade (CIT). On December 16, 2011, the CIT issued a decision remanding the Department's final results. While the matter was still pending, the Company and the United States reached an agreement to settle the appeal. Subject to the conditions of the agreement, the Company anticipated that certain of its subsidiaries would incur antidumping duties on subject imports made during the period of review and, as such, established a reserve for this matter. After the lapse of the statutory period of time during which U.S. Customs and Border Protection (CBP) was required, but failed, to liquidate the entries at the settled rate, the Company released the reserve. Between October 30, 2015 and November 27, 2015, CBP sent a series of invoices to Southland Pipe Nipples Co., Inc. (Southland), requesting payment of approximately $3.0 million in duties and interest in connection with 795 import entries made during the November 1, 2007 through October 31, 2008 period. On January 26, 2016 and January 27, 2016, Southland filed protests with CBP in connection with these invoices, noting that CBP's asserted claims were not made in accordance with applicable law, including statutory provisions governing deemed liquidation. The Company believes in the merits of the legal objections raised in Southland's protests, and CBP's response to Southland's protests is currently pending. Given the procedural posture and issues raised by this legal dispute, the Company cannot estimate the amount of potential duty liability, if any, that may result from CBP's asserted claims.

Deepwater Horizon Economic and Property Damage Claim

During 2020, Mueller Copper Tube Company, a wholly owned subsidiary of the Company, collected approximately $22.1 million related to its claim under the Deepwater Horizon Economic and Property Damage Settlement Program. The collected amount represent settlement proceeds received after the payment of fees and expenses.

Guarantees

Guarantees, in the form of letters of credit, are issued by the Company generally to assure the payment of insurance deductibles, certain retiree health benefits, and debt at certain unconsolidated affiliates. The terms of the guarantees are generally one year but are renewable annually as required. These letters are primarily backed by the Company's revolving credit facility. The maximum payments that the Company could be required to make under its guarantees at December 26, 2020 were $22.3 million.

Other

The Company is involved in certain litigation as a result of claims that arose in the ordinary course of business, which management believes will not have a material adverse effect on the Company's financial position, results of operations, or cash flows. It may also realize the benefit of certain legal claims and litigation in the future; these gain contingencies are not recognized in the Consolidated Financial Statements.

Note 15 – Income Taxes

The components of income before income taxes were taxed under the following jurisdictions:

(In thousands)	2020	2019	2018
Domestic	$ 144,770	$ 112,812	$ 105,455
Foreign	64,419	53,271	44,962
Income before income taxes	$ 209,189	$ 166,083	$ 150,417

Income tax expense consists of the following:

(In thousands)	2020	2019	2018
Current tax expense:			
Federal	$ 37,964	$ 19,066	$ 17,974
Foreign	16,221	12,727	9,650
State and local	5,182	3,892	3,158
Current tax expense	59,367	35,685	30,782
Deferred tax (benefit) expense:			
Federal	(5,991)	1,725	(1,381)
Foreign	90	(2,311)	551
State and local	1,855	158	1,000
Deferred tax (benefit) expense	(4,046)	(428)	170
Income tax expense	$ 55,321	$ 35,257	$ 30,952

The difference between the reported income tax expense and a tax determined by applying the applicable U.S. federal statutory income tax rate to income before income taxes is reconciled as follows:

(In thousands)	2020	2019	2018
Expected income tax expense	$ 43,930	$ 34,892	$ 31,588
State and local income tax, net of federal benefit	5,949	3,234	3,495
Effect of foreign statutory rates different from U.S. and other foreign adjustments	2,783	(771)	759
Investment in unconsolidated affiliates	(387)	538	(2,776)
Effect of tax on accumulated foreign earnings	—	(111)	(4,415)
Other, net	3,046	(2,525)	2,301
Income tax expense	$ 55,321	$ 35,257	$ 30,952

