HAYNES
International

January 24, 2020

To My Fellow Stockholders:

As we begin fiscal 2020, I am pleased to say that we have moved from words to actions and from plans to results. I am proud of our team and everything that they have accomplished with safety, volumes, costs, pricing, margins and cash generation over the past year. Our employees' focus on our monthly metrics and the actions required to change this business have been excellent. We are gaining momentum. Examples of our progress include the following:

- Our proactive initiatives on safety are taking hold, and the best initiatives are being shared across the organization. Our OSHA recordable rate has shown significant year on year improvement. Our leaders, starting with me, will continue to lead by example across all of our facilities.
- Our improvement initiative work is having a significant impact on our performance, specifically in higher volumes, better pricing and lower costs. Our price increases are possible due to the supply of high value differentiated products and services into our markets. Cost reduction projects are being implemented across all of our manufacturing locations. Our efforts to secure the right incremental volume led to net revenues increasing 12.6% and an 8.9% increase in volume in fiscal 2019, resulting in achieving our 20-million-pound goal for the year.
- We ended fiscal year 2019 with a backlog of $235.2 million, $19.2 million greater than the beginning of our fiscal year. Our September 30th backlog was at the highest end of year level in eight years. Our team deserves a lot of credit. Our customers truly want to do business with Haynes. The depth of so many of our customer relationships has been very impressive to see and experience.
- Based on this focus and the efforts of our entire team, our gross margin percentage improved quarterly throughout fiscal 2019—10.6% in the first quarter, 11.5% in the second quarter, 14.4% in the third quarter and 16.4% in the fourth quarter.
- We are generating cash primarily due to improved profitability. Fiscal year 2019 net cash provided by operating activities improved significantly to $43.0 million, compared to cash used by operating activities of $(13.7) million in fiscal 2018.

This process improvement, along with our industry differentiators of people, processes and innovation, has created enthusiasm through our entire organization.

The team at Haynes has continued its long history of creating competitive advantage through the supply of high value differentiated products. This shows in our research and development through alloy development, in our applications development and sales staff, all of whom work closely with customers to provide solutions to material related issues, and in our distribution facilities, where we continue to grow our cut parts business, allowing us to become a value-added solutions provider to our customers.

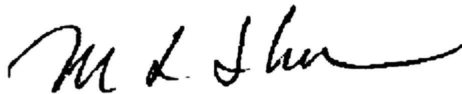
We are an industry leader in developing new alloys and applications for existing and new alloys developed to meet our customers' specialized and demanding requirements. Our portfolio of patented alloys continues to gain traction in the aerospace industry. Aerospace is our largest market, and fiscal 2019 was a record year for the Company for this market in volume and net revenue. We are well positioned to supply into the growing, current and new generation aero-engine platforms, most notably with our patented HAYNES® 282® alloy and HAYNES 244® alloy.

Our other patented alloys are also gaining industry acceptance. These include HASTELLOY® G-35®, HASTELLOY HYBRID BC-1® and HAYNES HR-235® for corrosion applications and HAYNES NS-163®, HAYNES HR-224® and HAYNES 233™ for high-temperature applications.

While our team has made great progress, we believe there is so much more that is possible. As fiscal 2020 unfolds, we plan to continue to execute and benefit from our improvement initiatives.

Finally, positive and permanent change only occurs through the hard work and dedication of our employees. My sincere thanks to everyone on the Haynes team. We are making excellent progress. Our entire team should all be proud of the last year's accomplishments—and excited about what we can continue to build together.

Sincerely,



Michael L. Shor
President and Chief Executive Officer

HAYNES
International

January 24, 2020

Dear Stockholders of Haynes International, Inc.:

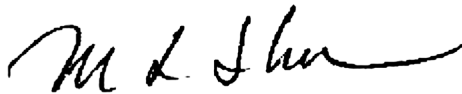
You are cordially invited to attend the Annual Meeting of Stockholders of Haynes International, Inc. ("Haynes") to be held Tuesday, February 25, 2020 at 10:00 a.m. (EST) at Conrad Indianapolis, 50 W. Washington Street, Indianapolis, Indiana 46204.

The business to be discussed and voted upon by the stockholders at the annual meeting is described in the accompanying Notice of Annual Meeting and Proxy Statement.

We hope you are able to attend the annual meeting personally, and we look forward to meeting with you. Whether or not you attend, it is important that your stock be represented and voted at the meeting. I urge you to please complete, date and return the proxy card in the enclosed envelope. The vote of each stockholder is very important. You may revoke your proxy at any time before it is voted at the annual meeting by giving written notice to the Corporate Secretary of Haynes, by filing a properly executed proxy bearing a later date or by attending the annual meeting and voting in person.

On behalf of the Board of Directors and management of Haynes, I thank you for your continued support.

Sincerely,
Haynes International, Inc.



Michael L. Shor
President and Chief Executive Officer

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HAYNES
International

HAYNES INTERNATIONAL, INC.
NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD FEBRUARY 25, 2020

Stockholders of Haynes International, Inc.:

The Annual Meeting of Stockholders of Haynes International, Inc. ("Haynes") will be held at the Conrad Indianapolis, 50 West Washington St., Indianapolis, Indiana 46204 on Tuesday, February 25, 2020 at 10:00 a.m. (EST) for the following purposes:

1. To elect Donald C. Campion as a director of Haynes to serve for a one-year term;
2. To elect Robert H. Getz as a director of Haynes to serve for a one-year term;
3. To elect Dawne S. Hickton as a director of Haynes to serve for a one-year term;
4. To elect Michael L. Shor as a director of Haynes to serve for a one-year term;
5. To elect Larry O. Spencer as a director of Haynes to serve for a one-year term;
6. To elect William P. Wall as a director of Haynes to serve for a one-year term;
7. To ratify the appointment of Deloitte & Touche LLP as Haynes' independent registered public accounting firm for the fiscal year ending September 30, 2020;
8. To hold a vote on the Haynes International, Inc. 2020 Incentive Compensation Plan;
9. To hold an advisory vote on executive compensation; and
10. To transact such other business as may properly come before the meeting.

Only stockholders of record at the close of business on January 10, 2020 are entitled to notice of, and to vote at, the annual meeting.

YOUR VOTE IS IMPORTANT. EVEN IF YOU EXPECT TO ATTEND THE ANNUAL MEETING, PLEASE DATE, SIGN AND PROMPTLY MAIL THE ENCLOSED PROXY. A RETURN ENVELOPE IS PROVIDED FOR THIS PURPOSE.

By Order of the Board of Directors,

Janice W. Gunst
Corporate Secretary

January 24, 2020
Kokomo, Indiana

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on February 25, 2020: This Notice of Annual Meeting and Proxy Statement and the Company's Fiscal 2019 Annual Report are available in the "Investor Relations" section of the Company's website at *www.haynesintl.com*

HAYNES INTERNATIONAL, INC. PROXY STATEMENT

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HAYNES
International

ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD FEBRUARY 25, 2020

GENERAL INFORMATION

This proxy statement is furnished in connection with the solicitation by the Board of Directors of Haynes International, Inc. ("Haynes" or the "Company") of proxies to be voted at the Annual Meeting of Stockholders to be held at 10:00 a.m. (EST) on Tuesday, February 25, 2020, and at any adjournment thereof. The meeting will be held at the Conrad Indianapolis, 50 W. Washington St., Indianapolis, Indiana 46204. This proxy statement and the accompanying form of proxy were first mailed to stockholders of the Company on or about January 24, 2020.

A stockholder signing and returning the enclosed proxy may revoke it at any time before it is exercised by delivering written notice to the Corporate Secretary of Haynes, by filing a properly executed proxy bearing a later date or by attending the annual meeting and voting in person. The signing of a proxy does not preclude a stockholder from attending the annual meeting in person. All proxies returned prior to the annual meeting, and not revoked, will be voted in accordance with the instructions contained therein. Any executed proxy not specifying to the contrary will be voted as follows:

(1) FOR the election of Donald C. Campion;

(2) FOR the election of Robert H. Getz;

(3) FOR the election of Dawne S. Hickton;

(4) FOR the election of Michael L. Shor;

(5) FOR the election of Larry O. Spencer;

(6) FOR the election of William P. Wall;

(7) FOR ratification of the selection of Deloitte & Touche LLP as the Company's independent registered public accounting firm for its fiscal year ending September 30, 2020;

(8) FOR the approval of the Haynes International, Inc. 2020 Incentive Compensation Plan;

(9) FOR the compensation of the Named Executive Officers described herein, in a non-binding, advisory capacity; and

(10) IN the discretion of the proxy holders upon such other business as may properly come before the annual meeting.

The vote with respect to approval of the compensation of the Company's Named Executive Officers is advisory in nature and will not be binding on the Company or the Board of Directors. Stockholders may also choose to abstain from voting on such matters.

As of the close of business on January 10, 2020, the record date for the annual meeting, there were outstanding and entitled to vote 12,556,255 shares of common stock of Haynes. Each outstanding share of common stock is entitled to one vote on each matter properly brought before the annual meeting and can be voted only if the record owner of that share, determined as of the record date, is

present in person or represented by a properly completed proxy at the annual meeting. For beneficial owners who are not record holders, the brokers, banks or nominees holding shares for beneficial owners must vote those shares as instructed. If the broker, bank or nominee has not received instructions from the beneficial owner, the broker, bank or nominee generally has discretionary voting power only with respect to matters that are considered routine matters. If you are not the record holder of your shares and want to attend the meeting and vote in person, you must obtain a legal proxy from your broker, bank or nominee and present it to the inspector of election with your ballot when you vote at the meeting. Haynes has no other voting securities outstanding. Stockholders do not have cumulative voting rights. All stockholders of record as of January 10, 2020 are entitled to notice of and to vote at the annual meeting.

A quorum will be present if holders of a majority of the outstanding shares of common stock are present, in person or by proxy, at the annual meeting. Shares registered in the names of brokers or other "street name" nominees for which proxies are voted on some, but not all, matters will be considered to be present at the annual meeting for quorum purposes, but will be voted only as to those matters as to which a vote is indicated, and will not be voted as to the matters with respect to which no vote is indicated (commonly referred to as "broker non-votes"). If a quorum is present, the nominees for director will be elected by a majority of the votes cast. Abstentions and broker non-votes are treated as votes not cast and will have no effect on the election of directors. The affirmative vote of the majority of the shares present and entitled to vote on the matter is required for adoption of the proposal to ratify the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm, approval of the compensation of the Company's Named Executive Officers and approval of the Haynes International, Inc. 2020 Incentive Compensation Plan. Accordingly, abstentions applicable to shares represented at the meeting will have the same effect as votes against these proposals. Broker non-votes will have no effect on the outcome of the advisory proposals with respect to the approval of the Haynes International, Inc. 2020 Incentive Compensation Plan, advisory votes with respect to the compensation of the Company's Named Executive Officers because those are non-routine matters for which brokers, banks or other nominees may not vote absent instructions, but will have the same effect as votes against the proposal to ratify the appointment of Deloitte & Touche LLP because this proposal is a routine matter for which brokers, banks or other nominees have discretionary voting power. With respect to any other proposals which may properly come before the annual meeting, proposals will be approved upon the affirmative vote of a majority of the shares of common stock present in person or represented by proxy and entitled to vote on such matters at the annual meeting.

A copy of the Haynes International, Inc. Fiscal Year 2019 Annual Report on Form 10-K, including audited financial statements and a description of operations for the fiscal year ended September 30, 2019, accompanies this proxy statement. The financial statements contained in the Form 10-K are not incorporated by reference in this proxy statement, but they do contain important information regarding Haynes.

This solicitation of proxies is being made by Haynes, and all expenses in connection with this solicitation of proxies will be borne by Haynes. Haynes expects to solicit proxies primarily by mail, but directors, officers and other employees of Haynes may also solicit proxies electronically, in person or by telephone.

PROPOSALS FOR 2021 ANNUAL MEETING

Stockholders desiring to submit proposals to be included in the Proxy Statement for the 2021 Annual Meeting pursuant to Rule 14a-8 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), will be required to submit them to the Company in writing on or before September 26, 2020, provided that if the date of the 2021 Annual Meeting is more than 30 days from the anniversary of the 2020 Annual Meeting, then the deadline would be a reasonable time before

Haynes begins to print and send its proxy materials. Any such stockholder proposal must also be proper in form and substance, as determined in accordance with the Exchange Act and the rules and regulations promulgated thereunder.

Stockholder proposals other than those to be included in the proxy statement for the 2021 Annual Meeting of Stockholders, pursuant to Rule 14a-8 must be submitted in writing to the Corporate Secretary of Haynes and received on or before November 27, 2020 and not earlier than October 28, 2020, provided however, that in the event that the 2021Annual Meeting of Stockholders is called for a date that is not within twenty-five (25) days before or after the anniversary date of the 2020 Annual Meeting of Stockholders, notice by the stockholder in order to be timely must be submitted and received not later than the close of business on the tenth (10th) day following the day on which notice of the date of the 2021 Annual Meeting of Stockholders was mailed or public disclosure of the date of the 2021 Annual Meeting is made, whichever first occurs. In addition, any such stockholder proposal must be in proper written form. To be in proper written form, a stockholder proposal (i) other than with respect to director nominations must set forth as to each matter the stockholder proposes to bring before the 2021 Annual Meeting of Stockholders (a) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (b) the name and record address of the stockholder, (c) the class or series and number of shares of capital stock of the Company which are owned beneficially or of record by the stockholder, (d) a description of all arrangements or understandings between the stockholder and any other person or persons (including their names) in connection with the proposal of such business by the stockholder and any material interest of the stockholder in such business and (e) a representation that the stockholder intends to appear in person or by proxy at the annual meeting to bring such business before the meeting and (ii) with respect to director nominations must set forth the information described under the heading "Governance Committee and Director Nominations" herein.

The mailing address of the principal executive offices of Haynes is 1020 West Park Avenue, P.O. Box 9013, Kokomo, Indiana 46904-9013.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

Listed below are the only individuals and entities known by the Company to beneficially own more than 5% of the outstanding common stock of the Company as of January 10, 2020 (assuming that their holdings have not changed from such other date as may be shown below):

Name	Number	Percent[1]
BlackRock, Inc.[2]	1,881,736	15.0%
T. Rowe Price Associates, Inc.[3]	1,444,316	11.5%
The Vanguard Group[4]	1,257,166	10.4%
Royce & Associates, LLC[5]	1,141,502	9.1%
Dimensional Fund Advisors LP[6]	1,054,319	8.4%

(1) The percentage is calculated on the basis of 12,556,255 shares of common stock outstanding as of January 10, 2020.

(2) The address of BlackRock, Inc. is 55 East 52nd Street, New York, New York 10022. Based solely on Schedule 13G/A, filed December 31, 2018 with the Securities and Exchange Commission. Represents sole voting power over 1,836,047 shares and sole dispositive power over 1,881,736 shares.

(3) The address of T. Rowe Price Associates, Inc. is 100 East Pratt Street, 10th floor, Baltimore, Maryland 21202. Based solely on Schedule 13G, filed December 31, 2018 with the Securities and

Exchange Commission. Represents sole voting power over 251,222 shares and sole dispositive power over 1,444,316 shares.

(4) The address of The Vanguard Group is 100 Vanguard Blvd., Malvern, Pennsylvania 19355. Based solely on Schedule 13G, filed September 30, 2019 with the Securities and Exchange Commission. Represents sole voting power over 11,172 shares, shared voting power over 1,182 shares, sole dispositive power over 1,245,512 shares and shared dispositive power over 11,654 shares.

(5) The address of Royce & Associates, LLC is 745 Fifth Avenue, New York, New York 10151. Based solely on Schedule 13G, filed January 14, 2019 with the Securities and Exchange Commission. Represents sole voting power over 1,141,502 shares and sole dispositive power over 1,137,816 shares.

(6) The address of Dimensional Fund Advisors LP is Building One, 6300 Bee Cave Road, Austin, Texas 78746. Based solely on Schedule 13G, filed December 31, 2018 with the Securities and Exchange Commission. Represents sole voting power over 1,010,852 shares and sole dispositive power over 1,054,319 shares.

SECURITY OWNERSHIP OF MANAGEMENT

The following table shows the ownership of shares of the Company's common stock as of January 10, 2020 (except as described in any associated footnote), by each director, the Chief Executive Officer, the Chief Financial Officer and the other three most highly compensated officers during fiscal year 2019 (the "Named Executive Officers") and the directors and all executive officers as a group. Except as noted below, the directors and executive officers have sole voting and investment power over these shares of common stock. The business address of each person indicated is c/o Haynes International, Inc., 1020 West Park Avenue, P.O. Box 9013, Kokomo, Indiana 46904-9013.

Name	Number	Percent(1)	Deferred Restricted Stock
Michael L. Shor(2)	57,383	*	2,650
John C. Corey(3)	24,746	*	5,150
Donald C. Campion(3)	17,202	*	5,150
Robert H. Getz(3)	18,263	*	5,150
Dawne S. Hickton(4)	2,000	*	8,097
Larry O. Spencer	0	*	—
William P. Wall(5)	11,105	*	7,447
Marlin C. Losch III(6)	51,204	*	—
Daniel W. Maudlin(7)	47,737	*	—
David L. Strobel(8)	8,503	*	—
Venkat R. Ishwar(9)	46,310	*	—
All directors and executive officers as a group (15 persons)(10)	397,731	3.12%	33,644

* Represents beneficial ownership of less than one percent of the outstanding common stock.

(1) The percentages are calculated on the basis of 12,556,255 shares of common stock outstanding as of January 10, 2020, plus the number of shares that such person or group has the right to acquire beneficial ownership of within sixty days of January 10, 2020, including applicable shares underlying stock options held by such person or group which may be exercised within sixty days of January 10, 2020.

(2) Shares of common stock beneficially owned by Mr. Shor include 18,296 shares of time-vesting restricted stock subject to forfeiture all of which Mr. Shor has the right to vote, 24,717 shares

underlying stock options which may be exercised within sixty days of January 10, 2020 and 14,370 shares owned with no restrictions. Excluded from this amount are 2,650 shares of restricted stock the receipt of which has been deferred to a future year as elected by the participant.

(3) Excluded from this amount are 5,150 shares of restricted stock the receipt of which has been deferred to a future year as elected by the participant.

(4) Excluded from this amount are 8,097 shares of restricted stock the receipt of which has been deferred to a future year as elected by the participant.

(5) Excluded from this amount are 7,447 shares of restricted stock the receipt of which has been deferred to a future year as elected by the participant

(6) Shares of common stock beneficially owned by Mr. Losch include 6,087 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Losch has the right to vote, 34,974 shares underlying stock options which may be exercised within sixty days of January 10, 2020 and 10,143 shares owned with no restrictions.

(7) Shares of common stock beneficially owned by Mr. Maudlin include 8,073 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Maudlin has the right to vote, 34,841 shares underlying stock options which may be exercised within sixty days of January 10, 2020 and 4,523 shares owned with no restrictions.

(8) Shares of common stock beneficially owned by Mr. Strobel include 4,784 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Strobel has the right to vote, and 3,719 shares underlying stock options which may be exercised within sixty days of January 10, 2020.

(9) Shares of common stock beneficially owned by Dr. Ishwar include 6,312 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Ishwar has the right to vote, 35,463 shares underlying stock options which may be exercised within sixty days of January 10, 2020 and 4,535 shares owned with no restrictions.

(10) Includes 207,260 shares underlying stock options that may be exercised within sixty days of January 10, 2020 and 71,658 shares of restricted stock.

PROPOSALS TO BE VOTED UPON

1 through 6. ELECTION OF DIRECTORS

The Amended and Restated By-Laws of the Company provide that the number of directors constituting the whole board shall be fixed from time to time by resolutions of the Board of Directors, but shall not be less than three nor more than nine directors. By resolution, the Board of Directors has fixed the number of directors at seven, which will be decreased to six following the Annual Meeting. The terms of all incumbent directors will expire at the annual meeting. Directors elected at the annual meeting will serve for a term ending at the 2021 annual meeting of stockholders and until their respective successors are elected and qualified.

Nominees

Upon the unanimous recommendation of the Corporate Governance and Nominating Committee (the “Governance Committee”), the Board of Directors has nominated five directors who served in fiscal 2019 for election at the annual meeting. Mr. Corey will retire from his position as a director of the Company at the annual meeting. Mr. Spencer was appointed to the Board effective January 1, 2020 and is also being nominated for fiscal 2020 upon the unanimous recommendation of the Governance Committee. The Board of Directors believes that all of its nominees will be available for re-election at

the annual meeting and will serve if re-elected. The directors nominated for election (the “Nominated Directors”) are:

Name	Age on 12/31/19	Current Position	Served as Director Since
Robert H. Getz	57	Chairman of the Board; Director	2006
Donald C. Campion	71	Director	2004
Dawne S. Hickton	62	Director	2017
Michael L. Shor	60	President and Chief Executive Officer; Director	2012
Larry O. Spencer	66	Director	2020
William P. Wall	57	Director	2004

The Board of Directors recommends that stockholders vote FOR the election of all of the Nominated Directors. Unless authority to vote for any Nominated Director is withheld, the accompanying proxy will be voted FOR the election of all the Nominated Directors. However, the persons designated as proxies reserve the right to cast votes for another person designated by the Board of Directors in the event that any Nominated Director becomes unable to, or for any reason will not, serve. If a quorum is present, those nominees receiving a majority of the votes cast will be elected to the Board of Directors.

Business Experience of Nominated Directors

Robert H. Getz has been a director since March 31, 2006. Mr. Getz serves as Chairman of the Board and as a member of the Corporate Governance and Nominating Committee. Mr. Getz is Managing Partner and Founder of Pecksland Capital Partners, a private investment firm. Prior to 2016, Mr. Getz served as a Managing Director and Partner of Cornerstone Equity Investors, LLC, a private equity investment firm which he co-founded in 1996. Prior to the formation of Cornerstone, Mr. Getz served as a Managing Director and Partner of Prudential Equity Investors and Prudential Venture Capital. Mr. Getz has invested in and served on the boards of several public and private technology, manufacturing and metals and mining companies. Mr. Getz currently serves on the Board of Directors of Ero Copper (TSX:ERO.TO), where he serves as Chairman of the Compensation Committee and a member of the Governance Committee. He also serves on the board of Techtronic Industries (HKG:0669.HK), a leading developer and manufacturer of power tools. Mr. Getz formerly served as a Director of Jaguar Mining until 2019. He also served as a Director of NewMarket Gold Inc. until 2016 and as Chairman of Crocodile Gold Corp until its merger with NewMarket in 2015. The board believes that Mr. Getz’s experience as an investor and extensive record as a director of other public and private companies, as well as his wide variety of operating experience, enables him to lead the board with his valuable perspective on a variety of strategic issues.

Donald C. Campion has been a director since August 31, 2004. Mr. Campion also serves as the Chairman of the Audit Committee and as a member of the Compensation Committee of the Board. Mr. Campion has also served on several company boards, both public and private. He currently serves on the board of MasterCraft Boat Holdings, Inc. (NASDAQ: MCFT), a public company, where he is Chairman of the Audit Committee and is a member of the Compensation Committee. From 2013 through 2014, Mr. Campion was a member of the board of directors of Cash Store Financial, Inc., a publicly traded company with shares listed on the Toronto Stock Exchange and the New York Stock Exchange. Mr. Campion previously served as Chief Financial Officer of several companies, including VeriFone, Inc., Special Devices, Inc., Cambridge, Inc., Oxford Automotive, Inc. and Delco Electronics Corporation. The Board believes Mr. Campion’s substantial tax and accounting experience built through his career in finance at several significant corporations, his work in engineering and lean manufacturing and his experience serving as a director of other companies make him well qualified to

serve as a director. Mr. Campion's tax and accounting acumen also qualify him as the Company's Audit Committee financial expert.

Dawne S. Hickton has been a director since July 1, 2017. Ms. Hickton also serves as Chairperson of the Corporate Governance and Nominating Committee and a member of the Audit Committee of the Board. Ms. Hickton is an Executive Vice President and Chief Operating Officer of Jacobs, Critical Missions Solutions line of business (NYSE:J). Serving now in an advisory role, Ms. Hickton is a Founding Partner of Cumberland Highstreet Partners, Inc., an executive strategic consulting firm for manufacturing businesses. Ms. Hickton previously served as Vice Chairman, President and Chief Executive Officer of RTI International Metals, Inc. from 2007 until its sale to Alcoa Corporation in 2015. She is currently Chair of the board of the Federal Reserve Bank of Cleveland. In addition, she serves on the University of Pittsburgh board of trustees and the board of the Smithsonian National Air & Space Museum. The Board believes that Ms. Hickton's leadership experience in specialty metals as well as her knowledge of Haynes' key markets are benefits to Haynes.

Michael L. Shor served as the Company's interim President and Chief Executive Officer from May 29, 2018 through August 31, 2018 and was elected as the Company's President and Chief Executive Officer effective September 1, 2018. Mr. Shor has been a director since August 1, 2012, and served as Chairman of the Board from February 2017 through August 2018. Mr. Shor retired as Executive Vice President—Advanced Metals Operations & Premium Alloys Operations of Carpenter Technology Corporation on July 1, 2011 after a thirty-year career with Carpenter Technology. At Carpenter, Mr. Shor held managerial positions in technology, marketing and operations before assuming full responsibility for the performance of Carpenter's operating divisions. From November 30, 2016 through February 1, 2018, Mr. Shor was a member of the board of AG&E Holdings Inc. (OTC-QB: AGNU), a leading parts distributor and service provider to the casino and gaming industry. The Board believes Mr. Shor's extensive management experience, and specific specialty materials experience, provides valuable insight to lead the Company in its strategic direction, operational excellence and growth initiatives.

Larry O. Spencer, General, USAF (Ret.) has served as a director since January 1, 2020 and serves as a member of the Audit Committee and Compensation Committee. Mr. Spencer served until March 1, 2019 as President of the United States Air Force Association, a position he held since his retirement as a four-star general in 2015 after serving 44 years with the United States Air Force. Mr. Spencer held positions of increasing responsibility with the Air Force, which included Vice Chief of Staff, the second highest-ranking military member in the Air Force. Mr. Spencer served as Vice Commander of the Oklahoma City Logistics Center where he led repair and overhaul operations for a myriad of Air Force aircraft and engines. Mr. Spencer was also the first Air Force officer to serve as the Assistant Chief of Staff in the White House Military Office, and he served as Chief Financial Officer and Director of Mission Support at a major command. Mr. Spencer has also been a board director of the Whirlpool Corporation since August 2016 and of Triumph Group, Inc. since February 2018. The Board believes it benefits from Mr. Spencer's experiences as a leader of large, complex organizations and global business operations and logistics and his knowledge of aerospace and insights into defense and government affairs.

William P. Wall has been a director since August 31, 2004. Mr. Wall also serves as the Chairman of Compensation Committee and as a member of the Audit and Corporate Governance and Nominating Committees of the Board. Mr. Wall is a managing member of OQ Partners, LLC, a private investment and advisory firm headquartered in Lexington, Massachusetts, Mr. Wall is a member of the Board of Directors of STAAR Surgical, Inc. (NASDAQ: STAA), where he serves as Chairman of the Nominating and Governance Committee and a member of the Compensation Committee and Audit Committee. Mr. Wall was also a member of the Board of Directors of Front Yard Residential Corporation (NYSE: RESI), where he served as Chairman of the Audit Committee, Chairman of the Nominating and Governance Committee and a member of the Compensation Committee from March 2016 until March

2018. From February 2006 until June 2015, Mr. Wall served as general counsel of Abrams Capital Management, LLC, a value-oriented investment firm headquartered in Boston. Prior to joining Abrams Capital, Mr. Wall was a partner at a hedge fund for two years and was employed with Fidelity Investments for seven years, concluding as a Managing Director in its private investment group. The Board believes, in addition to his experience as an attorney, Mr. Wall provides financing and investment analysis experience as a result of his career in the investment management industry. Mr. Wall's leadership, investment and corporate governance experience enable him to advise the Company on its strategic direction, allocation of capital and management development.

The Board of Directors unanimously recommends that stockholders vote *FOR* the election of each of the nominated directors.

Corporate Governance

Board Committee Structure

The Board of Directors had four standing committees at the beginning of fiscal 2019: (i) an Audit Committee; (ii) a Compensation Committee; (iii) a Corporate Governance and Nominating Committee; and (iv) a Risk Committee. The Risk Committee was dissolved in December 2018 and its functions spread among the full Board, other Board committees and management, as appropriate. In reviewing its overall governance and committee structure and costs, the Board determined that the cost of the Risk Committee was not a necessary expense given the ability of the full Board, other committees of the Board and management to handle the committee's responsibilities. The dissolution of the Risk Committee is an example of the Board's efforts to effectively manage governance expense. The responsibilities of the Risk Committee have been appropriately allocated among the other committees with active participation by management, including the CEO.

The Audit Committee is currently composed of five members, Messrs. Campion (who chairs the Committee), Corey, Spencer and Wall and Ms. Hickton, all of whom are independent under the definitions and interpretations of NASDAQ. The size of the Audit Committee will be reduced to four members following Mr. Corey's retirement at the time of the Annual Meeting. Under the Audit Committee Charter, adopted by the Board of Directors and available in the investor relations section of the Company's website at *www.haynesintl.com*, the Audit Committee is primarily responsible for, among other matters:

- Appointment, retention, termination and oversight, including the approval of compensation, of the Company's independent auditors;
- Pre-approving audit and non-audit services by the independent auditors;
- Reviewing the audit plan and the estimated fees;
- Reviewing and recommending approval to the full Board of securities disclosures and earnings press releases;
- Evaluating and making recommendations to the Board concerning the financial structure and financing strategy of the Company;
- Managing significant risks and exposures (including cybersecurity risks relating to financial reporting) and policies with respect to risk assessment and risk management relating to financial reporting;
- Reviewing operational and accounting internal controls, including any special procedures adopted in response to the discovery of material control deficiencies;
- Reviewing the action taken by management on the internal auditors' and independent auditors' recommendations;

- Reviewing and approving the appointment, reassignment and replacement of the senior internal audit executive;
- Reviewing the qualifications, performance and independence of the independent auditors;
- Reviewing the Company's Code of Business Conduct and Ethics;
- Reviewing and approving the existence and terms of any transactions between the Company and any related party; and
- Performing such additional activities, and considering such other matters, within the scope of its responsibilities, as the Audit Committee or the Board deems necessary or appropriate.

The Compensation Committee is currently composed of four members, Messrs. Wall (who chairs the Committee), Campion, Corey and Spencer, all of whom are independent under the definitions and interpretations of NASDAQ. The size of the Compensation Committee will be reduced to three members following Mr. Corey's retirement at the time of the Annual Meeting. Under the Compensation Committee Charter, adopted by the Board of Directors and available in the investor relations section of the Company's website at *www.haynesintl.com*, the Compensation Committee is primarily responsible for, among other matters:

- Establishing the Company's philosophy and policies regarding executive and director compensation, and overseeing the development and implementation of executive and director compensation programs;
- Setting the CEO's compensation level and performance goals and approving awards for the CEO under incentive compensation plans based on the performance evaluation conducted by the Board;
- Reviewing and approving the individual elements of total compensation for the executive management of the Company;
- Reviewing and approving revisions to the Company's executive officer salary range structure and annual salary increase guidelines;
- Assuring that the Company's executive incentive compensation program is administered in a manner consistent with the Committee's compensation philosophy and policies as to participation, target annual incentive awards, corporate financial goals and actual awards paid to executive officers;
- Reviewing the Company's employee benefit programs and approving changes, subject, where appropriate, to stockholder or Board approval;
- Overseeing regulatory compliance with respect to compensation matters;
- Reviewing performance of executive officers other than the CEO and overseeing succession planning;
- Overseeing and making recommendations to the Board with respect to the Company's incentive compensation plans and equity-based plans;
- Preparing and issuing compensation evaluations and reports; and
- Performing other duties or responsibilities expressly delegated by the Board from time to time relating to the Company's executive compensation programs.

The Corporate Governance and Nominating Committee is currently composed of three members, Ms. Hickton (who chairs the Committee) and Messrs. Getz and Wall, all of whom are independent under the definitions and interpretations of NASDAQ. Under the Governance Committee Charter, adopted by the Board of Directors and available in the investor relations section of the Company's website at *www.haynesintl.com*, the Governance Committee is responsible for overseeing the performance and composition of the Board of Directors to ensure effective governance. The Governance Committee identifies and recommends the nomination of qualified directors to the Board of Directors as well as develops and recommends governance principles for the Company. The Governance Committee is primarily responsible for, among other things:

- Overseeing the search for qualified individuals to serve on the Board;
- Recommending to the Board those director nominees who, in the Committee's opinion, the full Board should recommend for stockholder approval at the annual meeting or for election at such other times when vacancies exist or qualified candidates are identified and available;
- Assisting the Board in evaluating the continued suitability and effectiveness of incumbent director candidates, both individually and as a group;
- Overseeing the administration of the Board, including reviewing and recommending the appointment of directors to committees of the Board and monitoring and reviewing the functions of the committees;
- Developing, approving and reviewing the Company's Corporate Governance Guidelines;
- Recommending the organization and structure of the Board;
- Overseeing and reviewing annually the structure and effectiveness of the Board's committee system; and
- Performing any other duties assigned to it by the Board.

The Risk Committee was dissolved in December 2018 and its functions spread among the full Board, other Board committees and management, as appropriate. During the relevant portion of fiscal 2019, the Risk Committee was composed of three members, Messrs. Corey (who chaired the Committee) and Campion and Ms. Hickton, all of whom are independent under the definitions and interpretations of NASDAQ. Under the Risk Committee charter, adopted by the Board of Directors and available in the investor relations section of the Company's website at *www.haynesintl.com*, the Risk Committee was primarily responsible for, among other matters:

- Reviewing and approving the Company's risk governance framework;
- Setting the tone and developing a culture within the Company regarding risk;
- Reviewing the strategic and operating risks identified by management, designating some or all of those risks to be subject to the Committee's oversight;
- Reviewing periodic reports from management on the metrics used to measure, monitor and manage risks;
- Reviewing the independence, authority and effectiveness of the risk management function, including staffing levels and qualifications;
- Approving the appointment of the CEO's designated Risk Officer; and
- Attending to other matters as the Chair or other members of the Committee determine relevant to the Committee's oversight of strategic and operating risk assessment and management.

Meetings of the Board of Directors and Committees

The Board of Directors held fourteen meetings during the fiscal year ended September 30, 2019. During fiscal 2019, no member of the Board of Directors attended fewer than 75% of the aggregate of meetings of the Board of Directors and meetings of any committee of the Board of Directors of which he or she was a member during his or her tenure as a director. Scheduled meetings are supplemented by frequent informal exchanges of information and, on occasion, actions taken by unanimous written consent without meetings. All of the members of the Board of Directors are encouraged and expected to attend Haynes' annual meetings of stockholders. All of the members of the Board of Directors attended Haynes' 2019 annual meeting in person. The following chart shows the number of meetings in fiscal 2019 of each of the standing committees of the Board of Directors at which a quorum was present:

Committee	Meetings in Fiscal 2019
Audit Committee	8
Compensation Committee	8
Corporate Governance and Nominating Committee	6
Risk Committee	1

Meetings of Non-Management Directors

Consistent with NASDAQ governance requirements, the non-management members of the Board of Directors meet in an executive session at least twice per year, and usually in connection with every regularly-scheduled in-person board meeting, to: (a) review the performance of the management team; (b) discuss their views on management's strategic planning and its implementation; and (c) address any other matters affecting the Company that may concern individual directors. The executive sessions are designed to ensure that the Board of Directors is not only structurally independent, but also is given ample opportunity to exercise independent thought and action. In fiscal 2019, the non-management directors met in executive session five times. When meeting in executive session, the presiding person was the Chairman.

Independence of the Board of Directors and Committee Members

Except for Mr. Shor, all of the members of the Board of Directors, including each member of the Audit Committee, the Compensation Committee and the Governance Committee and each former member of the Risk Committee, meet the criteria for independence set forth in the rules and regulations of the Securities and Exchange Commission, including Rules 10A-3(b)(1) and 10C-1(b)(1) of the Exchange Act and the definitions and interpretations of NASDAQ. The Board of Directors has determined that Mr. Campion, the Chairman of the Audit Committee, is an "audit committee financial expert" (as defined by Item 407(d)(5)(ii) of Regulation S-K) and is "independent" (under the definitions and interpretations of NASDAQ).

The roles of Chairman and Chief Executive Officer are split into two positions. The Board of Directors believes that separating these roles aligns the Company with best practices for corporate governance of public companies and accountability to stockholders. The Board also believes that the separation of roles provides a leadership model that clearly distinguishes the roles of the Board and management. The separation of the Chairman and Chief Executive Officer positions allows the Company's Chief Executive Officer to direct his or her energy toward operational and strategic issues while the non-executive Chairman focuses on governance, leadership and providing counsel and advice to the Chief Executive Officer. The Company believes that separating the Chairman and Chief Executive Officer positions enhances the independence of the Board, provides independent business

counsel for the Company's Chief Executive Officer and facilitates improved communications between Company management and Board members.

Family Relationships

There are no family relationships among the directors and executive officers of the Company.

Conflict of Interest and Related Party Transactions

It is the Company's policy to require that all conflict of interest transactions between the Company and any of its directors, officers or 5% beneficial owners (each, an "insider") and all transactions where any insider has a direct or indirect financial interest, including related party transactions required to be reported under Item 404(a) of Regulation S-K, must be reviewed and approved or ratified by the Audit Committee of the Board of Directors. Management discloses the existence of any such transaction to the Audit Committee. In addition, the material terms of any such transaction, including the nature and extent of the insider's interest therein, must be disclosed to the Audit Committee. The Audit Committee will then review the terms of the proposed transaction to determine whether the terms of the proposed transaction are fair to the Company and are no less favorable to the Company than those that would be available from an independent third party. Following the Audit Committee's review and discussion, the proposed transaction will be approved or ratified only if it receives the affirmative votes of a majority of the members of the Audit Committee who have no direct or indirect financial interest in the proposed transaction, even though the disinterested directors may represent less than a quorum. Interested directors may be counted in determining the presence of a quorum at a meeting of the Audit Committee which authorizes the contract or transaction. Haynes did not enter into any transactions in fiscal 2019 with any insider.

Governance Committee and Director Nominations

Nominees for the Board of Directors are currently recommended for nomination to the Board of Directors by the Governance Committee. The Governance Committee bases its recommendation for nomination on criteria that it believes will provide a broad perspective and depth of experience in the Board of Directors. In general, when considering independent directors, the Governance Committee will consider the candidate's experience in areas central to the Company, such as operational experience in a manufacturing environment, aerospace or specialty metals industry experience, general business management experience, finance and legal acumen and experience and demonstrated leadership capabilities as well as considering the candidate's personal qualities and accomplishments and their ability to devote sufficient time and effort to their duties as directors. Important areas of experience and expertise include manufacturing, international operations, finance and the capital markets, accounting and experience as a director or executive of other companies, or similar experience in a governmental or non-profit setting. The Governance Committee does not have a formal diversity policy but considers diversity as one criteria evaluated as a part of the total package of attributes and qualifications a particular candidate possesses. The Governance Committee construes the notion of diversity broadly, considering differences in viewpoint, professional experience, education, skills and other individual qualities, in addition to race, gender, age, ethnicity and cultural background as elements that contribute to a diverse Board.

The Governance Committee has adopted Corporate Governance Guidelines which establish, among other matters, a mandatory retirement age for Board members of 72, subject to exceptions that may be granted by the Board. In recent years, two directors have retired pursuant to the Board's retirement age policy, which the Board believes demonstrates the Board's adherence to proper board refreshment. In keeping with its commitment to enhancing diversity of viewpoints and background on the Board, the two most recent directors appointed to the Board, each of whom brings substantial experience in the form of executive leadership in the specialty metals industry and the U.S. Air Force,

respectively, further the Board's goals of enhancing diversity of viewpoints and experience. The Company benefits from their valuable perspectives on the competitive landscape confronting the Company, emerging trends in the defense and aerospace industry as well as their general leadership skills.

Although the Governance Committee has no formal policy regarding the consideration of director candidates recommended by stockholders, the Committee will consider candidates recommended by stockholders, provided the names of such persons, accompanied by relevant biographical information, are properly submitted in writing to the Secretary of the Company in accordance with the procedure described below for stockholder nominations. Candidates recommended by stockholders are evaluated in the same manner using the same criteria as candidates recommended by the Board or Governance Committee or individual directors or officers.

Stockholders may nominate directors by providing timely notice thereof in proper written form to the Secretary of Haynes. To be timely, a stockholder's notice to the Secretary must be delivered to or mailed and received at Haynes' principal executive offices (a) in the case of an annual meeting, not less than ninety days nor more than one hundred twenty days prior to the anniversary date of the immediately preceding annual meeting; provided, however, that in the event that the annual meeting is called for a date that is not within twenty-five days before or after such anniversary date, notice by the stockholder in order to be timely must be so received not later than the close of business on the tenth day following the day on which notice of the date of the annual meeting is mailed or public disclosure of the date of the annual meeting is made, whichever first occurs; and (b) in the case of a special meeting of stockholders called for the purpose of electing directors, not later than the close of business on the tenth day following the day on which notice of the date of the special meeting is mailed or public disclosure of the date of the special meeting is made, whichever first occurs.

To be in proper written form, a stockholder's notice to the Secretary must set forth (a) as to each person whom the stockholder proposes to nominate for election as a director (i) the name, age, business address and residence address of the person, (ii) the principal occupation or employment of the person, (iii) the class or series and number of shares of capital stock of the Company which are owned beneficially or of record by the person and (iv) any other information relating to the person that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder; and (b) as to the stockholder giving the notice (i) the name and record address of such stockholder, (ii) the class or series and number of shares of capital stock of the Company which are owned beneficially or of record by such stockholder, (iii) a description of all arrangements or understandings between such stockholder and each proposed nominee and any other person or persons (including their names) pursuant to which the nomination(s) are to be made by such stockholder, (iv) a representation that such stockholder intends to appear in person or by proxy at the meeting to nominate the persons named in its notice and (v) any other information relating to such stockholder that would be required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for election of directors pursuant to Section 14 of the Exchange Act and the rules and regulations promulgated thereunder. Such notice must be accompanied by a written consent of each proposed nominee to being named as a nominee and to serving as a director if elected.

Code of Ethics

The Company has adopted a Code of Business Conduct and Ethics that applies to its Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer, as well as to its directors and other officers and employees. This Code is posted on the Company's website at *www.haynesintl.com/investor-relations/our-company/code-of-business-conduct-and-ethics*. The Audit

Committee of the Board regularly reviews the Code of Business Conduct and Ethics and is informed of any whistleblower complaints provided thereunder.

Board of Directors' Role in Risk Oversight

As a part of its oversight function, the Board of Directors monitors how management operates the Company. In October through December of fiscal 2019, the Risk Committee acted as the primary tool to keep risk as an important part of the Board's and the various committees' deliberations by working with management to identify and prioritize enterprise risks—the specific financial, operational, business and strategic risks that the Company faces, whether internal or external. With the dissolution of the Risk Committee in December 2018, those functions were distributed among the full Board, other committees of the Board and management, as appropriate. Certain strategic and business risks, such as those relating to the Company's products, markets and capital investments (including environmental and social risks), are overseen by the entire Board of Directors. The Audit Committee oversees management of market and operational risks that could have a financial impact, such as those relating to internal controls or liquidity. The Corporate Governance and Nominating Committee manages the risks associated with governance issues, such as the independence of the Board of Directors, and the Compensation Committee manages risks relating to the Company's compensation plans and policies.

In addition to the formal compliance program, the Board of Directors encourages management to promote a corporate culture that understands risk management and incorporates it into the overall corporate strategy and day-to-day business operations of the Company. The Company's risk management structure also includes a standing enterprise risk management committee comprised of members of the executive team and led by the CEO, collectively undertaking an ongoing effort to assess and analyze the most likely areas of future risk for the Company and to address them in its long-term planning process.

Communications with Board of Directors

Stockholders may communicate with the full Board of Directors by sending a letter to Haynes International, Inc. Board of Directors, c/o Corporate Secretary, 1020 West Park Avenue, P.O. Box 9013, Kokomo, Indiana 46904-9013. The Company's Corporate Secretary will review the correspondence and forward it to the chairman of the appropriate committee or to any individual director or directors to whom the communication is directed, unless the communication is unduly hostile, threatening, illegal, does not reasonably relate to the Company or its business or is similarly inappropriate. In addition, interested parties may contact the non-management directors as a group by sending a written communication to the Corporate Secretary as directed above. Such communication should be clearly addressed to the non-management directors.

Director Compensation Program

Directors who are also Company employees do not receive compensation for their services as directors. Following is a description of the Company's compensation program for non-management directors in fiscal 2019. In consultation with its independent compensation consultant, Total Rewards Strategies, the Compensation Committee reviews the compensation paid to non-management directors and recommends changes to the Board of Directors, as appropriate.

Director Compensation Table

The following table provides information regarding the compensation paid to the Company's non-employee members of the Board of Directors in fiscal 2019.

Name	Fees Earned or Paid in Cash ($)	Restricted Stock Awards ($)[1]	Dividends on Stock Awards ($)	Total ($)
R. H. Getz, Chairman	$115,000	$84,950	$4,532	$204,482
D. C. Campion, Director	$111,250	$84,950	$4,532	$200,732
J. C. Corey, Director	$ 93,125	$84,950	$4,532	$182,607
D. S. Hickton, Director	$103,750	$84,950	$5,104	$193,804
W. P. Wall, Director	$117,500	$84,950	$4,532	$206,982

(1) Represents restricted stock with a grant date fair value equal to $33.98 per share, which was the closing price of the Company's common stock on the trading day prior to the date of the grant computed in accordance with FASB ASC Topic 718. The shares of restricted stock are subject to vesting as described more fully under "Director Compensation Program—Equity Compensation".

Director Compensation Analysis

Total Rewards Strategies, the Compensation Committee's independent compensation consulting firm, reviewed the Board of Directors' total compensation in fiscal 2019, including Board of Directors and Committee annual retainers and restricted stock grants. Specifically, Total Rewards Strategies provided a report to the Compensation Committee evaluating the Haynes fiscal 2018 director compensation and the comparator group companies' (as identified under "Committee Procedures") director compensation and making recommendations with respect to Haynes' fiscal 2019 director compensation. The Compensation Committee decided to make no changes to the Board's existing director compensation structure for 2019 in light of the overall relatively small size of the Board, the significant resulting demands imposed on each director in terms of Board and Committee service, and the overall governance cost represented by director compensation, which cost was less than the 50th percentile of the comparator group.

In December 2019, in consultation with Total Rewards Strategies, the Compensation Committee recommended, and the Board adopted, a revised director compensation structure to better balance the mix between cash and equity received by the Company's directors, to increase the fee paid to the Chairman of the Board, and to reduce the retainers paid to members of each standing committee. The specific changes are outlined in the following sections.