The Tax Cuts and Jobs Act (the Act) was enacted on December 22, 2017. The Act required companies to pay a one-time transition tax on the accumulated earnings of certain foreign subsidiaries. The Company applied the guidance in Staff Accounting Bulletin No. 118 in accounting for the enactment date effects of the Act. During the fourth quarter of 2018, the Company completed its accounting for all of the enactment-date income tax effects of the Act, and following the completion of the analysis of the calculation of the transition tax, the Company recorded a reduction to income tax expense of $4.4 million, or eight cents per diluted share, to reduce this liability. During 2019, the Treasury Department finalized regulation related to the calculation of the transition tax, the impact of which was immaterial to the Company's Consolidated Financial Statements. The Company continues to assert that the undistributed earnings of most of its foreign subsidiaries are permanently reinvested. No taxes have been accrued with respect to these undistributed earnings or any outside basis differences. The Company has elected to provide for the tax expense related to global intangible low-taxed income (GILTI) in the year the tax is incurred.

The Company includes interest and penalties related to income tax matters as a component of income tax expense, none of which was material in 2020, 2019, and 2018.

The statute of limitations is open for the Company's federal tax return for 2015 and for 2017 and all subsequent years. The statutes of limitations for most state returns are open for 2017 and all subsequent years, and some state and foreign returns are also open for some earlier tax years due to differing statute periods. The Internal Revenue Service is currently auditing the Company's 2015 and 2017 tax returns. While the Company believes that it is adequately reserved for possible audit adjustments, the final resolution of these examinations cannot be determined with certainty and could result in final settlements that differ from current estimates.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

(In thousands)	2020	2019
Deferred tax assets:		
Inventories	$ 13,910	$ 12,247
Other postretirement benefits and accrued items	11,477	9,271
Other reserves	7,782	6,834
Foreign tax attributes	6,250	5,909
State tax attributes, net of federal benefit	21,178	22,395
Stock-based compensation	3,751	3,378
Right of Use Liability	6,034	5,965
Basis difference in unconsolidated affiliates	8,478	6,547
Total deferred tax assets	78,860	72,546
Less valuation allowance	(27,199)	(23,130)
Deferred tax assets, net of valuation allowance	51,661	49,416
Deferred tax liabilities:		
Property, plant, and equipment	48,990	47,791
Pension	—	949
Right of Use Asset	6,157	5,967
Other Liabilities	638	311
Total deferred tax liabilities	55,785	55,018
Net deferred tax liabilities	$ (4,124)	$ (5,602)

As of December 26, 2020, after consideration of the federal impact, the Company had state income tax credit carryforwards of $2.6 million, all of which expire by 2023, and other state income tax credit carryforwards of $9.0 million with unlimited lives. The Company had state net operating loss (NOL) carryforwards with potential tax benefits of $9.6 million, after consideration of the federal impact, expiring between 2021 and 2035. The state tax credit and NOL carryforwards are offset by valuation allowances totaling $12.0 million.

As of December 26, 2020, the Company had other foreign tax attributes with potential tax benefits of $4.6 million that have an unlimited life. These attributes were offset by a valuation allowance totaling $3.4 million. The Company also had other foreign tax attributes of $1.6 million, which have limited lives expiring between 2034 and 2040. The Company has also recorded a valuation allowance against deferred tax assets related to the book-tax differences in investments in unconsolidated affiliates.

Income taxes paid were approximately $49.3 million in 2020, $41.8 million in 2019, and $38.1 million in 2018.

Note 16 – Equity

The Company's Board of Directors has extended, until July 2021, its authorization to repurchase up to 20 million shares of the Company's common stock through open market transactions or through privately negotiated transactions. The Company has no obligation to purchase any shares and may cancel, suspend, or extend the time period for the purchase of shares at any time. Any purchases will be funded primarily through existing cash and cash from operations. The Company may hold any shares purchased in treasury or use a portion of the repurchased shares for its stock-based compensation plans, as well as for other corporate purposes. From its initial authorization in 1999 through December 26, 2020, the Company has repurchased approximately 6.4 million shares under this authorization.

Note 17 – Stock-Based Compensation

The Company has in effect stock incentive plans under which stock-based awards have been granted to certain employees and members of its Board of Directors. Under these existing plans, the Company may grant stock options, restricted stock awards, and performance stock awards. Approximately 1.6 million shares were available for future stock incentive awards at December 26, 2020.

During the years ended December 26, 2020, December 28, 2019, and December 29, 2018, the Company recognized stock-based compensation, as a component of selling, general, and administrative expense, in its Consolidated Statements of Income of $8.6 million, $8.7 million, and $8.0 million, respectively.

The total compensation expense not yet recognized related to stock incentive awards at December 26, 2020 was $20.8 million, with an average expense recognition period of 3.0 years.

The Company generally issues treasury shares when stock options are exercised, or when restricted stock awards or performance stock awards are granted. A summary of the activity and related information follows:

	Stock Options		Restricted Stock Awards		Performance Stock Awards	
(Shares in thousands)	Shares	Weighted Average Exercise Price	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Beginning of period	939	$ 25.05	764	$ 31.44	$ 298	$ 31.08
Granted	28	24.33	120	29.00	197	29.61
Exercised/Released	(158)	15.55	(176)	31.93	—	—
Forfeited	(16)	31.63	(2)	32.36	—	—
End of period	793	$ 26.81	706	$ 30.89	495	$ 30.50

Stock Options

Stock options are generally granted to purchase shares of common stock at an exercise price equal to the average of the high and low market price of the Company's stock on the grant date. Generally, the awards vest within five years from the grant date. Any unexercised options expire after not more than ten years. The fair value of each option is estimated as a single award and amortized into compensation expense on a straight-line or accrual basis over its vesting period based on its vesting schedule.

The Company estimates the fair value of all stock option awards as of the grant date by applying the Black-Scholes-Merton option pricing model. The use of this valuation model in the determination of compensation expense involves certain assumptions that are judgmental and/or highly sensitive including the expected life of the option, stock price volatility, risk-free interest rate, and dividend yield. Additionally, forfeitures are not estimated at the time of valuation; they are recognized as they occur. The weighted average of key assumptions used in determining the fair value of options granted and a discussion of the methodology used to develop each assumption are as follows:

	2020	2019	2018
Fair value of stock options on grant date	$ 6.81	$ 8.78	$ 9.64
Expected term	7.9 years	7.8 years	7.6 years
Expected price volatility	31.9 %	28.6 %	27.2 %
Risk-free interest rate	0.6 %	2.4 %	2.9 %
Dividend yield	1.7 %	1.4 %	1.3 %

Expected term – This is the period of time estimated based on historical experience over which the options granted are expected to remain outstanding. An increase in the expected term will increase compensation expense.

Expected price volatility – This is a measure of the amount by which a price has fluctuated or is expected to fluctuate. The Company uses actual historical changes in the market value of its stock to calculate the volatility assumption. Daily market value changes from the grant date over a past period representative of the expected term of the options are used. An increase in the expected price volatility rate will increase compensation expense.

Risk-free interest rate – This is the U.S. Treasury rate for the week of the grant, having a term representative of the expected term of the options. An increase in the risk-free rate will increase compensation expense.

Dividend yield – This rate is the annual dividends per share as a percentage of the Company's stock price. An increase in the dividend yield will decrease compensation expense.

The total intrinsic value of options exercised was $2.4 million, $1.6 million, and $0.9 million in 2020, 2019, and 2018, respectively. The total fair value of options that vested was $0.7 million, $1.0 million, and $1.0 million in 2020, 2019, and 2018.

At December 26, 2020, the aggregate intrinsic value of all outstanding options was $6.4 million with a weighted average remaining contractual term of 5.3 years. Of the outstanding options, 568 thousand are currently exercisable with an aggregate intrinsic value of $5.7 million, a weighted average exercise price of $24.92, and a weighted average remaining contractual term of 4.6 years.

Restricted Stock Awards

The fair value of each restricted stock award equals the fair value of the Company's stock on the grant date and is amortized into compensation expense on a straight-line or accrual basis over its vesting period based on its vesting schedule. The weighted average grant-date fair value of awards granted during 2020, 2019, and 2018 was $29.00, $28.64, and $31.95, respectively.

The aggregate intrinsic value of outstanding and unvested awards was $24.7 million at December 26, 2020. The total fair value of awards that vested was $5.6 million, $5.6 million, and $3.7 million in 2020, 2019, and 2018, respectively.

Performance Stock Awards

Performance stock awards require achievement of certain performance criteria which are predefined by the Compensation Committee of the Board of Directors at the time of grant. The fair value of each performance stock award equals the fair value of the Company's stock on the grant date. Performance stock awards are vested and released at the end of the performance period if the predefined performance criteria are achieved.