Annual Retainer

In fiscal 2019, non-management members of the Board of Directors received a $60,000 annual retainer related to their Board of Directors duties and responsibilities, which was paid in four equal installments of $15,000 each. Additionally, there was a $40,000 annual retainer for serving as Chairman of the Board, also paid in four equal installments. For fiscal 2020, after consultation with its compensation consultant, and in recognition that the existing retainer was significantly lower than that customarily paid by its comparator group companies, the Board voted to increase the retainer payable to the Chairman by $25,000, a portion of which will be payable in equity and a portion of which will be payable in cash.

Committee Fees

In fiscal 2019, directors received an additional annual retainer of $15,000 for each standing committee on which they served, paid in four equal installments. In addition, there was a $17,500 annual retainer for serving as the chairman of the Audit Committee, a $12,500 annual retainer for serving as the chairman of the Compensation Committee and a $10,000 annual retainer for serving as the chairman of the Corporate Governance and Nominating Committee of the Board of Directors. In December 2019, after reviewing the Company's director compensation program and consulting with its compensation consultant, the Committee recommended, and the Board approved, a reduction in the annual committee retainer fees, effective January 1, 2020, to $10,000 each for the Audit Committee members, $7,500 each for the Compensation Committee members and $5,000 each for the Corporate Governance and Nominating Committee members.

Equity Compensation

In consultation with its compensation consultant, for fiscal 2019, the Compensation Committee established a target equity grant amount of $85,000 for each Director. On November 21, 2018, each non-employee director was granted 2,500 shares of restricted stock, pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan. In granting the awards, the Compensation Committee considered information provided by Total Rewards Strategies on methods of encouraging long-term stock ownership by directors, as well as information regarding how comparator group companies utilized restricted or deferred stock. The shares of restricted stock will vest in full on the earlier of (i) the first anniversary of the grant date, or (ii) the failure of the director to be re-elected at an annual meeting of the stockholders of the Company as a result of the director being excluded from the nominations for any reason other than "cause" as defined in the 2016 Incentive Compensation Plan.

In December 2019, after reviewing the Company's director compensation program and consulting with its compensation consultant, the Committee recommended and the Board approved, an increase in the equity grant amount by $10,000 in order to increase the equity portion of the total amount of compensation paid to the Company's directors. This amount is effective for fiscal 2020.

The Company adopted a deferred compensation plan for directors and executives in 2017 that permits directors to defer up to 100% of their cash retainers and up to 100% of their annual equity grant. Each non-employee director elected to defer the receipt of shares upon vesting to a later date. That election also resulted in deferral of the receipt of dividends throughout fiscal 2019 on deferred restricted stock held on the record date of each dividend paid during the year.

Director Stock Retention Guidelines

The Board of Directors approved stock ownership guidelines for non-employee members of the Board of Directors effective January 1, 2014. The guidelines provide that directors own common stock equal to 400% of their annual retainer within five (5) years of their date of election to the Board. For purposes of this calculation, shares owned by an individual include shares or other equity interests owned directly or indirectly, including those subject to risk of forfeiture (but not forfeited) under the Company's 2009 Restricted Stock Plan or under the 2016 Incentive Compensation Plan, as applicable, and shares subject to a deferral election. The guidelines also provide that directors retain a certain amount of stock (based upon the value of shares owned) after meeting the ownership goal. As of September 30, 2019 all of the directors met the ownership goal.

The share ownership amount for each non-employee director as of September 30, 2019 is summarized below and is based on the closing price of the Company's stock as of September 30, 2019.

Name	Number of Shares Owned	Number of Deferred Shares	Number of Non Vested Shares	Total Share Ownership	Ownership Value as of 9/30/2019
R. H. Getz	15,425	5,150	—	20,575	$737,408
D. C. Campion	14,905	5,150	—	20,055	$718,771
J. C. Corey	22,449	5,150	—	27,599	$989,148
D. S. Hickton	2,000	5,800	—	7,800	$279,552
W. P. Wall	13,906	5,150	—	19,056	$682,967

Total Compensation

The Board of Directors approved the 2020 Incentive Compensation Plan on January 15, 2020, which includes an annual maximum equity award for each director of $250,000 and a maximum annual total compensation (cash and equity) limit of $350,000 for each director.

Expenses

The Company reimburses directors for their reasonable out-of-pocket expenses incurred in attending meetings of the Board of Directors or any committee thereof and other expenses incurred by directors in connection with their service to the Company.

Indemnification Agreements

Pursuant to individual written agreements, the Company indemnifies all of its directors against loss or expense arising from such individuals' service to the Company and its subsidiaries and affiliates and advances attorneys' fees and other costs of defense to such individuals in respect of claims that may be eligible for indemnification under certain circumstances.

Compensation Committee Interlocks and Insider Participation

The members of the Compensation Committee as of September 30, 2019 were Messrs. Wall, Campion and Corey. None of the members of the Compensation Committee are now serving or previously have served as employees or officers of the Company or any subsidiary, and none of the Company's executive officers serve as directors of, or in any compensation related capacity for, companies with which members of the Compensation Committee are affiliated.

Executive Compensation

Compensation Committee Report

The Compensation Committee of the Board of Directors has reviewed and discussed the following Compensation Discussion and Analysis with management and, based on such review and discussion, has recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this proxy statement and in the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019.

SUBMITTED BY THE COMPENSATION COMMITTEE

William P. Wall, Chair
Donald C. Campion
John C. Corey
Larry O. Spencer

2019 Business Summary

In fiscal 2019, the Company results were as follows.

- Net revenues of $490.2 million in fiscal 2019 as compared to $435.3 million in fiscal 2018 and net income of $9.7 million in fiscal 2019 compared to a net loss of $21.8 million in fiscal 2018 (which included $20.9 in special non-recurring charges).
- Quarterly increase in gross margin percentage throughout fiscal 2019—10.6% in the first quarter, 11.5% in the second quarter, 14.4% in the third quarter and 16.4% in the fourth quarter.
- Backlog increase to $235.2 at the end of fiscal 2019, up $19.2 million from $216.0 million at the end of fiscal 2018.
- Net cash provided from operations of $43.0 million in fiscal 2019 compared to net cash used in operating activities of $13.7 million in fiscal 2018, a difference of $56.8 million.

Overview

This Compensation Discussion and Analysis describes the key principles and approaches used to determine the compensation in fiscal 2019 for Michael L. Shor, the Company's principal executive officer; Daniel W. Maudlin, the Company's principal financial officer; and David L. Strobel, Venkat R. Ishwar and Marlin C. Losch III, the Company's other three most highly compensated executive officers in fiscal 2019, as well as other senior executives. Detailed information regarding the compensation of these named executive officers, who are referred to as "Named Executive Officers" or "NEOs", appears in the tables following this Compensation Discussion and Analysis. This Compensation Discussion and Analysis should be read in conjunction with those tables.

This Compensation Discussion and Analysis consists of the following parts:

Responsibility for Executive Compensation Decisions

Role of Executive Officers in Compensation Decisions

Executive Compensation Philosophy and Principles

Committee Procedures

Setting Named Executive Officer Compensation in Fiscal 2019

Responsibility for Executive Compensation Decisions

The Compensation Committee of the Board of Directors, whose membership is limited to independent directors, acts pursuant to a Board-approved charter. The Compensation Committee is responsible for approving the compensation programs for all executive officers, including the Named Executive Officers, and making decisions regarding specific compensation to be paid or awarded to them. The Compensation Committee has responsibility for establishing and monitoring adherence to the Company's compensation philosophies and objectives. The Compensation Committee aims to ensure that the total compensation paid to the Company's executives, including the NEOs, is fair, reasonable and competitive. Although the Compensation Committee approves all elements of an executive officer's compensation, it approves equity grants and certain other incentive compensation subject to approval by the full Board of Directors.

Role of Executive Officers in Compensation Decisions

No Named Executive Officer participates directly in the determination of his or her compensation. For Named Executive Officers other than himself, the Company's Chief Executive Officer provides the Compensation Committee with performance evaluations and presents individual compensation recommendations to the Compensation Committee, as well as compensation program design recommendations. The Chief Executive Officer's performance is evaluated by the Board of Directors. Mr. Shor's salary was established by the Executive Employment Agreement between Mr. Shor and the Company entered into on September 1, 2018. The Chief Executive Officer and the Chief Financial Officer work closely with the Compensation Committee on the development of the financial targets and overall compensation awardable to the Named Executive Officers under the Company's Management Incentive Plan ("MIP") as those amounts are determined by reference to the Company's annual operating budget. The Compensation Committee retains the full authority to modify, accept or reject all compensation recommendations provided by management.

Executive Compensation Philosophy and Objectives

The Company's compensation program is designed to attract, motivate, reward and retain key executives who drive the Company's success and enable it to consistently achieve corporate performance goals in the competitive high-performance alloy business and increase stockholder value. The Company seeks to achieve these objectives through a compensation package that:

- Pays for performance: The MIP provides incentives to the Company's executive officers based upon meeting or exceeding specified short-term financial goals, taking into consideration the ability of the Company's executives to influence financial results. In addition, grants of restricted stock, performance shares and stock options provide an appropriate incentive to produce stockholder returns through long-term corporate performance, including through the attainment of performance targets applicable to performance share grants.
- Supports the Company's business strategy: The annual bonus provided by the MIP focuses the Company's executive officers on short-term goals, while the Company's equity compensation plans aim to engage management in the Company's long-term performance. The Company believes both of those elements serve to align management interests with creating stockholder value.
- Pays competitively: The Company sets compensation levels so that they are in line with those of individuals holding comparable positions and producing similar results at other multi-national corporations of similar size, value and complexity.
- Values stockholder input: In setting compensation levels, the Company takes into account the outcome of stockholder advisory votes regarding executive compensation.

In addition to aligning management's interests with the interests of the stockholders, a key objective of the Company's compensation plan is mitigating the risk in the compensation package by ensuring that a significant portion of compensation is based on the long-term performance of the Company. This reduces the risk that executives will place too much focus on short-term achievements to the detriment of the long-term sustainability of the Company.

As part of its oversight responsibilities, the Compensation Committee, along with a cross-functional team with representatives from Human Resources, Legal and Finance, annually evaluates the risks arising from the Company's compensation policies and practices, with the assistance of its independent compensation consultant. The Committee considered, among other factors, the design of the incentive compensation programs, which are closely linked to corporate performance, the mix of short-term and long-term compensation, the maximum payout levels for short- term and long-term incentives, the distribution of compensation between equity and cash and other factors that mitigate risk. The

Committee concluded that the Company's compensation policies and practices do not create risks that are reasonably likely to have a material adverse effect on the Company.

At the Company's 2019 annual meeting of stockholders, the stockholders voted on a non-binding advisory proposal to approve the compensation of the Named Executive Officers. Approximately 96.59% of the shares voted on the proposal were voted in favor of the proposal. In light of the approval by a substantial majority of stockholders of the compensation programs described in the Company's 2019 proxy statement, the Compensation Committee did not implement material changes to the executive compensation programs as a result of the stockholders' advisory vote.

2019 Compensation Plan Highlights

The design of the Company's executive compensation program for 2019 was generally consistent with the design of the 2018 program. The following table highlights the features of the program:

- Pay-for-performance philosophy
- Pay positioning philosophy relative to comparator group and mix of base salary and annual and long-term incentive compensation
- Annual incentive compensation metrics
- Change-in-control agreements with best practice features (double-trigger severance, less than three times base salary and target bonus, no tax gross-up, no enhanced retirement benefits)
- Compensation risk assessment
- Performance share awards to enhance the balance of the long-term incentive program, together with stock options and restricted stock
- Relative total shareholder return (TSR) as performance share metric to ensure alignment with shareholders
- Clawback policy consistent with SEC proposed regulations mandated by Dodd-Frank
- Share ownership and retention requirement for management and directors
- Limited perquisites

Committee Procedures

The Compensation Committee retains the services of Total Rewards Strategies, an independent compensation consulting firm, to analyze the compensation and financial data of a comparator group of companies. Total Rewards Strategies also provides the Compensation Committee with alternatives to consider when making compensation decisions and provides opinions on compensation recommendations the Compensation Committee receives from management. Total Rewards Strategies provided analyses and opinions regarding executive compensation trends and practices to the Compensation Committee during fiscal 2018 and fiscal 2019. Total Rewards Strategies did not provide any services to the Company other than compensation consulting to the Compensation Committee in fiscal 2018 or fiscal 2019. Total Rewards Strategies' work for the Company in fiscal 2019 did not raise any conflicts of interest.

Comparator Group

- The Company uses the comparator group as a reference for its executive compensation program. The Compensation Committee believes the comparator group is representative of the labor market from which the Company recruits executive talent. Factors used to select the comparator group companies include industry segment, market capitalization, revenue, profitability, labor markets, business model, customer markets, institutional ownership and number of employees.
- The Compensation Committee reviews and approves the composition of the comparator group annually. For the 2019 fiscal year, the Committee undertook a thorough analysis of the characteristics and composition of its comparator group and the Company's performance and with the input of its compensation consultant, significantly revised the composition of the

comparator group. For fiscal 2019, nine companies entered into the Company's comparator group and thirteen companies were deleted. The effect of this change resulted in a lower average market capitalization represented by the comparator group, which the Committee believes provided more appropriate benchmarks for compensation comparison versus larger capitalization companies, which typically set higher compensation levels. For fiscal 2019, the comparator group is comprised of 24 companies, including industrial metals, mineral and manufacturing companies.

Ampco-Pittsburgh	Insteel Industries	Olympic Steel
CECO Environmental	L.B. Foster	Shiloh Industries
CIRCOR International	Lindsay Corp.	Skyline Champion
Columbus-McKinnon	LSB Industries	Stoneridge
Core Molding Technologies	Materion	Synalloy Corp.
CTS	Myers Industries	Timken Steel
Ducommun	NN	Titan International
Global Brass and Copper	Northwest Pipe	Universal Stainless & Alloy Products

Market Rates

Among other analyses, Total Rewards Strategies provides the 50th percentile, or median, of the comparator group for base salary, cash bonus, long-term incentives and total overall compensation, or the Median Market Rate. The Compensation Committee uses the Median Market Rate as a primary reference point when determining compensation targets for each element of pay. As noted, by changing the composition of its comparator group, the Committee believes it adjusted the Median Market Rate to a level more consistent with the Company's revenue base, market capitalization and performance. When individual and targeted company financial performance is achieved, the objective of the executive compensation program is to provide overall compensation near the Median Market Rate of pay practices of the comparator group of companies. Actual target pay for an individual may be more or less than the Median Market Rate based on the Compensation Committee's evaluation of the individual's performance, experience and potential.

Consistent with the Compensation Committee's philosophy of pay for performance, incentive payments can exceed target levels only if overall Company financial targets are exceeded and will fall below target levels if overall financial goals are not achieved. The Compensation Committee requires appropriate targets to achieve incentive payments in order to ensure alignment of interests with the Company's stockholders. In recent years, the Company's financial performance and stock price performance fell below the Compensation Committee's targets, which resulted in the Company's executives foregoing significant incentive payments and equity compensation. The Compensation Committee believes this best ensures that the Company's executives are properly aligned with stockholders. The effectiveness of this approach is demonstrated by the fact that in two of the last five fiscal years, no incentive payments were earned by management due to the Company's underperformance versus the financial targets established by the Compensation Committee, in two years less than the target was paid out due to underperformance versus target, and approximately 56,450 shares of restricted stock were forfeited as unearned for failure to achieve required performance targets and 91,500 options expired worthless. The Committee believes its philosophy, and the implementation of that philosophy, is in the best interests of the Company's stockholders, and has resulted in a significant transformation in the focus and effort of its management team under the new leadership of Michael Shor, its Chief Executive Officer who began service in May 2018.

Setting Named Executive Officer Compensation in Fiscal 2019

Michael L. Shor was appointed President and Chief Executive Officer of the Company on September 1, 2018, after serving as interim President and Chief Executive Officer since May 29, 2018. The disclosures regarding Mr. Shor's fiscal 2019 compensation within this section should be read with that background and in conjunction with the disclosures provided under the "CEO Compensation" section and the notes to the "Summary Compensation Table" provided herein.

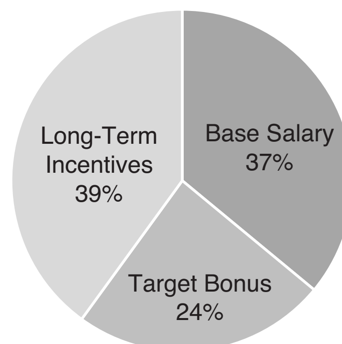
Components of Compensation

The chief components of each Named Executive Officer's compensation in fiscal 2019 were:

- base salary;
- a performance-based annual incentive award under the MIP;
- long-term compensation awards that include a combination of stock options, time-based restricted stock and performance shares;
- employee benefits, such as life, health and disability insurance benefits, and a qualified savings (401(k)) plan; and
- limited perquisites.

Each element of compensation is designed to achieve a specific purpose and to contribute to a total package that is competitive, appropriately performance-based and valued by the Company's executives. The Compensation Committee reviews information provided by Total Rewards Strategies and the Company's historical pay practices to determine the appropriate level and mix of compensation. In allocating compensation among elements, the Company believes the compensation of the Company's most senior executives, including the Named Executive Officers, who have the greatest ability to influence Company performance, should be predominately performance-based. As a result of this strategy, 63% of the Named Executive Officers' total target compensation, including the Chief Executive Officer's compensation, was allocated to performance-based pay in fiscal 2019.

Fiscal 2019 Target Compensation



Base Salary

The Company provides executives with a base salary that is intended to attract and retain the quality of executives needed to lead the Company's complex businesses. Base salaries for executives are generally targeted at the Median Market Rate of the comparator group, although individual performance, experience, internal equity, compensation history and contributions of the executive are also considered. The Committee reviews base salaries for Named Executive Officers annually and may

make adjustments based on individual performance, experience, market competitiveness, internal equity and the scope of responsibilities.

The base salaries of the Named Executive Officers were generally increased in fiscal 2019. The following table provides annualized base salary information for the Named Executive Officers effective July 1, 2018 and base salary as of July 1, 2019 as a percentage of the median market rate for 2019:

Named Executive Officer	Base Salary as of July 1, 2018	Base Salary as of July 1, 2019	Base Salary as a Percentage of Median Market Rate for 2019
Michael L. Shor	$400,000	$580,000	85%
Daniel W. Maudlin	$280,500	$305,000	88%
David L. Strobel	NA	$280,000	99%
Venkat R. Ishwar	$279,000	$286,000	108%
Marlin C. Losch III	$268,100	$275,000	105%

Management Incentive Plan—Annual Cash Incentive

The purpose of the MIP is to provide an annual cash bonus based on the achievement of specific operational and financial performance targets, tying compensation to the creation of value for stockholders. Target cash bonus awards are determined for each executive position by competitive analysis of the comparator group. In general, the median annual cash bonus opportunity of the comparator group is used to establish target bonus opportunities, but consideration is given to the individual executive's responsibilities and contributions to business results and internal equity. The MIP allows the Board of Directors discretion to administer the plan, including not paying out any compensation thereunder, accounting for unforeseen one-time transactions or adjusting the performance measures based on external economic factors. MIP payments are made on a sliding scale in accordance with established performance targets and are earned as of the end of the applicable fiscal year. MIP payments are sometimes referred to herein as a "bonus".

For fiscal 2019, the target performance level was established by reference to the Company's consolidated annual operating budget. The annual operating budget is developed by management and presented by the CEO and the CFO to the Board of Directors for its review and approval. The bonus target was intended to represent corporate performance which the Board of Directors believed was more likely than not to be achieved based upon management's presentation of the annual operating budget. For fiscal 2019, the Compensation Committee established a target by reference to the Company's net income (loss) as the sole financial goal for MIP payouts.

The Board of Directors establishes income and performance goals in order the align the interests of management with those of the Company's stockholders. Based upon fiscal 2018's income (loss) before income taxes and 2019's net income, MIP payments in excess of the minimum threshold but less than target were made for each of fiscal years 2018 and 2019.

The table below lists the 2019 MIP incentive awards that could have been earned at the minimum, target and maximum levels by each Named Executive Officer as a percentage of his base salary:

	MIP Incentive as % of Base Salary		
Named Executive Officer	**Minimum**	**Target**	**Maximum**
Michael L. Shor	40.0%	80.0%	120.0%
Daniel W. Maudlin	32.5%	65.0%	97.5%
David L. Strobel	30.0%	60.0%	90.0%
Venkat R. Ishwar	25.0%	50.0%	75.0%
Marlin C. Losch III	25.0%	50.0%	75.0%

The following table sets forth the targets for net income (loss), as well as actual net income (loss) for fiscal 2019:

($ in thousands)	Net Income
Threshold	$ 5,000
Target	$14,100
Maximum	$20,000
Fiscal 2019 Actual Net Income	$ 9,745

Long-Term Incentives

Stockholders approved the 2016 Incentive Compensation Plan on March 1, 2016. Grants were made under that plan in fiscal 2019. The plan provides the Company with a means to grant compensation awards designed to attract and retain key management, including the Named Executive Officers. The Compensation Committee administers the plan and believes awards available under the plan provide an appropriate incentive to produce superior returns to stockholders over the long term by offering participants an opportunity to benefit from stock appreciation through stock ownership.

Competitive benchmarking to the comparator group, the executive's responsibilities and the individual's contributions to the Company's business results determine the level of long-term compensation. In general, the median value of long-term compensation in the comparator group is used to determine the approximate value of long-term incentives. Fair value methodologies, which are consistent with the Company's expensing of equity awards under Financial Accounting Standards Board ASC Topic 718 Compensation—Stock Compensation, were used in fiscal 2019 to determine the value of stock options.

The Company currently does not have any formal plan requiring it to grant equity compensation on specified dates. With respect to newly hired or promoted executives, the Company's practice is typically to consider stock equity grants at the first meeting of the Compensation Committee and Board of Directors following such executive's hire date. The recommendations of the Compensation Committee are subsequently submitted to the Board of Directors for approval. The Company's policy is to issue equity grants at a time when the Company is in an "open window" for trading purposes, which customarily occurs two days after the filing of the Company's required reports with the Securities and Exchange Commission, and that the grant value of all equity awards is equal to the fair market value on the date of grant, which is determined using the closing price on the trading day prior to the grant date. The Compensation Committee considers whether or not to grant additional equity awards to the management team on an annual basis.

The amount of equity compensation is determined by the Committee as part of the total mix of compensation, including base salary, long-term incentive compensation and short-term incentive

compensation. The Committee uses information provided by its compensation consultant regarding the composition and median value of equity compensation for equivalent executive officers in the comparator group as a reference point in its analysis of appropriate equity compensation for the CEO and the other Named Executive Officers. The Committee then applies its judgment and experience to balance the following factors in determining equity compensation for the CEO and the other Named Executive Officers:

- responsibilities and duties of the relevant officer;
- individual performance;
- Company performance;
- stockholder return;
- internal pay equity;
- individual potential; and
- retention risk.

The Committee believes that a combination of performance shares, time-based restricted stock and stock options aligns the executive's interests with those of the stockholders and provides an appropriate balance between long-term stock price appreciation and executive retention. In fiscal 2019, the regular annual equity grants to the NEOs consisted of thirty-three percent (33%) stock options, thirty-three percent (33%) performance shares and thirty-three percent (33%) time-based restricted stock.

Clawback Policy

The Board of Directors has adopted a clawback policy that is consistent with the currently proposed SEC regulations mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. The clawback policy provides for recoupment of performance-based executive compensation in the event of an accounting restatement resulting from material noncompliance with financial reporting requirements under federal securities laws. The policy applies to current and former executives and requires reimbursement or forfeiture of any excess performance-based compensation received by an executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an accounting restatement.

If needed to comply with the final regulations when issued, the Board of Directors will make changes to that policy.

Anti-Pledging and Anti-Hedging Policies

Pledging is the practice in which a director or executive secures a loan by using equity compensation obtained from the Company as collateral to secure the loan ("Pledging"). Any director, executive officer or other employee of the Company is prohibited from Pledging. In addition, directors, executive officers and key employees of the Company are prohibited from trading in any interest or position relating to the future price of the Company's securities, such as a put, call or short sale.

Stock Ownership and Retention Guidelines

On September 23, 2013, the Board of Directors approved stock ownership guidelines applicable to executive officers and members of the Board of Directors, and those guidelines were subsequently updated. The guidelines became effective on January 1, 2014 and established the goal that, within five (5) years from the effective date or date of hiring, promotion or election, executive officers and directors each own an amount of the Company's common stock determined based upon a multiple of base salary, in the case of executive officers, or annual retainer, in the case of board members. The

multiples are as follows: in the case of the Chief Executive Officer, 300% of base salary; in the case of all other named executive officers, 200% of base salary; in the case of other executive officers, 100% of base salary; and in the case of non-employee members of the Board of Directors, 400% of annual cash retainer. The calculation of shares owned by an individual includes shares or other equity interests owned directly or indirectly, including those subject to risk of forfeiture (but not forfeited) under the Company's 2009 Restricted Stock Plan or under the 2016 Incentive Compensation Plan, as applicable, including performance shares at target amount, whether or not then earned, shares subject to a deferral election and shares subject to exercisable stock options with exercise prices lower than then current market value. The guidelines also require that executive officers and directors retain at all times the required amount of stock (based upon value of shares owned) after first meeting the ownership goal.

Stock Options

All options granted to the Company's NEOs vest in three equal annual installments on the first, second and third anniversaries of the grant date. The Company currently grants stock option awards under the 2016 Incentive Compensation Plan. Upon departure from the Company, executives retain the options; provided that, in the event of termination of employment due to death, disability (as defined in the 2016 Plan) or retirement (as defined in the 2016 Plan), the options remain exercisable for five years following the date of the event; in the case of termination for cause (as defined in the 2016 Plan), the options are forfeited and no longer exercisable; and in the case of termination of employment for any reason other than those noted above, the options remain exercisable for a period of, in the case of the CEO, six months following the date of termination, or in the case of any other NEO, ninety days following the date of termination

The Compensation Committee granted stock options to the management team, including the Named Executive Officers, in November 2018 and in May 2019. The Compensation Committee believes that the stock options, in conjunction with the other elements of compensation described herein, align management's interests with those of the stockholders and will provide no return whatsoever if stockholders do not also realize gains. In determining the number of shares underlying the options to be granted to the Named Executive Officers, the Compensation Committee established the value of such shares underlying the options at $10.61 for the November 2018 grant and an average of $7.93 for the May 2019 grant using a fair value methodology. The Compensation Committee then set a total pool of options for grant to all executive officers of approximately $0.8 million for the November 2018 grant and $1.2 million for the May 2019 grant.

The May 2019 stock option grant was a one-time award designed to promote retention of the Company's senior management and incentives to implement a comprehensive plan of operational improvement throughout the Company. The stock prices for the May 2019 equity grant were set at multiple points equal to ten percent or twenty percent higher than the fair market value per share as of the close of trading on the business day immediately preceding the date of grant in order to ensure that senior management benefited only if the Company's stock price increased appreciably beyond its then current level.

Restricted Stock and Performance Shares

Grants of restricted stock and performance shares vest in accordance with the terms and conditions established by the Compensation Committee. In fiscal 2019, the Compensation Committee set restrictions on the vesting of the performance share grants based on the achievement of specific performance goals, while vesting of the restricted stock grants is time-based.

Restricted stock and performance share grants are subject to forfeiture if employment or service terminates prior to the end of the vesting period or, in the case of performance shares, if performance goals are not met. The Company assesses, on an ongoing basis, the probability of whether performance

criteria will be achieved. The Company will recognize compensation expense over the performance period if it is deemed probable that the goal will be achieved. The fair value of the Company's restricted stock is determined based upon the closing price of the Company's common stock on the trading day before the grant date. The plan provides for the adjustment of the number of shares covered by an outstanding grant and the maximum number of shares for which restricted stock may be granted in the event of a stock split, extraordinary dividend or distribution or similar recapitalization event. Outstanding shares of restricted stock are entitled to receive dividends on shares of common stock after the grant date, but no other type of equity compensation award is entitled to receive dividends until after vesting or exercise, as applicable.

2017 Fiscal Year Grants

On November 22, 2016, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were granted time-based restricted stock. Participants must be employees at the end of the performance period to receive a payout, except in the event of death, disability or a change in control. The time-based restricted shares vested on the third anniversary of the date of grant. The number of shares and value of restricted stock as of September 30, 2019 is listed in the Outstanding Equity Awards at Fiscal Year End table on page 34. The fiscal 2017 expense related to restricted stock grants to Named Executive Officers is listed in the Summary Compensation Table on page 31.

On November 22, 2016, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were granted a target amount of Performance Share awards. The actual number of shares that will ultimately be earned as well as the number of shares that will be distributed in settling those Performance Shares, is determined at the end of a three-year Performance Period and depends on the calculated Total Shareholder Return ("TSR") of the Company at the end of the Performance Period as compared to the TSR of a peer group of nine companies. The total shares earned and distributed can range from 0% to 200% of the target amount granted. Participants must be employees at the end of the Performance Period to receive a payout, except in the event of death, disability or a change in control.

Relative TSR compares the results of investing in common stock of the Company versus the stock of other companies in the TSR Peer Group considering both the appreciation or depreciation in share price as well as the value of dividends distributed during the three-year time period. Share price is calculated at the beginning and end of the period using the average closing price for the twenty (20) business days immediately prior to the start of the performance period (October 1) and immediately prior to the end of the performance period (September 30).

The TSR Peer Group for the 2017 performance awards (the "TSR Peer Group) was comprised of the following nine companies:

Allegheny Technologies	Insteel Industries	Olympic Steel
Carpenter Technology	Kaiser Aluminum	Timken Steel
Commercial Metals	Materion Corporation	Universal Stainless & Alloy Products

For fiscal 2017, the TSR achieved by Haynes was below the threshold performance level of the Peer Group thirtieth percentile, and, as a result, all of the 2017 performance shares were forfeited.

On November 22, 2016, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were granted stock options that expire after ten years. The options vest 33⅓% per year over three years from the date of grant.

2018 Fiscal Year Grants

On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were granted time-based restricted stock. Participants must be employees at the end of the three year vesting period to have continuing rights to the awarded stock, except in the event of death, disability or change in control.

On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were also granted awards of a target amount of performance shares. The actual number of shares that may ultimately be earned, as well as the number of shares of common stock that may be distributed in settling those performance shares, are determined at the end of a three-year performance period starting on October 1, 2017 and ending on September 30, 2020 based on the relative total shareholder return (TSR) of the Company compared to the TSR Peer Group. The total number of performance shares earned and shares of common stock distributed can range from 0% to 200% of the target amount of performance shares granted. Participants must be employees at the end of the performance period to receive a payout, except in the event of death, disability or a change in control.

On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor who was not then an NEO), were granted stock options that expire after ten years. The options vest 33⅓% per year over three years from the date of grant.

2019 Fiscal Year Grants

On November 21, 2018, executives, including the Named Executive Officers, were granted time-based restricted stock. The number of shares and value of restricted stock as of September 30, 2019, is listed in the Outstanding Equity Awards at Fiscal Year End table on page 34. Participants must be employees at the end of the three year vesting period to have continuing rights to the awarded stock, except in the event of death, disability or a change in control.

On November 21, 2018, executives, including the Named Executive Officers, were also granted awards of a target amount of performance shares. The actual number of shares that may ultimately be earned, as well as the number of shares of common stock that may be distributed in settling those performance shares, are determined at the end of a three-year performance period starting October 1, 2018 and ending September 30, 2021, based on the relative total shareholder return (TSR) of the Company compared to the TSR Peer Group. The total number of performance shares earned and shares of common stock distributed can range from 0% to 200% of the target amount of performance shares granted. Participants must be employees at the end of the performance period to receive a payout, except in the event of death, disability or a change in control.

Relative TSR compares the results of investing in common stock of the Company versus the stock of other companies in the TSR Peer Group considering both the appreciation or depreciation in share price as well as the value of dividends distributed during the three-year time period. Share price is calculated at the beginning and end of the period using the average closing price for the twenty (20) business days immediately prior to the start of the performance period (October 1) and immediately prior to the end of the performance period (September 30).

The relative TSR performance metric for the 2018-2021 performance period is determined as follows:

Haynes TSR Versus TSR Peer Group	Payout % of Target Award
50th %ile to 100th %ile	2.0x Haynes Percentile Ranking
30th %ile to 49th %ile	50% + (2.5x {Haynes Percentile Ranking—30%})
<30th percentile	0.0%

On November 21, 2018 and May 28, 2019, executives, including the Named Executive Officers, were granted stock options that expire after ten years. The options vest 33⅓% per year over three years from the date of grant. The number of options and exercise prices are listed in the "Grants of Plan-Based Awards Table" on page 33.

Benefits

The Named Executive Officers are eligible for the same level and offering of benefits made available to other employees, including the Company's 401(k) plan (which provides for a matching contribution to be made by the Company), health care plan, life insurance plan and other welfare benefit programs. The Company pays premiums for life insurance for each of the Named Executive Officers. The Company's benefits are designed to be competitive with other employers in the central/northern Indiana region to enable it to compete for and retain employees.

In addition, the Company maintains the Haynes International, Inc. Pension Plan, a defined benefit pension plan for the benefit of certain eligible domestic employees, including certain of the Named Executive Officers who were hired prior to December 31, 2005. As of December 31, 2005, the Pension Plan was closed to new salaried employees and, as of December 31, 2007, the benefits of all salaried participants in the Pension Plan were frozen, and no further benefits will accumulate.

Perquisites

The Company provides limited perquisites to certain executives. These arrangements are primarily intended to increase the efficiency of an executive by allowing him or her to focus on business issues and to provide business and community development opportunities. In fiscal 2019, these perquisites consisted of taxable automobile usage and country club memberships for Messrs. Ishwar and Losch. Mr. Ishwar's country club membership was canceled in August of 2019. In fiscal 2019, no single perquisite exceeded $10,000 per person. The Company provides limited perquisites to certain executives. These arrangements are primarily intended to increase the efficiency of an executive by allowing him or her to focus on business issues and to provide business and community development opportunities. In fiscal 2019, these perquisites consisted of taxable automobile usage and country club memberships for Messrs. Ishwar and Losch. Mr. Ishwar's country club membership was canceled in August of 2019. In fiscal 2019, no single perquisite exceeded $10,000 per person. In fiscal 2020, the Compensation Committee voted to eliminate these types of perquisites as of February 1, 2020.

Non-Qualified Deferred Compensation Plan

The Compensation Committee approved implementation of a non-qualified deferred compensation plan for independent directors and executive officers effective November 20, 2017. The plan provides the opportunity to defer current compensation and taxes until a future date, and to receive tax deferred investment returns on deferred amounts. The plan allows directors to defer up to 100% of their annual cash retainers and up to 100% of their annual equity grants. The plan allows eligible employees to defer up to 80% of their base salary, up to 100% of MIP and up to 100% of Long Term Incentive awards.

CEO Compensation

The Company entered into an interim Employment Agreement with Mr. Shor on June 1, 2018, which was superseded by an Employment Agreement entered into on September 1, 2018, under which Mr. Shor agreed to serve as the President and Chief Executive Officer of the Company on a full-time basis for an initial term ending on September 30, 2020, provided that the initial employment term will automatically extend for additional one-year periods commencing on October 1, 2020 and on each

anniversary thereafter, unless the Board or Mr. Shor provides written notice to the other to the contrary at least 90 days prior to the end of the then current term.

Under the terms of Mr. Shor's September 1, 2018 Employment Agreement, Mr. Shor is (a) entitled to receive a base salary at a rate of $580,000 per year, subject to adjustment as approved by the Compensation Committee (b) eligible to receive an annual bonus ranging from 40% to 120% of Mr. Shor's base salary (with the target amount set at 80%), based upon the achievement by the Company of specific performance requirements measured over the Company's fiscal year, as determined by the Compensation Committee, (c) eligible for grants of equity awards under the Company's equity incentive plans in the sole and absolute discretion of the Board and (d) entitled to reimbursement for certain travel and relocation expenses. Mr. Shor is also entitled to participate in the Company's benefit plans and programs provided to Company executives generally, subject to eligibility requirements and other terms and conditions of those plans. In addition, the Company must use reasonable efforts to secure term life insurance coverage for Mr. Shor in an amount not less than four times his annual salary, subject to certain stipulations. The September 1, 2018 Employment Agreement terminated Mr. Shor's interim Employment Agreement, provided that the equity awards granted to Mr. Shor pursuant to his interim Employment Agreement dated May 29, 2018, remained outstanding on the terms of the relevant award agreements and, to the extent earned, Mr. Shor remained entitled to payment of the MIP bonus provided under the interim agreement. All of the incentive compensation payable pursuant to the September 1, 2018 Employment Agreement is subject to recoupment under the terms of the Company's Clawback Policy.

Tax Implications of the Compensation Committee's Compensation Decisions

Section 162(m) of the Internal Revenue Code ("Code") generally limits tax deductibility of compensation paid by a public company to its chief executive officer and certain other executive officers in any year to $1 million in the year compensation becomes taxable to the executive. Prior to the 2017 Tax Cuts and Jobs Act, certain compensation was exempt from the deduction limit to the extent it met the requirements to be considered "qualified performance-based compensation" as previously defined in Section 162(m). The 2017 Tax Cuts and Jobs Act eliminated that exemption. Certain arrangements entered into prior to November 2, 2017 are considered "grandfathered" and compensation paid under such arrangements will continue to be deductible until the arrangements are materially modified.

The Compensation Committee has historically considered Section 162(m) in the design of incentive plans to preserve the corporate tax deductibility of compensation. However, in light of the changes to Section 162(m), the Committee anticipates that a larger portion of future compensation paid to the Company's NEOs will be subject to a tax deduction disallowance under Section 162(m). The Compensation Committee recognizes that factors other than tax deductibility should be considered in determining the forms and levels of executive compensation most appropriate and in the best interests of the Company and its stockholders. Annually, the Compensation Committee reviews all compensation programs and payments, including the tax impact on the Company.

Compensation Tables and Narrative Disclosure

The following tables, footnotes and narratives provide information regarding the compensation, benefits and equity holdings in the Company for the persons who acted as CEO, CFO and the other Named Executive Officers in fiscal 2019.

Summary Compensation Table

The narrative and footnotes below describe the total compensation disclosed in the below Summary Compensation Table for fiscal 2017, 2018 and 2019 to the Named Executive Officers. For

information on the role of each element of compensation within the total compensation package, please see the discussion above under "Compensation Discussion and Analysis".

Salary—This column represents the base salary earned during fiscal 2017, 2018 and 2019, including any amounts invested by the Named Executive Officers in the Company's 401(k) plan.

Stock Awards—This column represents the fair value of the restricted stock and performance share grants, computed in accordance with FASB ASC Topic 718.

Option Awards—This column represents the compensation expense the Company recognized for financial statement reporting purposes, computed in accordance with Financial Accounting Standards Board ASC Topic 718, with respect to stock options granted in fiscal 2017, 2018 and 2019. For options issued in fiscal 2017, 2018 and 2019, compensation expense was calculated using a fair value methodology and recognized over the vesting period of the stock option.

Non-Equity Incentive Plan Compensation—This column represents cash bonuses earned in fiscal 2017, 2018 and 2019 by the Named Executive Officers under the 2017, 2018 and 2019 MIP.

Change in Pension Value and Nonqualified Deferred Compensation Earnings—This column represents the actuarial increase during fiscal 2017, 2018 and 2019 in the pension value for the Named Executive Officers under the Haynes International, Inc. Pension Plan. A description of the Pension Plan can be found below under "Pension Benefits".

All Other Compensation—This column represents all other compensation paid or provided to the Named Executive Officers for fiscal 2017, 2018 and 2019 not reported in previous columns, such as the Company's matching contributions to 401(k) plans, payment of insurance premiums and costs of providing certain perquisites and benefits.

Name and Principal Position	Year	Salary	Stock Awards[2]	Options[3]	Non-Equity Incentive Plan Compensation[4]	Change in Pension	All Other Comp[5]	Total
M. L. Shor[1]	2019	$579,616	$718,341	$659,292	$352,971	—	$108,898	$2,419,118
President & CEO	2018	$138,462	$297,064	$208,800	$ 46,167	—	$102,426	$ 792,919
	2017	—	—	—	—	—	—	—
D. W. Maudlin	2019	$304,530	$212,460	$210,240	$150,812	$ 18,645	$ 24,838	$ 921,525
VP of Finance & CFO	2018	$280,395	$186,591	$ 56,492	$ 93,229	—	$ 24,882	$ 641,589
	2017	$274,711	$203,042	$ 55,200	—	—	$ 24,863	$ 557,816
D. L. Strobel	2019	$279,903	$151,744	$209,072	—	—	$ 14,893	$ 655,612
VP of Operations	2018	$ 5,288	$ 35,340	$ 55,150	—	—	—	$ 95,778
	2017	—	—	—	—	—	—	
V. R. Ishwar	2019	$285,865	$154,979	$185,476	$108,782	$142,969	$ 34,905	$ 912,976
VP Marketing and Technology	2018	$278,895	$162,025	$ 49,187	$ 77,275	—	$ 35,893	$ 603,275
	2017	$273,336	$175,761	$ 48,300	—	—	$ 31,101	$ 528,499
M. C. Losch III	2019	$274,867	$149,016	$207,905	$104,598	$ 93,517	$ 33,972	$ 863,875
VP Sales and Distribution	2018	$267,996	$156,927	$ 47,239	$ 74,256	—	$ 26,624	$ 573,042
	2017	$262,602	$170,714	$ 46,288	—	—	$ 32,816	$ 512,420

(1) Mr. Shor became interim President and Chief Executive Officer on May 29, 2018 and became permanent President and Chief Executive Officer on September 1, 2018.

(2) The amounts listed in the table include restricted stock and performance share awards (PSA's) as valued in accordance with FASB ACS Topic 718. PSA's are valued based on the target number of share awards at grant date which is less than the maximum potential share awards that may be granted at the end of the performance period. If the maximum number of share awards is granted, the stock award amount granted in fiscal 2019 will be $1,127,294

for M. Shor, $333,411 for D. Maudlin, $238,144 for D. Strobel, $233,844 for M. Losch III, and $243,222 for V. Ishwar.

(3) The options issued in fiscal 2017, 2018 and 2019 were valued pursuant to FASB ASC Topic 718 using a fair value methodology.

(4) No amounts were earned in fiscal 2017 under the 2017 MIP. Please see the discussion of the MIP under "Compensation Discussion and Analysis".

(5) Amounts shown in the "All Other Compensation" column include the following:

Name	Year	Dividends On Restricted Stock	Life Insurance	Disability Insurance	401(k) Company Match	401(m) Company Match	Other	Total
M. L. Shor	2019	$12,544	$3,960	$6,368	$13,480	$2,326	$70,220[1]	$108,898
	2018	$ 6,732	$ 570	$1,017	—	—	$94,107	$102,426
	2017	—	—	—	—	—	—	—
D. W. Maudlin	2019	$ 6,792	$2,196	$5,497	$10,358	—	—	$ 24,838
	2018	$ 7,502	$2,023	$5,492	$ 9,865	—	—	$ 24,882
	2017	$ 7,282	$1,835	$5,492	$ 9,890	$ 364	—	$ 24,863
D. L. Strobel	2019	$ 2,572	$1,764	$1,623	$ 8,934	—	—	$ 14,893
	2018	—	—	—	—	—	—	—
V. R. Ishwar	2019	$ 5,578	$2,059	$5,886	$ 9,536	$ 204	$11,642	$ 34,905
	2018	$ 6,842	$2,009	$6,858	$ 9,449	$ 802	$ 9,933	$ 35,893
	2017	$ 6,930	$1,828	$8,517	$ 9,504	—	$ 4,322	$ 31,101
M.C. Losch III	2019	$ 5,380	$1,980	$6,281	$ 5,668	$2,133	$12,530	$ 33,972
	2018	$ 6,622	$1,937	$6,281	$ 4,584	—	$ 7,200	$ 26,624
	2017	$ 6,798	$1,755	$6,281	$ 6,562	$ 260	$11,160	$ 32,816

(1) Included, in the case of Mr. Shor only, relocation expenses of $68,013 as well as rent reimbursement of $2,206.

Grants of Plan-Based Awards in Fiscal 2019

During fiscal 2019, the Named Executive Officers received four types of plan-based awards:

Management Incentive Plan—On November 21, 2018, the Named Executive Officers were awarded grants under the Company's 2019 MIP. Under the plan, certain employees of the Company, including the Named Executive Officers, were eligible for cash awards if the Company met certain net income targets established by the Compensation Committee for fiscal 2019. The amount of the cash awards could range between 40% and 120% of base salary for Mr. Shor, 25% and 75% of base salary for Messrs. Ishwar and Losch; 32.5% and 97.5% for Mr. Maudlin and 30% and 90% for Mr. Strobel, depending on the level of net income earned by the Company compared to the targeted amount.

Stock Options—Non-qualified options were granted to the Named Executive Officers on November 21, 2018 and May 28, 2019 under the Haynes International, Inc. 2016 Incentive Compensation Plan. Each option vests in three equal installments on the first, second and third anniversaries of the grant date, remains exercisable for ten years and, except in the case of the May 2019 grant which is described more fully under "Stock Options" on page 26, has an exercise price equal to the closing stock price on the trading day prior to the date of grant.

Restricted Stock—On November 21, 2018, executives, including the Named Executive Officers, were granted restricted stock under the Haynes International, Inc. 2016 Incentive Compensation Plan which are subject to time-based vesting and will vest on the third anniversary of the date of grant, if the participant is then employed by the Company, except in the event of death, disability or a change in control.

Performance Share Awards—On November 21, 2018, executives, including the Named Executive Officers, were granted awards of a target amount of performance shares. The actual number of performance shares that may ultimately be earned, as well as the number of shares of common stock that may be distributed in settling those performance shares, are determined at the end of a three-year performance period and will depend on the calculated total shareholder return of the Company at the end of the performance period as compared to the total shareholder return of a peer group of ten companies. The total performance shares earned and shares of common stock distributed can range from 0% to 200% of the target amount granted. Participants must be employees at the end of the performance period to receive a payout, except in the event of death, disability or a change in control.