For all performance stock awards, in the event the certified results equal the predefined performance criteria, the Company will grant the number of shares equal to the target award. In the event the certified results exceed the predefined performance criteria, additional shares up to the maximum award will be granted. In the event the certified results fall below the predefined performance criteria but above the minimum threshold, a reduced number of shares will be granted. If the certified results fall below the minimum threshold, no shares will be granted.

In the period it becomes probable that the minimum threshold specified in the award will be achieved, the Company recognizes expense for the proportionate share of the total fair value of the performance stock awards related to the vesting period that has already lapsed for the shares expected to vest and be released. The remaining fair value of the shares expected to vest and be released is expensed on a straight-line basis over the balance of the vesting period. In the event the Company determines it is no longer probable that it will achieve the minimum threshold specified in the award, all of the previously recognized compensation expense is reversed in the period such a determination is made.

The weighted average grant-date fair value of awards granted during 2020, 2019, and 2018 was $29.61, $29.11, and $32.28, respectively.

The aggregate intrinsic value of outstanding and unvested awards was $17.2 million at December 26, 2020.

Note 18 – Accumulated Other Comprehensive Income (Loss)

AOCI includes certain foreign currency translation adjustments from those subsidiaries not using the U.S. dollar as their functional currency, net deferred gains and losses on certain derivative instruments accounted for as cash flow hedges, adjustments to pension and other post-employment benefit liabilities, and other comprehensive income attributable to unconsolidated affiliates.

The following table provides changes in AOCI by component, net of taxes and noncontrolling interest (amounts in parentheses indicate debits to AOCI):

(In thousands)	Cumulative Translation Adjustment	Unrealized (Loss) Gain on Derivatives	Pension/ OPEB Liability Adjustment	Attributable to Unconsol. Affiliates	Total
Balance at December 29, 2018	$ (54,257)	$ (214)	$ (24,967)	$ (354)	$ (79,792)
Other comprehensive income (loss) before reclassifications	8,059	1,176	2,315	(839)	10,711
Amounts reclassified from AOCI	—	(486)	797	—	311
Balance at December 28, 2019	(46,198)	476	(21,855)	(1,193)	(68,770)
Other comprehensive income (loss) before reclassifications	8,859	(4,583)	(3,639)	(132)	505
Amounts reclassified from AOCI	—	5,091	8,291	—	13,382
Balance at December 26, 2020	$ (37,339)	$ 984	$ (17,203)	$ (1,325)	$ (54,883)

Reclassification adjustments out of AOCI were as follows:

(In thousands)	Amount reclassified from AOCI 2020	2019	2018	Affected Line Item
Unrealized losses (gains) on derivatives:				
Commodity contracts	$ 6,337	$ (587)	$ (429)	Cost of goods sold
	(1,246)	101	58	Income tax (benefit) expense
	$ 5,091	$ (486)	$ (371)	Net of tax and noncontrolling interests
Amortization of net loss (gain) and prior service cost on employee benefit plans	$ 11,642	$ —	$ —	Pension plan termination expense
	(998)	960	341	Other income, net
	(2,353)	(163)	(38)	Income tax benefit
	$ 8,291	$ 797	$ 303	Net of tax and noncontrolling interests

Note 19 – Quarterly Financial Information (Unaudited) [(1)]

(In thousands, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2020				
Net sales	$ 602,919	$ 500,168	$ 619,105	$ 675,851
Gross profit [(2)]	94,204	97,009	118,325	122,344
Consolidated net income [(3)]	33,951	28,487	43,957	37,254
Net income attributable to Mueller Industries, Inc.	32,415	27,956	42,702	36,420
Basic earnings per share	0.58	0.50	0.77	0.65
Diluted earnings per share	0.57	0.50	0.76	0.64
Dividends per share	0.10	0.10	0.10	0.10
2019				
Net sales	$ 611,781	$ 666,394	$ 608,602	$ 543,839
Gross profit [(2)]	100,388	102,446	97,814	94,358
Consolidated net income	17,139	28,676	30,444	29,973
Net income attributable to Mueller Industries, Inc.	15,723	27,986	29,093	28,170
Basic earnings per share	0.28	0.50	0.52	0.50
Diluted earnings per share	0.28	0.50	0.52	0.50
Dividends per share	0.10	0.10	0.10	0.10