Grants of Plan-Based Awards Table

Name and Princ Pos	Grant Type	Grant Date	Est Future Pay Under Inc. Plan			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock	All Other Options	Ex or Base Price of Option[2]	Grant Date FV of Stock & Option[3]
			Threshold	Target	Max	Threshold	Target	Max				
M. L. Shor	MIP	11/21/18	$232,000	$464,000	$696,000							
	Option	11/21/18								29,152	$33.98	$309,303
	Restr. Stock-Time based	11/21/18							9,105			$309,388
	Performance Share Awards[1]	11/21/18				4,551	9,102	18,204	—			$408,953
D. Maudlin	MIP	11/21/18	$ 99,125	$198,250	$297,375							
	Option	11/21/18								8,623	$33.98	$ 91,490
	Restr. Stock-Time based	11/21/18							2,693			$ 91,508
	Performance Share Awards[1]	11/21/18				1,346	2,692	5,384				$120,952
D. L. Strobel	MIP	11/21/18	$ 84,000	$168,000	$252,000							
	Option	11/21/18								6,157	$33.98	$ 65,326
	Restr. Stock-Time based	11/21/18							1,923			$ 65,344
	Performance Share Awards[1]	11/21/18				962	1,923	3,846				$ 86,400
V. R. Ishwar	MIP	11/21/18	$ 71,500	$143,000	$214,500							
	Option	11/21/18								6,289	$33.98	$ 66,726
	Restr. Stock-Time based	11/21/18							1,964			$ 66,737
	Performance Share Awards[1]	11/21/18				982	1,964	3,928				$ 88,243
M. C. Losch III	MIP	11/21/18	$ 68,750	$137,500	$206,250							
	Option	11/21/18								6,047	$33.98	$ 64,159
	Restr. Stock-Time based	11/21/18							1,889			$ 64,188
	Performance Share Awards[1]	11/21/18				944	1,888	3,776				$ 84,828

(1) Target number of performance shares that have not vested. This column represents the target number of performance share to be earned over a three-year performance period and settled in shares of common stock.

(2) The exercise price of each option is equal to the closing market price of shares of common stock on the trading day prior to the grant date.

(3) Represents the grant date fair value calculated in accordance with FASB ASC Topic 718, but excludes any forfeiture assumptions related to service-based vesting conditions as prescribed by SEC rules.

Outstanding Equity Awards at Fiscal Year-End

The table below provides information on the Named Executive Officers' outstanding equity awards as of September 30, 2019. The equity awards consist of stock options, shares of restricted stock (with time-based and performance-based vesting) and performance share awards. The table includes the following:

Number of Securities Underlying Unexercised Options (Exercisable)—This column represents options to buy shares of common stock which are fully vested and subject to forfeiture only with respect to a break in service.

Number of Securities Underlying Unexercised Options (Unexercisable)—This column represents options to buy shares of common stock which are not fully vested. All options vest in three equal annual installments on the first, second and third anniversaries of the grant date.

Option Exercise Price—All outstanding option exercise prices are equal to the closing market price of shares of common stock on the day prior to grant date.

Option Expiration Date—This is the date upon which an option will expire if not yet exercised by the option holder. In all cases, this is ten years from the date of grant.

Number of Shares or Units of Stock that Have Not Vested and Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested—All shares of restricted stock and performance share awards granted to the Named Executive Officers in fiscal 2019 are unvested.

Market Value of Shares or Units of Stock that Have Not Vested and Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that Have Not Vested—The market

value of unvested shares of restricted stock is based upon the September 30, 2019 closing price of the Company's common stock of $35.84 and is calculated in accordance with FASB ASC Topic 718.

	Option Awards					Restricted Stock Awards		Performance Share Awards	
Name	Grant Date	Number of securities underlying unexercised options (Exercisable)[1]	Number of securities underlying unexercised options (Unexercisable)	Option Exercise Price	Option Expiration Date	Number of Shares that Have Not Vested[2]	Market Value of Shares That Have Not Vested	Number of Awards Not Vested[3]	Market Value of Shares that Have Not Vested
M. L. Shor	06/01/18	15,000	—	$42.58	06/01/28			—	—
	11/21/18		29,152	$33.98	11/21/28	9,105	$326,323	9,102	$507,461
	05/24/19(a)	—	13,333	$30.54	05/24/29	—	—	—	—
	05/24/19(b)	—	14,693	$33.59	05/24/29	—	—	—	—
	05/24/19(c)	—	16,136	$36.65	05/24/29	—	—	—	—
D. W. Maudlin	11/25/11	1,200	—	$55.88	11/25/21	—	—	—	—
	11/20/12	3,300	—	$47.96	11/20/22	—	—	—	—
	11/26/13	4,000	—	$52.78	11/26/23	—	—	—	—
	11/25/14	7,500	—	$46.72	11/25/24	—	—	—	—
	11/24/15	7,300	—	$37.75	11/24/25	—	—	—	—
	11/22/16	3,200	1,600	$40.86	11/22/26	2,175	$ 77,952	—	—
	11/21/17	1,933	3,867	$31.76	11/21/27	2,850	$102,144	2,500	$ 89,600
	11/21/18	—	8,623	$33.98	11/21/28	2,693	$ 96,517	2,692	$ 96,481
	05/24/19(a)	—	4,524	$30.54	05/24/29	—	—	—	—
	05/24/19(b)	—	4,985	$33.59	05/24/29	—	—	—	—
	05/24/19(c)	—	5,475	$36.65	05/24/29	—	—	—	—
D. L. Strobel	09/17/18	—	5,000	$35.34	9/17/28	1,000	$ 35,840	—	—
	11/21/18	—	6,157	$33.98	11/21/28	1,923	$ 68,920	1,923	$ 68,920
	05/24/19(a)	—	5,476	$30.54	05/24/29	—	—	—	—
	05/24/19(b)	—	6,035	$33.59	05/24/29	—	—	—	—
	05/24/19(c)	—	6,627	$36.65	05/24/29	—	—	—	—
V. R. Ishwar	01/08/10	2,500	—	$34.00	1/08/20	—	—	—	—
	11/24/10	2,100	—	$40.26	11/24/20	—	—	—	—
	11/25/11	1,900	—	$55.88	11/25/21	—	—	—	—
	11/20/12	3,500	—	$47.96	11/20/22	—	—	—	—
	11/26/13	4,000	—	$52.78	11/26/23	—	—	—	—
	11/25/14	7,200	—	$46.72	11/25/24	—	—	—	—
	11/24/15	7,100	—	$37.75	11/24/25	—	—	—	—
	11/22/16	2,800	1,400	$40.86	11/22/26	1,875	$ 67,200	—	—
	11/21/17	1,683	3,367	$31.76	11/21/17	2,500	$ 89,600	2,150	$ 77,056
	11/21/18	—	6,289	$33.98	11/21/28	1,964	$ 70,390	1,964	$ 70,390
	05/24/19(a)	—	4,524	$30.54	05/24/29	—	—	—	—
	05/24/19(b)	—	4,985	$33.59	05/24/29	—	—	—	—
	05/24/19(c)	—	5,475	$36.65	05/24/29	—	—	—	—
M. C. Losch II	01/08/10	3,700	—	$34.00	1/08/20	—	—	—	—
	11/24/10	2,300	—	$40.26	11/24/20	—	—	—	—
	11/25/11	1,900	—	$55.88	11/25/21	—	—	—	—
	11/20/12	3,400	—	$47.96	11/20/22	—	—	—	—
	11/26/13	4,000	—	$52.78	11/26/23	—	—	—	—
	11/25/14	7,200	—	$46.72	11/25/24	—	—	—	—
	11/24/15	6,900	—	$37.75	11/24/25	—	—	—	—
	11/22/16	2,683	1,342	$40.86	11/22/26	1,825	$ 65,408	—	—
	11/21/17	1,617	3,233	$31.76	11/21/27	2,400	$ 86,016	2,100	$ 75,264
	11/21/18	—	6,047	$33.98	11/20/28	1,889	$ 67,702	1,888	$ 67,666
	05/24/19(a)	—	5,476	$30.54	05/24/29	—	—	—	—
	05/24/19(b)	—	6,035	$33.59	05/24/29	—	—	—	—
	05/24/19(c)	—	6,627	$36.65	05/24/29	—	—	—	—

(1) Except as noted, vest in three equal annual installments on the first, second and third anniversaries of the grant date.

(2) Vest on the third anniversary of the grant date.

(3) Vest on the third anniversary of the grant date if the Company has met a relative total shareholder return goal.

Option Exercises and Stock Vested

The following table provides information concerning the exercise of stock options and vesting of restricted stock awards for the Named Executive Officers in fiscal 2019.

	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting ($)[1]
M. L. Shor	—	—	7,650	$230,488
D. W. Maudlin	—	—	1,750	$ 57,260
D. L. Strobel	—	—	—	—
V. R. Ishwar	—	—	1,700	$ 55,624
M. C. Losch II	2,084	$24,362	1,650	$ 53,988

(1) This column is calculated by multiplying the number of shares acquired by the closing price of a share of Common Stock on the vesting date. The Named Executive Officers had the following stock awards vest in fiscal 2018:

Name	Type of Award	Vesting Date	Number of Shares Acquired on Vesting (#)	Closing Price on Vesting Date ($/Share)	Value Realized on Vesting ($)
M.L. Shor	Time-Based Restricted Stock	11/24/18	2,650	$33.14	$ 84,838
M.L. Shor	Time-Based Restricted Stock	06/01/19	5,000	$29.13	$145,650
D.W. Maudlin	Time-Based Restricted Stock	11/24/18	1,750	$32.72	$ 57,260
D.L. Strobel	Time-Based Restricted Stock	—	—	—	—
V.R. Ishwar	Time-Based Restricted Stock	11/24/18	1,700	$32.72	$ 55,624
M.C. Losch II	Time-Based Restricted Stock	11/24/18	1,650	$32.72	$ 53,988

Pension Benefits

The Company maintains a defined benefit pension plan for the benefit of eligible domestic employees designated as the Haynes International, Inc. Pension Plan. The pension plan is qualified under Section 401 of the Internal Revenue Code, permitting the Company to deduct for federal income tax purposes all amounts the Company contributes to the pension plan pursuant to funding requirements. The following table sets forth the present value of accumulated benefits payable in installments after retirement, based on retirement at age 65. As of December 31, 2005, the Pension Plan was closed to new salaried employees and, as of December 31, 2007, the benefits of all salaried participants in the Pension Plan were frozen and no further benefits will accumulate. No payments were made to any of the Named Executive Officers pursuant to the Pension Plan in fiscal 2018.

Name	Year	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit
M. L. Shor	2019	Defined Benefit	N/A	—
D. W. Maudlin	2019	Defined Benefit	14	$ 80,116
D. L. Strobel	2019	Defined Benefit	N/A	—
V. R. Ishwar	2019	Defined Benefit	34	$824,333
M. C. Losch III	2019	Defined Benefit	31	$531,918

Participants in the pension plan are eligible to receive an unreduced pension annuity upon the first to occur of (i) reaching age 65, (ii) reaching age 62 and completing ten years of benefit service or (iii) completing 30 years of benefit service. The final option is available only for salaried employees who were plan participants in the pension plan on March 31, 1987. For salaried employees who retire on or after July 2, 2002 under option (i) or (ii) above, the normal monthly pension benefit provided under the pension plan is the greater of (i) 1.6% of the employee's average monthly earnings

multiplied by years of benefit service, plus an additional 0.5% of the employee's average monthly earnings, if any, in excess of Social Security covered compensation multiplied by years of benefit service up to 35 years, or (ii) the employee's accrued benefits as of September 30, 2002. For salaried employees who retire on or after July 2, 2002 under option (iii) above (with 30 years of benefit service), the normal monthly pension provided under the pension plan is equal to one of the following as elected by the participant: (i) the accrued benefit as of March 31, 1987 plus any supplemental retirement benefit payable to age 62; (ii) the accrued benefit as of March 31, 1987 plus any supplemental retirement benefit payable to any age elected by the participant (prior to 62) and thereafter the actuarial equivalent of the benefit payable for retirement under options (i) and (ii) above; or (iii) if the participant is at least age 55, the actuarial equivalent of the benefit payable for retirement under options (i) and (ii) above. There are provisions for delayed retirement, early retirement benefits, disability retirement, death benefits, optional methods of benefits payments, payments to an employee who leaves after five or more years of service and payments to an employee's surviving spouse. Participants' interests are vested and they are eligible to receive pension benefits after completing five years of service. However, all participants as of October 1, 2001 became 100% vested in their benefits on that date. Vested benefits are generally paid to retired employees beginning at or after age 55.

Non-Qualified Deferred Compensation Plan

The Compensation Committee approved implementation of a non-qualified deferred compensation plan for independent directors and executive officers effective November 20, 2017. The plan provides the opportunity to defer current compensation and taxes until a future date, and to receive tax deferred investment returns on deferred amounts. The plan allows directors to defer up to 100% of their annual cash retainer, annual committee chair cash retainers and annual equity grants. The plan allows eligible employees to defer up to 80% of their base salaries, up to 100% of MIP and up to 100% of long term incentive awards.

Mr. Shor deferred 2,650 shares in 2017 while serving as an independent director.

Executive	Executive Contributions in 2019	Haynes Contributions in 2019	Aggregate Earnings from Deferred Shares in 2019	Aggregate Withdrawals Distributions in 2019	Aggregate Balance at 09/30/2019
M.L. Shor	$0.00	$0.00	$1,325.00	$0.00	$94,976.00

Potential Payments Upon Termination or Change of Control

As described in the Compensation Discussion and Analysis, Mr. Shor has an Employment Agreement and the other Named Executive Officers have termination benefits agreements that provide for payments to the Named Executive Officers at, following or in connection with a termination of their employment in the circumstances described in those agreements. In addition, certain of the Company's compensation plans and arrangements provide for acceleration of vesting of outstanding unvested options and restricted stock in certain circumstances described therein, including a "change of control" of the Company.

The information below generally describes payments or benefits payable to the Named Executive Officers (including Mr. Shor) under agreements between the Named Executive Officers and the Company or under the Company's compensation plans and arrangements in the event of a change of control of the Company or the termination of the Named Executive Officer's employment, whether prior to or following a change of control of the Company. Any such payments or benefits that a Named Executive Officer has elected to defer would be provided in accordance with the requirements of Internal Revenue Code Section 409A. Payments or benefits under other plans and arrangements that are generally available to the Company's employees on similar terms are not described. Certain capitalized terms used in this discussion are defined under the caption "Certain Definitions" below.

Conditions and Obligations Applicable to Receipt of Termination/Change of Control Payments

Under the applicable compensation agreements, each Named Executive Officer has agreed not to compete with, or solicit the employees of the Company during and for a one-year period (two years for Mr. Shor) after termination of employment. Further, each Named Executive Officer is obligated to maintain the confidentiality of Company information and to assign all inventions, improvements, discoveries, designs, works of authorship, concepts or ideas or expressions thereof to the Company. The Company is entitled to cease making payments or providing benefits due under the applicable agreement if the Named Executive Officer breaches the confidentiality, non-competition or non-solicitation provisions of the agreement.

As a condition to the receipt of the payments and other benefits to be received by the Named Executive Officers under the applicable agreements upon termination of employment, each Named Executive Officer must execute and deliver to the Company a release of all claims against the Company, including claims arising out of his employment with the Company. Certain payments to Mr. Shor are required to be made or commence on the date that the release executed by him in connection with the termination of his employment becomes effective (generally seven days following execution thereof by Mr. Shor). In addition to the release, Named Executive Officers may be asked to sign letter agreements reaffirming their applicable confidentiality, non-competition and non-solicitation obligations and may enter into extended non-competition agreements with the Company.

Payments Made Upon Death or Disability

Upon death or total disability, the Company's compensation plans and arrangements for the Named Executive Officers provide as follows:

- Each Named Executive Officer (other than Mr. Shor) or his heirs, estate, personal representative or legal guardian, as appropriate, is entitled to receive a lump sum payment equal to the sum of (i) the Named Executive Officer's earned but unpaid base salary and bonus through the termination date; (ii) any reimbursable expenses incurred by the Named Executive Officer and not reimbursed as of the termination date; and (iii) a bonus for the fiscal year in which the termination date occurs in an amount equal to his target bonus for such fiscal year pro-rated based upon the number of days he worked in the fiscal year in which the termination date occurs.
- Mr. Shor or his heirs, estate, personal representative or legal guardian, as appropriate, is entitled to receive a lump sum payment equal to the sum of (i) his earned but unpaid base salary through the termination date; (ii) any bonus earned prior to the termination date that remains unpaid on the termination date; (iii) any reimbursable expenses incurred by Mr. Shor and not reimbursed as of the termination date, and (iv) health and welfare benefits through the date on which the termination occurs.
- All unvested stock options held by the Named Executive Officer will vest immediately and all options will remain exercisable for six months from the termination date in the case of options granted under the 2009 Restricted Stock Plan or five years in the case of options granted under the 2016 Incentive Compensation Plan, but in no event later than the expiration date of such stock options as specified in the applicable option agreement.
- All restrictions on transfer of any shares of restricted stock held by the Named Executive Officer on the termination date, including vesting conditions, will lapse as of the termination date and performance based restricted stock and performance shares will be deemed earned, so long as the Named Executive Officer has been continuously employed by the Company between the grant date and the termination date.

- In the case of death, the Named Executive Officer's designated beneficiary is entitled to receive the death benefit under a Company-provided life insurance policy in the amount of two times the Named Executive Officer's base salary (four times base salary for Mr. Shor).
- In the case of total disability, the Named Executive Officer will be entitled to disability benefits under the Company's executive long-term disability plans. Each Named Executive Officer is entitled to disability benefits under a group plan and an individual plan. The group plan provides for a monthly benefit equal to 50% of monthly base salary, subject to a maximum benefit of $10,000 per month. The individual plan provides for a monthly benefit equal to 70% of monthly base salary, subject to a maximum benefit of $5,000 per month. Benefits under the plan are payable monthly beginning 90 days after the employee becomes disabled and continuing until age 65.

Payments Made Upon Other Termination

If the employment of any of the Named Executive Officers (other than Mr. Shor) is terminated by the Company for "cause" (as defined in the Termination Benefits Agreements), or is terminated by the Named Executive Officer without "good reason"(as defined in the Termination Benefits Agreements), the Named Executive Officer would be entitled to receive a lump sum cash payment equal to the sum of (i) the Named Executive Officer's earned but unpaid base salary through the termination date; (ii) any accrued but unpaid compensation, including any unpaid bonus compensation; and (iii) any reimbursable expenses incurred by the Named Executive Officer and not reimbursed as of the termination date.

If, prior to or more than 12 months after any change of control, the employment of any Named Executive Officer (other than Mr. Shor) is terminated by the Company without "cause" or is terminated by the Named Executive Officer with "good reason", the Named Executive Officer would be entitled to receive a lump sum payment equal to the sum of (i) the Named Executive Officer's earned but unpaid base salary through the termination date; (ii) any accrued but unpaid compensation, including any unpaid bonus compensation; (iii) any reimbursable expenses incurred by the Named Executive Officer and not reimbursed as of the termination date; and (iv) a bonus for the fiscal year in which the termination date occurs in an amount equal to his target bonus for such fiscal year pro-rated based upon the number of days he worked in the fiscal year in which the termination date occurs.

If Mr. Shor's employment is terminated by the Company for "cause" (as defined in his Employment Agreement), or by Mr. Shor without "good reason" (as defined in his Employment Agreement), Mr. Shor is entitled to receive a lump sum payment equal to the sum of (i) his earned but unpaid base salary through the termination date; (ii) any bonus earned prior to the termination date that remains unpaid on the termination date; and (iii) any reimbursable expenses incurred by Mr. Shor and not reimbursed as of the termination date. He would also be entitled to continuation of health and welfare benefits through the termination date.

If, prior to or more than 24 months after a change of control, Mr. Shor's employment is terminated by the Company without "cause" or by Mr. Shor for "good reason",

- Mr. Shor is entitled to receive a lump sum payment equal to the sum of (i) his earned but unpaid base salary through the termination date; (ii) any bonus earned prior to the termination date that remains unpaid on the termination date; and (iii) any reimbursable expenses incurred by Mr. Shor and not reimbursed as of the termination date. He would also be entitled to continuation of health and welfare benefits through the termination date.
- Mr. Shor is entitled to a continuation of his annual salary as in effect immediately prior to such termination date through the end of the then current employment term, payable in accordance with the then prevailing payroll practices of the Company.

- If Mr. Shor is not otherwise entitled to a bonus for the same period or fiscal year as part of his termination benefits, Mr. Shor is entitled to receive a bonus for the fiscal year in which the termination date occurs in an amount equal to his target bonus for such fiscal year pro-rated based upon the number of whole months he worked in the fiscal year in which the termination date occurs.

Payments Made Upon or Following a Change of Control

The Company's 2009 Restricted Stock Plan and the 2016 Incentive Compensation Plan provide that all restrictions imposed on shares of restricted stock subject to restricted stock awards under the plan, including vesting conditions, lapse upon a change of control and performance based restricted stock and performance shares will be deemed earned. Similarly, all unvested stock options issued pursuant to the Company's stock option plans vest automatically upon the occurrence of the events described in clauses (i) or (ii) of the definition of a "change of control" below, and the Board of Directors has discretion to accelerate the vesting of unvested stock options in the event of any other event constituting a change of control. In the event that the employment of a Named Executive Officer (other than Mr. Shor) is terminated by the Company without "cause" or by the Named Executive Officer for "good reason" within 12 months following a change of control,

- The Named Executive Officer is entitled to receive a lump sum payment equal to the sum of (i) the Named Executive Officer's accrued but unpaid base salary through the termination date; (ii) any accrued but unpaid compensation, including any unpaid bonus compensation; (iii) any reimbursable expenses incurred by the Named Executive Officer and not reimbursed as of the termination date; (iv) a bonus for the fiscal year in which the termination date occurs in an amount equal to his target bonus for such fiscal year pro-rated based upon the number of days he worked in the fiscal year in which the termination date occurs; and (v) an amount equal to one year's base salary.
- Subject to the discretion of the Board of Directors as described above, all unvested stock options held by the Named Executive Officer will vest immediately and all options will remain exercisable for one year from the termination date, but in no event later than the expiration date of such stock options as specified in the applicable option agreement.
- The Named Executive Officer and his dependents are entitled to medical, hospitalization and life insurance benefits that he received immediately prior to termination for a period of one year following the termination date, unless the Named Executive Officer obtains comparable benefits from another employer.

If Mr. Shor's employment is terminated by the Company without "cause" or by Mr. Shor for "good reason" within 24 months after a change of control,

- Mr. Shor is entitled to receive a lump sum payment equal to the sum of (i) his earned but unpaid base salary through the termination date; (ii) any bonus earned prior to the termination date that remains unpaid on the termination date; and (iii) any reimbursable expenses incurred by Mr. Shor and not reimbursed as of the termination date.
- Mr. Shor is entitled to a cash payment equal to two times his annual salary as in effect immediately prior to the termination date, payable in equal monthly installments of one-twenty-fourth of the total amount of the cash payment.
- Any unvested stock options held by Mr. Shor as of the termination date will become vested and exercisable and will remain exercisable after the termination date for a period equal to the lesser of (i) six months following the termination date or (ii) the expiration of the original exercise period of such option.

- Mr. Shor and his dependents are entitled to medical, hospitalization and life insurance benefits that he received immediately prior to termination through and including the termination date.

Certain Definitions

A termination for "*cause*", as defined in the Termination Benefits Agreements and Mr. Shor's Employment Agreement, means a termination by reason of the good faith determination of the Company's Board of Directors that the Named Executive Officer (1) continually failed to substantially perform his duties to the Company (other than a failure resulting from his medically documented incapacity due to physical or mental illness), including, without limitation, repeated refusal to follow the reasonable directions of the Company's Chief Executive Officer (or, in Mr. Shor's case, the Board), knowing violation of the law in the course of performance of his duties with the Company, repeated absences from work without a reasonable excuse or intoxication with alcohol or illegal drugs while on the Company's premises during regular business hours, (2) engaged in conduct which constituted a material breach of the confidentiality, non-competition or non-solicitation provisions of the applicable agreement, (3) was indicted (or equivalent under applicable law), convicted of or entered a plea of nolo contendere to the commission of a felony or crime involving dishonesty or moral turpitude, (4) engaged in conduct which is demonstrably and materially injurious to the financial condition, business reputation, or otherwise of the Company or its subsidiaries or affiliates or (5) perpetuated a fraud or embezzlement against the Company or its subsidiaries or affiliates, and in each case the particular act or omission was not cured, if curable, in all material respects by the Named Executive Officer within thirty (30) days (or by Mr. Shor within 15 days) after receipt of written notice from the Board.

The term "*change of control*" has varying definitions under the different plans and agreements, but generally means the first to occur of the following: (i) any person becomes the beneficial owner, directly or indirectly, of securities of the Company representing a majority of the combined voting power of the Company's then outstanding securities (assuming conversion of all outstanding non-voting securities into voting securities and the exercise of all outstanding options or other convertible securities); (ii) the following individuals cease for any reason to constitute a majority of the number of directors then serving: individuals who, on the effective date, constitute the Board of Directors and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to a consent solicitation, relating to the election of directors of the Company) whose appointment or election by the Board of Directors or nomination for election by the Company's stockholders was approved or recommended by a vote of at least two-thirds (⅔) of the directors then still in office who either were directors on the effective date or whose appointment, election or nomination for election was previously so approved or recommended; (iii) there is consummated a merger or consolidation of the Company or any direct or indirect subsidiary of the Company with any other corporation other than (x) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent, either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof, a majority of the combined voting power of the securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (y) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person is or becomes the beneficial owner, directly or indirectly, of securities of the Company representing a majority of the combined voting power of the Company's then outstanding securities; or (iv) the stockholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets, or to an entity a majority of the combined voting power of the voting securities of which is owned by substantially all of the stockholders of the Company immediately prior to such sale

in substantially the same proportions as their ownership of the Company immediately prior to such sale.

The term "*good reason*" means the occurrence of any of the following actions or failures to act if it is not consented to by the Named Executive Officer in writing: (a) a material adverse change in the Named Executive Officer's duties, reporting responsibilities, titles or elected or appointed offices; (b) a material reduction by the Company in the Named Executive Officer's base salary or annual bonus opportunity, not including any reduction resulting from changes in the market value of securities or other instruments paid or payable to the Named Executive Officer; or (c) solely with respect to Mr. Shor, any change of more than 50 miles in the location of the principal place of Mr. Shor's employment. None of the actions described in clauses (a) and (b) above shall constitute "good reason" if it was an isolated and inadvertent action not taken in bad faith by the Company and if it is remedied by the Company within 30 days after receipt of written notice thereof given by the Named Executive Officer (or, if the matter is not capable of remedy within 30 days, then within a reasonable period of time following such 30-day period, provided that the Company has commenced such remedy within said 30-day period); provided that "good reason" ceases to exist for any action described in clauses (a) and (b) above on the 60th day following the later of the occurrence of such action or the Named Executive Officer's knowledge thereof, unless the Named Executive Officer has given the Company written notice thereof prior to such date.

Quantification of Payments and Benefits

The following tables quantify the potential payments and benefits upon termination or a change of control of the Company for each of the Named Executive Officers assuming the Named Executive Officer's employment terminated on September 30, 2019, given the Named Executive Officer's compensation and service level as of that date and, if applicable, based on the Company's closing stock price of $35.84 on that date. Other assumptions made with respect to specific payments or benefits are set forth in applicable footnotes to the tables. Information regarding the present value of pension benefits for each of the Named Executive Officers is set forth above under the caption "Pension Benefits" on page 35. Due to the number of factors that affect the nature and amount of any payments or benefits provided upon a termination or change of control, including, but not limited to, the date of any such event, the Company's stock price and the Named Executive Officer's age, any actual amounts paid or distributed may be different. None of the payments set forth below would be grossed-up for taxes.

M. L. Shor

Executive Benefits and Payments Upon Termination	Death	Disability	Voluntary or For Cause Term.	Invol. Term. Not for Cause or Term. for Good Reason	Change of Control
Performance-based Cash Payment[1]	$ 464,000	$464,000	—	$464,000	$ 464,000[3]
Cash Severance	—	—	—	$580,000[2]	$1,160,000[3]
Stock Options[4]	$ 157,947	$157,947	—	—	$ 157,947
Restricted Stock—Time[5]	$ 326,323	$326,323	—	—	$ 326,323
Performance share awards[6]	$ 326,216	$326,216	—	—	$ 326,216
Life, Long-Term Disability and Health Insurance Benefits	$2,320,000[7]	$827,298[8]	—	—	$ 14,774
Reduction due to 280G[9]	—	—	—	—	$ (91,200)

D. W. Maudlin

Executive Benefits and Payments Upon Termination	Death	Disability	Voluntary or For Cause Term.	Invol. Term. Not for Cause or Term. for Good Reason	Change of Control
Performance-based Cash Payment[1]	$198,250	$ 198,250	—	$198,250	$198,250[9]
Cash Severance	—	—	—	—	$305,000[9]
Stock Options[4]	$ 67,010	$ 67,010	—	—	$ 67,010
Restricted Stock—Time[5]	$276,613	$ 276,613	—	—	$276,613
Performance share awards[6]	$186,081	$ 186,081	—	—	$186,081
Life, Long-Term Disability and Health Insurance Benefits	$610,000[7]	$1,805,164[8]	—	—	$ 15,136

D.L. Strobel

Executive Benefits and Payments Upon Termination	Death	Disability	Voluntary or For Cause Term.	Invol. Term. Not for Cause or Term. for Good Reason	Change of Control
Performance-based Cash Payment[1]	$168,000	$ 168,000	—	$168,000	$168,000[9]
Cash Severance	—	—	—	—	$280,000[9]
Stock Options[4]	$ 56,554	$ 56,554	—	—	$ 56,554
Restricted Stock—Time[5]	$104,760	$ 104,760	—	—	$104,760
Performance share awards[6]	$ 68,920	$ 68,920	—	—	$ 68,920
Life, Long-Term Disability and Health Insurance Benefits	$560,000[7]	$1,126,753[8]	—	—	$(86,255)

V. R. Ishwar

Executive Benefits and Payments Upon Termination	Death	Disability	Voluntary or For Cause Term.	Invol. Term. Not for Cause or Term. for Good Reason	Change of Control
Performance-based Cash Payment[1]	$143,000	$143,000	—	$143,000	$143,000[9]
Cash Severance	—	—	—	—	$286,000[9]
Stock Options[4]	$ 60,628	$ 60,628	—	—	$ 60,628
Restricted Stock—Time[5]	$227,190	$227,190	—	—	$227,190
Performance share awards[6]	$147,446	$147,446	—	—	$147,446
Life, Long-Term Disability and Health Insurance Benefits	$572,000[7]	—[8]	—	—	$ 14,999

M. C. Losch III

Executive Benefits and Payments Upon Termination	Death	Disability	Voluntary or For Cause Term.	Invol. Term. Not for Cause or Term. for Good Reason	Change of Control
Performance-based Cash Payment[1]	$137,500	$137,500	—	$137,500	$137,500[9]
Cash Severance	—	—	—	—	$275,000[9]
Stock Options[4]	$ 67,040	$ 67,040	—	—	$ 67,040
Restricted Stock—Time[5]	$219,126	$219,126	—	—	$219,126
Performance share awards[6]	$142,930	$142,930	—	—	$142,930
Life, Long-Term Disability and Health Insurance Benefits	$550,000[7]	$979,147[8]	—	—	$ 14,920

(1) Represents base salary as of September 30, 2019 multiplied by the target percentage of the fiscal year 2019 MIP.

[2] In the case of termination by the Company without cause, Mr. Shor would be paid through the end of his Employment Agreement which expires on September 30, 2020.

[3] Represents the amount payable to Mr. Shor if his employment is terminated within 24 months after a change of control by the Company without "cause" or by Mr. Shor for "good reason".

[4] Represents market value of $35.84 per share minus the exercise price for all unvested options (but not less than zero). The number of unvested options for each Named Executive Officer is set forth in the Outstanding Equity Awards at Fiscal Year End table at page 25 above.

[5] Represents the market value of $35.84 of all time-based restricted stock awards at target in the case of death or disability and in the case of a change of controls. The number of time-based restricted stock awards for each Named Executive Officer is set forth in the Outstanding Equity Awards at Fiscal Year End table at page 25 above.

[6] Represents the market value at $35.84 of all unvested performance share awards at target in the case of death or disability not in the case of a change of control. The number of unvested performance share awards for each Named Executive Office is set forth in the Outstanding Equity Awards at Fiscal Year End table at page 25 above.

[7] Represents death benefit under a life insurance policy, the premiums on which are paid by the Company, equal to four times base salary for Mr. Shor and two times base salary for the other Named Executive Officers.

[8] Represents the present value of benefits payable under the Company's executive long-term disability plans, determined using the same discount rate used to determine the Company's funding obligation under the pension plan.

[9] Represents the amount payable to the Named Executive Officer if his employment is terminated within 12 months (24 months for Mr. Shor) after a change of control by the Company without "cause" or by the Named Executive Officer for "good reason".

CEO Pay Ratio

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K, the Company is providing the following information about the relationship of the annual total compensation of Michael Shor, President and Chief Executive Officer of the Company, to the annual total compensation of the "median" Company employee, determined as described below (the "CEO Pay Ratio"):

For fiscal 2019:

- the annual total compensation of the employee identified as the median employee of the Company (other than the Chief Executive Officer) was $82,049; and
- the annual total compensation of the Chief Executive Officer for purposes of determining the CEO Pay Ratio was $2,348,898.

Based on this information, the ratio of the annual total compensation of the Chief Executive Officer to the median employee's annual total compensation was estimated to be 28.6 to 1 for fiscal 2019.

This CEO Pay Ratio is a reasonable estimate calculated in a manner consistent with SEC rules based on the Company's payroll and employment records and the methodology described below. The SEC rules for identifying the median compensated employee and calculating the CEO Pay Ratio based on that employee's annual total compensation allow companies to adopt a variety of methodologies, to apply certain exclusions and to make reasonable estimates and assumptions that reflect their compensation practices. As such, the pay ratio reported by other companies may not be comparable to the pay ratio reported above, as other companies may have different employment and compensation practices and may utilize different methodologies, exclusions, estimates and assumptions in calculating their own pay ratios.

To identify the median of the annual total compensation of all of the Company's employees, as well as to determine the annual total compensation of the "median employee", the methodology and the material assumptions, adjustments and estimates used were as follows:

The Company determined that, as of September 30, 2019, the Company's employee population consisted of approximately 1,150 individuals globally. The Company selected September 30, 2019, which was the last day of fiscal 2019, as the date upon which the Company would identify the "median employee".

In accordance with the "de minimis exemption" adjustment permitted by SEC rules, which allows the exclusion of certain employees working in jurisdictions outside of the United States of America in an aggregate maximum equal to less than five percent of the Company's total employees, all employees of the Company's affiliates located in China (ten employees) and Singapore (three employees) were excluded from the calculation used to determine the median employee. To identify the median employee from the employee population, the Company collected actual salary, bonus paid, other lump sums, life insurance premiums and 401(k) plan matches paid by the Company during the 12-month period ended September 30, 2019. In making this determination, the Company annualized the compensation of all newly hired employees during this period.

In determining Mr. Shor's compensation for purposes of the CEO Pay Ratio, the Company adjusted the compensation reported on the Summary Compensation Table on page 31 to reflect his compensation, excluding costs to relocate him from his residence prior to joining the Company. For purposes of calculating the CEO Pay Ratio, this resulted in total annual compensation of $2,348,898 for the Chief Executive Officer as opposed to the amount shown on Summary Compensation Table of $2,419,118.

Audit Committee Report

The Audit Committee reviews the Company's financial reporting process on behalf of the Board of Directors. In fulfilling its responsibilities, the Audit Committee has reviewed and discussed the audited financial statements contained in the Annual Report on Form 10-K for the year ended September 30, 2019 with the Company's management and the independent auditors. These reviews included quality, not just acceptability, of accounting principles, reasonableness of significant judgments and clarity of disclosures in financial statements. Management is responsible for the financial statements and the reporting process, including administering the systems of internal control. The independent registered public accounting firm is responsible for performing an independent audit of the Company's financial statements and expressing an opinion on the conformity of those financial statements with generally accepted accounting principles, as well as expressing an opinion on the effectiveness of the Company's internal control over financial reporting.

The Audit Committee discussed with the independent registered public accounting firm, the matters required to be discussed by the applicable requirements of the PCAOB and the Commission. In addition, the Audit Committee has discussed with the independent registered public accounting firm the auditors' independence from the Company and its management, including the matters in the

written disclosures and letter received by the Audit Committee, as required by *Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees*, as amended, and considered the compatibility of non-audit services with the auditors' independence.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended September 30, 2019, for filing with the SEC, and the Board of Directors has so approved the audited financial statements.

Respectfully submitted,

Donald C. Campion, Chair
John C. Corey
Dawne S. Hickton
Larry O. Spencer
William P. Wall

7. RATIFICATION OF THE APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

In accordance with its charter, the Audit Committee has selected the firm of Deloitte & Touche LLP ("Deloitte"), an independent registered public accounting firm, to be the Company's auditors for the fiscal year ended September 30, 2020, and the Board of Directors is asking stockholders to ratify that selection. The Company is not required to have the stockholders ratify the selection of Deloitte as the independent auditor. The Company nonetheless is doing so because the Company believes it is a matter of good corporate practice. If the stockholders do not ratify the selection, the Audit Committee will reconsider the retention of Deloitte, but ultimately may decide to retain Deloitte as the Company's independent auditor. Even if the selection is ratified, the Audit Committee, in its discretion, may change the appointment at any time if it determines that such a change would be in the best interests of the Company and its stockholders. Before selecting Deloitte, the Audit Committee carefully considered that firm's qualifications as an independent registered public accounting firm for the Company. This included a review of its performance in prior years, including the firm's efficiency, integrity and competence in the fields of accounting and auditing. The Company has been advised by Deloitte that neither it nor any of its associates has any direct or material indirect financial interest in the Company.

Deloitte has acted as the independent registered public accounting firm for Haynes and its predecessors since 1998. Its representatives are expected to be present at the annual meeting and will have an opportunity to make a statement if they desire to do so and will be available to respond to appropriate questions concerning the audit of the Company's financial statements.

Audit Fees—The Company has paid, or expects to pay, audit fees (including cost reimbursements) to Deloitte for the fiscal years ended September 30, 2018 and 2019, including fees for an integrated audit which included the Sarbanes-Oxley attestation audit and reporting to the Securities and Exchange Commission (SEC), of $1,027,266 and $1,098,596, respectively.

Audit-Related Fees—The Company has paid, or expects to pay, fees (including cost reimbursements) to Deloitte for audit-related services during fiscal 2018 and 2019 of $601,381 (comprised primarily of fees relating to due diligence for an acquisition that was not completed) and $16,100, respectively. These services related primarily to benefit plan audits and special projects.

Tax Fees—The Company has paid, or expects to pay, fees (including cost reimbursements) to Deloitte for services rendered related to tax compliance, tax advice and planning during fiscal 2018 and 2019 of $371,117 and $459,197, respectively. Services included preparation of federal and state tax

returns, tax planning and assistance with various business issues including correspondence with taxing authorities.

All Other Fees—The Company did not incur any additional fees for services rendered by Deloitte in the fiscal years ended September 30, 2018 and 2019.

The Audit Committee reviewed the audit and non-audit services rendered by Deloitte and concluded that such services were compatible with maintaining the auditors' independence. All audit and non-audit services performed by the Company's independent registered public accounting firm are approved in advance by the Board of Directors or the Audit Committee to ensure that such services do not impair the auditors' independence.

The Company's policies require that the scope and cost of all work to be performed for the Company by its independent registered public accounting firm must be pre-approved by the Audit Committee. Prior to the commencement of any work by the independent registered public accounting firm on behalf of the Company, the independent registered public accounting firm provides an engagement letter describing the scope of the work to be performed and an estimate of the fees. The Audit Committee and the Chief Financial Officer must review and approve the engagement letter and the fee estimate before authorizing the engagement. The Audit Committee pre-approved 100% of the services rendered by Deloitte in fiscal 2018 and 2019.

The Board of Directors unanimously recommends that stockholders vote *FOR* this proposal.

8. APPROVAL OF 2020 INCENTIVE COMPENSATION PLAN

The stockholders are being asked to approve the Haynes International, Inc. 2020 Incentive Compensation Plan (the "2020 Plan") and the reservation of 600,000 shares of common stock (or common stock equivalents) for issuance thereunder.

On January 15, 2020, upon recommendation of the Compensation Committee, the Board of Directors approved the 2020 Plan and submittal of the 2020 Plan to the stockholders for their consideration and approval. The 2020 Plan will become effective if, and as of the date, approved by the stockholders. The 2020 Plan would replace the Company's current Haynes International, Inc. 2016 Incentive Compensation Plan, and no further awards would be granted pursuant to that plan. The 2020 Plan is substantially consistent with the Company's current 2016 Incentive Compensation Plan, provided that the 2020 Plan, among other things, (i) provides for the issuance of up to 600,000 shares of common stock (or common stock equivalents), compared to the 700,000 shares or equivalents that were issuable under the 2016 Incentive Compensation Plan, (ii) establishes annual total limitations for the Company's non-employee directors and implements annual equity compensation limitations for such directors based on aggregate value of equity awards, as opposed to the number of securities granted, (iii) provides for the vesting of restricted stock, restricted stock units, performance shares and performance units in the case of retirement or involuntary severance of service as specified below under "Other Acceleration of Vesting or Forfeiture of Awards", and (iv) reflects the elimination of the performance-based compensation exception from the limits on tax deductibility imposed by the Internal Revenue Code of 1986, as amended (the "Code"), Section 162(m).

The 2020 Plan is intended to promote the interests of the Company and its stockholders by providing directors, executive officers and other management employees of the Company with appropriate incentives and rewards to encourage them to enter into and continue in the employ of the Company, to acquire a proprietary interest in the long-term success of the Company and to reward the performance of individuals in fulfilling their personal responsibilities for long range and annual achievements.

Under applicable NASDAQ rules, stockholder approval is required in order to make awards under the 2020 Plan to directors and executive officers of the Company. In addition, stockholder approval is required to grant incentive options to employees under Section 422 of the Code.

Description of the 2020 Plan

The following is a summary of the principal features of the 2020 Plan and its operation. The summary is qualified in its entirety by reference to the 2020 Plan itself, which is set forth in *Appendix A*.

- *2020 Plan Limits.* Subject to customary adjustments for changes in the Company's corporate structure (e.g. a reorganization, stock split or merger), in the aggregate no more than (i) 250,000 shares (or share equivalents) may be awarded under the 2020 Plan in the form of restricted stock, restricted stock units, performance shares or performance units, and (ii) 350,000 shares underlying stock options and stock appreciation rights may be granted under the 2020 Plan. These numbers include securities authorized but not awarded under the Haynes International, Inc. 2016 Incentive Compensation Plan. In addition, the 2020 Plan caps annual awards (i) to employees at any combination of (a) $1,500,000 in cash awards, including performance units, (b) 40,000 restricted stock shares or units or performance shares or (c) 100,000 stock options or stock appreciation rights, and (ii) to non-management directors at any combination of awards with a maximum aggregate value of $250,000. In addition, total maximum compensation to non-management directors, including cash and equity, may not exceed $350,000 per person per year. The 2020 Plan contains additional restrictions pertaining to incentive stock options to provide for their qualification as such. Certain shares, including those subject to awards that are forfeited, cancelled or terminated, will be eligible for reissuance under the 2020 Plan and shares shall not be deemed to have been issued pursuant to the 2020 Plan with respect to any portion of an award settled in cash. See Section 4.6 of the 2020 Plan.
- *Eligibility.* All of the Company's executive officers and non-management directors and such other management employees of the Company and its subsidiaries as are selected by the Compensation Committee are eligible to participate in and receive awards under the 2020 Plan, except that incentive options may be granted only to employees. Subject to limitations under the 2020 Plan, the Compensation Committee is authorized to determine the timing and amounts of grants made to participants. Non-management directors may not receive any performance-based awards under the 2020 Plan.
- *Administration.* The Compensation Committee has the authority and responsibility to administer the 2020 Plan. The Compensation Committee consists solely of members who are "non-management directors" within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934, as amended, and "independent directors" under the NASDAQ rules. The Compensation Committee may exercise broad discretionary authority in the administration of the 2020 Plan, including the authority to determine the recipients of awards and, so long as not inconsistent with the 2020 Plan, the terms and conditions of such awards.
- *Amendments and Termination.* No awards may be made under the 2020 Plan after March 1, 2030. The 2020 Plan may be terminated at any time prior to that date by the Board of Directors, in its sole discretion, and the Board may also amend the 2020 Plan or any award made thereunder at any time, provided that no termination, amendment or modification of the 2020 Plan or any award made thereunder (other than with respect to performance share or performance unit awards) may adversely affect in any material way any award previously granted under the 2020 Plan, without the written consent of the participant of such award. Furthermore, stockholder approval will be required for any amendment to the extent necessary to comply with applicable law and the regulations, rules or requirements of NASDAQ or any other stock

exchange on which the Company's common stock is listed or traded. Currently, NASDAQ rules would require stockholder approval for a material revision of the 2020 Plan, which would generally include: (i) any material increase in the number of shares to be issued under the 2020 Plan (other than to reflect a reorganization, stock split, merger, spinoff or similar transaction), (ii) any material increase in benefits to participants, including any material change to (a) permit a repricing (or decrease in exercise price) of outstanding options, (b) reduce the price at which shares or options to purchase shares may be offered, or (c) extend the duration of the 2020 Plan, (iii) any material expansion of the class of participants eligible to participate in the 2020 Plan and (iv) any expansion in the types of options or awards provided under the 2020 Plan.

- *Types of Awards.* Six different types of equity awards may be made under the 2020 Plan; which awards may be free-standing or granted in tandem. They are as follows:
  - ***Stock Options.*** Stock Options entitle the participant to elect to purchase up to a specified number of shares of the Company's common stock at a specified price (the exercise price). The exercise price cannot be less than the fair market value of the common stock when the options are granted. Under the 2020 Plan, stock options may be incentive options (unavailable to non-management directors) or non-qualified stock options. No stock options may be exercised more than ten years from the date of grant. Unless another vesting schedule is provided, one-third of the options granted will vest on each of the first three anniversaries of the grant date.

    As detailed in the 2020 Plan, stock options are generally payable at the time of exercise via any of the following methods: (i) personal or bank cashier's check, (ii) subject to Compensation Committee approval, delivery of unrestricted shares of common stock owned by the participant having a value at the time of exercise equal to the option price, (iii) subject to Compensation Committee approval, the participant surrendering such number of vested options sufficient in value to cover the option price, or (iv) any combination of the foregoing.
  - ***Stock Appreciation Rights.*** A stock appreciation right entitles the participant to receive, for each share as to which the award is granted, payment, in cash, in shares of common stock, or in some combination of both, of an amount equal in value to the excess of the fair market value of a share of the Company's common stock on the date of exercise over the specified purchase price designated at the grant date (which may not be less than the fair market value of a share of common stock on the date of grant). Unless otherwise provided, a stock appreciation right shall not vest more rapidly than ratably over a period of three years from the grant date, beginning on the first anniversary of the grant date. Participants holding stock appreciation rights have no dividend rights with respect to the shares subject to such rights.
  - ***Restricted Stock.*** Restricted stock represents shares of the Company's common stock actually issued in the name of the participant, but which the participant has no right to sell, pledge or otherwise transfer until it is determined in the future how many shares the participant is entitled to retain, free of such restrictions, and how many shares, if any, must be forfeited back to the Company. Unless otherwise provided, the participant has beneficial ownership of the shares of restricted stock, including the right to vote the shares and to receive dividends thereon. In general, restrictions on the transfer of shares received as a restricted stock award lapse no sooner than (i) in the case of employees, the first anniversary of the date of grant and (ii) in the case of non-management directors, the earlier of such time as may be determined by the Compensation Committee and the failure of such director to be re-elected at an annual meeting of stockholders or the removal of a Non-Employee Director from office by any other means by action of the stockholders of the Company.
  - ***Restricted Stock Units.*** In lieu of or in addition to awarding shares of restricted stock, the Compensation Committee may award restricted stock units. Restricted stock units constitute a

promise by the Company to issue up to a fixed number of shares of Common Stock to the award participant or the cash equivalent thereof at some point in the future, with the number of such shares that are actually issued and the number of shares that are forfeited or the amount of cash paid, as applicable, determined by the number of shares underlying the restricted stock units and relevant conditions attached to the award by the Compensation Committee. Unlike restricted stock awards, restricted stock units have no voting rights and do not entitle participants to dividends, but shall, unless otherwise provided by the Compensation Committee receive dividend equivalents at the time and at the same rate as dividends are paid on shares with the same record and pay dates.

- ***Performance Shares/Units.*** Performance shares or units represent the right to payment of shares or cash subject to the achievement of relevant performance goals during a performance period. Upon achievement of relevant performance goals, performance units are distributed to participants in the form of cash, while performance shares are distributed to participants in the form of cash, stock or some combination of both, generally at the Compensation Committee's discretion. Unless otherwise provided by the Compensation Committee or prohibited by the 2020 Plan (such as in the case of a change in control), the Compensation Committee has the authority to reduce or eliminate the number of performance units or performance shares to be converted and distributed, or to cancel any part or all of a grant of performance shares or units. If determined by the Compensation Committee, a cash payment in an amount equal to the dividend payable on one share may be made to a participant for each performance share held by such participant on the record date for the dividend.

- Change in Control. Unless, prior to a grant, the Compensation Committee provides otherwise, upon a change in control of the Company (as defined in the 2020 Plan) (i) any and all options and stock appreciation rights would immediately vest and be exercisable for a one year period, but in no event exercisable later than the expiration date of such options or stock appreciation rights, (ii) restricted stock and restricted stock units would immediately fully vest and (iii) outstanding Performance Shares or Performance Units will vest automatically, with payment made or Shares issued based upon actual performance of the Company in the period prior to the Change in Control, but in no event less than the amount that would have been paid or issued if the target level of performance established by the Committee prior to the occurrence of the Change in Control had been achieved.

- Other Acceleration of Vesting or Forfeiture of Awards. The exercisability of stock options and the vesting or forfeiture of restricted stock, restricted units, performance stock and performance units under the 2020 Plan, would also be impacted as described below. In addition, under the 2020 Plan, the Compensation Committee has discretion to accelerate the vesting of stock appreciation rights upon the occurrence of events that are specified in the applicable award agreement.

  - Stock Options (other than Incentive Stock Options) and Stock Appreciation Rights: Upon the death, disability (as defined in the 2020 Plan) or retirement (as defined in the 2020 Plan) of a participant, all non-incentive stock options and stock appreciation rights granted under the 2020 Plan would vest immediately and remain exercisable for five years, but in no event later than the expiration date of such options or stock appreciation rights. If a participant is terminated for cause (as defined in the 2020 Plan) all non-incentive stock options and stock appreciation rights granted under the 2020 Plan, whether vested or not, would immediately be forfeited. Upon a termination for any other reason, unless otherwise provided in an award agreement, all unvested non-incentive stock options and stock appreciation rights would terminate immediately and vested non-incentive stock options would remain exercisable for a period of 90 days (six months in the case of the Chief Executive Officer of the Company).

- Incentive Stock Options: Upon the death, disability or retirement of a participant, all incentive stock options granted under the 2020 Plan would vest immediately and remain exercisable for 90 days, in the case of death or retirement, and one year, in the case of disability. If a participant is terminated for cause all incentive stock options granted under the 2020 Plan, whether vested or not, would immediately be forfeited. Upon a termination for any other reason, unless otherwise provided in an award agreement, all unvested incentive stock options would terminate immediately and vested incentive stock options would remain exercisable for a period of 90 days (including for the Chief Executive Officer of the Company).
- Restricted Stock and Restricted Stock Units: Upon a participant's death or disability, restricted stock and restricted stock unit awards would fully vest. If a participant retires prior to vesting of any restricted stock or restricted stock unit, all unvested awards would fully vest; provided that, in the case of awards subject to performance criteria, the number of shares that will vest will be determined as if target performance criteria had been achieved with the remainder of such shares being forfeited and returned to the Company. If the employment or directorship of an employee or a non-employee director is terminated involuntarily for any reason other than for cause, then all unvested awards would fully vest on the day of such event as to all shares subject to the award; provided that, in the case of awards subject to a performance criteria, the number of shares that vest will be determined as if target performance criteria had been achieved, subject to proration determined by multiplying the amount of the shares subject to the award by the number of months the participant worked at least one day during the applicable performance period. If employment is terminated voluntarily or for cause, all unvested shares would be forfeited.
- Performance Shares and Performance Units: Upon a participant's death, retirement or disability, performance share or unit awards would be paid out in a lump sum as if all unfinished performance periods had ended with one hundred percent (100%) of the performance goals achieved at target level. If the participant is not retirement eligible and terminates employment voluntarily during the performance period, performance units or performance shares would be forfeited upon such termination. If a participant's employment is terminated for cause during the performance period, then performance shares or performance unit awards would also be forfeited. If employment is otherwise involuntarily terminated, performance shares or performance unit awards would be paid out based upon target performance, but pro-rated with respect to the period of the participant's service during the performance period.

- Performance-Based Awards. The 2020 Plan provides that performance shares and performance units will be earned based on the attainment of performance goals established by the Compensation Committee. The Compensation Committee also has discretion to tie vesting of other awards under the 2020 Plan to the achievement of performance objectives. Performance objectives may be based on one or more of the following criteria, in each case applied to the Company on a consolidated basis and/or to a subsidiary, affiliate or business unit of the Company, and which the Compensation Committee may use as an absolute measure, or as a measure of comparable performance relative to a peer group of companies: (1) return on total stockholder equity; (2) earnings per share; (3) income before taxes; (4) earnings before any or all of interest, taxes, minority interest, depreciation and amortization; (5) economic profit; (6) sales or revenues; (7) return on assets, capital or investment; (8) market share; (9) cost reduction goals; (10) implementation or completion of critical projects or processes; (11) operating cash flow; (12) free cash flow; (13) net income; (14) accounts receivable; (15) costs; (16) debt to equity ratio; (17) diversity; (18) economic value added; (19) index comparisons; (20) inventory; (21) operating margin; (22) peer company comparisons;

(23) production levels; (24) productivity; (25) profit margin; (26) return on sales; (27) safety; (28) sales growth; (29) stock price; (30) succession planning and talent development; (31) sustainability; (32) total segment profit; (33) total stockholder return (actual or relative); (34) working capital and (35) any combination of, or a specified increase or decrease in, any of the foregoing. The 2020 Plan provides flexibility to establish additional criteria, or modify or amend existing criteria, subject to certain limitations, as well as individualized goals for employees. In the Compensation Committee's reasonable discretion, measurement of achievement of performance goals may be calculated excluding the impact of extraordinary or non-recurring items during any applicable performance period to the extent set forth in the applicable award agreement.

- Transferability of Awards. Restricted stock, restricted stock units, performance stock or units and stock appreciation rights granted under the 2020 Plan will not be transferable by a participant. During a participant's lifetime, options granted under the 2020 Plan are not transferrable and may only be exercised by the participant or his or her guardian or legal representative.
- Federal Income Tax Consequences. The following discussion is limited to a summary of the U.S. federal income tax consequences of the grant, exercise, and vesting of awards under the 2020 Plan. The tax consequences of the grant, exercise, or vesting of awards may vary depending upon the particular circumstances, and it should be noted that income tax laws, regulations, and interpretations change frequently. Participants should rely upon their own tax advisors for advice concerning the specific tax consequences applicable to them, including the applicability and effect of state, local, and foreign tax laws.

Tax Consequences to Participants.

- *Non-Qualified Options.* In general, the Company anticipates that (i) a participant will not recognize income at the time a non-qualified option is granted, (ii) a participant will recognize ordinary income at the time of exercise in an amount equal to the excess of the fair market value of the shares on the date of exercise over the option exercise price paid for the shares and (iii) at the time of sale of shares acquired pursuant to the exercise of the non-qualified option, appreciation (or depreciation) in value of the shares after the date of exercise will be treated as either short-term or long-term capital gain (or loss) depending on how long the shares have been held.
- *Incentive Stock Options.* The Company anticipates that a participant will not recognize income at the time an incentive option is granted or exercised. However, the excess of the fair market value of the shares on the date of exercise over the option exercise price paid may constitute a preference item for the alternative minimum tax. If shares are issued to the optionee pursuant to the exercise of an incentive option, and if no disqualifying disposition of such shares is made by such optionee within two years after the date of the grant or within one year after the issuance of such shares to the optionee, then upon the sale of such shares, any amount realized in excess of the option price will be taxed to the optionee as a long-term capital gain and any loss sustained will be a long-term capital loss. If shares acquired upon the exercise of an incentive option are disposed of prior to the expiration of either holding period described above, the optionee generally will recognize ordinary income in the year of disposition in an amount equal to the excess (if any) of the fair market value of such shares as of the time of exercise (or, if less, the amount realized on the disposition of such shares if a sale or exchange) over the option price paid for such shares. Any further gain (or loss) realized by the participant generally will be taxed as short-term or long-term capital gain (or loss) depending on the holding period.
- *Stock Appreciation Rights.* In general, the Company anticipates that a participant will not recognize income upon the grant of stock appreciation rights. The participant generally will

recognize ordinary income when the stock appreciation rights are exercised in an amount equal to the cash and the fair market value of any unrestricted shares received on the exercise.

- *Restricted Stock.* In general, the Company anticipates that a participant will not be subject to tax until the shares of restricted stock are no longer subject to forfeiture or restrictions on transfer for purposes of Section 83 of the Code. At that time, the participant will be subject to tax at ordinary income rates on the fair market value of the restricted shares (reduced by any amount paid by the participant for such restricted shares). However, a participant who so elects under Section 83(b) of the Code within 30 days of the date of award of the shares will have taxable ordinary income on the date of award of the restricted shares equal to the excess of the fair market value of such shares (determined without regard to the restrictions) over the purchase price, if any, of such restricted shares. Any appreciation (or depreciation) realized upon a later disposition of such shares will be treated as long-term or short-term capital gain depending upon how long the shares have been held. If a Section 83(b) election has not been made, any dividends received with respect to restricted shares that are subject to forfeiture and transfer restrictions generally will be treated as compensation that is taxable as ordinary income to the participant.

- *Restricted Stock Units and Performance Shares or Units.* In general, the Company anticipates a participant will not recognize income upon the grant of a restricted stock unit award or a performance share or unit award. Upon settlement of the awards, the participant generally will recognize ordinary income in an amount equal to the cash and the fair market value of any unrestricted shares received.

- *Dividends or Dividend Equivalents.* Any dividend or dividend equivalents awarded with respect to awards granted under the 2020 Plan and paid in cash or unrestricted shares will be taxed to the participant at ordinary income rates when such cash or unrestricted shares are received by the participant.

- *Section 409A.* The 2020 Plan permits the grant of various types of awards that may or may not be exempt from Section 409A of the Internal Revenue Code. In general, if an award is subject to Section 409A, and if the requirements of Section 409A are not met, the award could be subject to tax at an earlier time than described above and could be subject to additional taxes and penalties. All awards granted under the 2020 Plan will be designed either to be exempt from, or to comply with the requirements of, Section 409A.

Tax Consequences to the Company.

- To the extent that a participant recognizes ordinary income in the circumstances described above, the Company will be entitled to a corresponding deduction provided that, among other things, the income meets the test of reasonableness, is an ordinary and necessary business expense, and is not an "excess parachute payment" within the meaning of Section 280G of the Internal Revenue Code.

2020 Plan Benefits. No awards have been granted, awarded or received under the 2020 Plan. Assuming approval of the 2020 Plan by the Company's stockholders, future awards under the 2020 Plan will be granted by the Compensation Committee, in its discretion, and the amount of any such awards to the Company's employees and non-management directors is not currently determinable. In addition, the following table sets forth equity based awards granted in fiscal 2019 under the Company's 2016

Incentive Compensation Plan to the Company's executive officers, as a group, other employees who are not executive officers, as a group, and non-management directors, as a group.

Name	Annual Performance Share Awards	Annual Restricted Stock—Time Based	Annual Stock Option Grant	One-time Performance Stock Option Grant
Executives	24,282	24,288	77,760	157,723
Non-Management Directors (deferred)		12,500		
All Employees (excluding executives)		3,500		

The Board of Directors unanimously recommends that stockholders vote *FOR* this proposal.

9. ADVISORY VOTE ON EXECUTIVE COMPENSATION

As described in detail under the heading "Executive Compensation" the Company's executive compensation programs are designed to attract, motivate and retain talented executives. In addition, the programs are structured to create an alignment of interests between the Company's executives and stockholders so that a significant portion of each executive's compensation is linked to maximizing stockholder value. Under the programs, the Named Executive Officers are provided with opportunities to earn rewards for the achievement of specific annual and long-term goals that are directly relevant to the Company's short-term and long-term success. Accordingly, as a result of the Company's financial performance in recent years, no MIP payments were made for 2017 and MIP payments for fiscal 2018 and 2019 were made at levels between the minimum and target payment levels. Similarly, equity awards for which vesting depended upon achievement of a measurement of income for those periods were forfeited. The effectiveness of this alignment is demonstrated by the fact that financial under performance by the Company and under performance of its stock price in recent years has resulted in only partial or no payouts under the Company's management incentive plan and forfeiture of equity incentive awards that did not meet required performance targets, as well as the lack of value creation due to stock option exercise prices being above the trading price of the Company's common stock. The Company believes it has undertaken significant efforts to improve its operational and financial performance, which has been demonstrated in improved operating margins and financial results during fiscal 2019, which in turn has resulted in an improved stock price for the Company's stockholders. Please read the "Compensation Discussion and Analysis" beginning on page 18 for additional details about the Company's executive compensation philosophy and programs, including information about the Fiscal Year 2019 compensation of the Named Executive Officers.

The Compensation Committee of the Board of Directors continually reviews the Company's compensation programs to ensure they achieve the desired objectives. As a result of its review process, in fiscal year 2019 the Compensation Committee took the following actions with respect to the Company's executive compensation practices:

- established corporate performance goals under the MIP based on the Company's attainment of certain net income levels, creating a clear and direct relationship between executive pay and corporate performance;
- made grants of restricted stock subject to time-based vesting and performance shares subject to the achievement of performance conditions, in order to reward executive officers for the achievement of both long-term and strategic goals;
- established base salary and overall compensation at levels that are in line with those of individuals holding comparable positions and producing similar results at other multi-national corporations of similar size, value and complexity; and

- designed the elements of the compensation program to retain and incentivize the Named Executive Officers and align their interests with those of the stockholders.

The Company seeks your advisory vote on the compensation of the Named Executive Officers. The Company asks that you support the compensation of the Named Executive Officers as described in this proxy statement by voting in favor of this proposal. This proposal, commonly known as a "say-on-pay" proposal, gives the Company's stockholders the opportunity to express their views on the compensation of the Named Executive Officers. This vote is not intended to address any specific item of compensation, but rather the overall compensation of the Named Executive Officers and the philosophy, policies and practices described in this proxy statement. The say-on-pay vote is advisory, and therefore not binding on the Company, the Compensation Committee or the Board of Directors. The Board of Directors and the Compensation Committee will review the voting results and consider them, along with any specific insight gained from stockholders of Haynes and other information relating to the stockholder vote on this proposal, when making future decisions regarding executive compensation.

The Board of Directors unanimously recommends that stockholders vote *FOR* this proposal.

10. OTHER MATTERS

As of the date of this proxy statement, the Board of Directors of Haynes has no knowledge of any matters to be presented for consideration at the annual meeting other than those referred to above. If (a) any matters unknown to the Board of Directors as of the date of this proxy statement should properly come before the annual meeting; (b) a person not named herein is nominated at the annual meeting for election as a director because a nominee named herein is unable to serve or for any reason will not serve; (c) any proposals properly omitted from this proxy statement and the form of proxy should come before the annual meeting; or (d) any matters should arise incident to the conduct of the annual meeting, then the proxies will be voted with respect to such matters in accordance with the recommendations of the Board of Directors of the Company.

By Order of the Board of Directors,

Janice W. Gunst
Corporate Secretary
January 24, 2020

Appendix A

HAYNES INTERNATIONAL, INC.
2020 INCENTIVE COMPENSATION PLAN

ARTICLE I

ESTABLISHMENT AND PURPOSE

The Board of Directors of Haynes International, Inc. (the "Company") hereby establishes the Haynes International, Inc. 2020 Incentive Compensation Plan (the "Plan"), effective on the date this plan is approved by the stockholders of the Company (the "Effective Date"), for the purpose of making cash and non-cash awards to eligible employees and non-employee directors. The Plan is intended to promote the interests of the Company and the stockholders of the Company by providing directors, executive officers and other management employees of the Company with appropriate incentives and rewards to encourage them to enter into and continue in the employ of the Company or to provide services to the Company, to acquire a proprietary interest in the long-term success of the Company and to reward the performance of individuals in fulfilling their personal responsibilities for long range and annual achievements.

ARTICLE II

DEFINITIONS

Whenever used in the Plan or any Award hereunder, the following terms shall have the meanings set forth below:

(a) "Affiliate" means any entity in which the Company has a substantial direct or indirect equity interest (other than a Subsidiary), but only if expressly so designated by the Committee from time to time.

(b) "Award" means, individually or collectively, a grant or award under this Plan of Stock Options, Restricted Stock, Stock Appreciation Rights, Restricted Stock Units, Performance Units or Performance Shares.

(c) "Award Agreement" means an agreement entered into by each Participant and the Company, setting forth the terms and provisions applicable to Awards granted to Participants under this Plan.

(d) "Beneficial Owner" shall have the meaning set forth in Rule 13d-3 under the Exchange Act.

(e) "Board" or "Board of Directors" means the Company's Board of Directors.

(f) "Cause" shall have the meaning set forth in any employment, consulting or other agreement between the Company and the Participant. If there is no such agreement, or if any such agreement does not define "Cause", then "Cause" means (i) in the case of an Employee, willful and gross misconduct on the part of an Employee that is materially and demonstrably detrimental to the Company or any Subsidiary or Affiliate as determined by the Board of Directors in its sole discretion or (ii) in the case of a Director, the removal of a Director from office pursuant to the relevant provisions of the Amended and Restated By-laws of the Company, as amended from time to time.

(g) "Change in Control" shall mean the occurrence of any one of the following events:

  (i) any Person other than an Existing Substantial Shareholder becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing a majority of the combined voting power of the Company's then outstanding securities (assuming

conversion of all outstanding non-voting securities into voting securities and the exercise of all outstanding options or other convertible securities),

(ii) in any two (2) year period during the term of the Plan, individuals who, on the first day of such period, constitute a majority of the number of Directors serving on the Board of Directors and any new Director (other than a Director whose initial assumption of office is in connection with an actual or threatened election contest, including but not limited to, a consent solicitation, relating to the election of Directors of the Company) whose appointment or election by the Board or nomination for election by the Company's stockholders was approved or recommended by a vote of at least two-thirds (⅔) of the Directors then still in office who either were Directors on the first day of such period or whose appointment, election or nomination for election was previously so approved or recommended, cease to constitute a majority of the number of Directors serving on the Board of Directors at the end of such two (2) year period;

(iii) the consummation of a merger or consolidation of the Company or any Subsidiary of the Company with any other corporation (other than with an Existing Substantial Shareholder or any of its Affiliates), other than (x) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent, either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof, a majority of the combined voting power of the securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (y) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no Person is or becomes the Beneficial Owner, directly or indirectly, of securities of the Company representing a majority of the combined voting power of the Company's then outstanding securities; or

(iv) the stockholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of the Company's assets to an entity controlled by an Existing Substantial Shareholder or any of its affiliates, or to an entity, a majority of the combined voting power of the voting securities of which is owned by substantially all of the stockholders of the Company immediately prior to such sale in substantially the same proportions as their ownership of the Company immediately prior to such sale.

(h) "Code" means the Internal Revenue Code of 1986, as amended from time to time.

(i) "Committee" means the Compensation Committee of the Board of Directors.

(j) "Director" means any individual who is a member of the Board of Directors.

(k) "Disability" means a Total and Permanent Disability as defined in the Haynes International, Inc. Pension Plan.

(l) "Employee" means executive officers, other members of management and other full-time employees employed by the Company or any Subsidiary. The payment of a Director's fee by the Company shall not be sufficient to constitute employment by the Company.

(m) "Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, or any successor act thereto.

(n) "Exercise Price" means the price at which a Share may be purchased by a Participant pursuant to an Option, as determined by the Committee.

(p) “Existing Substantial Shareholder” means any Person that alone or together with its affiliates shall be the Beneficial Owner of more than 15% of the Shares outstanding as of the Effective Date.

(q) “Fair Market Value” per Share as of a particular date means the last reported sale price (on the last trading day immediately preceding such date) of the Shares quoted on the NASDAQ Global Select Market, the NASDAQ Global Market or the NASDAQ Capital Market, as the case may be (or any other exchange or national market system upon which price quotations for the Shares are regularly available); *provided, however,* if price quotations for the Shares are not regularly available on any exchange or national market system, Fair Market Value per Share shall mean, as of any date, the fair market value of such Shares on such date as determined in good faith by the Board of Directors or the Committee by formula or other method consistent with the determination of fair market value under Code Section 409A and its interpretive regulations.

(r) “Non-Employee Director” means a Director who is a “non-employee director” within the meaning of Rule 16b-3 of the Exchange Act.

(s) “Option” means an option to purchase Shares from the Company.

(t) “Participant” means an Employee or Non-Employee Director who has entered into an Award Agreement with the Company pursuant to this Plan.

(u) “Performance Criteria” means performance criteria determined by reference to goals pre-established by the Committee in its sole discretion, based on one or more of the following (if applicable, such criteria shall be determined in accordance with United States generally accepted accounting principles (“GAAP”) or based upon the Company’s GAAP financial statements): (1) return on total stockholder equity; (2) earnings per Share; (3) income before taxes; (4) earnings before any or all of interest, taxes, minority interest, depreciation and amortization; (5) economic profit; (6) sales or revenues; (7) return on assets, capital or investment; (8) market share; (9) cost reduction goals; (10) implementation or completion of critical projects or processes; (11) operating cash flow; (12) free cash flow; (13) net income; (14) accounts receivable; (15) costs; (16) debt to equity ratio; (17) diversity; (18) economic value added; (19) index comparisons; (20) inventory; (21) operating margin; (22) peer company comparisons; (23) production levels; (24) productivity; (25) profit margin; (26) return on sales; (27) safety; (28) sales growth; (29) stock price; (30) succession planning and talent development; (31) sustainability; (32) total segment profit; (33) total stockholder return (actual or relative); (34) working capital and (35) any combination of, or a specified increase or decrease in, any of the foregoing. The Committee in its sole discretion may designate additional Performance Criteria on which the Performance Goals may be based or adjust, modify or amend the Performance Criteria.

(v) “Performance Goals” means the required level of achievement of the Performance Criteria established by the Committee in order for an eligible Employee to receive an Award hereunder.

(w) “Performance Period” means such period, whether a fiscal year of the Company or such other period as may from time to time be established by the Committee, over which attainment of a Performance Goal shall be measured by the Committee, however, in no event shall an Award have a Performance Period of less than one (1) year.

(x) “Performance Unit” and “Performance Share” each mean an Award granted to an Employee pursuant to *Article VIII* herein.

(y) “Person” means any individual or entity.

(z) "Restricted Stock" means shares of the Company's stock granted to a Participant subject to restrictions in accordance with Article VII.

(aa) "Restricted Stock Unit" means an Award of Restricted Stock Units pursuant to *Section 7.8.*

(bb) "Retirement" or to "Retire" means a resignation (a) after reaching age sixty-five (65) or (b) after reaching age sixty-two (62) and completing at least ten (10) years of service with the Company.

(cc) "Shares" or "Stock" means the shares of common stock, 0.001 par value, of the Company, as may be adjusted in accordance with *Section 4.7* below.

(dd) "Subsidiary" means any corporation, partnership, venture or other entity in which the Company holds, directly or indirectly, a fifty percent (50%) or greater ownership interest.

(ee) "Termination of Employment" means, in the case of an Employee, a complete termination of the employment relationship between an Employee and the Company and all Subsidiaries, or, in the case of a Non-Employee Director, such Non-Employee Director ceasing to serve on the Board of Directors. For purposes of this definition, a Participant who is employed by an entity that ceases to be a Subsidiary or a business unit within a Subsidiary shall be deemed to have Terminated Employment as of the date such entity ceased to be a Subsidiary or a business unit within a Subsidiary, unless the Participant is also employed by the Company or an entity that continues to be a Subsidiary or a business unit within a Subsidiary. Notwithstanding the preceding provisions, to the extent required to be exempt from or to comply with Code Section 409A and its interpretive regulations and other guidance, a Termination of Employment must also constitute a "separation from service" within the meaning of Code Section 409A(a)(2)(A)(i) and the guidance thereunder.

ARTICLE III

ADMINISTRATION OF THE PLAN

The Plan shall be administered by the Committee. The Committee may establish and adopt resolutions, rules and regulations, including revisions thereto, not inconsistent with the provisions of the Plan, and construe and interpret provisions of the Plan, as it deems appropriate to make the Plan and Awards effective and to provide for the administration of the Plan, and it may take such other action with regard to the Plan and Awards as it deems appropriate, including, but not limited to, adopting and authorizing the Company to enter into Award Agreements. All such actions shall be final, conclusive and binding on all persons, and no member of the Committee or the Board of Directors shall be liable for any action or determination made in good faith with respect to the Plan or any Award granted hereunder.

In furtherance, and not in limitation, of the above, the Committee shall have the authority in its sole discretion, subject to and not inconsistent with the express provisions of the Plan, to administer the Plan and to exercise all the powers and authorities either specifically granted to it under the Plan or necessary or advisable in the administration of the Plan, including, without limitation, the authority to grant Awards; to determine the persons to whom and the time or times at which Awards shall be granted; to determine the type and number of Awards to be granted, the number of Shares to which an Award may relate and the terms, conditions, restrictions and performance criteria relating to any Award; to determine Performance Goals no later than ninety (90) days after the start of the applicable Performance Period; to determine whether, to what extent, and under what circumstances an Award may be settled, cancelled, forfeited, exchanged, or surrendered; and to make adjustments in the terms and conditions of, and the Performance Goals (if any) included in, Awards. The Committee shall certify as to whether any Performance Goals were met prior to the payment of any Performance Unit or Performance Share.

No Award may be made under the Plan after March 1, 2030, but Awards granted prior to such date may extend beyond that date.

ARTICLE IV

AWARDS SUBJECT TO THE PLAN

4.1 ***Types of Awards*****.** Awards under this Plan may be made in any of the following forms at the Committee's discretion: Performance Shares; Performance Units; Restricted Stock; Restricted Stock Units; Stock Appreciation Rights; Incentive Stock Options; or Non-qualified Stock Options.

4.2. ***Annual Limitation on Awards to Employees***. In any calendar year, no Awards to any one Employee may exceed any combination of (i) $1,500,000 in cash awards, including Performance Units, (ii) 40,000 shares of performance-based Restricted Stock, performance-based Restricted Stock Units, shares of time-based Restricted Stock, time-based Restricted Stock Units or Performance Shares or (iii) 100,000 Stock Options (including Incentive Stock Options and Non-Qualified Stock Options) or Stock Appreciation Rights.

4.3 ***Annual Limitation on Awards to Non-Employee Directors***. In any calendar year, no Awards to any one Non-Employee Director hereunder may exceed a maximum aggregate value of $250,000, determined based upon the closing price of the Company's common stock on the trading day prior to the grant date. In addition, total maximum compensation, including cash and Awards hereunder, to any one Non-Employee Director may not exceed $350,000, determined based upon the closing price of the Company's common stock on the day prior to the grant date, in any calendar year.

4.4 ***Performance Goals***. The Committee shall determine the Performance Criteria and Performance Goals, if any, and amounts payable pursuant to any Award in writing no later than ninety (90) days after the commencement of any Performance Period and no later than after twenty-five percent (25%) of such Performance Period has elapsed. The Committee shall determine attainment of Performance Goals and any other applicable terms and conditions and the amount of any payments/Awards earned. In the Committee's reasonable discretion, measurement of achievement of Performance Goals may be calculated excluding the impact of extraordinary or non-recurring items during any applicable Performance Period to the extent set forth in the applicable Award Agreement. Performance Goals shall include payout tables, formulas or other standards to be used in determining the extent to which the Performance Goals are met, and, if met, the amount of the Award to be distributed pursuant to this Plan. The Committee shall establish or modify the Performance Goals for the respective Award prior to or within 90 days after the beginning of the Performance Period relating to such Performance Goal, and not later than the date twenty-five percent (25%) of such Performance Period has elapsed. The Performance Goals may be based upon the performance of the Company or of any Subsidiary or Affiliate of the Company (or any division or business unit of such entity) and may also be based upon the performance of the Company alone (excluding Subsidiaries and Affiliates), a particular group within the Company or an individual Employee's performance. The Performance Goals may differ from Participant to Participant and from Award to Award. The Performance Goals may also be based upon the attainment of specified levels of performance under one or more of the Performance Criteria relative to the performance of other comparable entities. Performance Goals may include a threshold level of performance below which no Award will be earned, a level of performance at which the target amount of an Award will be earned and a level of performance at which the maximum amount of the Award will be earned. The Committee shall have the discretion to decrease or cancel a performance-based Award despite the fact that the relevant Performance Goals have been met, but the Committee shall not have the discretion to vest or increase an Award if the relevant Performance Goals have not been met except as set forth above.

4.5 ***Number of Shares***. Subject to adjustment as provided in *Section 4.7* herein, the following limitations shall apply in the aggregate as specified in the categories set forth below:

(a) For Restricted Stock, Restricted Stock Units and Performance Shares, no more than 250,000 Shares (or Share equivalents) may be granted in the aggregate hereunder;

(b) For Stock Options and Stock Appreciation Rights, no more than 350,000 Shares (or Share equivalents) may be granted in the aggregate hereunder.

The Shares granted under this Plan may be either authorized but unissued or reacquired Shares, subject to the terms of *Section 4.6*.

4.6 ***Share Accounting***. The following rules will apply for purposes of the determination of the number of Shares available for grant under the Plan or compliance with the foregoing limits:

(a) If an outstanding Award for any reason expires or is terminated or canceled without having been exercised or settled in full, or if Shares acquired pursuant to an Award subject to forfeiture are forfeited under the terms of the Plan or the relevant Award, the Shares allocable to the terminated portion of such Award or such forfeited Shares shall again be available for issuance under the Plan;

(b) Shares shall not be deemed to have been issued pursuant to the Plan with respect to any portion of an Award that is settled in cash;

(c) The following Shares may not again be made available for issuance as awards under the Plan: (i) Shares not issued or delivered as a result of the net settlement of an outstanding Option or SAR, (ii) Shares used to pay the exercise price or withholding taxes related to an outstanding Option or SAR, (iii) Shares repurchased on the open market with the proceeds of the Option Exercise Price and (iv) Shares delivered to the Company pursuant to Section 14.2 shall not be available for future grants under the Plan.

4.7 ***Adjustments in Authorized Plan Shares and Outstanding Awards***. In the event of any merger, reorganization, consolidation, recapitalization, separation, split-up, liquidation, Share combination, Stock split, Stock dividend, or other change in the corporate structure of the Company affecting the Shares, an adjustment shall be made in the number and class of Shares available for Awards under the Plan (including but not limited to individual limits), and in the number and class of and/or price of Shares subject to outstanding Awards granted under the Plan, and/or the number of outstanding Options, Shares of Restricted Stock, and Performance Shares (and other Awards whose value is based on a number of Shares) constituting outstanding Awards and any applicable Performance Goals, as may be determined to be appropriate and equitable by the Committee, in its sole discretion, to prevent dilution or enlargement of rights. In a stock-for-stock acquisition of the Company, the Committee may, in its discretion, substitute securities of another issuer for any Shares subject to outstanding Awards.

ARTICLE V

ELIGIBILITY AND PARTICIPATION

5.1 ***Eligibility***. All full-time Employees and Non-Employee Directors are eligible to receive Awards under this Plan.

5.2 ***Actual Participation***. Subject to the provisions of the Plan, the Committee may, from time to time, select from all eligible Employees and Non-Employee Directors those to whom Awards shall be granted and shall determine the nature and amount of each Award. No Employee or Non-Employee Director is entitled to receive an Award unless selected by the Committee. Non-Employee Directors shall not be entitled to receive any Award subject to Performance Goals hereunder.

ARTICLE VI

STOCK OPTIONS

6.1 ***Grant of Options.*** Subject to the terms and provisions of the Plan, Options may be granted to Non-Employee Directors and Employees at any time and from time to time, and under such terms and conditions, as shall be determined by the Committee. Subject to *Sections 4.2 and 4.3,* the Committee shall have discretion in determining the number of Shares subject to Options granted to each Participant. The Committee may grant Incentive Stock Options, as described in Section 422 of the Code, under this Plan.

6.2 ***Form of Issuance.*** Each Option grant shall be issued in the form of an Award Agreement containing terms and conditions to be established by the Committee. Such terms and conditions shall include the Exercise Price, the duration of the Option, the number of Shares to which an Option pertains and such other provisions as the Committee shall determine.

6.3 ***Exercise Price.*** Except as otherwise specifically set forth herein, unless a greater Exercise Price is determined by the Committee, the Exercise Price for each Option awarded under this Plan shall be equal to one hundred percent (100%) of the Fair Market Value of a Share on the date the Option is granted. Subject to adjustment as provided in *Section 4.7* herein or as otherwise provided herein, the terms of an Option may not be amended to reduce the exercise price nor may Options be cancelled or exchanged for cash, other awards or Options with an exercise price that is less than the exercise price of the original Options without stockholder approval; provided, however, the foregoing shall not prohibit the cancellation of Options in exchange for cash or other consideration that does not exceed the excess of the Fair Market Value of the Shares underlying such Options over the exercise price thereof on the date of such cancellation.

6.4 ***Duration of Options.*** Each Option shall expire at such time as the Committee shall determine at the time of grant (which duration may be extended by the Committee); *provided, however,* that no Option shall be exercisable later than the tenth (10th) anniversary date of its grant. In the event the Committee does not specify the expiration date of an Option, then such Option will expire on the tenth (10th) anniversary date of its grant, except as otherwise provided herein.

6.5 ***Vesting of Options.*** A grant of Options shall vest at such times and under such terms and conditions as determined by the Committee; *provided, however*, unless another vesting schedule is provided by the Committee in the Award Agreement, one-third of the Options will vest on each of the first three anniversaries of the grant date.

6.6 ***Exercise of Options.***

(a) Options granted under the Plan shall be exercisable at such times and be subject to such restrictions and conditions as the Committee shall in each instance approve, which need not be the same for each grant or for each Participant. Exercises of Options may be effected only on days and during the hours that the NASDAQ Stock Market is open for regular trading. The Committee may change or limit the times or days Options may be exercised. If an Option expires on a day or at a time when exercises are not permitted, then the Options may be exercised no later than the immediately preceding date and time that the Options were exercisable.

(b) An Option shall be exercised by providing notice to the designated agent selected by the Committee (if no such agent has been designated, then to the Committee) and to the Committee, in the manner and form determined by the Committee, which notice shall be irrevocable, setting forth the exact number of Shares with respect to which the Option is being exercised and including with such notice payment or other settlement of the Exercise Price, as applicable. When an Option has been transferred, the Committee or its designated agent may

require appropriate documentation that the person or persons exercising the Option, if other than the Participant, has the right to exercise the Option. No Option may be exercised with respect to a fraction of a Share.

(c) The Committee also may allow broker-assisted exercise as permitted under Federal Reserve Board's Regulation T, subject to applicable securities law restrictions, or by any other means that the Committee determines to be consistent with the Plan's purpose and applicable law.

6.7 *Payment*. The Exercise Price shall be paid in full, at the time of exercise of the Option, (i) by personal or bank cashier's check, (ii) if the Participant may do so without violating Section 16(b) or (c) of the Exchange Act, and subject to approval by the Committee, by tendering to the Company whole Shares owned by such Participant having a Fair Market Value at the time of exercise equal to the Exercise Price of the Shares which the Option is being exercised, (iii) if the Participant may do so without violating Section 16(b) or (c) of the Exchange Act, and subject to approval by the Committee, by surrendering a number of vested options having a value (based on the difference between the Exercise Price per share and the Fair Market Value per share of the Shares at the time of exercise) equal to the Exercise Price of the Shares for which the Option is being exercised, or (iv) any combination of (i), (ii) or (iii).

6.8 *Termination of Employment*. Unless otherwise provided by the Committee, the following limitations on exercise of Options shall apply upon Termination of Employment:

(a) *Termination Other than for Cause, Death, Disability or Retirement*. Unless specifically provided otherwise in the Award Agreement, if the employment of a Participant is terminated for any reason other than Cause, death, Disability or Retirement, all unvested Options held by the Participant on the date of termination shall terminate immediately and any vested Options shall remain exercisable for (i) in the case of the Chief Executive Officer, six (6) months following the date of termination (or, in the case of an Incentive Stock Option, ninety (90) days following the date of termination), but in no event later than the expiration of such Options as specified in the applicable Option Agreement or (ii) in the case of any other Participant, ninety (90) days following the date of termination, but in no event later than the expiration of such Options as specified in the applicable Option Agreement. If the Option is not exercised during this period, it shall be void and deemed to have been forfeited and be of no further force or effect.

(b) *Termination by Death, Disability or Retirement*. Upon the death, Disability or Retirement of a Participant, all unvested Options shall vest immediately and all Options held by such Participant shall remain exercisable for five (5) years following the date of such event, but in no event later than the expiration date of such Option as specified in the applicable Award Agreement. Notwithstanding the foregoing, in the case of Incentive Stock Options, such Options shall remain exercisable for a period of one (1) year in the case of Disability and for a period of ninety (90) days in the case of death or Retirement. If the Option is not exercised during this period, it shall be void and deemed to have been forfeited and be of no further force or effect.

(c) *Forfeiture by Reason of Termination for Cause*. Notwithstanding the exercise period described in *Section 6.4*, if the employment or service of Participant is Terminated for Cause by the Company, all rights or interests in any Option, regardless of the extent to which it might otherwise have been vested and exercisable on the date of such Termination for Cause, shall be forfeited and such Option shall no longer be exercisable to any extent whatsoever.

6.9 *Restrictions on Exercise and Transfer of Options*. Unless otherwise provided by the Committee:

(a) During the Participant's lifetime, the Participant's Options shall be exercisable only by the Participant or by the Participant's guardian or legal representative. After the death of the

Participant, an Option shall only be exercised by the holder thereof (including, but not limited to, an executor or administrator of a decedent's estate) or his or her guardian or legal representative.

(b) No Option shall be transferable except: (i) in the case of the Participant, only upon the Participant's death; and (ii) in the case of any holder after the Participant's death, only by will or by the laws of descent and distribution.

6.10 ***Incentive Stock Options***

In addition to the other terms and conditions applicable to all Options:

(a) the aggregate Fair Market Value (determined as of the date the Option is granted) of the Shares with respect to which Incentive Stock Options held by an individual first become exercisable in any calendar year (under this Plan and all other incentive stock options plans of the Company and its Affiliates) shall not exceed $100,000 (or such other limit as may be required by the Code), if such limitation is necessary to qualify the Option as an Incentive Stock Option, and to the extent an Option or Options granted to a Participant exceed such limit such Option or Options shall be treated as Non-Qualified Stock Options;

(b) an Incentive Stock Option shall not be exercisable and the Term of the Award shall not be more than ten (10) years after the date of grant (or such other limit as may be required by the Code) if such limitation is necessary to qualify the Option as an Incentive Stock Option;

(c) the Agreement covering an Incentive Stock Option shall contain such other terms and provisions which the Committee determines necessary to qualify such Option as an Incentive Stock Option; and

(d) notwithstanding any other provision of this Plan if, at the time an Incentive Stock Option is granted, the Participant owns (after application of the rules contained in Section 424(d) of the Code, or its successor provision) Shares possessing more than ten percent of the total combined voting power of all classes of stock of the Company or its subsidiaries, (A) the option price for such Incentive Stock Option shall be at least 110% of the Fair Market Value of the Shares subject to such Incentive Stock Option on the date of grant and (B) such Option shall not be exercisable after the date five years from the date such Incentive Stock Option is granted.

ARTICLE VII

RESTRICTED STOCK AND RESTRICTED STOCK UNITS

7.1 ***Grant of Restricted Stock.*** Subject to the terms and provisions of the Plan, the Committee, at any time and from time to time, may grant Shares of Restricted Stock to Non-Employee Directors and eligible Employees in such amounts and upon such terms and conditions as the Committee shall determine. In addition to any other terms and conditions imposed by the Committee, vesting of Restricted Stock for Employees may be conditioned upon the achievement of Performance Goals.

7.2 ***Restricted Stock Award Agreement.*** The terms and conditions of each Restricted Stock Award shall be set forth in a Restricted Stock Award Agreement between the Company and the Participant.

7.3 ***Restrictions.*** Each Restricted Stock Award Agreement made under the Plan shall contain the following terms, conditions and restrictions and such additional terms, conditions and restrictions as may be determined by the Committee:

(a) *Restrictions*. Except in the event of circumstances set forth in subsections (b), (c), (d), (e) or (f) of this *Section 7.3*, Shares awarded to a Participant in accordance with a Restricted Stock

Award shall be subject to the following restrictions: such Shares shall not be sold, assigned, transferred, pledged, hypothecated or otherwise disposed of.

(b) *Lapse of Restrictions for Grants to Employees*. Except as set forth in this *Section 7.3*, the restrictions set forth in Subsection (a) shall begin to lapse on or after (but not before) the first anniversary of the date of any Restricted Stock Award made to an Employee at such times and to such extent as the Committee may designate in the Award Agreement (including, without limitation, the attainment of Performance Goals).

(c) *Lapse of Restrictions for Grants to Non-Employee Directors*. Except as set forth in this *Section 7.3*, the restrictions set forth in Subsection (a) shall lapse for any Restricted Stock Award made to a Non-Employee Director upon the earlier of (i) such time as may be determined by the Committee at the time of the Award and set forth in the Award Agreement or (ii) the failure of such Non-Employee Director to be re-elected at an annual meeting of the stockholders of the Company or the removal of a Non-Employee Director from office by any other means, other than action of the stockholders of the Company.

(d) *Termination of Employment by Reason of Death or Disability*. Notwithstanding any provision of Subsection (a) to the contrary, if an Employee or a Non-Employee Director either dies or Terminates Employment because of Disability while in such employment or directorship, then the restrictions set forth in Subsection (a) shall lapse on the day of such event as to all Shares subject to a Restricted Stock Award.

(e) *Termination of Employment by Reason of Retirement*. Notwithstanding any other provision of this *Section 7.3* to the contrary, if an Employee or a Non-Employee Director Retires while in such employment or directorship, then the restrictions set forth in Subsection (a) shall lapse on the day of such event as to all Shares subject to a Restricted Stock Award; provided that, in the case of Restricted Stock Awards subject to Performance Criteria, the number of Shares that will vest will be determined as if target Performance Criteria had been achieved with the remainder of such Shares being forfeited and returned to the Company as of such date without the payment of consideration by the Company.

(f) *Involuntary Termination of Employment*. Notwithstanding any other provision of this *Section 7.3* to the contrary, if the employment or directorship of an Employee or a Non-Employee Director is terminated involuntarily for any reason other than for Cause, then the restrictions set forth in Subsection (a) shall lapse on the day of such event as to all Shares subject to a Restricted Stock Award; provided that, in the case of Restricted Stock Award subject to a Performance Criteria, the number of Shares that vest will be determined as if target Performance Criteria had been achieved, subject to proration determined by multiplying the amount of the Shares subject to the Restricted Stock Award by the number of months the Participant worked at least one day during the applicable Performance Period.

(g) *Forfeiture of Award*. Any Shares as to which the restrictions of *Section 7.3(a)* have not lapsed in accordance with this *Section 7.3* as of the date of a Participant's Termination of Employment shall be forfeited and returned to the Company as of such date without the payment of consideration by the Company.

7.4 ***Voting Rights, Dividends and Other Distributions.*** Except as otherwise provided in an Award Agreement, Participants holding Shares of Restricted Stock granted hereunder may exercise full voting rights and shall receive all dividends and distributions paid with respect to such Shares. If any such dividends or distributions are paid in Shares, the Shares so paid shall automatically be subject to the same restrictions and conditions as the Shares of Restricted Stock with respect to which they were paid.

7.5 ***Rights With Respect to Shares***. A Participant to whom a Restricted Stock Award has been made shall have absolute beneficial ownership of the Shares awarded to him, including the right to vote the shares and to receive dividends thereon; subject, however, to the terms, conditions and restrictions described in the Plan and/or the Award Agreement. The certificate(s) for such shares, with restrictive legends thereon, shall be held by the Company for the Participant's benefit until the restrictions lapse, whereupon certificates without restrictive legends shall be issued and delivered to him.

7.6 ***Restrictive Legends***. Certificates for Shares issued pursuant to Restricted Stock Awards shall bear an appropriate legend referring to the terms, conditions and restrictions described in the Plan and the Award Agreement. Any attempt to dispose of any Shares in contravention of the terms, conditions and restrictions described in the Plan or the Award Agreement shall be ineffective.

7.7 ***Restricted Stock Units.*** In lieu of or in addition to Restricted Stock, the Committee may grant Restricted Stock Units under such terms and conditions as shall be determined by the Committee. Restricted Stock Units shall be subject to the same terms and conditions under this Plan as Restricted Stock except as otherwise provided in this Plan or as otherwise provided by the Committee. Except as otherwise provided by the Committee, a Restricted Stock Unit Award shall be settled and pay out promptly upon vesting (to the extent permitted by Section 409A of the Code), and the Participant holding such Restricted Stock Units shall receive, as determined by the Committee, Shares equal to the number of such Restricted Stock Units as to which restrictions lapse, or cash equal to the Fair Market Value of the number of Shares underlying such Restricted Stock Units as of the settlement date. Restricted Stock Units shall not be transferable, shall have no voting rights and shall not receive dividends but shall, unless otherwise provided by the Committee, receive dividend equivalents at the time and at the same rate as dividends are paid on Shares with the same record and pay dates.