(1) *The sum of quarterly amounts may not equal the annual amounts reported due to rounding. In addition, the earnings per share amounts are computed independently for each quarter, while the full year is based on the weighted average shares outstanding.*

(2) *Gross profit is net sales less cost of goods sold, which excludes depreciation and amortization.*

(3) *Includes income earned by Shoals Tubular, Inc., acquired during Q1 2020, and Kessler Sales and Distribution, acquired during Q3 2020.*

Note 20 – Subsequent Events

On February 22, 2021, the Company announced that intends to issue on or about February 25, 2021 a notice of full redemption to the holders of its 6% Subordinated Debentures due 2027.

On January 29, 2021, the Company entered into an asset purchase agreement with Hart & Cooley LLC, whereby the Company purchased the Hart & Cooley flexible duct business. The total purchase price was $14.0 million in cash paid at closing. The acquisition will expand the Company’s footprint in the air quality and climate control systems market and complement the existing flexible duct business within the Climate segment.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Mueller Industries, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Mueller Industries, Inc. (the Company) as of December 26, 2020 and December 28, 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 26, 2020, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 26, 2020 and December 28, 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 26, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 26, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 24, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Defined Benefit Pension Obligation

Description of the Matter

At December 26, 2020 the aggregate defined pension obligation was $90.8 million and exceeded the fair value of pension plan assets of $78.5 million, resulting in an underfunded defined pension obligation of $12.3 million. As disclosed in Notes 1 and 13 to the consolidated financial statements, the Company recognizes the overfunded or underfunded status of the plans as an asset or liability in the consolidated balance sheets with changes in the funded status recorded through comprehensive income in the year in which those changes occur. The obligations for these plans are actuarially determined and affected by assumptions, including discount rates, expected long-term return on plan assets, and certain employee-related factors such as mortality.

Auditing the defined benefit pension obligation is complex and required the involvement of our actuarial specialists due to the highly judgmental nature of actuarial assumptions (e.g., discount rate, mortality rate, and expected return on plan assets) used in the measurement process. These assumptions have a significant effect on the projected benefit obligation.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls that address the measurement and valuation of the defined benefit pension obligation. For example, we tested controls over management's review of the defined benefit pension obligation, including the significant actuarial assumptions used by management and the related data inputs.

To test the defined benefit pension obligation, our audit procedures included, among others, evaluating the methodology used, the significant actuarial assumptions discussed above and testing the completeness and accuracy of the underlying data, including the participant data used by management.

We involved our actuarial specialist to assist with our procedures. For example, we compared the actuarial assumptions used by management to historical trends and evaluated the change in the defined benefit pension obligation from prior year due to the change in service cost, interest cost, actuarial gains and losses, benefit payments, contributions and other activities, including settlements. In addition, we evaluated management's methodology for determining the discount rate that reflects the maturity and duration of the benefit payments that is used to measure the defined benefit pension obligation. As part of this assessment, we compared management's selected discount rate to an independently developed range of reasonable discount rates. To evaluate the mortality rate assumption, we assessed whether the information is consistent with publicly available information, and whether any market data adjusted for entity-specific factors were applied. Lastly, to evaluate the expected return on plan assets, we assessed whether management's assumption was consistent with a range of returns for a portfolio of comparative investments.

Ernst + Young LLP

We have served as the Company's auditor since 1991.