ARTICLE VIII

PERFORMANCE UNITS AND PERFORMANCE SHARES

8.1 ***Grants of Performance Units and Performance Shares.*** Subject to the terms of the Plan, Performance Shares and Performance Units may be granted to eligible Employees or Non-Employee Directors at any time and from time to time, as determined by the Committee. Subject to Sections 4.2, 4.3 and 8.2, the Committee shall have complete discretion in determining the number of Performance Units and/or Performance Shares Awarded to each Participant and the terms and conditions of each such Award.

8.2 ***Value of Performance Shares and Units.***

(a) A Performance Share is equivalent in value to a Share.

(b) A Performance Unit shall be equal in value to a fixed dollar amount determined by the Committee. The number of Shares equivalent to the potential payout of a Performance Unit shall be determined by dividing the maximum cash payout of the Award by the Fair Market Value per Share on the effective date of the grant. The Committee may denominate a Performance Unit Award in dollars instead of Performance Units.

8.3 ***Performance Goals.*** For each Award of Performance Shares or Performance Units, the Committee shall establish (and may establish for other Awards) Performance Goals for the Company, its Subsidiaries, and/or divisions of any of foregoing, using the Performance Criteria. Unless previously canceled or reduced, Performance Shares and Performance Units which may not be converted because of failure in whole or in part to satisfy the relevant Performance Goals or for any other reason shall be canceled without further action by the Committee at the time they would otherwise be distributable.

8.4 ***Dividend Equivalents on Performance Shares.*** If determined by the Committee, a cash payment ("*Dividend Equivalent*") in an amount equal to the dividend payable on one Share may be

made to a Participant for each Performance Share held by such Participant on the record date for the dividend. Such Dividend Equivalent, if any, shall only be paid on the number of Performance Shares actually distributed and such payment shall be made when the related Performance Shares are distributed.

8.5 ***Form and Timing of Payment of Performance Units and Performance Shares.*** As soon as practicable after the applicable Performance Period has ended and all other conditions (other than Committee actions) to conversion and distribution of a Performance Share and/or Performance Unit Award have been satisfied (or, if applicable, at such other time determined by the Committee at or before the establishment of the Performance Goal), the Committee shall determine whether and the extent to which the Performance Goals were met for the applicable Performance Units and Performance Shares and shall certify such results prior to payment of any awards subject to Performance Criteria. If Performance Goals have been met, then the number of Performance Units and Performance Shares to be converted into Stock and/or cash and distributed to the Participants shall be determined in accordance with the Performance Goals for such Awards, subject to any limits imposed by the Committee. Payment of Performance Units and Performance Shares shall be made in a single lump sum, as soon as reasonably administratively possible following the determination of the number of Shares or amount of cash to which the Participant is entitled but not later than the 15th the day of the third month following the end of the applicable Performance Period. Performance Units will be distributed to Participants in the form of cash. Performance Shares will be distributed to Participants in the form of cash or Stock, or a combination of cash and Stock, as determined by the Committee. In the event the Participant is no longer an Employee at the time of the distribution, then the distribution shall be one hundred (100%) in cash, provided the Participant may elect to take fifty percent (50%) or one hundred percent (100%) in Stock. At any time prior to the distribution of the Performance Shares and/or Performance Units, unless otherwise provided by the Committee or prohibited by this Plan (such as in the case of a Change in Control), the Committee shall have the authority to reduce or eliminate the number of Performance Units or Performance Shares to be converted and distributed, or to cancel any part or all of a grant or award of Performance Units or Performance Shares, or to mandate the form in which the Award shall be paid (i.e., in cash, in Stock or both, in any proportions determined by the Committee).

For the purpose of converting Performance Shares into cash and distributing the same to the holders thereof (or for determining the amount of cash to be deferred), the value of a Performance Share shall be the Fair Market Value of a Share on the date the Committee authorizes the payout of Awards. Performance Shares to be distributed in the form of Stock will be converted at the rate of one (1) Share per Performance Share.

8.6 ***Termination of Employment Due to Death, Retirement or Disability.*** In the event of the Participant's Termination of Employment by reason of death, Retirement or Disability during a Performance Period, the Participant shall receive a lump sum payout of the related outstanding Performance Units and Performance Shares calculated as if all unfinished Performance Periods had ended with one hundred percent (100%) of the Performance Goals achieved at target level, valued as of the first business day of the calendar year following the date of Termination of Employment and payable as soon thereafter as reasonably possible but not later than the 15th day of the third month after the end of the calendar year in which such death, Retirement or Disability occurred. Where the amount or part of Dividend Equivalents is determined by the number of Performance Shares that are paid out or is otherwise determined by a performance measure, and the related Performance Period for the Dividend Equivalents was not completed at death, Retirement or Disability, then the Dividend Equivalents will be calculated as though one hundred percent (100%) of the goals were achieved at target level and paid as soon as reasonably possible.

8.7 ***Voluntary Termination of Employment.*** Unless the Committee determines otherwise at any time, if the Participant is not Retirement eligible and Terminates Employment voluntarily during the

Performance Period for a grant of Performance Units or Performance Shares, then such Award shall be cancelled upon such Termination. A Termination shall be deemed to be voluntary if it is recorded as such on the records of the Company, as determined by the Company in its sole discretion.

8.8 ***Involuntary Termination of Employment***. Unless the Committee determines otherwise at any time, in the event of the Participant's involuntary Termination of Employment other than for Cause during the Performance Period, then upon such Termination, the amount of the Participant's Performance Units and number of Participant's Performance Shares shall be adjusted. The revised Awards shall be determined by multiplying the amount of Performance Units and the number of Performance Shares, as applicable, by the number of months the Participant worked at least one day during the respective Performance Period divided by the number of months in the Performance Period, to be paid, if at all, at the same time and under the same terms that such outstanding Performance Units or Performance Shares would otherwise be paid.

8.9 ***Termination of Employment for Cause***. In the event of the Termination of Employment of a Participant by the Company for Cause, all Performance Units and Performance Shares shall be forfeited by the Participant to the Company.

8.10 ***Non-transferability***. Performance Units and Performance Shares may not be sold, transferred, pledged, assigned or otherwise alienated or hypothecated.

ARTICLE IX

STOCK APPRECIATION RIGHTS

9.1 ***Grant***. An Award of a Stock Appreciation Right shall entitle the Participant, subject to terms and conditions determined by the Committee, to receive upon exercise of the Stock Appreciation Right all or a portion of the excess of (i) the Fair Market Value of a specified number of Shares as of the date of exercise of the Stock Appreciation Right over (ii) a specified purchase price which shall not be less than 100% of the Fair Market Value of such Shares as of the date of grant of the Stock Appreciation Right. Each Stock Appreciation Right shall be subject to such terms as provided in the applicable Award Agreement. Except as otherwise provided in the applicable Award Agreement, upon exercise of a Stock Appreciation Right, payment to the Participant (or to his or her Successor) shall be made in the form of cash, Shares or a combination of cash and Shares (as determined by the Committee if not otherwise specified in the Award) as promptly as practicable after such exercise. The Agreement may provide for a limitation upon the amount or percentage of the total appreciation on which payment (whether in cash and/or Stock) may be made in the event of the exercise of a Stock Appreciation Right. Participants holding Stock Appreciation Rights shall have no dividend rights with respect to Shares subject to such Stock Appreciation Rights.

9.2 ***Exercisability***. Each Stock Appreciation Right shall vest and be exercisable in whole or in part on the terms provided in the Award Agreement. Unless otherwise provided in the Award Agreement, a Stock Appreciation Right shall not vest more rapidly than ratably over a period of three years from the grant date beginning on the first anniversary of the Stock Appreciation Right grant date. Notwithstanding the foregoing, the vesting of a Stock Appreciation Right may be accelerated upon the occurrence of certain events as provided in the Agreement. In no event shall any Stock Appreciation Right be exercisable at any time after its Term. When a Stock Appreciation Right is no longer exercisable, it shall be deemed to have lapsed or terminated. No Stock Appreciation Right may be exercised for a fraction of a Share. The provisions of *Section 6.8 and 6.9* shall be applicable to SARs as if they were Options (but not Incentive Stock Options).

ARTICLE X

BENEFICIARY DESIGNATION

10.1 In the event of the death of a Participant, distributions or Awards under this Plan, other than Restricted Stock, shall pass in accordance with the Company's rules for employee beneficiary designations, as the same may be amended from time to time. A Participant's most recent beneficiary designation will also apply to distributions or awards under this Plan unless and until the Participant provides to the contrary in accordance with the procedures set forth in such rules.

ARTICLE XI

EMPLOYEE MATTERS

11.1 ***No Contract of Employment*.** Unless otherwise expressed in a separate writing signed by an authorized officer of the Company, all Employees are employed for an unspecified period of time and are considered to be "at-will employees." Nothing in this Plan shall confer upon any Participant the right to continue in the employ of the Company or any Subsidiary, nor shall it limit or restrict in any way the right of the Company or any Subsidiary to discharge the Participant at any time for any reason whatsoever, with or without cause.

11.2 ***No Rights As A Stockholder*.** Except as specifically set forth herein or in an applicable Award Agreement, a Participant shall have no rights as a stockholder with respect to any Award unless and until the Participant duly performs all obligations set forth herein that would result in the Participant becoming the owner of any Shares subject to such Award and certificates evidencing ownership of Shares are issued to the Participant. Thereafter, cash dividends, stock dividends, stock splits and other securities and rights to subscribe shall be paid or distributed with respect to Shares acquired pursuant to the Plan in the same manner as such items are paid or distributed to other stockholders of the Company. Adjustments to the number and kind of Shares in the event of certain transactions shall be made as described in *Section 4.7.*

11.3 ***Participation*.** No Employee shall have the right to be selected to receive an Award under this Plan, or, having been so selected, to be selected to receive a future Award.

11.4 ***Clawback Policy*.** All Awards granted hereunder are subject to the Committee's policy relating to potential return or forfeiture of Awards granted hereunder in the event of a restatement of the Company's financial statements due to material noncompliance by the Company with financial reporting requirements under the securities laws.

ARTICLE XII

CHANGE IN CONTROL

Unless the Committee provides otherwise prior to the grant of an Award, upon the occurrence of a Change in Control, the following shall apply to such Award:

(a) Any and all Options and Stock Appreciation Rights granted hereunder to a Participant immediately shall become vested and exercisable upon the occurrence of a Change in Control, and shall remain exercisable for one (1) year following the date of such event, but in no event later than the expiration date of such Option as specified in the applicable Award Agreement;

(b) Any restriction periods and all restrictions imposed on Restricted Stock and Restricted Stock Units shall lapse and they shall immediately become fully vested upon the occurrence of a Change in Control; provided, Restricted Stock Units shall be settled in accordance with the terms of the grant without regard to the Change in Control unless the Change in Control constitutes a "change in contract event" within the meaning of Section 409A of the Code and

such Termination of Employment occurs within two years following such Change in Control, in which case the Restricted Stock Units shall be settled and paid out with such Termination of Employment.

(c) Outstanding Performance Shares or Performance Units will vest automatically, with payment made or Shares issued based upon actual performance of the Company in the period prior to the Change in Control, but in no event less than the amount that would have been paid or issued if the target level of performance established by the Committee prior to the occurrence of the Change in Control had been achieved.

(d) In the event of a Change in Control, an Award shall be treated, to the extent determined by the Committee to be appropriate and permitted under Section 409A of the Code, in accordance with one of the following methods as determined by the Committee in its sole discretion: (i) upon at least ten (10) days' advance notice to the affected persons, cancel any outstanding Awards and pay to the holders thereof, in cash or stock, or any combination thereof, the value of such Awards based upon the price per Share received or to be received by other stockholders of the Company in the event; or (ii) provide for the assumption of or the issuance of substitute awards that will substantially preserve the otherwise applicable terms of any affected Awards previously granted under the Plan, as determined by the Committee in its sole discretion.

ARTICLE XIII

AMENDMENT, MODIFICATION AND TERMINATION

13.1 ***Amendment, Modification, and Termination*.** The Board may at any time and from time to time, alter or amend the Plan or any Award in whole or in part or suspend or terminate the Plan in whole or in part.

13.2 ***Awards Previously Granted*.** No termination, amendment or modification of the Plan or any Award (other than Performance Shares or Performance Units) shall adversely affect in any material way any Award previously granted under the Plan, without the written consent of the Participant holding such Award; *provided, however*, that any such modification made for the purpose of complying with Section 409A of the Code may be made by the Company without the consent of any Participant.

13.3 ***Delay in Payment*.** To the extent required in order to avoid the imposition of any interest and/or additional tax under Section 409A(a)(1)(B) of the Code, any amount that is considered deferred compensation under the Plan or Agreement and that is required to be postponed pursuant to Section 409A of the Code, following the a Participant's Termination of Employment shall be delayed for six months if a Participant is deemed to be a "specified employee" as defined in Section 409A(a)(2)(i)(B) of the Code; *provided* that, if the Participant dies during the postponement period prior to the payment of the postponed amount, the amounts withheld on account of Section 409A shall be paid to the executor or administrator of the decedent's estate within 60 days following the date of his death. A "Specified Employee" means any Participant who is a "key employee" (as defined in Code Section 416(i) without regard to paragraph (5) thereof), as determined by the Company in accordance with its uniform policy with respect to all arrangements subject to Code Section 409A, based upon the twelve (12) month period ending on each December 31st (such twelve (12) month period is referred to below as the "identification period"). All Participants who are determined to be key employees under Code Section 416(i) (without regard to paragraph (5) thereof) during the identification period shall be treated as Specified Employees for purposes of the Plan during the twelve (12) month period that begins on the first day of the 4th month following the close of such identification period.

ARTICLE XIV

TAXES

14.1 ***General Tax Withholding.*** Unless otherwise provided by the Committee or this Plan, the Company shall deduct or withhold an amount sufficient to satisfy Federal, state, and local taxes (including but not limited to the Participant's employment tax obligations) required by law to be withheld with respect to any taxable event arising or as a result of cash paid under this Plan ("Withholding Taxes").

14.2 ***Restricted Stock Withholding Taxes.***

(a) *Employees*. The Company and its Subsidiaries shall, to the extent permitted by law, deduct from any payments of any kind otherwise due or to become due to an Employee granted a Restricted Stock Award any federal, state or local taxes of any kind required by law to be paid or withheld with respect to the vesting of a Restricted Stock Award, *provided*, that, if such arrangement is not possible or practicable, the Employee shall make direct payment of the applicable taxes to the Company. Notwithstanding the foregoing, an Employee may, by written notice to the Committee (which notice may be delivered to such members of management of the Company which the Committee may from time to time designate) and subject to such rules as the Committee may adopt, elect to satisfy, in whole or in part, any withholding tax obligation that may arise in connection with the Shares subject to the Restricted Stock Award by having the Company accept from the Employee delivery of Shares having a Fair Market Value equal to the amount of the withholding tax to be satisfied by such delivery.

(b) *Non-Employee Directors*. Unless a written election notice is delivered in accordance with the immediately following sentence, a Non-Employee Director shall make direct payment of all applicable taxes arising from the vesting of a Restricted Stock Award to the relevant taxing authorities. A Non-Employee Director may, by written notice to the Committee (which notice may be delivered to such members of management of the Company which the Committee may from time to time designate) and subject to such rules as the Committee may adopt, elect to satisfy, in whole or in part, any tax obligation that may arise in connection with the Shares subject to the Restricted Stock Award by having the Company buy from the Non-Employee Director Shares having a Fair Market Value equal to the amount of the tax to be satisfied by such delivery.

14.3 ***Option Withholding Taxes.***

(a) *Generally*. The Company or any Subsidiary may take such steps as it may deem necessary or appropriate for the withholding of any taxes which the Company or any Subsidiary is required by law or regulation of any governmental authority, whether federal, state or local, domestic or foreign, to withhold in connection with any Option including, but not limited to, requiring the Participant to pay such tax at the time of exercise or the withholding of issuance of Shares to be issued upon the exercise of any Option until the Participant reimburses the Company for the amount the Company is required to withhold with respect to such taxes, or, at the Company's sole discretion, canceling any portion of such issuance of Shares in any amount sufficient to reimburse itself for the amount it is required to so withhold.

(b) *Satisfying Taxes by Withholding Optioned Shares*. Option Agreements under the Plan may, at the discretion of the Board or the Committee, contain a provision to the effect that all federal and state taxes required to be withheld or collected from a Participant upon exercise of an Option may be satisfied by the withholding of a sufficient number of exercised Shares that are subject to the Option which, valued at Fair Market Value on the date of exercise, would be equal to the total withholding obligation of the Participant for the exercise of such Option; *provided, however*, that if the Company is a public reporting corporation, no person who is an

"officer" of the Company, as such term is defined in Rule 3b-2 under the Exchange Act, may elect to satisfy the withholding of federal and state taxes upon the exercise of an Option by the withholding of exercised Shares that are subject to the Option, unless such election is made either (i) at least six (6) months prior to the date that the exercise of the Option becomes a taxable event or (ii) during any of the periods beginning on the third business day following the date on which the Company issues a news release containing the operating results of a fiscal quarter or fiscal year and ending on the twelfth business day following such date. Such election shall be deemed made upon receipt of notice thereof by an officer of the Company, by mail, personal delivery, or by facsimile message, and shall (unless notice to the contrary is provided to the Company) be operative for all Option exercises which occur during the twelve-month period following the election.

ARTICLE XV

SUCCESSORS

All obligations of the Company under the Plan, with respect to Awards granted hereunder, shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation or other acquisition of all or substantially all of the business and/or assets of the Company.

ARTICLE XVI

LEGAL CONSTRUCTION

16.1 ***Gender and Number*.** Except where otherwise indicated by the context, any masculine term used herein also shall include the feminine; the plural shall include the singular and the singular shall include the plural.

16.2 ***Severability*.** In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

16.3 ***Requirements of Law*.** The granting of Awards and the issuance of Shares under the Plan shall be subject to all applicable laws, rules and regulations, and to such approvals by any governmental agencies, stockholders or national securities exchanges as may be required.

16.4 ***Errors*.** At any time, the Company may correct any error made under the Plan without prejudice to the Company. Such corrections may include, without limitation, changing or revoking an issuance of an Award made in error.

16.5 ***Elections and Notices*.** Notwithstanding anything to the contrary contained in this Plan, all elections and notices of every kind shall be made on forms prepared by the Company or the General Counsel, Secretary or Assistant Secretary, or their respective delegates, or shall be made in such other manner as permitted or required by the Company or the General Counsel, Secretary or Assistant Secretary, or their respective delegates, including but not limited to elections or notices through electronic means, over the Internet or otherwise. An election shall be deemed made when received by the Company (or its designated agent, but only in cases where the designated agent has been appointed for the purpose of receiving such election), which may waive any defects in form. The Company may limit the time an election may be made in advance of any deadline.

Where any notice or filing is required or permitted to be given to the Company under the Plan, it shall be delivered to the principal office of the Company, directed to the attention of the Vice President—General Counsel of the Company or his or her successor. Such notice shall be deemed given on the date of delivery.

Notice to the Participant shall be deemed given when mailed (or sent by telecopy or electronic mail) to the Participant's work or home address as shown on the records of the Company or, at the option of the Company, to the Participant's e-mail address as shown on the records of the Company.

It is the Participant's responsibility to ensure that the Participant's addresses are kept up to date on the records of the Company. In the case of notices affecting multiple Participants, the notices may be given by general distribution at the Participants' work locations.

16.6 ***Governing Law.*** To the extent not preempted by Federal law, the Plan, and all Awards and agreements hereunder, and any and all disputes in connection therewith, shall be governed by and construed in accordance with the substantive laws of the State of Indiana, without regard to conflict or choice of law principles which might otherwise refer the construction, interpretation or enforceability of this Plan to the substantive law of another jurisdiction.

16.7 ***409A Compliance.*** Awards under the Plan may be structured to be exempt from or be subject to Section 409A of the Code. To the extent that Awards granted under the Plan are subject to Section 409A of the Code, the Plan will be construed and administered in a manner that enables the Plan and such Awards to comply with the provisions of Section 409A of the Code.

16.8 ***Issuance of Shares and Compliance With Securities Laws.*** No Shares shall be issued upon the exercise of any Award unless the issuance of such Shares is the subject of an effective registration statement under the federal Securities Act of 1933, as amended (the "Securities Act"), and applicable state securities laws, or unless, in the opinion of counsel to the Company, the issuance would be exempt from the registration requirements of the Securities Act and such state laws. A Participant has no right at any time to require the Company to register the Shares under federal or state securities laws. Any person purchasing Shares upon exercise of an Option issued pursuant to the Plan may be required to make such representations and furnish such information as may, in the opinion of counsel for the Company, be appropriate to permit the Company, in light of the existence or nonexistence with respect to such Shares of an effective registration under the Securities Act, or any similar state statute, to issue the Shares in compliance with the provisions of those or any comparable acts.

16.9 ***Securities Restrictions.*** All certificates for Shares delivered under the Plan shall be subject to such stop-transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations, and other requirements of the Securities and Exchange Commission, any stock exchange upon which the Shares are then listed, and any applicable federal or state securities law, and the Committee may cause a legend or legends to be put on any such certificates to make appropriate reference to such restrictions. If the Committee determines that the issuance of Shares hereunder is not in compliance with, or subject to an exemption from, any applicable federal or state securities laws, such shares shall not be issued until such time as the Committee determines that the issuance is permissible. Shares delivered under the Plan may be delivered electronically pursuant to such arrangements as the Committee shall determine.

16.10 ***Other Plans.*** Notwithstanding the adoption of this Plan by the Board and approval of this Plan by the Company's stockholders as provided in Article I hereof, any other incentive compensation plans adopted by the Company, as amended from time to time (the "*Other Plans*") shall remain in effect, but grants of stock options and other awards pursuant to the Other Plans shall not be made after the effective date of this Plan. All grants and awards heretofore made under the Other Plans shall be governed by the terms of the applicable Other Plans.

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

FORM 10-K

(Mark One)

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

For the fiscal year ended September 30, 2019

or

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

For the transition period from to

Commission file number 001-33288

HAYNES INTERNATIONAL, INC.
(Exact name of registrant as specified in its charter)

Delaware	**06-1185400**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1020 West Park Avenue, Kokomo, Indiana	**46904-9013**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code **(765) 456-6000**

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, par value $.001 per share	**HAYN**	**NASDAQ Global Market**

Securities registered pursuant to section 12(g) of the Act: **None**.

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of March 31, 2019, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was $299,299,784 based on the closing sale price as reported on the NASDAQ Global Market. Shares of common stock held by each executive officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

12,513,500 shares of Haynes International, Inc. common stock were outstanding as of November 14, 2019.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders to be held February 25, 2020 have been incorporated by reference into Part III of this report.

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This Annual Report on Form 10-K contains statements that constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. All statements other than statements of historical fact, including statements regarding market and industry prospects and future results of operations or financial position, made in this Annual Report on Form 10-K are forward-looking. In many cases, you can identify forward-looking statements by terminology, such as "may", "should", "expects", "intends", "plans", "anticipates", "believes", "estimates", "predicts", "potential" or "continue" or the negative of such terms and other comparable terminology. The forward-looking information may include, among other information, statements concerning the Company's outlook for fiscal year 2020 and beyond, overall volume and pricing trends, cost reduction strategies and their anticipated results, market and industry trends, capital expenditures and dividends. There may also be other statements of expectations, beliefs, future plans and strategies, anticipated events or trends and similar expressions concerning matters that are not historical facts. Readers are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, including, without limitation, those risk factors set forth in Item 1A of this Annual Report on Form 10-K. Actual results may differ materially from those in the forward-looking statements as a result of various factors, many of which are beyond the Company's control.

The Company has based these forward-looking statements on its current expectations and projections about future events. Although the Company believes that the assumptions on which the forward-looking statements contained herein are based are reasonable, any of those assumptions could prove to be inaccurate. As a result, the forward-looking statements based upon those assumptions also could be incorrect. Risks and uncertainties may affect the accuracy of forward-looking statements.

The Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Part I

Item 1. Business

Overview

Haynes International, Inc. ("Haynes", "the Company", "we", "our" or "us") is one of the world's largest producers of high-performance nickel- and cobalt-based alloys in flat product form such as sheet, coil and plate forms. The Company is focused on developing, manufacturing, marketing and distributing technologically advanced, high-performance alloys, which are sold primarily in the aerospace, chemical processing and industrial gas turbine industries. The Company's products consist of high-temperature resistant alloys, or HTA products, and corrosion-resistant alloys, or CRA products. HTA products are used by manufacturers of equipment that is subjected to extremely high temperatures, such as jet engines for the aerospace market, gas turbine engines used for power generation and industrial heating equipment. CRA products are used in applications that require resistance to very corrosive media found in chemical processing, power plant emissions control and hazardous waste treatment. Management believes Haynes is one of the principal producers of high-performance alloy flat products in sheet, coil and plate forms, and sales of these forms, in the aggregate, represented approximately 58% of net product revenues in fiscal 2019. The Company also produces its products as seamless and welded tubulars, and in slab, bar, billet and wire forms.

The Company has significant manufacturing facilities in Kokomo, Indiana; Arcadia, Louisiana; and Mountain Home, North Carolina. The Kokomo facility specializes in flat products, the Arcadia facility specializes in tubular products, and the Mountain Home facility specializes in wire products. The Company's products are sold primarily through its direct sales organization, which includes 12 service and/or sales centers in the United States, Europe and Asia. All of these centers are Company-operated. In fiscal 2019, approximately 75% of the Company's net revenue was generated by its direct sales organization, and the remaining 25% was generated by a network of independent distributors and sales agents that supplement its direct sales efforts primarily in the United States, Europe and Asia, some of whom have been associated with the Company for over 30 years.

Available Information

The address of the Company's website is *www.haynesintl.com*. The Company provides a link to its reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 on its website as soon as reasonably practicable after filing with the U.S. Securities and Exchange Commission. The filings available on the Company's website date back to February 3, 2011. For all filings made prior to that date, the Company's website includes a link to the website of the U.S. Securities and Exchange Commission, where such filings are available. Information contained or referenced on the Company's website is not incorporated by reference into, and does not form a part of this Annual Report on Form 10-K. For a statement of the Company's profits and losses and total assets, please see the financial statements of the Company included in Item 8 of this Annual Report on Form 10-K.

Business Strategy

The Company's goal is to grow its business by increasing revenues, profitability and cash flow while continuing to be its customers' provider of choice for high-performance alloys and value-added processes. This goal is pursued within the overarching goal of ***safety***, which is a core priority. The Company has launched and implemented a series of focus initiatives designed to continue to improve safety and to unlock the potential of the Company by increasing volumes, improving targeted pricing and relentlessly pursuing reduced costs. This includes effectively utilizing open capacity on major assets and managing mix at constrained assets.

The following are some examples of strategic focus initiatives that are currently being undertaken.

- ***Increasing prices to ensure the Company is compensated for the high-value differentiated products and services it provides.*** The Company is adjusting pricing in a number of high-value products especially in high-temperature applications. This includes spot pricing, mill lead- time products and long-term customer agreements when they renew. These price increases are beyond raw material increases, thus they contribute

to improving margins. In addition, price increases to offset inflationary increases in the Company's costs are also a focus initiative.

- ***Capitalize on strategic equipment investment.*** The Company expects to continue to improve operations and gain traction in realizing a return on investment of capital in manufacturing facilities and equipment. Management believes that the Company's capital investments will enable it to continue to satisfy long-term customer demand for value-added products.

- ***Optimize processes to reduce costs.*** The Company is focusing on operational improvements, which include specific cost reduction projects. This ongoing pursuit is significant and includes initiatives in many different areas such as material management, productivity enhancements, yield & efficiency improvements and outsourcing costs.

- ***Increase revenues by inventing new alloys, developing new applications for existing alloys and expanding into new markets.*** The Company believes that it is an industry leader in developing new alloys designed to meet its customers' specialized and demanding requirements. The Company continues to work closely with customers and end users of its products to identify, develop and manufacture new high-performance alloys. Since fiscal 2003, the Company's technical programs have yielded nine new proprietary alloys with multiple applications, an accomplishment that the Company believes distinguishes it from its competitors.

  Developing new applications for existing alloys is also a key strength and strategy of the Company. The Company leverages its technical expertise to develop unique applications for its products, especially proprietary and specialty alloys that can yield higher margins. These new applications, including use in unique special projects and new content programs are an important part of the Company's growth strategy.

  Through development of new alloys and new applications for existing alloys, the Company is seeking to participate in additional markets in order to generate new revenue streams beyond the core markets of aerospace, chemical processing and industrial gas turbine industries. The Company believes that the synthetic natural gas, renewable energy, clean-coal, waste-to-energy, oil and gas, flue-gas desulfurization, automotive, consumer electronics, heat treatment, medical and nuclear industries all present possible opportunities for its products.

- ***Increase revenues by providing value-added processing services and leveraging the Company's global distribution network.*** The Company believes that its network of service and sales centers throughout North America, Europe and Asia distinguishes it from its competitors, many of whom operate only mills. The Company's service and sales centers enable it to develop close customer relationships through direct interaction with customers and to respond to customer orders quickly, while also providing value-added cutting services such as laser, plasma and water-jet cutting. These services allow the Company's customers to minimize their processing costs and outsource non-core activities.

- ***Continue to expand the maintenance, repair and overhaul business.*** The Company believes that its maintenance, repair and overhaul, or MRO, business represents both an expanding and recurring revenue stream. Products used in the Company's end markets require periodic replacement due to the extreme environments in which they are used, which drives demand for recurring MRO work. The Company intends to continue to leverage the capabilities of its service and sales centers to respond quickly to its customers' time-sensitive MRO needs to develop new and retain existing business opportunities.

- ***Increase profitability through strategic acquisitions and alliances.*** The Company will continue to examine opportunities that enable it to enhance shareholder value. These opportunities may include product line additions, market expansion opportunities or other synergies. The Company will also continue to evaluate strategic relationships with third parties in the industry in order to enhance its competitive position and relationships with customers.

Company History

The Company was founded in 1912 as Haynes Stellite Works by American inventor and entrepreneur Elwood Haynes in Kokomo, Indiana. Since its founding, the Company has continuously conducted its main operations in Kokomo, Indiana. The Company was owned for much of its history by corporate parents, including Union Carbide and Cabot Corporation, until purchased in 1989 and then again in 1997 by private equity firms. The debt incurred in the last leveraged buy-out ultimately forced the Company into bankruptcy in March 2004, from which it emerged five months later in August 2004.

The Company began operations in its tubular facility in Arcadia, Louisiana over 30 years ago. This facility and the Company's tubular product business have grown with additional investment over time. The Company operates service centers in the U.S. many of which include value-added operations with laser, water-jet and plasma cutting. The Company also acquired a stainless steel and high-temperature alloy wire company located in Mountain Home, North Carolina in 2005. The Company primarily produces high-performance alloy wire at that facility. Most recently, in January 2015, the Company acquired assets in LaPorte, Indiana enabling coil stretching, leveling, slitting and cut-to-length operations. The Laporte operation also includes a toll processing business. The Company expanded the Laporte facility and moved operations from Lebanon, Indiana to that facility. In addition, the Company has expanded globally with service center locations in the United Kingdom, Switzerland and China and other sales offices in France, Japan, Singapore and Italy.

In March 2007, the Company completed a public equity offering, and simultaneously the Company listed its common stock on the NASDAQ Global Market. The Company began paying a dividend in fiscal 2010 and raised the dividend at the beginning of fiscal 2012.

Products

The global specialty alloy market consists of three primary sectors: stainless steel, general-purpose nickel alloys and high-performance nickel- and cobalt-based alloys. The Company believes that the high-performance alloy sector represents less than 10% of the total alloy market. The Company competes primarily in the high-performance nickel- and cobalt-based alloy sectors, which includes HTA products and CRA products. In each year of fiscal 2017, 2018 and 2019, HTA products accounted for approximately 81%, 81% and 80% of the Company's net revenues, and sales of the Company's CRA products accounted for approximately 19%, 19% and 20% of the Company's net revenues. These percentages are based on data which include revenue associated with sales by the Company to its foreign subsidiaries, but exclude revenue associated with sales by foreign subsidiaries to their customers. Management believes, however, that the effect of including revenue data associated with sales by its foreign subsidiaries would not materially change the percentages presented in this section.

High-temperature Resistant Alloys. HTA products are used primarily in manufacturing components for the hot sections of gas turbine engines. Stringent safety and performance standards in the aerospace industry result in development lead times typically as long as eight to ten years in the introduction of new aerospace-related market applications for HTA products. However, once a particular new alloy is shown to possess the properties required for a specific application in the aerospace market, it tends to remain in use for extended periods. HTA products are also used in gas turbine engines produced for use in applications such as naval and commercial vessels, electric power generation, power sources for offshore drilling platforms, gas pipeline booster stations and emergency standby power generators. The following table

sets forth information with respect to the Company's significant high-temperature resistant alloys, applications and features (new HTA development is discussed below under "Patents and Trademarks"):

Alloy and Year Introduced	End Markets and Applications[1]	Features
HAYNES® HR-160® alloy (1990)[2]	Waste incineration/CPI-boiler tube shields	Good resistance to sulfidation at high temperatures
HAYNES 242® alloy (1990)	Aero-seal rings	High strength, low expansion and good fabricability
HAYNES HR-120® alloy (1990).	IGT-cooling shrouds	Good strength-to-cost ratio as compared to competing alloys
HAYNES 230® alloy (1984)[2]	Aero/IGT-ducting, combustors	Excellent combination of strength, stability, oxidation-resistance and fabricability
HAYNES 214® alloy (1981)[2]	Aero-honeycomb seals	Excellent combination of oxidation resistance and fabricability among nickel-based alloys
HAYNES 188 alloy (1968)	Aero-burner cans, after-burner components	High strength, oxidation resistant cobalt-based alloy
HAYNES 625 alloy (1964)	Aero/CPI-ducting, tanks, vessels, weld overlays	Good fabricability and general corrosion resistance
HAYNES 617 alloy (1999)	Aero/IGT—ducting, combustors	Good combination of strength, stability, oxidation resistance and fabricability
HAYNES 263 alloy (1960)	Aero/IGT-components for gas turbine hot gas exhaust pan	Good ductility and high strength at temperatures up to 1600°F
HAYNES 718 alloy (1955)	Aero-ducting, vanes, nozzles	Weldable, high-strength alloy with good fabricability
HASTELLOY® X alloy (1954)	Aero/IGT-burner cans, transition ducts	Good high-temperature strength at relatively low cost
HAYNES 25 alloy (1950)[2]	Aero-gas turbine parts, bearings, and various industrial applications	Excellent strength, good oxidation resistance to 1800°F
HAYNES 282® alloy (2005)[2]	Aero/IGT components	Excellent high temperature strength, weldability and fabricability
HAYNES 244® alloy (2013)[2].	Aero/IGT components	High strength to 1400°F and low thermal expansion

(1) "Aero" refers to the aerospace industry; "IGT" refers to the industrial gas turbine industry; "CPI" refers to the chemical processing industry.

(2) Represents a patented product or a product which the Company believes has limited or no competition.

Corrosion-resistant Alloys. CRA products are used in a variety of applications, such as chemical processing, power plant emissions control, hazardous waste treatment, sour gas production and pharmaceutical vessels. Historically, the chemical processing market has represented the largest end-user sector for CRA products. Due to maintenance, safety and environmental considerations, the Company believes this market continues to represent an area of potential long-term growth. In addition to the use of CRA products in the chemical and petrochemical processing industry, the Company has seen an increased demand for some of these alloys in applications such as gas-to-liquid and synthetic gas. For improved efficiency within relevant applications, higher operating temperatures and harsher environmental conditions are required and, as a consequence, high-temperature, corrosion-resistant alloys are used. Some of our HTA products offer excellent resistance to oxidation, sulfidation, metal dusting and other high-temperature degradation modes. The Company expects this area of the chemical and petrochemical industry to represent potential long-term growth opportunities for the HTA products. Unlike aerospace applications within the HTA product market, the development of new market applications for CRA products generally does not require long lead times. The following table sets forth information with respect to certain

of the Company's significant corrosion-resistant alloys, applications and features (new CRA development is discussed below under "Patents and Trademarks"):

Alloy and Year Introduced	End Markets and Applications[1]	Features
HASTELLOY C-2000® alloy (1995)[2]	CPI-tanks, mixers, piping	Versatile alloy with good resistance to uniform corrosion
HASTELLOY B-3® alloy (1994)[2]	CPI-acetic acid plants	Better fabrication characteristics compared to other nickel-molybdenum alloys
HASTELLOY D-205® alloy (1993)[2]	CPI-plate heat exchangers	Corrosion resistance to hot concentrated sulfuric acid
ULTIMET® alloy (1990)[2]	CPI-pumps, valves	Wear and corrosion resistant nickel-based alloy
HASTELLOY C-22® alloy (1985)	CPI/FGD-tanks, mixers, piping	Resistance to localized corrosion and pitting
HASTELLOY G-30® alloy (1985)[2]	CPI-tanks, mixers, piping	Alloy with good corrosion resistance in phosphoric acid
HASTELLOY G-35® alloy (2004)[2]	CPI-tanks, heat exchangers, piping	Improved corrosion resistance to phosphoric acid with excellent resistance to corrosion in highly oxidizing media
HASTELLOY C-276 alloy (1968)	CPI/FGD/oil and gas tanks, mixers, piping	Broad resistance to many environments
HASTELLOY C-22HS® alloy (2003)[2] . . .	Oil & Gas/Marine tubular, shafts, fasteners	Combines very high strength with excellent corrosion resistance and toughness
HASTELLOY® HYBRID-BC1® alloy (2008)[2]	CPI-tanks, heat exchangers, piping	Higher resistance to hydrochloric and sulfuric acids and can tolerate the presence of oxidizing species

(1) "CPI" refers to the chemical processing industry; "FGD" refers to the flue gas desulfurization industry.

(2) Represents a patented product or a product which the Company believes has limited or no significant competition.

Patents and Trademarks

The Company currently maintains a total of approximately 23 published U.S. patents and applications and approximately 291 foreign counterpart patents and applications targeted at countries with significant or potential markets for the patented products. Since fiscal 2003, the Company's technical programs have yielded nine new proprietary alloys.

The alloys being commercialized saw significant further advancement in the process during fiscal 2017, 2018 and 2019. The Company believes that its alloys (particularly HAYNES® 282® alloy) are being commercialized rapidly when compared to historical trends for other proprietary alloys introduced by the Company. The Company will continue to actively promote its new alloys through customer engineering visits, technical presentations and papers.

In the aerospace, industrial gas turbine and high temperature markets, one of the alloys that has already seen significant commercial success is HAYNES® 282® alloy. This alloy has an excellent combination of high temperature strength, formability and fabricability. There have been a significant number of customer tests and evaluations of this product for the hot sections of gas turbines in the aerospace and industrial gas turbine markets, and for other high temperature applications. The alloy has already been specified into major aerospace and industrial gas turbine applications, as well as for certain high temperature components in the automotive and industrial applications. Another new alloy for use in the aerospace and industrial gas turbine markets is HAYNES® 244® alloy. It combines high strength to 1400 degrees Fahrenheit with a low coefficient of thermal expansion. Commercialization is ongoing for this alloy, and it has recently been specified into a major aerospace component.

In the chemical processing industry, customers have found extensive applications for HASTELLOY® G-35® alloy, particularly in wet phosphoric acid production. Management expects demand for this alloy will continue to grow. Commercialization is also ongoing for HASTELLOY® HYBRID-BC1® alloy. HYBRID-BC1® alloy is a CRA product with potential applications in the chemical processing industry that has demonstrated resistance to hydrochloric and sulfuric acid.

In the oil and gas industry, HASTELLOY® C-22HS® alloy has already found increasing applications. Commercialization of this alloy continues as is the testing, evaluation and promotion of this alloy with special emphasis on applications for this industry.

In addition to the successful commercialization of the above alloys, the Company continues to develop applications for new alloys being scaled up at the mill and not yet ready to begin the commercialization process. HAYNES® HR-235® alloy has excellent resistance to metal dusting in carbonaceous high temperature environments. Potential uses include applications in petrochemical production and syngas plants. HAYNES® HR-224® alloy is a HTA product with superior resistance to oxidation and excellent fabricability, and could be used in certain current and emerging technology applications. Another new alloy, HAYNES® NS-163® alloy, is a nitride dispersion strengthened alloy for certain potential high temperature applications. Most recently, HAYNES® 233™ alloy was introduced. This alloy offers excellent oxidation resistance at temperatures to 2100°F or higher coupled with superior creep strength, a combination of properties believed not to have been achieved previously in a readily fabricated alloy. This alloy is also being introduced to key customers.

Patents or other proprietary rights are an important element of the Company's business. The Company's strategy is to file patent applications in the U.S. and any other country that represents an important potential commercial market to the Company. In addition, the Company seeks to protect technology that is important to the development of the Company's business. The Company also relies upon trade secret rights to protect its technologies and its development of new applications and alloys. The Company protects its trade secrets in part through confidentiality and proprietary information agreements with its customers. Trademarks on the names of many of the Company's alloys have also been applied for or granted in the U.S. and certain foreign countries.

While the Company believes its patents are important to its competitive position, significant barriers to entry exist beyond the expiration of any patent period. These barriers to entry include the unique equipment required to produce these materials and the exacting processes required to achieve the desired metallurgical properties. These processing requirements include optimal melting and thermo-mechanical processing parameters for each alloy. Management believes that the current alloy development programs and these barriers to entry reduce the impact of patent expirations on the Company.

End Markets

The global specialty alloy market consists of stainless steels, general purpose nickel alloys and high-performance nickel- and cobalt-based alloys. Of this total market, the Company primarily competes in the high-performance nickel- and cobalt-based alloy sector, which demands diverse specialty alloys suitable for use in precision manufacturing. Given the technologically advanced nature of the products, strict requirements of the end users and higher-growth end markets, the Company believes the high-performance alloy sector provides greater growth potential, the opportunity for higher profit margins and greater opportunities for service, product and price differentiation as compared to the stainless steels and general-purpose nickel alloys markets. While stainless steel and general-purpose nickel alloys are generally sold in bulk through third-party distributors, the Company's products are sold in smaller-sized orders which are customized and typically handled on a direct-to-customer basis.

Aerospace. The Company has manufactured HTA products for the aerospace market since the late 1930s and has developed numerous proprietary alloys for this market. Customers in the aerospace market tend to be the most demanding with respect to meeting specification requirements, precise tolerances and achieving new product performance standards. Stringent safety standards and continuous efforts to reduce equipment weight, reduce emissions, and develop more fuel-efficient designs require close coordination between the Company, the aero-engine OEM's, and its customers in the selection and development of HTA products. As a result, sales to aerospace customers tend to be made through the Company's direct sales force. Demand for the Company's products in the aerospace market is based on the new and

replacement market for jet engines and the maintenance needs of operators of commercial and military aircraft. The Company's HTA products are used for static components in the hot sections of the aero-engine. The hot sections are subjected to substantial wear and tear and require periodic maintenance, repair and overhaul. The Company views the maintenance, repair and overhaul (MRO) business as an area of continuing long-term growth.

Chemical Processing. The chemical processing market represents a large base of customers with diverse CRA and HTA applications driven by demand for key end-use markets such as automobiles, housing, health care, biopharmaceuticals, agriculture and metals production. Both CRA and HTA supplied by the Company have been used in the chemical processing market since the early 1930s. Demand for the Company's products in this market is driven by the level of MRO and expansion requirements of existing chemical processing facilities, as well as the construction of new facilities. The expansion of manufacturing of natural gas liquids in North America is expected to be a driver of demand in this market. In addition, the Company believes the extensive worldwide network of Company-owned service and sales centers, as well as its network of independent distributors and sales agents who supplement the Company's direct sales efforts outside of the U.S., provide a competitive advantage in marketing its CRA and HTA products in the chemical processing market.

Industrial gas turbine. Demand for the Company's products in the industrial gas turbine market is driven primarily by utility-scale electricity generation, both for base load as well as for backup generation during times of peak power demand. The benefit of these turbines are their relatively low cost, high efficiency, rapid response and reliability, especially as weather-controlled renewables have become major sources of electricity. An additional demand consideration is the drive to lower emissions from coal-fired generating facilities, since natural gas has gained acceptance as a cleaner, low cost alternative to coal. Industrial gas turbines are also used for power and propulsion in certain classes of ships and ferries, most commonly as derivatives of popular aero turbine engines. Demand is also generated by mechanical drive units used for oil and gas production and pipeline transportation and for back-up sources of power generation for hospitals and shopping malls. The company also has a strong presence in microturbine applications, which provide decentralized power and thermal heating for many key markets. The Company's products have allowed turbines to operate with higher temperatures and efficiencies for much longer service intervals.

Other Markets. Other markets in which the Company sells its HTA products and CRA products include flue-gas desulfurization (FGD), oil and gas, waste incineration, industrial heat treating, automotive, sensors and instrumentation, biopharmaceuticals, solar and nuclear fuel. The FGD market has been driven by both legislated and self-imposed standards for lowering emissions from fossil fuel fired electric generating facilities. This market is expected to soften in the U.S. if the trend to switch from coal to natural gas for power plants continues, but has continued potential in other regions of the world. The Company also sells its products for use in the oil and gas market, primarily in connection with sour gas production. In addition, incineration of municipal, biological, industrial and hazardous waste products typically produces very corrosive conditions that demand high performance alloys. The Company continues to look for opportunities to introduce and expand the use of its alloys in emerging technologies such as solar, fuel cells, ultra-supercritical steam and supercritical-CO2 power plants, and nuclear fuel applications. Markets capable of providing growth are being driven by increasing performance, reliability and service life requirements for products used in these markets, which could provide further applications for the Company's products.

Sales and Marketing and Distribution

The Company sells its products primarily through its direct sales organization, which operates from 15 total locations in the U.S., Europe and Asia, 12 of which are service and/or sales centers. All of the Company's service and/or sales centers are operated either directly by the Company or through its directly or indirectly wholly-owned subsidiaries. Approximately 75% of the Company's net revenue in fiscal 2019 was generated by the Company's direct sales organization. The remaining 25% of the Company's fiscal 2019 net revenues was generated by a network of independent distributors and sales agents who supplement the Company's direct sales in the U.S., Europe and Asia. Going forward, the Company expects its direct sales force to generate approximately 75% of its total net revenues.

Providing technical assistance to customers is an important part of the Company's marketing strategy. The Company provides performance analyses of its products and those of its competitors for its customers. These analyses enable the Company to evaluate the performance of its products enabling the products to be included as part of the technical

specifications used in the production of customers' products. The Company's market development professionals are assisted by its engineering and technology staff in directing the sales force to new opportunities. Management believes the Company's combination of direct sales, technical marketing, engineering and customer support provides an advantage over other manufacturers in the high-performance alloy industry. This framework allows the Company to obtain direct insight into customers' alloy needs and to develop proprietary alloys that provide solutions to customers' problems.

The Company continues to focus on growing its business in foreign markets, operating from service and sales centers in Asia and Europe.

While the Company is making concentrated efforts to expand foreign sales, the majority of its revenue continues to be provided by sales to U.S. customers. The Company's domestic expansion effort includes, but is not limited to, the continued expansion of ancillary product forms, the continued development of new high-performance alloys, the addition of equipment in U.S. service and sales centers to improve the Company's ability to provide a product closer to the form required by the customer and the continued effort, through the technical expertise of the Company, to find solutions to customer challenges.

The following table sets forth the approximate percentage of the Company's fiscal 2019 net revenues generated through each of the Company's distribution channels.

	From Domestic Locations	From Foreign Locations	Total
Company mill direct/service and sales centers	50 %	25 %	75 %
Independent distributors/sales agents	25 %	— %	25 %
Total	75 %	25 %	100 %

The Company's top twenty customers accounted for approximately 38%, 36% and 44% of the Company's net revenues in fiscal 2017, 2018 and 2019, respectively. No customer or group of affiliated customers of the Company accounted for more than 10% of the Company's net revenues in fiscal 2017, 2018 or 2019.

Manufacturing Process

High-performance alloys require a lengthier, more complex production process and are more difficult to manufacture than lower-performance alloys, such as stainless steel. The alloying elements in high-performance alloys must be highly refined during melting, and the manufacturing process must be tightly controlled to produce precise chemical properties. The resulting alloyed material is more difficult to process because, by design, it is more resistant to deformation. Consequently, high-performance alloys require that a greater force be applied when hot or cold working and are less susceptible to reduction or thinning when rolling or forging. This results in more cycles of rolling, annealing and pickling compared to a lower-performance alloy to achieve proper dimensions. Certain alloys may undergo forty or more distinct stages of melting, remelting, annealing, hot reduction, cold reduction, pickling and testing before they achieve the specifications required by a customer. This longer production cycle contributes to slower inventory turns. The Company manufactures its high-performance alloys in various forms, including sheet, coil, plate, billet/ingot, tubular, wire and other forms. The Company also performs value-added cutting services to supply certain customers with product cut to their specification.

At the Kokomo, Indiana facility, the manufacturing process begins with raw materials being combined, melted and refined in a precise manner to produce the chemical composition specified for each high-performance alloy. The Company's primary melt facility utilizes two different melting processes. The argon oxygen decarburization process utilizes gas controls to remove carbon and other undesirable elements, thereby allowing more tightly-controlled chemistries, which in turn produce more consistent properties in the high-performance alloys. The other primary melt method utilizes vacuum induction melting, which involves the melting of raw materials through electromagnetic induction while under vacuum conditions to produce the desired tightly-controlled chemistry. The control systems allow for statistical process control monitoring in real time to improve product quality. For most high-performance alloys, this molten material is cast into electrodes and additionally refined through electroslag remelting. The resulting ingots are then

forged or rolled to an intermediate shape and size depending upon the intended final product form. Intermediate shapes destined for flat products are then sent through a series of hot and cold rolling, annealing, pickling, leveling and shearing operations before being cut to final size.

The Company has a four-high Steckel rolling mill for use in hot rolling high-performance alloys, created specifically for that purpose. The four-high Steckel rolling mill was installed in 1982 and is one of the most powerful four-high Steckel rolling mills in the world. The mill is capable of generating approximately 12.0 million pounds of separating force and rolling a plate up to 72 inches wide. The mill includes integrated computer controls (with automatic gap control and programmed rolling schedules), two coiling Steckel furnaces and seven heating furnaces. Computer-controlled rolling schedules for each of the hundreds of combinations of product shapes and sizes the Company produces allow the mill to roll numerous widths and gauges to exact specifications without stoppages or changeovers.

The Company also operates a three-high hot rolling mill and a two-high hot rolling mill, each of which is capable of custom processing much smaller quantities of material than the four-high Steckel rolling mill. These mills provide the Company with significant flexibility in running smaller batches of varied products in response to customer requirements. The Company believes the flexibility provided by the three-high and two-high mills provides the Company with an advantage over its major competitors in obtaining smaller specialty orders.

The coil and sheet operation includes the ability to cold roll to tight tolerances, bright anneal, oxidize anneal and pickle, along with finishing processes that slit and cut to size. The Company recently made the capital investment to redesign, rebuild, and operate a cold mill that had been shuttered for a decade, resulting in a significant increase in capacity in that area. The Company has also invested, installed, and begun to operate a new processing line for more annealing capacity to support the added rolling capacity. This added annealing capacity gives the Company the ability to offer either bright annealed finish or anneal and pickled finish that will be determined by specifications, application or type of alloy.

The Company also produces bar and billet product through a series of bar mills and a forge press operation that is located at the Kokomo, Indiana facility.

The Arcadia, Louisiana facility uses feedstock produced at the Kokomo facility to fabricate welded and seamless alloy pipe and tubing and purchases extruded tube hollows to produce seamless titanium tubing. The manufacturing processes at Arcadia require cold pilger mills, weld mills, draw benches, annealing furnaces and pickling facilities. The Company recently completed a capital investment project that added capacity in the above-mentioned processes.

The Mountain Home, North Carolina facility primarily manufactures finished high-performance alloy wire. Finished wire products and powder are also warehoused at this facility.

Backlog

The Company defines backlog to include firm commitments from customers for delivery of product at established prices. There are orders in the backlog at any given time which include prices that are subject to adjustment based on changes in raw material costs, that can vary from approximately 30%-50% of the orders. Historically, approximately 75% of the Company's backlog orders have shipped within six months and approximately 90% have shipped within 12 months. The backlog figures do not typically reflect that portion of the Company's business conducted at its service and sales centers on a spot or "just-in-time" basis. For additional discussion of backlog, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations contained in this Annual Report on Form 10-K.

Consolidated Backlog at Fiscal Quarter End

	2015	2016	2017	2018	2019
			(in millions)		
1st quarter	$ 215.5	$ 204.7	$ 167.3	$ 205.7	$ 237.8
2nd quarter	220.4	193.5	170.8	212.3	253.0
3rd quarter	192.9	187.2	180.9	220.6	254.9
4th quarter	185.8	168.3	177.3	216.0	235.2

Raw Materials

Raw materials represented an estimated 45% of cost of sales in fiscal 2019. Nickel, a major component of many of the Company's products, accounted for approximately 30% of raw material costs, or approximately 14% of total cost of sales in fiscal 2019. Other raw materials include cobalt, chromium, molybdenum and tungsten. Melt materials consist of virgin raw material, purchased scrap and internally produced scrap.

The average nickel price per pound for cash buyers for the 30-day period ended on September 30, 2017, 2018 and 2019, as reported by the London Metals Exchange, was $5.10, $5.68 and $8.02 respectively. Prices for certain other raw materials which are significant in the manufacture of the Company's products, such as cobalt and chrome were lower in fiscal 2019 compared to fiscal 2018, while the price of molybdenum was higher in fiscal 2019 compared to fiscal 2018.

To the extent that the Company is unable to adjust to rapid fluctuations in the price of nickel, cobalt and other raw materials that it uses in large quantities, there may be a negative effect on gross profit margins. The Company enters into several different types of sales contracts with customers, some of which allow it to pass on increases in nickel or other raw material prices to customers. In other cases, the Company fixes the nickel or other raw materials component of its prices for a period of time through the life of a long-term contract. In yet other cases, the Company prices its products at the time of order, which allows it to establish prices with reference to known costs of raw material inventory, but which does not allow the Company to offset an unexpected rise in the price of raw materials.

The Company's business model includes mill manufacturing and global distribution facilities, which create a long working capital cycle and contribute to a long position as it relates to commodity price risk, especially for product sold out of distribution facility inventory at spot prices. In addition, the type of high-performance products the Company produces require multiple production steps to create the final yielded product that is sold to the customer. These refining steps generate high revert scrap pounds that are recycled back through the melt at metal value. This scrap cycle also contributes to a long position as it relates to commodity price risk.

Although alternative sources of supply are available, the Company currently purchases nickel through an exclusive arrangement with a single supplier to ensure consistent quality and supply. The Company purchases raw materials through various arrangements including fixed-term contracts and spot purchases, which involve a variety of pricing mechanisms. In cases where the Company prices its products at the time of order placement, the Company attempts to establish selling prices with reference to known costs of materials, thereby reducing the risk associated with changes in the cost of raw materials. However, to the extent that the price of nickel fluctuates rapidly, there may be a favorable or unfavorable effect on the Company's gross profit margins. The Company periodically purchases material forward with certain suppliers in connection with fixed price agreements with customers. In the event a customer fails to meet the expected volume levels or the consumption schedule deviates from the expected schedule, a rapid or prolonged decrease in the price of raw materials could adversely affect the Company's operating results.

The Company values inventory utilizing the first-in, first-out ("FIFO") inventory costing methodology. Under the FIFO inventory costing method, the cost of materials included in cost of sales may be different from the current market price at the time of sale of finished product due to the length of time from the acquisition of the raw material to the sale of the finished product. In a period of decreasing raw material costs, the FIFO inventory valuation method normally results in higher costs of sales as compared to last-in, first out method. Conversely, in a period of rising raw material costs, the FIFO inventory valuation method normally results in lower costs of sales.

Research and Technical Support

The Company's technology facilities are located at the Kokomo headquarters and consist of 19,000 square feet of offices and laboratories, as well as an additional 90,000 square feet of paved storage area. The Company has six fully equipped technology testing laboratories, including a mechanical and wear test lab, a metallographic lab, an electron microscopy lab, a corrosion lab, a high-temperature lab and a welding lab. These facilities also contain a reduced scale, fully equipped melt shop and process lab. As of September 30, 2019, the technology, engineering and technological testing staff consisted of 28 persons, 14 of whom have engineering or science degrees, including 8 with doctoral degrees, with the majority of degrees in the field of metallurgical engineering or materials science.

During fiscal 2019, research and development projects were focused on new alloy development, new product form development, supportive data generation and new alloy concept validation, relating to products for the aerospace, industrial gas turbine, chemical processing and oil and gas industries. In addition, significant projects were conducted to generate technical data in support of major market application opportunities in areas such as renewable energy, fuel cell systems, biotechnology (including toxic waste incineration and pharmaceutical manufacturing) and power generation.

Competition

The high-performance alloy market is a highly competitive market in which eight to ten major producers participate in various product forms. The Company's primary competitors in flat rolled products include Special Metals Corporation, a subsidiary of Precision Castparts Corp., Allegheny Technologies, Inc. and VDM Metals GmbH. The Company faces strong competition from domestic and foreign manufacturers of both high-performance alloys (similar to those the Company produces) and other competing metals. The Company may face additional competition in the future to the extent new materials are developed, such as plastics, ceramics or additive manufacturing that may be substituted for the Company's products. The Company also believes that it will face increased competition from non-U.S. entities in the next five to ten years, especially from competitors located in Eastern Europe and Asia. Recent tariff increases between the U.S. and China have adversely impacted the Company when competing with producers outside of the U.S. for sales into China. Additionally, in recent years, the Company's domestic business has been challenged by a strong U.S. dollar, which makes the goods of foreign competitors less expensive to import into the U.S and makes the Company's products more expensive to export outside the U.S.

In recent years, the Company experienced strong price competition from competitors who produce both stainless steel and high-performance alloys due primarily to weakness in the stainless steel market. Increased competition requires the Company to price its products competitively, which pressures the Company's gross profit margin and net income. The Company continues to respond to this competition by increasing emphasis on service centers, offering value-added services, improving its cost structure and striving to improve delivery times and reliability.

Employees

As of September 30, 2019, the Company employed 1,179 full-time employees worldwide. All eligible hourly employees at the Kokomo, Indiana and Arcadia, Louisiana plants (597 in the aggregate) are covered by two collective bargaining agreements.

On July 1, 2018, the Company entered into a new five-year collective bargaining agreement with the United Steelworkers of America, which covers eligible hourly employees at the Kokomo, Indiana plant. This agreement will expire in June 2023.

On December 21, 2015, the Company entered into a new collective bargaining agreement with the United Steelworkers of America which covers eligible hourly employees at the Company's Arcadia, Louisiana plant. This agreement will expire in December 2020.

Management believes that current relations with the union are satisfactory.

Environmental Matters

The Company has an enterprise level environmental policy, which focuses on fostering a safe workplace, offering high quality products while protecting the environment, compliance with law and health and safety management systems, utilization of all available resources to improve the quality, environmental, health and safety management systems and setting, implementing and reviewing quality, environmental, health and safety objectives and targets. This policy is communicated to contractors and vendors who provide services on site, and the Company periodically audits selected suppliers from an environmental compliance perspective. The Company maintains an environmental management system certified to ISO 14001 standards and, for its Kokomo operations, ISO 50001 standards. The Company maintains multiple policies designed to comply with the Occupational Safety and Health Administration standards and has OHSAS 18001 certification.

The Company's facilities and operations are subject to various foreign, federal, state and local laws and regulations relating to the protection of human health and the environment, including those governing the discharge of pollutants into the environment and the storage, handling, use, treatment and disposal of hazardous substances and wastes. In the U.S., such laws include, without limitation, the Occupational Safety and Health Act, the Clean Air Act, the Clean Water Act, the Toxic Substances Control Act and the Resource Conservation and Recovery Act. As environmental laws and regulations continue to evolve, it is likely the Company will be subject to increasingly stringent environmental standards in the future, particularly under air quality and water quality laws and standards related to climate change issues, such as reporting of greenhouse gas emissions. Violations of these laws and regulations can result in the imposition of substantial penalties and can require facility improvements. Expenses related to environmental compliance, which are primarily included in Cost of sales on the Consolidated Statements of Operations, were approximately $3.5 million for fiscal 2019 and are currently expected to be approximately $3.2 million for fiscal 2020.

The Company's facilities are subject to periodic inspection by various regulatory authorities, who from time to time have issued findings of violations of governing laws, regulations and permits. In the past five years, the Company has paid administrative fines, none of which have had a material effect on the Company's financial condition, for alleged violations relating to environmental matters, requirements relating to its Title V Air Permit and alleged violations of record keeping and notification requirements relating to industrial waste water discharge. Capital expenditures of approximately $0.9 million were made for pollution control improvements during fiscal 2019, with additional expenditures of approximately $1.6 million for similar improvements planned for fiscal 2020.

The Company has received permits from the Indiana Department of Environmental Management and the North Carolina Department of Environment and Natural Resources to close and provide post-closure environmental monitoring and care for certain areas of its Kokomo and Mountain Home, North Carolina facilities, respectively.

The Company is required among other things to monitor groundwater and to continue post-closure maintenance of the former disposal areas at each site. As a result, the Company is aware of elevated levels of certain contaminants in the groundwater, and additional testing and corrective action by the Company could be required. The Company is unable to estimate the costs of any further corrective action at these sites, if required. Accordingly, the Company cannot assure that the costs of any future corrective action at these or any other current or former sites would not have a material effect on the Company's financial condition, results of operations or liquidity.

The Company may also incur liability for alleged environmental damages associated with the off-site transportation and disposal of hazardous substances. Generators of hazardous substances which are transported to disposal sites where environmental problems are alleged to exist are subject to claims under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, or CERCLA, and state counterparts. CERCLA imposes strict, joint and several liabilities for investigatory and cleanup costs upon hazardous substance generators, site owners and operators and other potentially responsible parties. The Company is currently named as a potentially responsible party at one site. There can be no assurance that the Company will not be named as a potentially responsible party at other sites in the future or that the costs associated with those sites would not have a material adverse effect on the Company's financial condition, results of operations or liquidity.

On February 11, 2016, the Company voluntarily reported to the Louisiana Department of Environmental Quality a leak that it discovered in one of its chemical cleaning operations at its Arcadia, Louisiana facility. As a result of the discovery, the Company is working with that department to determine the extent of the issue and appropriate remediation.

Business Conduct and Ethics

The Company has a number of policies in place governing ethical conduct, including, without limitation, a Code of Business Conduct and Ethics, a Human Trafficking Policy (which includes a forced labor policy), an Anti-Corruption Policy, an Anti-Nepotism Policy, an Anti-Harassment Policy (which includes a discrimination policy), a Gift Policy and an Insider Trading and Tipping Policy. Employees must certify compliance with our Code of Business Conduct and Ethics annually, and regular training is provided to employees regarding these and other policies. The Company also has a Supplier Code of Conduct. In addition, the Company maintains a whistleblower hotline with access available on an anonymous basis online or by telephone. The Company also has a conflict minerals policy and reports annually the results of its conflict minerals program on Form SD.

Executive Officers of the Company

The following table sets forth certain information concerning the persons who served as executive officers of the Company as of September 30, 2019. Except as indicated in the following paragraphs, the principal occupations of these persons have not changed during the past five years.

Name	Age	Position with Haynes International, Inc.
Michael L. Shor	60	President and Chief Executive Officer
Daniel W. Maudlin	53	Vice President—Finance, Treasurer and Chief Financial Officer
Janice W. Gunst	47	Vice President—General Counsel & Corporate Secretary
Venkat R. Ishwar	67	Vice President—Marketing & Technology
Marlin C. Losch	59	Vice President—Sales & Distribution
Jean C. Neel	60	Vice President—Corporate Affairs
Scott R. Pinkham	52	Vice President—Tube & Wire
David L. Strobel	58	Vice President—Operations
Gregory W. Tipton	58	Vice President & Chief Information Officer
David S. Van Bibber	48	Controller and Chief Accounting Officer

Mr. Shor was elected President and Chief Executive Officer of the Company in September 2018. Prior to that, he served as interim President and Chief Executive Officer of the Company from May 2018 through September 2018 and Chairman of the Board of the Company from February 2017 through September 2018. Mr. Shor has been a director since 2012.

Mr. Maudlin has served as the Vice President-Finance and Chief Financial Officer of the Company since December 2012.

Ms. Gunst has served as Vice President—General Counsel and Corporate Secretary of the Company since August 2011.

Dr. Ishwar has served as Vice President—Marketing & Technology of the Company since January 2010.

Mr. Losch has served as Vice President—Sales & Distribution of the Company since January 2010.

Ms. Neel has served as Vice President—Corporate Affairs of the Company since April 2000.

Mr. Pinkham has served as Vice President—Tube and Wire Products of the Company since September 2018. Prior to that, he served as Vice President—Manufacturing of the Company since March 2008.

Mr. Strobel has served as Vice President—Operations of the Company since September 2018. Prior to that, he was a consultant to manufacturing companies through his company Silver Eagle Consulting. Mr. Strobel was also Senior Vice President and Chief Technology Officer of Carpenter Technology Corporation from June 2015 to August 2016 and Senior Vice President – Operations of Carpenter Technology from September 2011 to June 2015.

Mr. Tipton has served as Vice President and Chief Information Officer of the Company since January 2019. Prior to that, he served as Chief Information Officer Americas for Dometic from August 2016 to December 2018 and as Director of Information Technology for Dometic from December 2012 to October 2016.

Mr. Van Bibber has served as Controller and Chief Accounting Officer of the Company since December 2012.

Item 1A. Risk Factors

The following risk factors should be considered carefully in addition to the other information contained in this filing.

The risks and uncertainties described below are not the only ones we face and represent risks that our management believes are material to our Company and our business. Additional risks and uncertainties not presently known to us or that we currently deem not material may also harm our business. If any of the following risks actually occur, our business, financial condition or results of operations could be harmed.

Risks Related to Our Business

Our revenues may fluctuate widely based upon changes in demand for our customers' products.

Demand for our products is dependent upon and derived from the level of demand for the machinery, parts and equipment produced by our customers, which are principally manufacturers and fabricators of machinery, parts and equipment for highly specialized applications. Historically, certain of the markets in which we compete have experienced unpredictable, wide demand fluctuations. Because of the comparatively high level of fixed costs associated with our manufacturing processes, significant declines in those markets have had a disproportionately adverse impact on our operating results.

Since we became an independent company, we have, in several instances, experienced substantial year-to-year declines in net revenues, primarily as a result of decreases in demand in the industries to which our products are sold. In fiscal 2002, 2003, 2009, 2010, 2013 and 2016, our net revenues, when compared to the immediately preceding year, declined by approximately 10.3%, 21.2%, 31.1%, 13.0%, 16.7% and 16.6%, respectively. We may experience similar fluctuations in our net revenues in the future. Additionally, demand is likely to continue to be subject to substantial year-to-year fluctuations as a consequence of industry cyclicality, as well as other factors such as global economic uncertainty, and such fluctuations may have a material adverse effect on our business.

Profitability in the high-performance alloy industry is highly sensitive to changes in sales volumes.

The high-performance alloy industry is characterized by high capital investment and high fixed costs. The cost of raw materials is the primary variable cost in the manufacture of our high-performance alloys and, in fiscal 2019, represented approximately 45% of our total cost of sales. Other manufacturing costs, such as labor, energy, maintenance and supplies, often thought of as variable, have a significant fixed element. Profitability is, therefore, very sensitive to changes in volume, and relatively small changes in volume can result in significant variations in earnings. Our ability to effectively utilize our manufacturing assets depends greatly upon continuing demand in our end markets, successfully increasing our market share and continued acceptance of our new products into the marketplace. Any failure to effectively utilize our manufacturing assets may negatively impact our business.

We are subject to risks associated with global trade matters

We are subject to macroeconomic downturns in the United States and abroad that may affect the general economic climate, our performance and the demand of our customers. Previous turmoil in the global economy has had, and future turmoil may have, an adverse impact on our business and our financial condition. In addition to the impact that the global financial crisis previously had, we may face significant challenges if conditions in the global economy worsen. Further, any global trade wars or similar economic turmoil, including new or existing tariffs, could adversely affect our business. For example, the U.S. and China have imposed tariffs on large amounts of products imported into each of the countries from one another. Moreover, these new tariffs, or other changes in trade policy, have resulted in, and may continue to trigger, retaliatory actions on the part of these countries and potentially other countries in the future. Talks between the two countries are ongoing, but the outcome is highly uncertain and could affect our ability to buy raw materials from China and sell products into the Chinese market. A "trade war" or other governmental action related to tariffs or international trade agreements or policies has the potential to adversely impact demand for our products, our costs, customers, suppliers and/or the U.S. economy or certain sections thereof, and, thus, adversely affect our business. Our competitors outside of the United States may not be subject to these tariffs or other measures, and therefore, could have a significant competitive advantage over us in that respect. In addition, the effect of the exit of the United Kingdom from the European Union is currently unknown and could adversely affect our business.

In addition, we are subject to various domestic and international risks and uncertainties, including changing social conditions and uncertainties relating to the current and future political climate. Changes in governmental policies (particularly those that would limit or reduce defense spending) could have an adverse effect on our financial condition and results of operations and may reduce our customers' demand for our products and/or depress pricing of those products used in the defense industry or which have other military applications, resulting in a material adverse impact on our business, prospects, results of operations, revenues and cash flows. Furthermore, any actual armed hostilities and any future terrorist attacks in the U.S. or abroad could also have an adverse impact on the U.S. economy, global financial markets and our business. The effects may include, among other things, a decrease in demand in the aerospace industry due to reduced air travel, as well as reduced demand in the other industries we serve. Depending upon the severity, scope and duration of these effects, the impact on our business could be material.

We operate in cyclical markets.

A significant portion of our revenues are derived from the highly cyclical aerospace, power generation and chemical processing markets. Our sales to the aerospace industry constituted 52.7% of our total sales in fiscal 2019. Our chemical processing and industrial gas turbine sales constituted 18.3% and 12.1%, respectively, of our total sales in fiscal 2019.

The commercial aerospace industry is historically driven by demand from commercial airlines for new aircraft. The U.S. and international commercial aviation industries continue to face challenges arising from the global economic climate, competitive pressures and fuel costs. Demand for commercial aircraft is influenced by industry profitability, trends in airline passenger traffic, the state of U.S. and world economies, the ability of aircraft purchasers to obtain required financing and numerous other factors, including the effects of terrorism and health and safety concerns. The military aerospace cycle is highly dependent on U.S. and foreign government funding which is driven by, among other factors, the effects of terrorism, a changing global political environment, U.S. foreign policy, the retirement of older aircraft and technological improvements to new engines that increase reliability. Accordingly, the timing, duration and magnitude of cyclical upturns and downturns cannot be forecasted with certainty. Downturns or reductions in demand for our products sold into the aerospace market could have a material adverse effect on our business.

The industrial gas turbine market is also cyclical in nature. Demand for power generation products is global and is affected by the state of the U.S. and world economies, the availability of financing to power generation project sponsors, the increase in renewable energy and the political environments of numerous countries. The availability of fuels and related prices also have a large impact on demand. Demand for our products in the industrial gas turbine industry may not return to peak demand levels, which has materially affected and may continue to have a material adverse effect on our business.

We also sell products into the chemical processing industry, which is also cyclical in nature. Customer demand for our products in this market may fluctuate widely depending on U.S. and world economic conditions, the availability of financing, and the general economic strength of the end use customers in this market. Cyclical declines or sustained weakness in this market could have a material adverse effect on our business.

Our business depends, in part, on the success of commercial aircraft programs and our ability to accelerate production levels to timely match order increases in new or existing programs.

The success of our business will depend, in part, on the success of new and existing commercial aircraft programs. We are currently under contract to supply components for a number of commercial aircraft programs. The programs are scheduled to have production increases over the next several years. Our failure to achieve production levels to timely match any related orders could have a material adverse effect on our business. Cancellation, reductions or delays of orders or contracts by our customers or in any of these programs, or regulatory or certification-related groundings or other delays or cancellations to new or existing aircraft programs or to the scheduled production increases for any aircraft programs, could also have a material adverse effect on our business. For example, The Boeing Company has grounded its Boeing 737 MAX passenger airliners worldwide as it works to resolve problems with that aircraft. The effect of any future action on our business is currently unknown, but any resulting change in production schedules could have a material adverse effect on our business.

The competitive nature of our business results in pressure for price concessions to our customers and increased pressure to reduce our costs.

We are subject to substantial competition in all of the markets we serve, and we expect this competition to continue. As a result, we have made significant price concessions to our customers in the aerospace, chemical processing and power generation markets from time to time, and we expect customer pressure for further price concessions to continue. Maintenance of our market share will depend, in part, on our ability to sustain a cost structure that enables us to be cost-competitive. If we are unable to adjust our costs relative to our pricing, our profitability will suffer. Our effectiveness in managing our cost structure and pricing for the value provided will be a key determinant of future profitability and competitiveness.

Reductions in government expenditures or changes in spending priorities could adversely affect our military aerospace business.

The budget for the U.S. Department of Defense may be reduced from current levels. In addition to debt reduction efforts already authorized, it is possible that the U.S. government could reduce or further delay its spending on, or reprioritize its spending away from, the military aerospace industry. Budgetary cuts could negatively affect our business.

Aerospace demand is primarily dependent on two manufacturers.

A significant portion of our aerospace products are sold to fabricators and are ultimately used in the production of new commercial aircraft. There are only two primary manufacturers of large commercial aircraft in the world, The Boeing Company and Airbus. A significant portion of our aerospace sales are dependent on the number of new aircraft built by these two manufacturers, which is in turn dependent on a number of factors over which we have little or no control. Those factors include demand for new aircraft from around the globe, success of new commercial and military aircraft programs and factors that impact manufacturing capabilities, such as the availability of raw materials and manufactured components, changes in highly exacting performance requirements and product specifications, U.S. and world economic conditions, changes in the regulatory environment and labor relations between the aircraft manufacturers and their work forces. A significant interruption or slowdown in the number of new aircraft built by the aircraft manufacturers could have a material adverse effect on our business. As noted above, future actions relating to the worldwide grounding of the Boeing 737 MAX passenger airliner by The Boeing Company could have a material adverse effect on our business.

Our operations are dependent on production levels at our Kokomo facility.

Our principal assets are located at our primary integrated production facility in Kokomo, Indiana and at our production facilities in Arcadia, Louisiana and in Mountain Home, North Carolina. The Arcadia and Mountain Home plants as well as all of the domestic and foreign service centers rely to a significant extent upon feedstock produced at the Kokomo facility. Any production failures, shutdowns or other significant problems at the Kokomo facility could have a material adverse effect on our financial condition and results of operations. We maintain property damage insurance to provide for reconstruction of damaged equipment, as well as business interruption insurance to mitigate losses resulting from any production shutdown caused by an insured loss. Although we believe that our insurance is adequate to cover any such losses, that may not be the case. Additionally, our insurance policies include deductibles that would require us to incur losses that could have an adverse effect on our financial results in the event a significant interruption occurs. One or more significant uninsured losses at our Kokomo facility may have a material adverse effect on our business.

In addition, from time to time we schedule planned outages on the equipment at our Kokomo facility for maintenance and upgrades. These projects are subject to a variety of risks and uncertainties, including a variety of market, operational and labor-related factors, many of which may be beyond our control. Should a planned shut down on a significant piece of equipment last substantially longer than originally planned, there could be a material adverse effect on our business.

Our production may be interrupted due to equipment failures, lack of critical spares, or other events affecting our factories.

Our manufacturing processes depend on certain sophisticated and high-value equipment, some of which has been in operation for a long period of time for which there may be only limited or no production alternatives. Failures of this equipment, or the lack of critical spares to timely repair this equipment, could result in production delays, revenue loss and significant repair costs. In addition, our factories rely on the availability of electrical power and natural gas, transportation for raw materials and finished products and employee access to our workplace that are subject to interruption in the event of severe weather conditions or other natural or manmade events. While we maintain backup resources to the extent practicable, a severe or prolonged equipment outage, failure or other interruptive event affecting areas where we have significant manufacturing operations may result in loss of manufacturing or shipping days, which could have a material adverse effect on our business. Natural or manmade events that interrupt significant manufacturing operations of our customers also could have a material adverse effect on our business.

Issues related to our agreements with Titanium Metals Corporation could require us to make significant payments and could disrupt our operations and materially affect our financial results.

We entered into a Conversion Services Agreement and an Access and Security Agreement with Titanium Metals Corporation (TIMET) in November 2006 that provide for the performance of certain titanium conversion services through November 2026. In 2012, TIMET was acquired by Precision Castparts Corp. which owns Special Metals Corporation, a direct competitor of ours. Events of default under the Conversion Services Agreement include (a) a change in control in which the successor does not assume the agreement, (b) a violation by us of certain non-compete obligations relating to the manufacture and conversion of titanium and (c) failure to meet agreed-upon delivery and quality requirements. If an event of default under the Conversion Services Agreement occurs, TIMET could require us to repay the unearned portion of the $50.0 million fee paid to us by TIMET when the agreement was signed, plus liquidated damages of $25.0 million. Our obligations to pay these amounts to TIMET are secured by a security interest in our four-high Steckel rolling mill, through which we process a substantial amount of our products. In addition, the Access and Security Agreement with TIMET includes, among other terms, an access right that would allow TIMET to use certain of our operating assets, including the four-high mill, to perform titanium conversion services in the event of our bankruptcy or the acceleration of our indebtedness. Exercise by TIMET of its rights under its security interest following a default and non-payment of the amounts provided in the Conversion Services Agreement or exercise of the access rights under the Access and Security Agreement could cause significant disruption in our Kokomo operations, which would have a material adverse effect on our business.

In addition, the Conversion Services Agreement contains a requirement that we reserve a significant amount of capacity exclusively for TIMET. That agreement does not contain a volume commitment on TIMET's part. The agreement also severely limits our ability to manufacture titanium for any customer other than TIMET. In recent years, our levels of business with TIMET have fluctuated.

During periods of lower demand in other alloy markets, some of our competitors may use their available capacity to produce higher volumes of high-performance alloys, which leads to increased competition in the high-performance alloy market.

We have experienced increased competition from competitors who produce both stainless steel and high-performance alloys. Due to continued under-utilization of capacity in the stainless steel market, we believe these competitors increased their production levels and sales activity in high-performance alloys to keep capacity in their mills as full as possible, while offering very competitive prices and delivery times. If the stainless market does not improve, continued competition from stainless steel producers could negatively impact our average selling price and reduce our gross profit margin.

In addition, as a result of the competition in our markets, we have made significant price concessions to our customers from time to time, and we expect customer pressure for further price concessions to continue. Maintenance of our market share will depend, in part, on our ability to sustain a cost structure that enables us to be cost-competitive. If we are unable to adjust our costs relative to our pricing, our profitability will suffer. Our effectiveness in managing our cost structure will be a key determinant of future profitability and competitiveness.

Periods of reduced demand and excess supply as well as the availability of substitute lower-cost materials can adversely affect our ability to price and sell our products at the profitability levels we require to be successful.

Additional worldwide capacity and reduced demand for our products could significantly impact future worldwide pricing, which would adversely impact our business. In recent years, several of our competitors have added capacity that represents direct competition with the Company's business. In addition, continued availability of lower-cost, substitute materials may also cause significant fluctuations in future results as our customers opt for a lower-cost alternative.

We change prices on our products as we deem necessary. In addition to the above general competitive impact, other market conditions and various economic factors beyond our control can adversely affect the timing of our pricing actions. The effects of any pricing actions may be delayed due to long manufacturing lead times or the terms of existing contracts. There is no guarantee that the pricing actions we implement will be effective in maintaining our profit margin levels.

Rapid fluctuations in the prices of nickel, cobalt and other raw materials may materially adversely affect our business.

To the extent that we are unable to adjust to rapid fluctuations in the price of nickel, cobalt and other raw materials that we use in large quantities, there may be a negative effect on our gross profit margins. In fiscal 2019, nickel, a major component of many of our products, accounted for approximately 30% of our raw material costs, or approximately 14% of our total cost of sales. We enter into several different types of sales contracts with our customers, some of which allow us to pass on increases in nickel or other raw material prices to our customers. In other cases, we fix the nickel or other raw materials component of our prices for a period of time through the life of a long-term contract. In yet other cases, we price our products at the time of order, which allows us to establish prices with reference to known costs of our raw material inventory, but which does not allow us to offset an unexpected rise in the price of raw materials. We may not be able to successfully offset rapid increases in the price of nickel, cobalt or other raw materials in the future. In the event that raw material price increases occur that we are unable to pass on to our customers, our cash flows or results of operations could be materially adversely affected.

Our business model includes mill manufacturing and global distribution facilities, which create a long working capital cycle and contribute to a long position as it relates to commodity price risk, especially for product sold out of distribution facility inventory at spot prices. In addition, the type of high-performance products we produce require multiple production steps to create the final yielded product that is sold to the customer. These refining steps generate

high revert scrap pounds that are recycled back through the melt at metal value. This scrap cycle also contributes to a long position as it relates to commodity price risk.

Our results of operations may also be negatively impacted if both customer demand and raw material prices rapidly fall at the same time. Because we value our inventory utilizing the first-in, first-out inventory costing methodology, a rapid decrease in raw material costs has a negative effect on our operating results. In those circumstances, we recognize higher material cost in cost of sales relative to lower raw material market prices that drive the sales price.

In addition, we periodically enter into forward purchase agreements for our raw material supply. If we enter into a forward purchase agreement which is not matched to one or more customer contracts with fixed raw material prices, a rapid or prolonged decrease in the price of significant raw materials could adversely impact our business.

Our business is dependent on a number of raw materials that are subject to volatility in price and availability.

We use a number of raw materials in our products which are found in only a few parts of the world and are available from a limited number of suppliers. The availability and costs of these materials may be influenced by private or government cartels, changes in world politics, additional regulation, labor relations between the materials producers and their work force, unstable governments in exporting nations, inflation, general economic conditions and export quotas imposed by governments in nations with rare earth element supplies. The ability of key material suppliers to meet quality and delivery requirements or to provide materials on price and other terms acceptable to us is beyond our control and can also impact our ability to meet commitments to customers. Future shortages or price fluctuations in raw materials could result in decreased sales as well as margins, or otherwise adversely affect our business. The enactment of new or increased import duties on raw materials imported by us could also increase the costs to us of obtaining the raw materials and might adversely affect our business.

If suppliers increase the price of critical raw materials or are unable to meet our demands, we may not have alternative sources of supply. In some cases, we have entered into exclusive supply agreements with respect to raw materials, which could adversely affect our business if the exclusive supplier cannot meet quality and delivery requirements to provide materials on price and other terms acceptable to us. In addition, to the extent that we have quoted prices to customers and accepted customer orders for products prior to purchasing necessary raw materials, or have existing fixed-price contracts, we may be unable to raise the price of products to cover all or part of the increased cost of the raw materials.

The manufacturing of the majority of our products is a complex process and requires long lead times. We may experience delays or shortages in the supply of raw materials. If we are unable to obtain adequate and timely deliveries of required raw materials, we may be unable to timely manufacture sufficient quantities of products. This could cause us to lose sales, incur additional costs, delay new product introductions or suffer harm to our reputation.

We value our inventory using the FIFO method, which could put pressure on our margins.

The cost of our inventories is determined using the first-in, first-out (FIFO) method. Under the FIFO inventory costing method, the cost of materials included in cost of sales may be different than the current market price at the time of sale of finished product due to the length of time from the acquisition of raw material to the sale of the finished product. In a period of decreasing raw material costs, the FIFO inventory valuation normally results in higher costs of sales as compared to the last-in, first-out method. This could result in compression of the gross margin on our product sales.

Changes in tax rules and regulations, or interpretations thereof, may adversely affect our effective tax rates.

We are a U.S. based company with customers and suppliers in foreign countries. We import various raw materials used in our production processes, and we export goods to our foreign customers. The United States, the European Commission, countries in the EU, including the United Kingdom, and other countries where we do business may change relevant tax, border tax, accounting and other laws, regulations and interpretations, that may unfavorably impact our effective tax rate or result in other costs to us. In addition, the Company has deferred tax assets on its balance sheet which could be subjected to unfavorable impacts if tax rates are reduced, such as those that occurred at the end of calendar 2017.

Failure to successfully develop, commercialize, market and sell new applications and new products could adversely affect our business.

We believe that our proprietary alloys, technology, applications development, technical services and metallurgical manufacturing expertise provide us with a competitive advantage over other high-performance alloy producers. Our ability to maintain this competitive advantage depends on our ability to continue to offer products and technical services that have equal or better performance characteristics than competing products at competitive prices. Our future growth will depend, in part, on our ability to address the increasingly demanding needs of our customers by inventing new alloys, enhancing the properties of our existing alloys, timely developing new applications for our existing and new alloys, and timely developing, commercializing, marketing and selling new alloys and products. If we are not successful in these efforts, or if our new alloys/products and product enhancements do not adequately meet the requirements of the marketplace and achieve market acceptance, our business could be negatively affected.

We are subject to risks relating to our cybersecurity measures and to misappropriation of information generally.

We have put in place a number of systems, processes and practices designed to protect against intentional or unintentional misappropriation or corruption of our systems and information or disruption of our operations. These include, for example, encryption of network access. Despite such efforts, we are subject to breaches of security systems which may result in unauthorized access, misappropriation, corruption or disruption of the information we are trying to protect, in which case we could suffer material harm. Access to our proprietary information regarding new alloy formulations would allow our competitors to use that information in the development of competing products. Current employees have, and former employees may have, access to a significant amount of information regarding our operations which could be disclosed to our competitors or otherwise used to harm us. Any misappropriation or corruption of our systems and information or disruption of our operations could have a material adverse effect on our business.

Our information technology systems could be subject to attack.

Our information technology systems could be subject to sabotage by employees or third parties, including attacks in which the systems could be shut down with a demand for payment of “ransom”, which could slow or stop production or otherwise adversely affect our business. Any such attack could disrupt our operations and could have a material adverse effect on our business.

An interruption in energy services may cause manufacturing curtailments or shutdowns.

We rely upon third parties for our supply of energy resources consumed in the manufacture of our products. The prices for and availability of electricity, natural gas, oil and other energy resources are subject to volatile market conditions. These market conditions often are affected by political and economic factors beyond our control. Disruptions in the supply of energy resources could temporarily impair our ability to manufacture products for customers. Further, increases in energy costs, which are outside of our control, or changes in costs relative to energy costs paid by competitors, has and may continue to adversely affect our business. To the extent that these uncertainties cause suppliers and customers to be more cost sensitive, increased energy prices may have an adverse effect on our business.

Our operations could result in injury to our workers or third parties.

Our manufacturing operations could result in harm to our workers or third parties in our facilities. Our manufacturing processes involve the use of heavy equipment, vehicles and chemicals, among other matters, that could lead to harm, injury, death or illness. In addition to harm to individuals, any such occurrences could result in reputational harm, adverse effects on employee morale, litigation and other costs, any of which could materially and adversely affect our business.

We may be adversely impacted by costs related to environmental, health and safety laws, regulations, and other liabilities.

We are subject to various foreign, federal, state and local environmental, health and safety laws and regulations, including those governing the discharge of pollutants into the environment, the storage, handling, use, treatment and disposal of hazardous substances and wastes and the health and safety of our employees. Under these laws and regulations, we may be held liable for all costs arising out of any release of hazardous substances on, under or from any of our current or former properties or any off-site location to which we sent or arranged to be sent wastes for disposal or treatment, and such costs may be material. We could also be held liable for any and all consequences arising out of human exposure to such substances or other hazardous substances that may be attributable to our products or other environmental damage. In addition, some of these laws and regulations require our facilities to operate under permits that are subject to renewal or modification. These laws, regulations and permits can require expensive pollution control equipment or operational changes to limit actual or potential impacts to the environment. Violations of these laws, regulations or permits can also result in the imposition of substantial penalties, permit revocations and/or facility shutdowns.

We have received permits from the environmental regulatory authorities in Indiana and North Carolina to close and to provide post-closure monitoring and care for certain areas of our Kokomo and Mountain Home facilities that were used for the storage and disposal of wastes, some of which are classified as hazardous under applicable regulations. We are required to monitor groundwater and to continue post-closure maintenance of the former disposal areas at each site. As a result, we are aware of elevated levels of certain contaminants in the groundwater and additional corrective action could be required. Additionally, it is possible that we could be required to undertake other corrective action for any other solid waste management unit or other conditions existing or determined to exist at our facilities. We are unable to estimate the costs of any further corrective action, if required. However, the costs of future corrective action at these or any other current or former sites could have a material adverse effect on our business.

We may also incur liability for alleged environmental damages associated with the off-site transportation and disposal of hazardous substances. Our operations generate hazardous substances, many of which we accumulate at our facilities for subsequent transportation and disposal or recycling by third parties off-site. Generators of hazardous substances which are transported to disposal sites where environmental problems are alleged to exist are subject to liability under CERCLA and state counterparts. In addition, we may have generated hazardous substances disposed of at sites which are subject to CERCLA or equivalent state law remedial action. We have been named as a potentially responsible party at one site. CERCLA imposes strict, joint and several liabilities for investigatory and cleanup costs upon hazardous substance generators, site owners and operators and other potentially responsible parties regardless of fault. If we are named as a potentially responsible party at other sites in the future, the costs associated with those future sites could have a material adverse effect on our business.

Environmental laws are complex, change frequently and have tended to become increasingly stringent over time. While we have budgeted for future capital and operating expenditures to comply with environmental laws, changes in any environmental law may increase our costs of compliance and liabilities arising from any past or future releases of, or exposure to, hazardous substances and may materially adversely affect our business. See "Business—Environmental Matters."

Increased regulation of greenhouse gases or other environmental issues could have a material adverse impact on our results of operations, financial condition and cash flows.

Regulation and forms of legislation aimed at regulating environmental issues, including greenhouse gas emissions, have been and will likely continue to be considered globally. As a high-performance alloy manufacturer, we may be affected, both directly and indirectly, if environmental legislation requires the Company or its customers, suppliers or partners to adjust manufacturing or other relevant processes, or to otherwise incur costs of compliance, which could have a material adverse impact on our business.

Government regulation is increasing and if we fail to comply with such increased regulation, we could be subject to fines, penalties and expenditures.

The United States Congress has adopted several significant pieces of legislation, such as the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, that affect our operation as well as those of other publicly traded companies. In addition, regulations relating to data protection and privacy law have become increasingly stringent. We may be subject to significant fines and penalties if we fail to comply with these laws or their implementing regulations, and the increasingly stringent regulations could require us to make additional unforeseen expenditures. Any such fines, penalties or expenditures could have a material adverse effect on our business.

Regulations related to conflict minerals could adversely impact our business.

The Dodd-Frank Act and related SEC rules require disclosure of the use of tin, tantalum, tungsten and gold, known as conflict minerals, in products manufactured by public companies. These rules require a reasonable country of origin inquiry to determine whether such minerals originated from the Democratic Republic of Congo (the "DRC") or an adjoining country and, under some circumstances, whether such minerals helped finance the armed conflict in the DRC. Conflict minerals disclosures are required to be filed annually. There are costs associated with complying with these disclosure requirements, including costs to determine the origin of conflict minerals used in our products. Also, we may face disqualification as a supplier for customers and reputational challenges if the procedures we implement do not satisfy all concerned stakeholders. In addition, these rules could adversely affect the sourcing, supply and pricing of materials used in our products.

Our business is affected by federal rules, regulations and orders applicable to some of our customers who are government contractors.

A number of our products are manufactured and sold to customers who are parties to U.S. government contracts or subcontracts. Consequently, we are indirectly subject to various federal rules, regulations and orders applicable to government contractors. From time to time, we are also subject to government inquiries and investigations of our business practices due to our participation in government programs. These inquiries and investigations are costly and consuming of internal resources. Violations of applicable government rules and regulations could result in civil liability, in cancellation or suspension of existing contracts or in ineligibility for future contracts or subcontracts funded in whole or in part with federal funds, any of which could have a material adverse effect on our business.

We could be required to make additional contributions to our defined benefit pension plans or recognize higher related expense in our statement of operations as a result of adverse changes in interest rates and the capital markets.

Our estimates of liabilities and expenses for pension benefits incorporate significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets and several assumptions relating to the employee workforce (salary increases, retirement age and mortality). We currently expect that we will be required to make future minimum contributions to our defined benefit pension plans. Many domestic and international competitors do not provide defined benefit plans and/or retiree health plans (which we do provide), and those competitors may have a resulting cost advantage. A decline in the value of plan investments in the future, an increase in costs or liabilities, including those caused by the lowering of the rate used to discount future payouts, or unfavorable changes in laws or regulations that govern pension plan funding could materially change the timing and amount of required pension funding or the amount of related expense recognized in our statement of operations. A requirement to fund any deficit created in the future could have a material adverse effect on our business.

If we are unable to recruit, hire and retain skilled and experienced personnel, our ability to effectively manage and expand our business will be harmed.

Our success largely depends on the skills, experience and efforts of our officers and other key employees who may terminate their employment at any time. The loss of any of our senior management team could harm our business. The announcement of the loss of one of our key employees could negatively affect our stock price. Our ability to retain our skilled workforce and our success in attracting and hiring new skilled employees will be a critical factor in determining

whether we will be successful in the future. We face challenges in hiring, training, managing and retaining employees in certain areas including metallurgical researchers, equipment technicians and sales and marketing staff. If we are unable to recruit, hire and retain skilled employees, our new product and alloy development and commercialization could be delayed and our marketing and sales efforts could be hindered, which would adversely impact our business.

The risks inherent in our international operations may adversely impact our revenues, results of operations and financial condition.