Memphis, Tennessee
February 24, 2021

MUELLER INDUSTRIES, INC.
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
Years Ended December 26, 2020, December 28, 2019, and December 29, 2018

(In thousands)	Balance at beginning of year	Additions: Charged to costs and expenses	Additions: Other additions	Deductions	Balance at end of year
2020					
Allowance for doubtful accounts	$ 770	$ 1,208	$ —	$ 440	$ 1,538
Environmental reserves	$ 20,866	$ 4,242	$ —	$ 1,107	$ 24,001
Valuation allowance for deferred tax assets	$ 23,130	$ 2,317	$ 1,898	$ 146	$ 27,199
2019					
Allowance for doubtful accounts	$ 836	$ (81)	$ 263	$ 248	$ 770
Environmental reserves	$ 23,619	$ 1,659	$ —	$ 4,412	$ 20,866
Valuation allowance for deferred tax assets	$ 25,311	$ 2,919	$ 290	$ 5,390	$ 23,130
2018					
Allowance for doubtful accounts	$ 980	$ (286)	$ 220	$ 78	$ 836
Environmental reserves	$ 28,004	$ 1,981	$ —	$ 6,366	$ 23,619
Valuation allowance for deferred tax assets	$ 30,316	$ 1,209	$ 150	$ 6,364	$ 25,311

APPENDIX A

MUELLER INDUSTRIES, INC.

RECONCILIATION OF OPERATING INCOME AS REPORTED TO NON-GAAP FINANCIAL MEASURES

	2016	**2017**	**2018**	**2019**	**2020**
Operating income	154,401	150,807	172,969	191,403	245,838
Litigation settlement, net	—	—	—	—	(22,053)
Insurance proceeds	—	—	(3,681)	(485)	—
Gain on asset sales	—	(1,491)	(253)	(963)	—
Impairment charges	6,778	1,466	—	—	3,771
Adjusted operating income	**161,179**	**150,782**	**169,035**	**189,955**	**227,556**
Operating income	154,401	150,807	172,969	191,403	245,838
Depreciation and amortization	35,133	33,944	39,555	42,693	44,843
EBITDA	**189,534**	**184,751**	**212,524**	**234,096**	**290,681**
Litigation settlement, net	0	—	—	—	(22,053)
Insurance proceeds	0	—	(3,681)	(485)	—
Gain on asset sales	—	(1,491)	(253)	(963)	—
Impairment charges	6,778	1,466	—	—	3,771
Adjusted EBITDA	**196,312**	**184,726**	**208,590**	**232,648**	**272,399**

ANNUAL MEETING

The Annual Meeting of Stockholders will be held at the Company's headquarters at 150 Schilling Boulevard, Second Floor, Collierville, TN 38017, 10:00 a.m. local time (CDT), May 6, 2021.

CAPITAL STOCK INFORMATION

The Company declared and paid a quarterly cash dividend of 10 cents per common share in each quarter of 2019 and 2020. In addition, in 2017 the Company declared and paid a special dividend of $8 per share. Payment of dividends in the future is dependent upon our financial condition, cash flows, capital requirements, and other factors.

COMMON STOCK

As of February 19, 2021, the number of holders of record of Mueller's common stock was approximately 653.

NEW YORK STOCK EXCHANGE

On February 19, 2021, the closing price for Mueller's common stock on the New York Stock Exchange was $37.76.

FORM 10-K

The Company's Annual Report on Form 10-K is available on the Company's website at www.muellerindustries.com or upon written request:

c/o Mueller Industries, Inc.
Attention: Investor Relations
150 Schilling Blvd., Suite 100
Collierville, TN 38017

NYSE CERTIFICATIONS

The Company submitted an unqualified Section 12(a) CEO Certification to the NYSE in 2020. The Company filed with the SEC the CEO/CFO Certifications required under Section 302 of the Sarbanes-Oxley Act as an exhibit to the Company's Annual Report on Form 10-K for 2020 and 2019.

MARKET FOR MUELLER INDUSTRIES SECURITIES

Common stock is traded on the NYSE (MLI).

TRANSFER AGENT, REGISTRAR & PAYING AGENT

To notify the Company of address changes, lost certificates, dividend payments, or account consolidations, security holders should contact:

American Stock Transfer & Trust Company, LLC
Shareholder Services Department
6201 15th Avenue
Brooklyn, NY 11219
Toll Free: (800) 937-5449
Local & International: (718) 921-8124
Email: help@astfinancial.com
Website: www.astfinancial.com

BOARD OF DIRECTORS

Gregory L. Christopher, Chairman
Terry Hermanson, Lead Independent Director
Elizabeth Donovan
Gennaro J. Fulvio
Gary S. Gladstein
Scott J. Goldman
John B. Hansen
Charles P. Herzog, Jr.

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