We anticipate that we will continue to derive a significant portion of our revenues from operations in international markets. As we continue to expand internationally, we will need to hire, train and retain qualified personnel for our direct sales efforts and retain distributors and train their personnel in countries where language, cultural or regulatory impediments may exist. Distributors, regulators or government agencies may not continue to accept our products, services and business practices. In addition, we purchase raw materials on the international market. The sale and shipment of our products and services across international borders, as well as the purchase of raw materials from international sources, subject us to the trade regulations of various jurisdictions, including tariffs and other possible punitive measures. Compliance with such regulations is costly. Any failure to comply with applicable legal and regulatory obligations could impact us in a variety of ways that include, but are not limited to, significant criminal, civil and administrative penalties, including imprisonment of individuals, fines and penalties, denial of export privileges, seizure of shipments and restrictions on certain business activities. Failure to comply with applicable legal and regulatory obligations could result in the disruption of our shipping, sales and service activities. Our international sales operations expose us and our representatives, agents and distributors to risks inherent in operating in foreign jurisdictions any one or more of which may adversely affect our business, including:

- our ability to obtain, and the costs associated with obtaining, U.S. export licenses and other required export or import licenses or approvals;
- changes in duties and tariffs, quotas, taxes, trade restrictions, license obligations and other non-tariff barriers to trade;
- policy changes affecting the market for our products;
- burdens of complying with the Foreign Corrupt Practices Act and a wide variety of foreign laws and regulations;
- business practices or laws favoring local companies;
- fluctuations in foreign currencies;
- restrictive trade policies of foreign governments;
- longer payment cycles and difficulties collecting receivables through foreign legal systems;
- difficulties in enforcing or defending agreements and intellectual property rights; and
- foreign political or economic conditions.

Any material decrease in our international revenues or inability to expand our international operations as a result of these or other factors would adversely impact our business.

Export sales could present risks to our business.

Export sales account for a significant percentage of our revenues, and we believe this will continue to be the case in the future. Risks associated with export sales include: political and economic instability, including weak conditions in the world's economies; accounts receivable collection; export controls; changes in legal and regulatory requirements; policy changes affecting the markets for our products; changes in tax laws and tariffs; trade duties; the effect of the United Kingdom's exit from the European Union and exchange rate fluctuations (which may affect sales to international

customers and the value of profits earned on export sales when converted into dollars). Any of these factors could materially adversely affect our business.

Although collective bargaining agreements are in place for certain employees, union or labor disputes could still disrupt the manufacturing process.

Our operations rely heavily on our skilled employees. Any labor shortage, disruption or stoppage caused by any deterioration in employee relations or difficulties in the renegotiation of labor contracts could reduce our operating margins and income. Approximately 55% percent of our U.S. employees are affiliated with unions or covered by collective bargaining agreements. The Company entered into two collective bargaining agreements with the United Steel Workers of America which cover eligible hourly employees at the Company’s Arcadia, Louisiana and Kokomo, Indiana facilities. Failure to negotiate new labor agreements when required could result in a work stoppage at one or more of our facilities. In addition, other Company facilities could be subject to union organizing activity. Although we believe that our labor relations have generally been satisfactory, it is possible that we could become subject to additional work rules imposed by agreements with labor unions, or that work stoppages or other labor disturbances could occur in the future, any of which could reduce our operating margins and income and place us at a disadvantage relative to non-union competitors.

Product liability and product warranty risks could adversely affect our operating results.

We produce many critical products for commercial and military aircraft, industrial gas turbines, chemical processing plants and pharmaceutical production facilities. Failure of our products could give rise to substantial product liability and other damage claims as well as reputational harm. We maintain insurance addressing this risk, but there can be no assurance that the insurance coverage will be adequate or will continue to be available on terms acceptable to us.

Additionally, we manufacture our products to strict contractually-established specifications using complex manufacturing processes. If we fail to meet the contractual requirements for a product, we may be subject to warranty costs to repair or replace the product itself and additional costs related to customers’ damages or the investigation and inspection of non-complying products. These costs are generally not insured.

Our business subjects us to risk of litigation claims, including those that might not be covered by insurance.

Litigation claims may relate to the conduct of our business, including claims pertaining to product liability, commercial disputes, employment actions, employee benefits, compliance with domestic and federal laws and personal injury. Due to the uncertainties of litigation, we might not prevail on claims made against us in the lawsuits that we currently face, and additional claims may be made against us in the future. The outcome of litigation cannot be predicted with certainty, and some of these lawsuits, claims or proceedings may be determined adversely to us. The resolution in any reporting period of one or more of these matters could have a material adverse effect on our business, particularly in the event that adverse outcomes are not covered by insurance.

Our insurance may not provide enough coverage or may not be available on terms that are acceptable to us.

We maintain various forms of insurance, including insurance covering claims related to our properties and risks associated with our operations. Our existing property and liability insurance coverages contain exclusions and limitations on coverage. From time-to-time, in connection with renewals of insurance, we have experienced additional exclusions and limitations on coverage, larger self-insured retentions and deductibles and significantly higher premiums. We were required to obtain new property insurance coverage for fiscal 2020 as a result of adjustments in the business strategy of our previous property insurance carrier. This resulted in lower levels of coverage, a higher deductible and higher premiums. As a result, in the future, our insurance coverage may not cover claims to the extent that it has in the past and the costs that we incur to procure insurance may increase significantly, either of which could have an adverse effect on our business. Furthermore, the insurance industry, or our carriers specifically, may continue to alter their business models in manners that are unfavorable to us, resulting in insufficient or more costly coverage, which could adversely affect our business.

We depend on our Information Technology (IT) infrastructure to support the current and future information requirements of our operations which exposes us to risk.

Management relies on IT infrastructure, including hardware, network, software, people and processes, to provide useful information to support assessments and conclusions about operating performance. Our inability to produce relevant or reliable measures of operating performance in an efficient, cost-effective and well-controlled fashion may have significant negative impacts on our business.

We are in the process of upgrading several components of our infrastructure from software that will no longer be supported by the manufacturer at the end of calendar 2019 to versions that will be supported in the future. If we fail to complete these upgrades, we will not receive security updates for the relevant software, which could compromise the security of some of our information.

Failure to protect our intellectual property rights could adversely affect our business.

We rely on a combination of confidentiality, invention assignment and other types of agreements and trade secret, trademark and patent law to establish, maintain, protect and enforce our intellectual property rights. Our efforts in regard to these measures may be inadequate, however, to prevent others from misappropriating our intellectual property rights. In addition, laws in some non-U.S. countries affecting intellectual property are uncertain in their application, which can affect the scope or enforceability of our intellectual property rights. Any of these events or factors could diminish or cause us to lose the competitive advantages associated with our intellectual property, which could have a material adverse effect on our business.

Any significant delay or problems in any future expansion of our operations could materially adversely affect our business, financial condition and results of operations.

We have undertaken, and may continue to undertake,significant capital projects in order to enhance, expand and/or upgrade our facilities and operational capabilities. Our ability to achieve the anticipated increased revenues or otherwise realize acceptable returns on these investments or other strategic capital projects that we may undertake is subject to a number of risks, many of which are beyond our control, including the ability of management to ensure the necessary resources are in place to properly execute these projects on time and in accordance with planned costs, the ability of key suppliers to deliver the necessary equipment according to schedule, customer demand (which fluctuates as a result of the cyclical markets in which we operate, as well as other factors) and our ability to implement these projects with minimal impact to our existing operations. In addition, the cost to implement any given strategic capital project ultimately may prove to be greater than originally anticipated. If we are not able to achieve the anticipated results from the implementation of any of our strategic capital projects, or if we incur unanticipated implementation costs or delays, our business may be materially adversely affected.

We consider acquisition, joint ventures and other business combination opportunities, as well as possible business unit dispositions, as part of our overall business strategy, which involve uncertainties and potential risks that we cannot predict or anticipate fully.

We intend to continue to strategically position our businesses in order to improve our ability to compete. Strategies we may employ include seeking new or expanding existing specialty market niches for our products, expanding our global presence, acquiring businesses complementary to existing strengths and continually evaluating the performance and strategic fit of our existing business units. From time to time, management of the Company holds discussions with management of other companies to explore acquisitions, joint ventures and other business combination opportunities as well as possible business unit dispositions. As a result, the relative makeup of our business is subject to change. Acquisitions, joint ventures and other business combinations involve various inherent risks, such as: assessing accurately the value, strengths, weaknesses, contingent and other liabilities and potential profitability of acquisition or other transaction candidates; the potential loss of key personnel of an acquired business; our ability to achieve identified financial and operating synergies anticipated to result from an acquisition or other transaction; diversion of the attention of certain management personnel from their day-to-day duties; and unanticipated changes in business and economic conditions affecting an acquisition or other transaction. International acquisitions could be affected by many additional factors,

including, without limitation, export controls, exchange rate fluctuations, domestic and foreign political conditions and deterioration in domestic and foreign economic conditions.

A global recession or disruption in global financial markets could adversely affect us.

A global recession or disruption in the global financial markets, including any significant tariff impositions or trade wars, presents risks and uncertainties that we cannot predict. During recessionary economic conditions or financial market disruptions, we face risks that may include:

- declines in revenues and profitability from reduced or delayed orders by our customers;
- supply problems associated with any financial constraints faced by our suppliers;
- restrictions on our access to credit sources;
- reductions to our banking group or to our committed credit availability due to combinations or failures of financial institutions; and
- increases in corporate tax rates to finance government spending programs.

Political and social turmoil could adversely affect our business.

The war on terrorism, as well as political and social turmoil, could put pressure on economic conditions in the United States and worldwide. These political, social and economic conditions could make it difficult for us, our suppliers and our customers to forecast accurately and plan future business activities, and could adversely affect the financial condition of our suppliers and customers and affect customer decisions as to the amount and timing of purchases from us. As a result, our business could be materially adversely affected.

The carrying value of goodwill and other intangible assets may not be recoverable.

Goodwill and other intangible assets are recorded at fair value on the date of acquisition. We review these assets at least annually for impairment. Impairment may result from, among other things, deterioration in performance, adverse market conditions, adverse changes in applicable laws or regulations and a variety of other factors. Any future impairment of goodwill or other intangible assets could have a material adverse effect on our business.

Healthcare costs, including those related to healthcare legislation, have and may continue to impact our business.

The Patient Protection and Affordable Care Act and other recent legislation relating to healthcare have increased our annual employee healthcare cost obligations. In addition, costs associated with healthcare generally, including our retiree healthcare plans, are expected to continue to increase. This area of law is expected to continue to change, and we cannot predict the effect that healthcare legislation or regulation, and the costs of healthcare in general, will ultimately have on our business.

Our working capital requirements may negatively affect our liquidity and capital resources.

Our working capital requirements can vary significantly, depending in part on the timing of our delivery obligations under various customer contracts and the payment terms with our customers and suppliers. If our working capital needs exceed our cash flows from operations, we would look to our cash balances and availability for borrowings under our existing credit facility to satisfy those needs, as well as potential sources of additional capital, which may not be available on satisfactory terms and in adequate amounts, if at all.

Risks Related to Shares of Our Common Stock

Our stock price is subject to fluctuations that may not be related to our performance as a result of being traded on a public exchange.

The stock market can be highly volatile. The market price of our common stock is likely to be similarly volatile, and investors in our common stock may experience a decrease in the value of their stock, including decreases unrelated to our operating performance or prospects. The price of our common stock could be subject to wide fluctuations in response to a number of factors, including, but not limited to, those described elsewhere in this "Risk Factors" section and those listed below:

- fluctuations in the market price of nickel (or other raw materials, such as cobalt, molybdenum or ferrochrome) or energy;
- market conditions in the end markets into which our customers sell their products, principally aerospace, power generation and chemical processing;
- implementation of barriers to free trade between the United States and other countries;
- announcements of technological innovations or new products and services by us or our competitors;
- the operating and stock price performance of other companies that investors may deem comparable to us;
- announcements by us of acquisitions, alliances, joint development efforts or corporate partnerships in the high-temperature resistant alloy and corrosion-resistant alloy markets;
- market conditions in the technology, manufacturing or other growth sectors; and
- rumors relating to us or our competitors.

Payment of dividends will depend on our future financial condition and performance.

Although our Board of Directors currently intends to continue the payment of regular quarterly cash dividends on shares of our common stock, the timing and amount of future dividends will depend on the Board's assessment of our operations, financial condition, projected liabilities, compliance with contractual restrictions in our credit agreement, restrictions imposed by applicable law and other factors. We cannot guarantee that we will continue to declare dividends at the same or similar rates.

Provisions of our certificate of incorporation and by-laws could discourage potential acquisition proposals and could deter or prevent a change in control.

Some provisions in our certificate of incorporation and by-laws, as well as Delaware statutes, may have the effect of delaying, deterring or preventing a change in control. These provisions, including those regulating the nomination of directors, may make it more difficult for other persons, without the approval of our Board of Directors, to launch takeover attempts that a stockholder might consider to be in his or her best interest. These provisions could limit the price that some investors might be willing to pay in the future for shares of our common stock.

Item 1B. Unresolved Staff Comments

There are no unresolved comments by the staff of the U.S. Securities and Exchange Commission.

Item 2. Properties

Manufacturing Facilities. The Company owns manufacturing facilities in the following locations:

- Kokomo, Indiana—manufactures and sells all product forms, other than tubular and wire goods;
- Arcadia, Louisiana—manufactures and sells welded and seamless tubular goods; and
- Mountain Home, North Carolina—manufactures and sells high-performance alloy wire and bar.

The Kokomo plant, the Company's primary production facility, is located on approximately 180 acres of industrial property and includes over 1.0 million square feet of building space. There are three sites consisting of (1) a headquarters and research laboratory; (2) primary and secondary melting, forge press and several smaller hot mills; and (3) the Company's four-high Steckel rolling mill and sheet product cold working equipment, including two cold rolling mills and three annealing furnaces. All alloys and product forms other than tubular and wire goods are produced in Kokomo.

The Arcadia plant is located on approximately 42 acres of land and includes 202,500 square feet of buildings on a single site. Arcadia uses feedstock produced in Kokomo to fabricate welded and seamless high-performance alloy pipe and tubing and purchases extruded tube hollows to produce seamless titanium tubing. Manufacturing processes at Arcadia require cold pilger mills, weld mills, draw benches, annealing furnaces and pickling facilities.

The Mountain Home plant is located on approximately 29 acres of land and includes approximately 100,000 square feet of building space. The Mountain Home facility is primarily used to manufacture finished high-performance alloy wire. Finished wire products are also warehoused at this facility.

The owned facilities located in the United States are subject to a mortgage which secures the Company's obligations under its U.S. revolving credit facility with a group of lenders led by Wells Fargo Capital Finance, LLC. For more information, see Note 8 to the Consolidated Financial Statements included in this Annual Report on Form 10-K.

Service and Sales Centers. The service and sales centers, which stock and sell all product forms, contain equipment capable of precision laser and water jet processing services to cut and shape products to customers' precise specifications. The Company owns service and sales centers in the following locations:

- Openshaw, England
- Lenzburg, Switzerland

The Openshaw plant, located near Manchester, England, consists of approximately 5 acres of land and over 85,000 square feet of buildings on a single site.

In addition, the Company leases service and sales centers, which stock and sell all product forms, in the following locations:

- LaPorte, Indiana
- La Mirada, California
- Houston, Texas
- Windsor, Connecticut

- Shanghai, China

Sales Centers. The Company leases sales centers, which sell all product forms, in the following locations:

- Paris, France
- Zurich, Switzerland
- Singapore
- Milan, Italy
- Tokyo, Japan

On January 1, 2015, the company entered into a capital lease agreement for the building that houses the assets and operations of LaPorte Custom Metal Processing (LCMP). The capital asset and obligation are recorded at the present value of the minimum lease payments. The asset is included in Property, plant and equipment, net on the Consolidated Balance Sheet and is depreciated over the 20 year lease term. The long-term component of the capital lease obligation is included in Long-term obligations (See Note 19. Long-term Obligations).

All owned and leased service and sales centers not described in detail above are single site locations and are less than 100,000 square feet, except for the LaPorte service center which is approximately 230,000 square feet.

Item 3. Legal Proceedings

The Company is subject to extensive federal, state and local laws and regulations. Future developments and increasingly stringent regulations could require the Company to make additional unforeseen expenditures for these matters. The Company is regularly involved in litigation, both as a plaintiff and as a defendant, relating to its business and operations. Such litigation includes, without limitation, federal and state EEOC administrative and judicial actions, litigation of commercial matters and litigation and administrative actions relating to environmental matters. For more information, see "Item 1. Business—Environmental Matters." Litigation and administrative actions may result in substantial costs and may divert management's attention and resources, and the level of future expenditures for legal matters cannot be determined with any degree of certainty. In January 2017, a customer based in the United Kingdom wrote to the Company making a claim in relation to certain product sold to that customer by the Company. This writing was followed up by claim correspondence in 2018 and 2019. The Company has engaged its legal advisors in the United Kingdom to respond to the claim, and correspondence between the parties' respective counsel remains ongoing. To date, the insurers have not accepted coverage responsibility for the claim but have agreed to fund expenses of legal counsel selected by the Company through the date of the determination regarding coverage. The Company intends to pursue such coverage as and if necessary while vigorously defending against the customer claim. Liability for the claim is disputed, and the amount of the claim, if any, remains unclear. Nonetheless, based on the facts presently known, management does not expect expenditures for pending legal proceedings to have a material effect on the Company's financial position, results of operations or liquidity.

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.

The Company's common stock is listed on the NASDAQ Global Market ("NASDAQ") and traded under the symbol "HAYN".

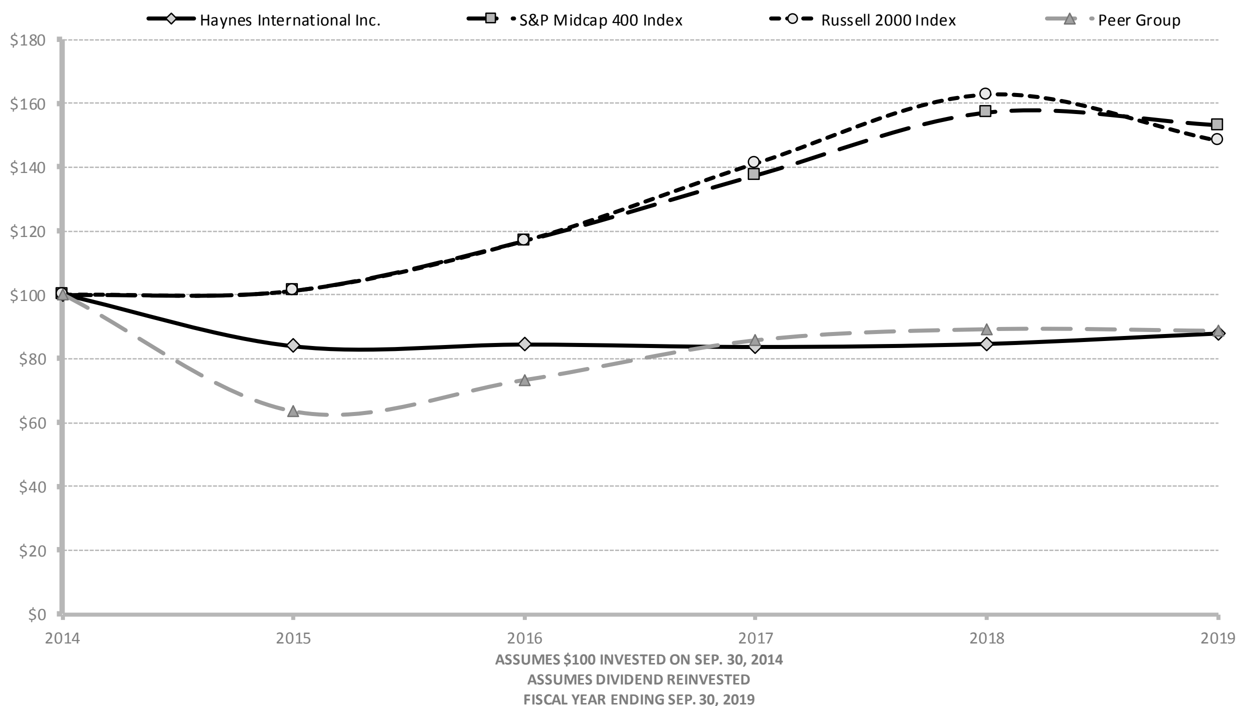
As of November 1, 2019, there were approximately 49 holders of record of the Company's common stock.

The Company has historically paid quarterly cash dividends. While it is the Company's intention to continue to pay quarterly cash dividends for fiscal 2020 and beyond, any decision to pay future cash dividends will be made by the Company's Board of Directors and will depend upon the Company's earnings, financial condition and other factors.

Cumulative Total Stockholder Return

The graph below compares the cumulative total stockholder return on the Company's common stock to the cumulative total return of the Russell 2000 Index, S&P MidCap 400 Index, and the Company's Peer Group for each of the last five fiscal years ended September 30. The cumulative total return assumes an investment of $100 on September 30, 2014 and the reinvestment of any dividends during the period. The Russell 2000 is a broad-based index that includes smaller market capitalization stocks. The S&P MidCap 400 Index is the most widely used index for mid-sized companies. Management believes that the S&P MidCap 400 is representative of companies with similar market and economic characteristics to Haynes. Furthermore, we also believe the Russell 2000 Index is representative of the Company's current market capitalization status and this index is also provided on a comparable basis. The companies included in the Company's Peer Group Index did not change in fiscal 2019 and consist of: Allegheny Technologies, Inc., Arconic, Inc., Carpenter Technology Corp., Commercial Metals, Inc., Global Brass and Copper Holdings, Inc., Insteel Industries, Inc., Kaiser Aluminum Corporation, Materion Corporation, Olympic Steel, Inc., and Universal Stainless & Alloy Products, Inc.. Management believes that the companies included in the Peer Group, taken as a whole, provide a meaningful comparison in terms of competition, product offerings and other relevant factors. The total stockholder return for the Peer Group is weighted according to the respective issuer's stock market capitalization at the beginning of each period.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN
Among Haynes, The Russell 2000 Index, The S&P MidCap 400
Index and our Peer Group



	2014	2015	2016	2017	2018	2019
Haynes International, Inc.	100.00	83.96	84.54	83.77	84.75	87.96
Russell 2000	100.00	101.25	116.91	141.15	162.66	148.20
S&P MidCap 400	100.00	101.40	116.94	137.42	156.95	153.04
New Peer Group	100.00	63.39	73.25	85.70	89.13	88.62

Item 6. Selected Financial Data

This information should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K.

Amounts below are in thousands, except backlog, which is in millions, share and per share information and average nickel price.

	Year Ended September 30,				
	2015	2016	2017	2018	2019
Statement of Operations Data:					
Net revenues	$ 487,635	$ 406,359	$ 395,209	$ 435,326	$ 490,215
Cost of sales	385,769	344,774	349,520	379,491	424,712
Selling, general and administrative expense	42,418	38,953	41,569	47,030	44,195
Research and technical expense	3,598	3,698	3,855	3,785	3,592
Operating income (loss)	55,850	18,934	265	5,020	17,716
Nonoperating retirement benefit expense	8,356	14,736	16,803	8,238	3,446
Interest expense (income), net	318	447	679	836	900
Provision for (benefit from) income taxes	16,690	(1,269)	(7,027)	17,697	3,625
Net income (loss)	$ 30,486	$ 5,020	$ (10,190)	$ (21,751)	$ 9,745
Net income (loss) per share:					
Basic	$ 2.45	$ 0.40	$ (0.83)	$ (1.75)	$ 0.78
Diluted	$ 2.45	$ 0.40	$ (0.83)	$ (1.75)	$ 0.78
Dividends declared per common share	$ 0.88	$ 0.88	$ 0.88	$ 0.88	$ 0.88
Weighted average shares outstanding:					
Basic	12,331,805	12,361,483	12,397,099	12,419,564	12,445,212
Diluted	12,344,209	12,366,197	12,397,099	12,419,564	12,480,908

Note that the Company implemented ASU 2017-07, Compensation – Retirement Benefits (Topic 715) on October 1, 2018 on a retrospective basis. This guidance requires non-service costs components of retirement expense to be reclassified outside of operating income to a new category titled "Nonoperating retirement benefit expense" in the statement of operations. Gross margins were favorably impacted by the reclassification of the non-service cost components of retirement expense. All prior periods have been adjusted for this change in accounting.

	September 30,				
	2015	2016	2017	2018	2019
Balance Sheet Data:					
Working capital	$ 332,015	$ 310,872	$ 300,468	$ 304,151	$ 311,793
Property, plant and equipment, net	185,351	199,182	192,556	179,400	169,966
Total assets	638,191	649,601	621,819	588,694	593,800
Total debt	4,574	8,256	7,896	8,127	7,979
Long-term portion of debt	4,574	8,256	7,896	7,980	7,809
Accrued pension and postretirement benefits[(1)]	217,837	255,346	208,476	170,180	215,741
Stockholders' equity	341,989	311,299	333,772	333,220	296,275
Cash dividends paid	10,952	10,988	11,009	11,013	11,011

	2015	2016	2017	2018	2019
Consolidated Backlog at Fiscal Quarter End[(2)]:					
1st quarter	$ 215.5	$ 204.7	$ 167.3	$ 205.7	$ 237.8
2nd quarter	220.4	193.5	170.8	212.3	253.0
3rd quarter	192.9	187.2	180.9	220.6	254.9
4th quarter	185.8	168.3	177.3	216.0	235.2

	Year Ended September 30,				
	2015	2016	2017	2018	2019
Average nickel price per pound[3]	$ 4.49	$ 4.63	$ 5.10	$ 5.68	$ 8.02

(1) Significant increases in the pension and postretirement benefits liability occurred in fiscal 2016 and fiscal 2019, primarily due to reductions in the discount rate used to value the future liability. Conversely, significant decreases occurred in fiscal 2017 and fiscal 2018 primarily due to the increase in the discount rate used to value the future liability. This has been reflected actuarially as a change to the Pension and Postretirement Benefits Liability and a corresponding change to the accumulated Other Comprehensive Loss account. On a prospective basis, if interest rates were to rise, this would cause a decrease in the liability and accumulated other comprehensive loss.

(2) The Company defines backlog to include firm commitments from customers for delivery of product at established prices. There are orders in the backlog at any given time which include prices that are subject to adjustment based on changes in raw material costs, which can vary from approximately 30%-50% of the orders. Historically, approximately 75% of the backlog orders have shipped within six months and approximately 90% have shipped within 12 months. The backlog figures do not typically reflect that portion of the business conducted at service and sales centers on a spot or "just-in-time" basis.

(3) Represents the average price for a cash buyer as reported by the London Metals Exchange for the 30 days ending on the last day of the period presented.

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

Please refer to page 2 of this Annual Report on Form 10-K for a cautionary statement regarding forward-looking information.

Overview of Business

The Company is one of the world's largest producers of high-performance nickel- and cobalt-based alloys in flat product form, such as sheet, coil and plate. The Company is focused on developing, manufacturing, marketing and distributing technologically advanced, high-performance alloys, which are used primarily in the aerospace, chemical processing and industrial gas turbine industries. The global specialty alloy market consists of three primary sectors: stainless steel, general-purpose nickel alloys and high-performance nickel- and cobalt-based alloys. The Company competes primarily in the high-performance nickel- and cobalt-based alloy sector, which includes high-temperature resistant alloys, or HTA products, and corrosion-resistant alloys, or CRA products. The Company believes it is one of the principal producers of high-performance alloy flat products in sheet, coil and plate forms. The Company also produces its products as seamless and welded tubulars and in bar, billet and wire forms.

The Company has manufacturing facilities in Kokomo, Indiana; Arcadia, Louisiana; and Mountain Home, North Carolina. The Kokomo facility specializes in flat products, the Arcadia facility specializes in tubular products and the Mountain Home facility specializes in wire and bar products. The Company distributes its products primarily through its direct sales organization, which includes 12 service and/or sales centers in the United States, Europe and Asia. All of these centers are Company-operated.

Overview of Markets

The following table includes a breakdown of net revenues, shipments and average selling prices to the markets served by the Company for the periods shown.

	Year Ended September 30,									
	2015		2016		2017		2018		2019	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net Revenues (dollars in millions)										
Aerospace	$ 215.1	44.1 %	$ 197.4	48.6 %	$ 192.5	48.7 %	$ 226.9	52.1 %	$ 258.1	52.7 %
Chemical processing	111.6	22.9	72.3	17.8	70.5	17.8	79.2	18.2	89.7	18.3
Industrial gas turbine	74.4	15.3	68.1	16.8	61.5	15.6	52.4	12.0	59.4	12.1
Other markets	59.8	12.2	45.0	11.0	43.2	10.9	53.4	12.3	57.9	11.8
Total product	460.9	94.5	382.8	94.2	367.7	93.0	411.9	94.6	465.1	94.9
Other revenue[(1)]	26.7	5.5	23.6	5.8	27.5	7.0	23.4	5.4	25.1	5.1
Net revenues	$ 487.6	100.0 %	$ 406.4	100.0 %	$ 395.2	100.0 %	$ 435.3	100.0 %	$ 490.2	100.0 %
U.S.	$ 287.7	59.0 %	$ 233.6	57.5 %	$ 235.5	59.6 %	$ 258.3	59.3 %	$ 300.7	61.3 %
Foreign	$ 199.9	41.0 %	$ 172.8	42.5 %	$ 159.7	40.4 %	$ 177.0	40.7 %	$ 189.5	38.7 %
Shipments by Market (millions of pounds)										
Aerospace	9.2	45.3 %	8.7	48.3 %	8.8	48.6 %	9.8	53.3 %	10.3	51.5 %
Chemical processing	4.3	21.2	2.8	15.6	3.2	17.7	3.9	21.2	4.3	21.5
Industrial gas turbine	4.7	23.2	5.0	27.8	4.5	24.9	2.9	15.8	3.4	17.0
Other markets	2.1	10.3	1.5	8.3	1.6	8.8	1.8	9.8	2.0	10.0
Total Shipments	20.3	100.0 %	18.0	100.0 %	18.1	100.0 %	18.4	100.0 %	20.0	100.0 %
Average Selling Price Per Pound										
Aerospace	$ 23.27		$ 22.64		$ 21.76		$ 23.05		$ 25.11	
Chemical processing	25.97		26.68		22.28		20.54		20.80	
Industrial gas turbine	15.99		13.71		13.77		18.27		17.44	
Other markets	28.98		30.74		26.36		29.14		28.35	
Total product[(2)]	22.75		21.31		20.30		22.38		23.21	
Total average selling price	24.07		22.62		21.81		23.66		24.46	

(1) Other revenue consists of toll conversion, royalty income, scrap sales and revenue recognized from the TIMET agreement (see Note 16 in the Notes to the Consolidated Financial Statements). Other revenue does not include associated shipment pounds.

(2) Total product price per pound excludes "Other Revenue".

Aerospace demand in fiscal 2015 was recovering and resupplying from a period of customer destocking within the supply chain the previous year. Fiscal 2015 proved to be a record year in volume for the Company in aerospace shipments at that time. Aerospace demand moderated slightly in fiscal 2016 due to delays in the transition to new engine platforms combined with some softness in demand driven by lower oil and fuel costs. As these issues normalized, pounds shipped increased slightly in fiscal 2017, although at a lower average selling price, resulting in a decline in aerospace revenues in fiscal 2017. Underpinning demand for new engines is a desire for more fuel-efficiency and lower emissions, which had been tempered with previous decreases in fuel prices. The slight pull-back was temporary, and in fiscal 2018 aerospace volume hit record levels and revenue increased 17.9%. Growth continued in fiscal 2019, with continued traction of the new generation engine platforms in spite of the grounding of the Boeing 737MAX aircraft. Fiscal 2019 sales into the aerospace market represented a record year in both volume, increasing 4.4%, and revenue, increasing 13.8%, in each case as compared to last fiscal year. One of the Company's core focus initiatives was to increase prices, which contributed to the revenue increase. Sales into the aerospace market represented 52.7% of the Company's overall revenue in fiscal 2019. Management anticipates that the maintenance, repair and overhaul business will continue at a steady-to-increasing pace due to required maintenance schedules for the rising number of engines in service year-over-year.

Chemical processing industry revenue declined in fiscal 2015, then took a sizable step down in fiscal 2016 and decreased again in fiscal 2017. Sales into this market in fiscal 2015 and the second half of fiscal 2016 included some high-

value special application projects with high average selling prices per pound, but overall base-volumes in this market were low in both fiscal 2015 and 2016 compared to prior years. Fiscal 2017 volume shipments increased, but at a lower average price per pound, resulting in lower chemical processing revenue in fiscal 2017 compared to fiscal 2016. Chemical processing revenue in fiscal 2018 increased 12.3% due to recovery in the base business, as well as a moderate increase in specialty application projects. This growth continued in fiscal 2019 with net revenues into the chemical processing market increasing 13.2%, which represents 18.3% of total net revenues. The main driver of demand in this market is capital spending in the chemical processing sector driven by end-user demand for housing, automotive, energy and agricultural products. The chemical processing market is sensitive to oil prices, currency fluctuations and fiscal policies as well as world economic conditions and GDP growth. Additional drivers of demand in this market were the increase in North American production of natural gas liquids and the further downstream processing of chemicals that may utilize equipment that requires high-performance alloys. Increased sales to the chemical processing industry in fiscal 2018 and 2019 were related to improvement in global spending in the chemical processing sector combined with the Company's focus initiatives aimed at improving volumes.

Sales to the industrial gas turbine market declined each year from fiscal 2016 to 2018 and fiscal 2018 volumes represented less than half the volume of fiscal 2012 peak levels. Reported significant overcapacity in large-frame turbines primarily used for electrical generation combined with growth in renewable energy facilities has taken a toll on demand for large frame gas turbines. Two of the large OEM producers of large-frame turbines have reported weak demand and announced restructuring plans in their power generation businesses. This period of weak demand is not expected to recover quickly and may not recover to peak demand level, however management believes that long-term demand in this market will stabilize due to higher activity in power generation and alternative power systems. Industrial gas turbines are beneficial in electric generating facilities due to low capital cost at installation, fewer emissions than traditional fossil fuel-fired facilities and favorable natural gas prices provided by availability of non-conventional (shale) gas supplies. Management anticipates that the maintenance, repair and overhaul business will continue at a steady to increasing pace due to required maintenance schedules.

Volume shipped into the other markets category declined in fiscal 2016 and improved in each of fiscal 2017, 2018 and 2019. Sales to this market in fiscal 2015 included some high-value special application projects with high average selling prices per pound. The industries in this category focus on upgrading overall product quality, improving product performance through increased efficiency, prolonging product life and lowering long-term costs. Companies in these industries are looking to achieve these goals through the use of "advanced materials" which support the increased use of high-performance alloys in an expanding number of applications. In addition to supporting and expanding the traditional businesses of oil and gas, flue-gas desulfurization, automotive and heat treating, the Company expects increased levels of activity in non-traditional markets such as fuel cells and alternative energy applications in the long term.

Other revenue consists primarily of toll conversion, but also includes royalty income, scrap sales and revenue recognized from the TIMET agreement. The demand for toll conversion includes TIMET conversion demand completed on the Company's four-high Steckel hot rolling mill in Kokomo, Indiana, as well as conversion work completed through LaPorte Customer Metal Products. Other revenue demand levels can vary year-to-year based upon demand drivers in the respective markets of our tolling customers. In fiscal 2019 other revenue represented 5.1% of net sales. Other revenue does not include associated shipment pounds as the metal is not owned by the Company.

Completion of Planned Equipment Outage and Upgrade

The Company undertook a significant planned equipment outage and upgrade in the cold-finishing production area during the first quarter and a portion of the second quarter of fiscal 2019, upgrading certain components of one of the three annealing lines beginning in mid-October 2018. The duration was fifteen weeks, with the upgraded annealing line placed back into service in late January 2019. The outage required to complete these upgrades had a significant impact on the Company's financial results in the first quarter of fiscal 2019, as well as a moderate financial impact on the second quarter of fiscal 2019. Start-up costs, including higher processing costs and lower yields, impacted product costs in the second quarter and represented a temporary margin headwind. This margin challenge continued through the third and fourth quarters as the higher-cost product produced during the start-up has shipped through the Company's foreign service centers and is reflected in cost of sales. This margin headwind has alleviated as of the end of the fourth quarter and is not

expected to impact the first or subsequent quarters of fiscal year 2020. The upgraded line is expected to be one of the key drivers to revenue growth moving forward.

Summary of Capital Spending

Capital spending was $11.1 million and $10.0 million in fiscal 2018 and 2019, respectively, and the forecast for capital spending in fiscal 2020 is approximately $12.0 million, which represents a level below the Company's depreciation levels.

Decrease in Discount Rate for Pension and Retiree Healthcare Liabilities

Due to the lower interest rate environment, a significant decrease in the discount rate used in the actuarial valuation of the Company's pension and retiree healthcare liabilities was required. This contributed to the $46.4 million increase in the long-term liabilities for Pension and Other Postretirement Benefits and the corresponding increase in Accumulated Other Comprehensive Loss on the balance sheet at September 30, 2019 (see Note 9 in the Company's Notes to Consolidated Financial Statements in this Annual Report on Form 10-K). In addition, this is expected to increase expense related to pension and retiree healthcare in fiscal year 2020 by $4.8 million, reflected mostly in the Nonoperating Retirement Benefit Expense in the Statement of Operations.

Volumes, Competition and Pricing

Volume shipped in the fourth quarter of fiscal 2019 was 5.4 million pounds, the Company's highest quarterly volume in four and a half years. The strong quarterly shipment performance put volume for fiscal 2019 at 20.0 million pounds, thus alleviating the margin headwind associated with lower volumes. The prior three years' volumes were at lower levels with volumes for fiscal 2016, 2017 and 2018 at 18.0 million, 18.1 million and 18.4 million pounds, respectively.

Record volume shipped into the aerospace market during fiscal 2019 was 10.3 million pounds, the highest in the Company's history. In addition, volume shipped into the chemical processing market in fiscal 2019 increased 11.8% to 4.3 million pounds, industrial gas turbine volumes increased 18.9% to 3.4 million pounds and other markets increased 11.5% to 2.0 million pounds. These strong growth rates are reflective of demand levels in these markets combined with several focus initiatives that are underway to improve volume levels.

The product average selling price per pound in fiscal 2019 was $23.21, which is a 3.7% increase over last fiscal year. The increase is partly driven by the realization of price increases primarily in the aerospace market, which continues to be an area of strategic focus. Sales into the aerospace market had an average selling price per pound of $25.11, which is higher by 8.9% over last fiscal year. Also impacting the average price per pound in fiscal 2019 were product mix and raw material pricing. In addition, volumes and revenue of specialty application projects were higher in fiscal 2019 compared to last fiscal year and were comprised of small/medium size projects as opposed to the individual large projects as has been the case in some historical fiscal years.

The average market price of nickel as reported by the London Metals Exchange for the last three years was $4.70 per pound in fiscal 2017, $5.95 in fiscal 2018, and $6.08 in fiscal 2019. The London Metals Exchange price for the 30-days ending September 30, 2019 was $8.02 per pound. The Company values inventory utilizing the first-in, first-out ("FIFO") inventory costing methodology. In a period of decreasing raw material costs, the FIFO inventory valuation normally results in higher costs of sales as compared to the last-in, first out method. Conversely, in a period of rising prices, the FIFO inventory valuation normally results in lower costs of sales as compared to the last-in, first out method.

Gross Profit Margin Trend Performance

The following tables show net revenue, gross profit margin and gross profit margin percentage for fiscal 2018 and fiscal 2019.

	Trend of Gross Profit Margin and Gross Profit Margin Percentage for Fiscal 2018			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	$ 89,693	$ 110,206	$ 113,114	$ 122,313
Gross Profit Margin	9,075	13,513	15,363	17,884
Gross Profit Margin %	10.1%	12.3%	13.6%	14.6%

	Trend of Gross Profit Margin and Gross Profit Margin Percentage for Fiscal 2019			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	$ 107,069	$ 127,474	$ 126,032	$ 129,640
Gross Profit Margin	11,335	14,683	18,175	21,310
Gross Profit Margin %	10.6%	11.5%	14.4%	16.4%

Gross margins ended fiscal year 2019 at $21.3 million, or 16.4% of net sales, which is the highest in three years. This margin improvement is in spite of two headwinds compressing margins in terms of the fall in the market price of cobalt and the shipment of the last of the higher cost product produced during the cold-finishing outage and upgrade. Both of these headwinds are expected to be alleviated moving into fiscal 2020. As described above, several focus initiatives are underway to improve margins including improving volumes and pricing, mix management and cost reductions. The fourth quarter volume was 5.4 million pounds, the Company's highest quarterly volume in four and a half years, which drove favorable fixed cost absorption contributing to improved margins. Price increases notably in the aerospace market and a significant emphasis on costs reductions also contributed to margin enhancement.

Note that the Company implemented ASU 2017-07, Compensation – Retirement Benefits (Topic 715) on October 1, 2018 on a retrospective basis. This guidance requires non-service costs components of retirement expense to be reclassified outside of operating income to a new category titled "Nonoperating retirement benefit expense" in the statement of operations. Gross margins were favorably impacted by the reclassification of the non-service cost components of retirement expense. All prior periods have been adjusted for this change in accounting.

Controllable Working Capital

Controllable working capital, which includes accounts receivable, inventory, accounts payable and accrued expenses, was $282.5 million at September 30, 2019, a decrease of $9.4 million or 3.2% from $291.9 million at September 30, 2018. This decrease resulted primarily from inventory decreasing $14.2 million, partially offset by an increase of accounts receivable of $3.5 million and decreases of accounts payable and accrued expenses of $1.3 million in the aggregate. As compared to the third quarter ended June 30, 2019, controllable working capital decreased $4.5 million, or 1.6%. This decrease resulted primarily from inventory decreasing $10.3 million and accounts receivable decreasing $0.8 million, partially offset by decreases in accounts payable and accrued expenses of $6.5 million in the aggregate.

Dividends Declared

On November 14, 2019, the Company announced that the Board of Directors declared a regular quarterly cash dividend of $0.22 per outstanding share of the Company's common stock. The dividend is payable December 16, 2019 to stockholders of record at the close of business on December 2, 2019. The aggregate cash payout based on current shares outstanding will be approximately $2.8 million, or approximately $11.0 million on an annualized basis.

Backlog

Set forth below is information relating to the Company's backlog and the 30-day average nickel price per pound as reported by the London Metals Exchange. This information should be read in conjunction with the consolidated financial statements and related notes thereto and the remainder of "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

	Quarter Ended				Quarter Ended			
	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019
Backlog								
Dollars (in thousands)	$ 205,718	$ 212,312	$ 220,596	$ 216,020	$ 237,802	$ 253,003	$ 254,947	$ 235,204
Pounds (in thousands)	8,073	7,764	7,646	7,260	8,392	8,855	9,072	8,064
Average selling price per pound	$ 25.48	$ 27.35	$ 28.85	$ 29.75	$ 28.34	$ 28.57	$ 28.10	$ 29.17
Average nickel price per pound								
London Metals Exchange[1]	$ 5.18	$ 6.08	$ 6.85	$ 5.68	$ 4.92	$ 5.93	$ 5.43	$ 8.02

(1) Represents the average price for a cash buyer as reported by the London Metals Exchange for the 30 days ending on the last day of the period presented.

Backlog was $235.2 million at September 30, 2019, a decrease of approximately $19.7 million, or 7.7%, from $254.9 million at June 30, 2019. The backlog dollars decreased during the fourth quarter of fiscal 2019 due to an 11.1% decrease in backlog pounds partially offset by a 3.8% increase in backlog average selling price. The increase in average selling price was due to a higher-value product mix and higher selling prices in the backlog.

The backlog increased by $19.2 million, or 8.9%, from $216.0 million at September 30, 2018 to $235.2 million at September 30, 2019 due to an 11.1% increase in backlog pounds partially offset by a 2.0% decrease in backlog average selling price. The increase in backlog pounds was primarily driven by increases in demand in the aerospace and industrial gas turbines markets.

Revenues by geographic area

Net revenues in fiscal 2017, 2018 and 2019 were generated primarily by the Company's U.S. operations. Sales to domestic customers comprised approximately 60%, 59% and 61% of the Company's net revenues in fiscal 2017, 2018 and 2019, respectively. In addition, the majority of the Company's operating costs are incurred in the U.S., as all of its manufacturing facilities are located in the U.S. It is expected that net revenues will continue to be highly dependent on the Company's domestic sales and manufacturing facilities in the U.S.

The Company's foreign and export sales were approximately $159.7 million, $177.0 million and $189.5 million for fiscal 2017, 2018 and 2019, respectively. Additional information concerning foreign operations and export sales is set forth in Note 14 to the Consolidated Financial Statements included in this Annual Report on Form 10-K.

Quarterly Market Information

	Quarter Ended				Quarter Ended			
	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019
Net revenues (in thousands)								
Aerospace	$ 46,839	$ 59,033	$ 59,646	$ 61,380	$ 54,607	$ 68,858	$ 66,321	$ 68,318
Chemical processing	13,356	21,148	21,364	23,301	18,920	21,761	21,197	27,773
Industrial gas turbine	13,421	11,755	11,866	15,308	14,083	13,685	15,870	15,792
Other markets	9,238	12,724	14,863	16,592	14,285	16,958	15,666	11,037
Total product revenue	82,854	104,660	107,739	116,581	101,895	121,262	119,054	122,920
Other revenue	6,839	5,546	5,375	5,732	5,174	6,212	6,978	6,720
Net revenues	$ 89,693	$ 110,206	$ 113,114	$ 122,313	$ 107,069	$ 127,474	$ 126,032	$ 129,640
Shipments by markets (in thousands of pounds)								
Aerospace	2,023	2,578	2,645	2,598	2,112	2,857	2,579	2,731
Chemical processing	687	1,000	1,018	1,150	898	971	1,126	1,315
Industrial gas turbine	876	640	622	728	811	757	893	946
Other markets	332	479	498	524	509	580	523	432
Total shipments	3,918	4,697	4,783	5,000	4,330	5,165	5,121	5,424
Average selling price per pound								
Aerospace	$ 23.15	$ 22.90	$ 22.55	$ 23.63	$ 25.86	$ 24.10	$ 25.72	$ 25.02
Chemical processing	19.44	21.15	20.99	20.26	21.07	22.41	18.83	21.12
Industrial gas turbine	15.32	18.37	19.08	21.03	17.36	18.08	17.77	16.69
Other markets	27.83	26.56	29.85	31.66	28.06	29.24	29.95	25.55
Total average selling price (product only; excluding other revenue)	21.15	22.28	22.53	23.32	23.53	23.48	23.25	22.66
Total average selling price (including other revenue)	22.89	23.46	23.65	24.46	24.73	24.68	24.61	23.90

Results of Operations

Year Ended September 30, 2019 Compared to Year Ended September 30, 2018

($ in thousands, except per share figures)

	Year Ended September 30,				Change	
	2018		2019		Amount	%
Net revenues	$ 435,326	100.0 %	$ 490,215	100.0 %	$ 54,889	12.6 %
Cost of sales	379,491	87.2 %	424,712	86.6 %	45,221	11.9 %
Gross profit	55,835	12.8 %	65,503	13.4 %	9,668	17.3 %
Selling, general and administrative expense	47,030	10.8 %	44,195	9.0 %	(2,835)	(6.0)%
Research and technical expense	3,785	0.9 %	3,592	0.7 %	(193)	(5.1)%
Operating income (loss)	5,020	1.2 %	17,716	3.6 %	12,696	252.9 %
Nonoperating retirement benefit expense	8,238	1.9 %	3,446	0.7 %	(4,792)	(58.2)%
Interest income	(82)	(0.0)%	(86)	(0.0)%	(4)	4.9 %
Interest expense	918	0.2 %	986	0.2 %	68	7.4 %
Income (loss) before income taxes	(4,054)	(0.9)%	13,370	2.7 %	17,424	(429.8)%
Provision for (benefit from) income taxes	17,697	4.1 %	3,625	0.7 %	(14,072)	(79.5)%
Net income (loss)	$ (21,751)	(5.0)%	$ 9,745	2.0 %	$ 31,496	(144.8)%
Net income (loss) per share:						
Basic	$ (1.75)		$ 0.78			
Diluted	$ (1.75)		$ 0.78			
Weighted average shares outstanding:						
Basic	12,419,564		12,445,212			
Diluted	12,419,564		12,480,908			

The following table includes a breakdown of net revenues, shipments and average selling prices to the markets served by the Company for the periods shown.

By market

	Year Ended September 30,		Change	
	2018	2019	Amount	%
Net revenues (dollars in thousands)				
Aerospace	$ 226,898	$ 258,104	$ 31,206	13.8 %
Chemical processing	79,169	89,651	10,482	13.2 %
Industrial gas turbine	52,350	59,430	7,080	13.5 %
Other markets	53,417	57,946	4,529	8.5 %
Total product revenue	411,834	465,131	53,297	12.9 %
Other revenue	23,492	25,084	1,592	6.8 %
Net revenues	$ 435,326	$ 490,215	$ 54,889	12.6 %
Pounds by market (in thousands)				
Aerospace	9,844	10,279	435	4.4 %
Chemical processing	3,855	4,310	455	11.8 %
Industrial gas turbine	2,866	3,407	541	18.9 %
Other markets	1,833	2,044	211	11.5 %
Total shipments	18,398	20,040	1,642	8.9 %
Average selling price per pound				
Aerospace	$ 23.05	$ 25.11	$ 2.06	8.9 %
Chemical processing	20.54	20.80	0.26	1.3 %
Industrial gas turbine	18.27	17.44	(0.83)	(4.5)%
Other markets	29.14	28.35	(0.79)	(2.7)%
Total product (excluding other revenue)	22.38	23.21	0.83	3.7 %
Total average selling price (including other revenue)	$ 23.66	$ 24.46	$ 0.80	3.4 %

Net Revenues. Net revenues were $490.2 million in fiscal 2019, an increase of 12.6% from $435.3 million in fiscal 2018, due to an increase in average selling price per pound combined with an increase in volume. The average product selling price was $23.21 per pound in fiscal 2019, an increase of 3.7%, or $0.83, from $22.38 per pound in fiscal 2018. Volume was 20.0 million pounds in fiscal 2019, an increase of 8.9% from 18.4 million pounds in fiscal 2018, with increases in each of the major markets. The average product selling price per pound increased as a result of price increases as well as other pricing considerations (such as customer mix, timing of customer agreement adjustors, etc.) and higher value product mix, which increased average selling price per pound by approximately $1.24 and $0.06, respectively, partially offset by lower raw material market prices, which decreased the average selling price per pound by approximately $0.47.

Sales to the aerospace market were $258.1 million in fiscal 2019, an increase of 13.8% from $226.9 million in fiscal 2018, due to an 8.9% increase in the average selling price per pound, or $2.06, combined with a 4.4% increase in volume. Demand in the aerospace market remains solid with volume in fiscal 2019 at record levels. However, uncertainty exists related to the Boeing 737MAX production schedule and the timing of lifting of the global grounding. The average selling price per pound increase reflects a higher value product mix and other pricing considerations, which increased average selling price per pound by approximately $2.72, partially offset by a change in market prices of raw materials, which decreased average selling price per pound by approximately $0.66.

Sales to the chemical processing market were $89.7 million in fiscal 2019, an increase of 13.2% from $79.2 million in fiscal 2018, due to an 11.8% increase in volume, combined with a 1.3%, or $0.26, increase in the average selling price per pound. Volumes increased in fiscal 2019 from both base business and special projects as compared to fiscal 2018. The average selling price per pound increase reflects a change in market prices of raw materials and other pricing considerations, which increased average selling price per pound by approximately $0.89, partially offset by a change to a lower-value product mix, which decreased average selling price per pound by approximately $0.63.

Sales to the industrial gas turbine market were $59.4 million in fiscal 2019, an increase of 13.5% from $52.4 million in fiscal 2018, due to an 18.9% increase in volume partially offset by a 4.5%, or $0.83, decrease in the average selling price per pound. The increase in volume was primarily due to an increase in small and medium frame engine builds, combined with a resupply of material into the supply chain. Demand for large-frame turbines in the energy market continues to be weak. The decrease in average selling price per pound primarily reflects a change to a lower-value product mix and lower market raw material prices, which decreased average selling price per pound by approximately $1.67 and $0.32, respectively, partially offset by increased base prices and other pricing considerations which increased the average selling price per pound by approximately $1.16.

Sales to other markets were $57.9 million in fiscal 2019, an increase of 8.5% from $53.4 million in fiscal 2018, due to an 11.5% increase in volume, partially offset by a 2.7%, or $0.79, decrease in average selling price per pound. The increase in volume is due primarily to an increase in demand in the flue-gas desulfurization market. The decrease in average selling price reflects lower market raw material prices and a lower-value product mix, which decreased average selling price per pound by approximately $1.34, partially offset by other pricing considerations, which increased average selling price per pound by approximately $0.55.

Other Revenue. Other revenue was $25.1 million in fiscal 2019, an increase of 6.8% from $23.5 million in fiscal 2018. The increase in other revenue is primarily attributable to increased toll conversion services.

Cost of Sales. Cost of sales was $424.7 million, or 86.6% of net revenues, in fiscal 2019 compared to $379.5 million, or 87.2% of net revenues, in fiscal 2018. Cost of sales in fiscal 2019 increased by $45.2 million primarily due to higher volumes.

Gross Profit. As a result of the above factors, gross margin was $65.5 million for fiscal 2019, an increase of $9.7 million from $55.8 million in fiscal 2018. Gross margin as a percentage of net revenue increased to 13.4% in fiscal 2019 as compared to 12.8% in fiscal 2018.

Selling, General and Administrative Expense. Selling, general and administrative expense was $44.2 million for fiscal 2019, a decrease of $2.8 million, or 6.0%, from $47.0 million in fiscal 2018. The significant drivers of the decrease in fiscal 2019 included two events that took place during fiscal 2018. First, expense of $1.5 million was recorded in fiscal 2018 related to certain legal and due diligence costs incurred in a terminated strategic acquisition initiative. Second, expense of $1.3 million was recorded in fiscal 2018 related to the retirement of the Company's Chief Executive Officer. As a result of the above-mentioned charges in fiscal 2018, selling, general and administrative expense as a percentage of net revenues decreased to 9.0% for fiscal 2019 compared to 10.8% for the same period of fiscal 2018.

Research and Technical Expense. Research and technical expense was $3.6 million, or 0.7% of revenue, for fiscal 2019, compared to $3.8 million, or 0.9% of net revenue, in fiscal 2018.

Operating Income/(Loss). As a result of the above factors, operating income in fiscal 2019 was $17.7 million, compared to operating income of $5.0 million in fiscal 2018.

Nonoperating retirement benefit expense. Nonoperating retirement benefit expense was $3.4 million in fiscal 2019, compared to $8.2 million in the same period of fiscal 2018. The reduction in expense was primarily driven by higher discount rates which resulted in lower retirement liabilities and ultimately lower expense.

Income Taxes. Income tax expense was $3.6 million during fiscal 2019, a difference of $14.1 million from an expense of $17.7 million in the same period of fiscal 2018. The lower tax expense for fiscal 2019 as compared to fiscal 2018 is primarily attributable to the passage of the Tax Cuts and Jobs Act during fiscal 2018, which required the Company to revalue its deferred tax asset based on the lowering of the statutory tax rate of 35% to 21% (24.5% in fiscal 2018). Note 7 to the consolidated financial statements in this Annual Report on Form 10-K for the year ended September 30, 2019 sets forth additional information regarding the impact of the Tax Cuts and Jobs Act. The Company's effective tax rate (ETR) for fiscal 2019 was adversely affected by the forfeiture of stock compensation which increased the ETR by approximately 4.7%.

Net Income/(Loss). As a result of the above factors, net income for fiscal 2019 was $9.7 million, an increase of $31.5 million from net loss of $(21.8) million in fiscal 2018.

Year Ended September 30, 2018 Compared to Year Ended September 30, 2017

($ in thousands, except per share figures)

	Year Ended September 30,				Change	
	2017		2018		Amount	%
Net revenues	$ 395,209	100.0 %	$ 435,326	100.0 %	$ 40,117	10.2 %
Cost of sales	349,520	88.4 %	379,491	87.2 %	29,971	8.6 %
Gross profit	45,689	11.6 %	55,835	12.8 %	10,146	22.2 %
Selling, general and administrative expense	41,569	10.5 %	47,030	10.8 %	5,461	13.1 %
Research and technical expense	3,855	1.0 %	3,785	0.9 %	(70)	(1.8)%
Operating income (loss)	265	0.1 %	5,020	1.2 %	4,755	1,794.3 %
Nonoperating retirement benefit expense	16,803	4.3 %	8,238	1.9 %	(8,565)	(51.0)%
Interest income	(186)	(0.0)%	(82)	(0.0)%	104	(55.9)%
Interest expense	865	0.2 %	918	0.2 %	53	6.1 %
Income (loss) before income taxes	(17,217)	(4.4)%	(4,054)	(0.9)%	13,163	(76.5)%
Provision for (benefit from) income taxes	(7,027)	(1.8)%	17,697	4.1 %	24,724	(351.8)%
Net income (loss)	$ (10,190)	(2.6)%	$ (21,751)	(5.0)%	$ (11,561)	113.5 %
Net income (loss) per share:						
Basic	$ (0.83)		$ (1.75)			
Diluted	$ (0.83)		$ (1.75)			
Weighted average shares outstanding:						
Basic	12,397,099		12,419,564			
Diluted	12,397,099		12,419,564			

The following table includes a breakdown of net revenues, shipments and average selling prices to the markets served by the Company for the periods shown.

By market

	Year Ended September 30,		Change	
	2017	**2018**	**Amount**	**%**
Net revenues **(dollars in thousands)**				
Aerospace	$ 192,515	$ 226,898	$ 34,383	17.9 %
Chemical processing	70,467	79,169	8,702	12.3 %
Industrial gas turbine	61,523	52,350	(9,173)	(14.9)%
Other markets	43,203	53,417	10,214	23.6 %
Total product revenue	367,708	411,834	44,126	12.0 %
Other revenue	27,501	23,492	(4,009)	(14.6)%
Net revenues	$ 395,209	$ 435,326	$ 40,117	10.2 %
Pounds by market **(in thousands)**				
Aerospace	8,847	9,844	997	11.3 %
Chemical processing	3,163	3,855	692	21.9 %
Industrial gas turbine	4,468	2,866	(1,602)	(35.9)%
Other markets	1,639	1,833	194	11.8 %
Total shipments	18,117	18,398	281	1.6 %
Average selling price per pound				
Aerospace	$ 21.76	$ 23.05	$ 1.29	5.9 %
Chemical processing	22.28	20.54	(1.74)	(7.8)%
Industrial gas turbine	13.77	18.27	4.50	32.7 %
Other markets	26.36	29.14	2.78	10.5 %
Total product (excluding other revenue)	20.30	22.38	2.08	10.2 %
Total average selling price (including other revenue)	$ 21.81	$ 23.66	$ 1.85	8.5 %

Net Revenues. Net revenues were $435.3 million in fiscal 2018, an increase of 10.2% from $395.2 million in fiscal 2017, due to an increase in average selling price per pound combined with an increase in volume. The average product selling price was $22.38 per pound in fiscal 2018, an increase of 10.2%, or $2.08, from $20.30 per pound in fiscal 2017. Volume was 18.4 million pounds in fiscal 2018, an increase of 1.6% from 18.1 million pounds in fiscal 2017 with increases in the aerospace, chemical processing and other markets, however the increase was nearly offset by a dramatic drop in industrial gas turbine volumes of 35.9%. The average product selling price per pound increased as a result of higher raw material market prices, price increases and other pricing considerations, which increased average selling price per pound by approximately $1.14, combined with a higher value product mix, which increased the average selling price per pound by approximately $0.94.

Sales to the aerospace market were $226.9 million in fiscal 2018, an increase of 17.9% from $192.5 million in fiscal 2017, due to an 11.3%, increase in volume, combined with a 5.9%, or $1.29, increase in the average selling price per pound. The increase in volume reflects the increase in new engine platform sales combined with the Company's enhanced capacity from the cold-finishing capital investment. The average selling price per pound increase reflects a change in market prices of raw materials and other pricing consideration, which increased average selling price per pound by approximately $1.32, partially offset by a slightly lower-value mix, which decreased average selling price per pound by approximately $0.03.

Sales to the chemical processing market were $79.2 million in fiscal 2018, an increase of 12.3% from $70.5 million in fiscal 2017, due to a 21.9% increase in volume, partially offset by a 7.8%, or $1.74, decrease in the average selling price per pound. Volumes increased in fiscal 2018 from low levels in both base business and special projects in fiscal 2017. The average selling price per pound decrease reflects a lower-value product mix driven by the higher base-business volumes of commodity alloys combined with a change in market prices of raw materials and other pricing considerations, which decreased average selling price per pound by approximately $1.42 and $0.32, respectively.

Sales to the industrial gas turbine market were $52.4 million in fiscal 2018, a decrease of 14.9% from $61.5 million in fiscal 2017, due to a 35.9% decrease in volume partially offset by a 32.7%, or $4.50, increase in the average selling price per pound. The decrease in volume was primarily due to weak demand, along with a lower level of ingot orders shipped in fiscal 2018 compared to the same period of fiscal 2017. Demand for large-frame industrial gas turbines has been weak due to an over-build in the industry as well as growth in renewable energy facilities. The two large OEM producers of large-frame turbines announced significant restructurings in their power generation businesses. The increase in average selling price per pound primarily reflects a change to a higher-value product mix and higher market raw material prices and other pricing considerations, which increased average selling price per pound by approximately $2.63 and $1.87, respectively.

Sales to other markets were $53.4 million in fiscal 2018, an increase of 23.6% from $43.2 million in fiscal 2017, due to an 11.8% increase in volume, combined with a 10.5%, or $2.78, increase in average selling price per pound. The increase in volume is due primarily to increases in demand in the flue-gas desulfurization market. The increase in average selling price reflects higher market raw material prices and other pricing considerations along with a higher-value product mix, which increased average selling price per pound by approximately $2.00 and $0.80, respectively.

Other Revenue. Other revenue was $23.5 million in fiscal 2018, a decrease of 14.6% from $27.5 million in fiscal 2017. The decrease in other revenue is primarily attributable to decreased conversion services.

Cost of Sales. Cost of sales was $379.5 million, or 87.2% of net revenues, in fiscal 2018 compared to $349.5 million, or 88.4% of net revenues, in fiscal 2017. Cost of sales in fiscal 2018 increased by $30.0 million as compared to fiscal 2017 primarily due to higher volumes, a higher-value product mix and costs associated with relocating the Lebanon service center to LaPorte as previously announced.

Gross Profit. As a result of the above factors, gross margin was $55.8 million for fiscal 2018, an increase of $10.1 million from $45.7 million in fiscal 2017. Gross margin as a percentage of net revenue increased to 12.8% in fiscal 2018 as compared to 11.6% in fiscal 2017.

Selling, General and Administrative Expense. Selling, general and administrative expense was $47.0 million for fiscal 2018, an increase of $5.5 million, or 13.1%, from $41.6 million in fiscal 2017. The significant drivers of the increase in fiscal 2018 included two events that took place during the third quarter of fiscal 2018. First, expense of $1.5 million was recorded related to certain legal and due diligence costs incurred in a strategic acquisition initiative that reached late stage negotiations but ultimately did not result in an executed purchase agreement. Second, expense of $1.3 million was recorded related to the retirement of the Company's Chief Executive Officer. A portion of the increase in cost was attributable to higher management incentive compensation expense of $1.1 million and $0.5 million of increased bad debt expense. As a result of the above-mentioned charges, selling, general and administrative expense as a percentage of net revenues increased to 10.8% for fiscal 2018 compared to 10.5% for the same period of fiscal 2017.

Research and Technical Expense. Research and technical expense was $3.8 million, or 0.9% of revenue, for fiscal 2018, compared to $3.9 million, or 1.0% of net revenue, in fiscal 2017.

Operating Income/(Loss). As a result of the above factors, operating income in fiscal 2018 was $5.0 million, compared to operating income of $0.3 million in fiscal 2017.

Nonoperating retirement benefit expense. Nonoperating retirement benefit expense was $8.2 million for fiscal 2018 compared to $16.8 million in the same period of fiscal 2017. The increase in expense was primarily driven by lower discount rates which resulted in higher retirement liabilities and ultimately higher expense.

Income Taxes. Income tax expense was $17.7 million during fiscal 2018, a difference of $24.7 million from a benefit of $7.0 million in the same period of fiscal 2017. The higher tax expense for fiscal 2018 as compared to fiscal 2017 is primarily attributable to the passage of the Tax Cuts and Jobs Act during fiscal 2018, which required the Company to revalue its deferred tax asset based on the lowering of the statutory tax rate of 35% to 21% (24.5% in fiscal 2018). Note 7 to the consolidated financial statements in this Annual Report on Form 10-K for the year ended September 30, 2018 sets forth additional information regarding the impact of the Tax Cuts and Jobs Act.

Net Income/(Loss). As a result of the above factors, net loss for fiscal 2018 was $(21.8) million (which includes a $20.9 million impact of the Tax Cuts and Jobs Act and other special charges), an increase in loss of $11.6 million from net loss of $(10.2) million in fiscal 2017.

Liquidity and Capital Resources

Comparative cash flow analysis (2018 to 2019)

The Company had cash and cash equivalents of $31.0 million, inclusive of $9.3 million that was held by foreign subsidiaries in various currencies at September 30, 2019, compared to $9.8 million at September 30, 2018. Additionally, there were zero borrowings against the line of credit outstanding as of September 30, 2019. During fiscal 2019, the Company's primary sources of cash were cash on-hand and the revolving credit facility which was drawn against during the first six months of fiscal 2019, but repaid in full by March 31, 2019.

Net cash provided by operating activities was $43.0 million in fiscal 2019 compared to net cash used in operating activities of $(13.7) million in fiscal 2018, a difference of $56.7 million. The improvement is primarily driven by a reduction in inventory value during fiscal 2019 of $11.7 million (net of foreign currency impacts) compared to a $29.9 million (net of foreign currency impacts) increase in inventory during the same period of fiscal 2018 along with $3.7 million of income tax refunds during fiscal 2019 as compared to a $2.0 million of tax payments during the same period of fiscal 2018.

Net cash used in investing activities was $10.0 million in fiscal 2019, which was lower than cash used in investing activities during the same period of fiscal 2018 of $11.1 million, driven by lower additions to property, plant and equipment.

Net cash used in financing activities was $11.3 million in fiscal 2019, which was lower than cash used in financing activities during the same period of fiscal 2018 of $11.5 million, as a result of, among other factors, proceeds received from the exercise of stock options during fiscal 2019. Dividends paid of $11.0 million in fiscal 2019, was comparable to the prior year. Additionally, during fiscal 2019, the Company borrowed $16.6 million from the revolving credit facility, which was fully repaid by the end of the second quarter.

Comparative cash flow analysis (2017 to 2018)

During fiscal 2018, the Company's primary source of cash was cash on-hand and the revolving credit facility which was temporarily drawn against in the fourth quarter of fiscal 2018, but paid back to zero by September 30, 2018. At September 30, 2018, the Company had cash and cash equivalents of $9.8 million, inclusive of $7.3 million that was held by foreign subsidiaries in various currencies, compared to $46.3 million at September 30, 2017.

Net cash used in operating activities was $13.7 million in fiscal 2018 compared to net cash provided by operating activities of $7.7 million in fiscal 2017. The cash used in operating activities during fiscal 2018 was driven by increases in controllable working capital (inventory, accounts receivable, accounts payable and accrued expenses) of $32.3 million (excluding the impact of foreign exchange) compared to cash used of $2.8 million in fiscal 2017, as well as higher pension contributions of $8.8 million as compared to $6.8 million during fiscal 2017. These factors were partially offset by income generated from operations excluding the impacts of expense that do not impact cash such as depreciation and amortization expense, pension expense and income tax expense.

Net cash used in investing activities in fiscal 2018 of $11.1 million was lower than cash used in investing activities in fiscal 2017 of $15.0 million by $3.9 million as a result of lower additions to property, plant and equipment, primarily driven by capital spend in cold-finish during fiscal 2017 that did not repeat in fiscal 2018.

Net cash used in financing activities in fiscal 2018 of $11.5 million included $11.0 million of dividend payments and approximately $0.2 million of stock re-purchases made to satisfy taxes in relation to the vesting of restricted stock, which is comparable to the prior year. Additionally, during the fourth quarter of fiscal 2018, the Company borrowed $4.2 million from the revolving credit facility which was fully repaid during the quarter.

Future sources of liquidity

The Company's sources of liquidity for fiscal 2020 are expected to consist primarily of cash generated from operations, cash on-hand and, if needed, borrowings under the U.S. revolving credit facility. At September 30, 2019, the Company had cash of $31.0 million, an outstanding balance of zero on the U.S. revolving credit facility and access to a total of approximately $120.0 million under the U.S. revolving credit facility, subject to a borrowing base formula and certain reserves. Management believes that the resources described above will be sufficient to fund planned capital expenditures, regular quarterly dividends and working capital requirements over the next twelve months.

U.S. revolving credit facility

The Company and Wells Fargo Capital Finance, LLC ("Wells Fargo") entered into a Third Amended and Restated Loan and Security Agreement (the "Amended Agreement") with certain other lenders with an effective date of July 14, 2011. On July 7, 2016, the Company amended the agreement to, among other things, extend the term through July 7, 2021 and reduce unused line fees and certain administrative fees. The maximum revolving loan amount under the Amended Agreement is $120.0 million, subject to a borrowing base formula and certain reserves. The Amended Agreement permits an increase in the maximum revolving loan amount from $120.0 million up to an aggregate amount of $170.0 million at the request of the borrower. Borrowings under the U.S. revolving credit facility bear interest, at the Company's option, at either Wells Fargo's "prime rate", plus up to 0.75% per annum, or the adjusted Eurodollar rate used by the lender, plus up to 2.0% per annum. As of September 30, 2019, the U.S. revolving credit facility had a zero balance.

The Company must pay monthly, in arrears, a commitment fee of 0.20% per annum on the unused amount of the U.S. revolving credit facility total commitment. For letters of credit, the Company must pay 1.5% per annum on the daily outstanding balance of all issued letters of credit, plus customary fees for issuance, amendments and processing.

The Company is subject to certain covenants as to fixed charge coverage ratios and other customary covenants, including covenants restricting the incurrence of indebtedness, the granting of liens and the sale of assets. The covenant pertaining to fixed charge coverage ratios is only effective in the event the amount of excess availability under the revolver is less than 10.0% of the maximum credit revolving loan amount. The Company is permitted to pay dividends and repurchase common stock if certain financial metrics are met (most of which do not apply in the case of regular quarterly dividends less than $20.0 million in the aggregate in a year and repurchases in connection with the vesting of shares of restricted stock). As of September 30, 2019, the most recent required measurement date under the Amended Agreement, management believes the Company was in compliance with all applicable financial covenants under the Amended Agreement. Borrowings under the U.S. revolving credit facility are collateralized by a pledge of substantially all of the U.S. assets of the Company, including the equity interests in its U.S. subsidiaries, but excluding the four-high Steckel rolling mill and related assets, which are pledged to Titanium Metals Corporation ("TIMET") to secure the performance of the Company's obligations under a Conversion Services Agreement with TIMET (see discussion of TIMET at Note 16 in the Company's Notes to Consolidated Financial Statements in this Annual Report on Form 10-K). The U.S. revolving credit facility is also secured by a pledge of a 65% equity interest in each of the Company's direct foreign subsidiaries.

Future uses of liquidity

The Company's primary uses of cash over the next twelve months are expected to consist of expenditures related to:

- Funding operations;
- Capital spending;
- Dividends to stockholders; and
- Pension and postretirement plan contributions.

Capital investment in fiscal 2019 was $10.0 million, and the plan for capital spending in fiscal 2020 is $12.0 million.

Contractual Obligations

The following table sets forth the Company's contractual obligations for the periods indicated, as of September 30, 2019:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1-3 Years	3-5 Years	More than 5 years
			(in thousands)		
Credit facility fees[1]	$ 510	$ 280	$ 230	$ —	$ —
Operating lease obligations	4,852	2,542	1,713	536	61
Capital and finance lease obligations	16,685	993	2,013	2,056	11,623
Raw material contracts (primarily nickel)	26,296	26,296	—	—	—
Capital projects and other commitments	2,108	2,108	—	—	—
Pension plan[2]	101,812	6,000	12,000	12,000	71,812
Non-qualified pension plans	719	95	190	190	244
Other postretirement benefits[3]	47,234	4,155	9,281	9,859	23,939
Environmental post-closure monitoring	606	97	144	151	214
Total	$ 200,822	$ 42,566	$ 25,571	$ 24,792	$ 107,893

(1) As of September 30, 2019, the revolver balance was zero, therefore no interest is due. However, the Company is obligated to the Bank for unused line fees and quarterly management fees.

(2) The Company has a funding obligation to contribute $101,812 to the domestic pension plan. These payments will be tax deductible. All benefit payments under the domestic pension plan will come from the plan and not the Company.

(3) Represents expected other postretirement benefits based upon anticipated timing of payments.

Inflation or Deflation

The Company may be favorably or unfavorably impacted by inflation or deflation, resulting in a material impact on its operating results. The Company attempts to pass onto customers both increases in consumable costs and material costs because of the value-added contribution the material makes to the final product, however, a rapid increase in raw material costs may not be able to be successfully offset by adjustments to customer selling prices. In the event of raw material price declines, the Company's customers may delay order placement, resulting in lower volumes. In the event that raw material price increases that the Company is unable to pass on to its customers occur, the Company's cash flows or results of operations could be materially adversely affected.

Critical Accounting Policies and Estimates

Overview

Management's Discussion and Analysis of Financial Condition and Results of Operations discusses the Company's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments, including those related to bad debts, inventories, income taxes, asset impairments, retirement benefits, matters related to product liability and other lawsuits and environmental matters. The process of determining significant estimates is fact specific and takes into account factors such as historical experience, current and expected economic conditions, product mix, pension asset mix and, in some cases, actuarial techniques and various other factors that are believed to be reasonable under the circumstances. The results of this process form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company routinely reevaluates these significant factors and makes adjustments

where facts and circumstances dictate. Actual results may differ from these estimates under different assumptions or conditions.

The Company's accounting policies are more fully described in Note 2 in the Notes to the Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The Company has identified certain critical accounting policies, which are described below. The following listing of policies is not intended to be a comprehensive list of all of the Company's accounting policies. In many cases, the accounting treatment of a particular transaction is specifically dictated by generally accepted accounting principles, with no need for management's judgment in their application. There are also areas in which management's judgment in selecting any available alternative would not produce a materially different result.

Revenue Recognition

The Company recognizes revenue when performance obligations under the terms of customer contracts are satisfied which occurs when control of the goods and services has been transferred to the customer. Allowances for sales returns are recorded as a component of net sales in the periods in which the related sales are recognized. The Company determines this allowance based on historical experience. Additionally, the Company recognizes revenue attributable to an up-front fee received from Titanium Metals Corporation ("TIMET") as a result of a twenty-year agreement, entered into on November, 17, 2006 to provide conversion services to TIMET. See Note 16 Deferred Revenue for a description of accounting treatment relating to this up-front fee.

Pension and Postretirement Benefits

The Company has defined benefit pension and postretirement plans covering most of its current and former employees. Significant elements in determining the assets or liabilities and related income or expense for these plans are the expected return on plan assets (if any), the discount rate used to value future payment streams, expected trends in health care costs and other actuarial assumptions. Annually, the Company evaluates the significant assumptions to be used to value its pension and postretirement plan assets and liabilities based on current market conditions and expectations of future costs. If actual results are less favorable than those projected by management, additional expense may be required in future periods.

The selection of the U.S. pension plan's (the Plan) assumption for the expected long-term rate of return on plan assets is based upon the Plan's target allocation of 60% equities and 40% bonds, and the expected rate of return for each equity/bond asset class. Based upon the target allocation and each asset class's expected return, the Plan's return on assets assumption is 7.25%, and is unchanged since last year's assumption. The return on assets is based on fair value of the plan assets and their investment allocation at the beginning of the fiscal year. The Company also realizes that historical performance is no guarantee of future performance.

In the short term, substantial decreases in plan assets will result in higher plan funding contribution levels and higher pension expenses. A decrease of 25 basis points in the expected long-term rate of return on plan assets would result in an increase in annual pension expense of about $503,000. To the extent that the actual return on plan assets during the year exceeds or falls short of the assumed long-term rate of return, an asset gain or loss is created. For funding purposes, gains and losses are generally amortized over a 7-year period. As an example, each $1.0 million in asset loss created by unfavorable investment performance results in seven annual payments (contributions) of approximately $160,000 depending upon the precise effective interest rate in the valuation and the timing of the contribution.

Decreases in discount rates used to value future payment streams will result in higher liabilities for pension and postretirement plans. A decrease of 25 basis points would result in $10.3 million higher liability for the U.S. pension plan and $4.8 million higher liability for the postretirement plan. This increase in liability would also increase the accumulated other comprehensive loss that would be amortized as higher pension and postretirement expense over an amortization period of approximately 6.5 and 7.2 years, respectively.

Salaried employees hired after December 31, 2005 and hourly employees hired after June 30, 2007 are not covered by the pension plan; however, they are eligible for an enhanced matching program of the defined contribution plan (401(k)). Effective December 31, 2007, the U.S. pension plan was amended to freeze benefits for all non-union employees in the U.S. Effective September 30, 2009, the U.K. pension plan was amended to freeze benefits for employees in the plan.

During the fourth quarter of fiscal 2018, the Company transferred assets of $13,576 to a third-party insurance company in exchange for the assumption of pension liability for approximately 397 retired participants. The pension liability for those retirees is not included in the projected benefit obligation as of September 30, 2018 and September 30, 2019.

Impairment of Long-lived Assets and Other Intangible Assets

The Company reviews long-lived assets for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of long-lived assets to be held and used is measured by a comparison of the carrying amount of the asset to the undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount exceeds the fair value of the asset. The Company reviews assets for impairment annually or more frequently if events or circumstances indicate that the carrying amount may be impaired on trademark and patent intangible assets.

Income Taxes

The Company accounts for deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between book and tax basis of recorded assets and liabilities. A valuation allowance is required if it is more likely than not that some portion or all of the deferred tax assets will not be realized. The determination of whether or not a valuation allowance is needed is based upon an evaluation of both positive and negative evidence. In its evaluation of the need for a valuation allowance, the Company assesses prudent and feasible tax planning strategies. The ultimate amount of deferred tax assets realized could be different from those recorded, as influenced by potential changes in enacted tax laws and the availability of future taxable income.

Recently Issued Accounting Pronouncements

See Note 2—Summary of Significant Accounting Policies of Notes to Consolidated Financial Statements for information regarding New Accounting Standards.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk is the potential loss arising from adverse changes in market rates and prices. The Company is exposed to various market risks, including changes in interest rates, foreign currency exchange rates and the price of raw materials, particularly nickel.

Changes in interest rates affect the Company's interest expense on variable rate debt. All of the Company's revolver availability was at a variable rate at September 30, 2018 and 2019. The Company's outstanding variable rate debt was zero at September 30, 2018 and 2019. The Company has not entered into any derivative instruments to hedge the effects of changes in interest rates.

The foreign currency exchange risk exists primarily because the Company's foreign subsidiaries maintain receivables and payables denominated in currencies other than their functional currency. Foreign currency forward contracts are entered into as a means to partially offset the impact of cash transactions occurring at the foreign affiliates in currencies other than the entities' functional currency. The U.S. operations transact their foreign sales in U.S. dollars, thereby avoiding fluctuations in foreign exchange rates. The Company is not party to any currency contracts as of September 30, 2019.

Fluctuations in the price of nickel and cobalt, subject the Company to commodity price risk. The Company manages its exposure to this market risk through internally established policies and procedures, including negotiating raw material escalators within product sales agreements and continually monitoring and revising customer quote amounts to reflect the fluctuations in market prices for nickel. The Company does not presently use derivative instruments to manage this market risk but may in the future. The Company monitors its underlying market risk exposure from a rapid change in nickel prices on an ongoing basis and believes that it can modify or adapt its strategies as necessary. The Company periodically purchases raw material forward with certain suppliers. However, there is a risk that the Company may not be able to successfully offset a rapid increase or decrease in the cost of raw material in the future.

Item 8. Financial Statements and Supplementary Data

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Audited Consolidated Financial Statements of Haynes International, Inc. and Subsidiaries as of September 30, 2019 and 2018 and for the years ended September 30, 2019, September 30, 2018 and September 30, 2017

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Haynes International, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Haynes International, Inc. and subsidiaries (the "Company") as of September 30, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the three years in the period ended September 30, 2019, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of September 30, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2019, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2019, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

Basis for Opinions

The Company's management is responsible for these financial statements, 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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

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

/s/ Deloitte & Touche LLP

Indianapolis, IN
November 14, 2019

We have served as the Company's auditor since fiscal year 1998.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	September 30, 2018	September 30, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,802	$ 31,038
Accounts receivable, less allowance for doubtful accounts of $1,130 and $441 at September 30, 2018 and September 30, 2019, respectively	73,437	76,979
Inventories	273,045	258,802
Income taxes receivable	7,240	1,757
Other current assets	2,825	3,297
Total current assets	366,349	371,873
Property, plant and equipment, net	179,400	169,966
Deferred income taxes	25,454	34,132
Other assets	7,163	7,756
Goodwill	4,789	4,789
Other intangible assets, net	5,539	5,284
Total assets	$ 588,694	$ 593,800
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 37,140	$ 34,497
Accrued expenses	17,463	18,833
Accrued pension and postretirement benefits	5,095	4,250
Deferred revenue—current portion	2,500	2,500
Total current liabilities	62,198	60,080
Long-term obligations (less current portion) (Note 19)	8,443	8,609
Deferred revenue (less current portion)	17,829	15,329
Deferred income taxes	1,919	2,016
Accrued pension benefits (less current portion)	62,072	101,812
Accrued postretirement benefits (less current portion)	103,013	109,679
Total liabilities	255,474	297,525
Commitments and contingencies (Notes 10 and 11)	—	—
Stockholders' equity:		
Common stock, $0.001 par value (40,000,000 shares authorized, 12,546,591 and 12,566,969 shares issued and 12,504,478 and 12,513,500 shares outstanding at September 30, 2018 and September 30, 2019, respectively)	13	13
Preferred stock, $0.001 par value (20,000,000 shares authorized, 0 shares issued and outstanding)	—	—
Additional paid-in capital	251,053	253,843
Accumulated earnings	126,588	125,296
Treasury stock, 42,113 shares at September 30, 2018 and 53,469 shares at September 30, 2019	(1,869)	(2,239)
Accumulated other comprehensive loss	(42,565)	(80,638)
Total stockholders' equity	333,220	296,275
Total liabilities and stockholders' equity	$ 588,694	$ 593,800

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)

	Year Ended September 30, 2017	Year Ended September 30, 2018	Year Ended September 30, 2019
Net revenues	$ 395,209	$ 435,326	$ 490,215
Cost of sales	349,520	379,491	424,712
Gross profit	45,689	55,835	65,503
Selling, general and administrative expense	41,569	47,030	44,195
Research and technical expense	3,855	3,785	3,592
Operating income	265	5,020	17,716
Nonoperating retirement benefit expense	16,803	8,238	3,446
Interest income	(186)	(82)	(86)
Interest expense	865	918	986
Income (loss) before income taxes	(17,217)	(4,054)	13,370
Provision for (benefit from) income taxes	(7,027)	17,697	3,625
Net income (loss)	$ (10,190)	$ (21,751)	$ 9,745
Net income (loss) per share:			
Basic	$ (0.83)	$ (1.75)	$ 0.78
Diluted	$ (0.83)	$ (1.75)	$ 0.78
Weighted Average Common Shares Outstanding			
Basic	12,397	12,420	12,445
Diluted	12,397	12,420	12,481
Dividends declared per common share	$ 0.88	$ 0.88	$ 0.88

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)

	Year Ended September 30, 2017	Year Ended September 30, 2018	Year Ended September 30, 2019
Net income (loss)	$ (10,190)	$ (21,751)	$ 9,745
Other comprehensive income (loss), net of tax:			
Pension and postretirement	39,624	32,029	(34,453)
Foreign currency translation adjustment	2,205	(1,900)	(3,620)
Other comprehensive income (loss)	41,829	30,129	(38,073)
Comprehensive income (loss)	$ 31,639	$ 8,378	$ (28,328)

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock		Additional Paid-in Capital	Accumulated Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par					
Balance September 30, 2016	12,491,149	$ 12	$ 246,625	$ 180,565	$ (1,380)	$ (114,523)	$ 311,299
Net income (loss)				(10,190)			(10,190)
Dividends paid ($0.88 per share)				(11,009)			(11,009)
Other comprehensive income (loss)						41,829	41,829
Tax impact of forfeited vested options							—
Issue restricted stock (less forfeitures)	24,625	1	(1)				—
Purchase of treasury stock	(6,017)				(266)		(266)
Stock compensation			2,109				2,109
Balance September 30, 2017	12,509,757	$ 13	$ 248,733	$ 159,366	$ (1,646)	$ (72,694)	$ 333,772
Net income (loss)				(21,751)			(21,751)
Dividends paid ($0.88 per share)				(11,027)			(11,027)
Other comprehensive income (loss)						30,129	30,129
Issue restricted stock (less forfeitures)	1,658						—
Purchase of treasury stock	(6,937)				(223)		(223)
Stock compensation			2,320				2,320
Balance September 30, 2018	12,504,478	$ 13	$ 251,053	$ 126,588	$ (1,869)	$ (42,565)	$ 333,220
Net income (loss)				9,745			9,745
Dividends paid and accrued ($0.88 per share)				(11,037)			(11,037)
Other comprehensive income (loss)						(38,073)	(38,073)
Exercise of stock options	12,084		215				215
Issue restricted stock (less forfeitures)	8,294						—
Purchase of treasury stock	(11,356)				(370)		(370)
Stock compensation			2,575				2,575
Balance September 30, 2019	12,513,500	$ 13	$ 253,843	$ 125,296	$ (2,239)	$ (80,638)	$ 296,275

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended September 30, 2017	Year Ended September 30, 2018	Year Ended September 30, 2019
Cash flows from operating activities:			
Net income (loss)	$ (10,190)	$ (21,751)	$ 9,745
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation	21,601	22,627	18,871
Amortization	496	527	255
Pension and post-retirement expense - U.S. and U.K.	23,435	14,110	8,819
Change in long-term obligations	(15)	(7)	316
Stock compensation expense	2,109	2,320	2,575
Deferred revenue	(7,488)	(2,500)	(2,500)
Deferred income taxes	(10,072)	23,115	1,872
Loss on disposition of property	612	250	138
Change in assets and liabilities:			
Accounts receivable	755	(12,590)	(5,002)
Inventories	(6,982)	(29,905)	11,702
Other assets	287	(2,120)	(1,080)
Accounts payable and accrued expenses	3,476	10,220	(204)
Income taxes	709	(7,406)	5,534
Accrued pension and postretirement benefits	(11,052)	(10,627)	(7,994)
Net cash provided by (used in) operating activities	7,681	(13,737)	43,047
Cash flows from investing activities:			
Additions to property, plant and equipment	(15,006)	(11,085)	(10,041)
Net cash provided by (used in) investing activities	(15,006)	(11,085)	(10,041)
Cash flows from financing activities:			
Revolving credit facility borrowings	—	4,200	16,600
Revolving credit facility repayments	—	(4,200)	(16,600)
Dividends paid	(11,009)	(11,013)	(11,011)
Proceeds from exercise of stock options	—	—	215
Payment for purchase of treasury stock	(266)	(223)	(370)
Payments on long-term obligation	(166)	(258)	(150)
Net cash provided by (used in) financing activities	(11,441)	(11,494)	(11,316)
Effect of exchange rates on cash	351	(210)	(454)
Increase (decrease) in cash and cash equivalents:	(18,415)	(36,526)	21,236
Cash, cash equivalents and restricted cash:			
Beginning of period	64,743	46,328	9,802
End of period	$ 46,328	$ 9,802	$ 31,038
Supplemental disclosures of cash flow information:			
Interest (net of capitalized interest)	$ 807	$ 860	$ 928
Income taxes paid (refunded), net	$ 2,335	$ 1,965	$ (3,650)
Capital expenditures incurred, but not yet paid	$ 1,910	$ 703	$ 490
Dividends declared but not yet paid	$ —	$ 14	$ 26
Lease obligation incurred	$ 4,100	$ —	$ —

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in thousands, except share and per share data and as otherwise noted)

Note 1. Background and Organization

Description of Business

Haynes International, Inc. and its subsidiaries (the “Company”, “Haynes”, “we”, “our” or “us”) develops, manufactures, markets and distributes technologically advanced, high-performance alloys primarily for use in the aerospace, industrial gas turbine and chemical processing industries. The Company’s products are high-temperature resistant alloys (“HTA”) and corrosion-resistant alloys (“CRA”). The Company’s HTA products are used by manufacturers of equipment that is subjected to extremely high temperatures, such as jet engines for the aerospace industry, gas turbine engines for power generation, waste incineration and industrial heating equipment. The Company’s CRA products are used in applications that require resistance to extreme corrosion, such as chemical processing, power plant emissions control and hazardous waste treatment. The Company produces its high-performance alloys primarily in sheet, coil and plate forms. In addition, the Company produces its products as seamless and welded tubulars, and in slab, bar, billets and wire forms.

High-performance alloys are characterized by highly engineered, often proprietary, metallurgical formulations primarily of nickel, cobalt and other metals with complex physical properties. The complexity of the manufacturing process for high-performance alloys is reflected in the Company’s relatively high average selling price per pound, compared to the average selling price of other metals, such as carbon steel sheet, stainless steel sheet and aluminum. The high-performance alloy industry has significant barriers to entry such as the combination of (i) demanding end-user specifications, (ii) a multi-stage manufacturing process and (iii) the technical sales, marketing and manufacturing expertise required to develop and sell new applications.

Note 2. Summary of Significant Accounting Policies

A. Principles of Consolidation and Nature of Operations

The consolidated financial statements include the accounts of Haynes International, Inc. and its wholly-owned subsidiaries. All intercompany transactions and balances are eliminated. The Company has manufacturing facilities in Kokomo, Indiana; Mountain Home, North Carolina; and Arcadia, Louisiana with service centers in LaPorte, Indiana; LaMirada, California; Houston, Texas; Windsor, Connecticut; Openshaw, England; Lenzburg, Switzerland; Shanghai, China; and sales offices in Paris, France; Zurich, Switzerland; Singapore; Milan, Italy; and Tokyo, Japan.

B. Cash and Cash Equivalents

The Company considers all highly liquid investment instruments, including investments with original maturities of three months or less at acquisition, to be cash equivalents, the carrying value of which approximates fair value due to the short maturity of these investments.

C. Accounts Receivable

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The Company markets its products to a diverse customer base, both in the United States of America and overseas. Trade credit is extended based upon evaluation of each customer’s ability to perform its obligation, which is updated periodically.

D. Revenue Recognition

The Company recognizes revenue when performance obligations under the terms of customer contracts are satisfied which occurs when control of the goods and services has been transferred to the customer. Allowances for sales returns are recorded as a component of net sales in the periods in which the related sales are recognized. The Company determines this allowance based on historical experience. Additionally, the Company recognizes revenue attributable to an up-front fee received from Titanium Metals Corporation (TIMET) as a result of a twenty-year agreement entered into on November 17, 2006 to provide conversion services to TIMET. See Note 16, Deferred Revenue for a description of accounting treatment relating to this up-front fee.

E. Inventories

Inventories are stated at the lower of cost or net realizable value. The cost of inventories is determined using the first-in, first-out (FIFO) method. The Company writes down its inventory for estimated obsolescence or unmarketable inventory in an amount equal to the difference between the cost of inventory and the estimated market or scrap value, if applicable, based upon assumptions about future demand and market conditions.

F. Goodwill and Other Intangible Assets

The Company has goodwill, trademarks, customer relationships and other intangibles as of September 30, 2019. As the customer relationships have a definite life, they are amortized over fifteen years. The Company reviews customer relationships for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the assets is measured by a comparison of the carrying amount of the asset to the undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount exceeds the fair value of the asset.

Goodwill and trademarks (indefinite lived) are tested for impairment at least annually as of January 31 for goodwill and August 31 for trademarks (the annual impairment testing dates), or more frequently if impairment indicators exist. If the carrying value of the trademarks exceeds the fair value (determined using an income approach, based upon a discounted cash flow of an assumed royalty rate), impairment of the trademark may exist resulting in a charge to earnings to the extent of the impairment. The impairment test for goodwill is performed by comparing the fair value of a reporting unit with its carrying amount and recognizing an impairment loss in the event that the carrying amount is greater than the fair value. Any goodwill impairment loss recognized would not exceed the total carrying amount of goodwill allocated to that reporting unit. No impairment was recognized in the years ended September 30, 2017, 2018 or 2019 because the fair value exceeded the carrying values.

During fiscal 2017, 2018 and 2019, there were no changes in the carrying amount of goodwill.

Amortization of the patents, customer relationships and other intangibles was $496, $527 and $255 for the years ended September 30, 2017, 2018 and 2019, respectively. The following represents a summary of intangible assets at September 30, 2018 and 2019:

September 30, 2018	Gross Amount	Accumulated Amortization	Carrying Amount
Patents	$ 4,030	$ (3,977)	$ 53
Trademarks	3,800	—	3,800
Customer relationships	2,100	(574)	1,526
Other	291	(131)	160
	$ 10,221	$ (4,682)	$ 5,539

September 30, 2019	Gross Amount	Accumulated Amortization	Carrying Amount
Patents	$ —	$ —	$ —
Trademarks	$ 3,800	$ —	$ 3,800
Customer relationships	2,100	(718)	1,382
Other	291	(189)	102
	$ 6,191	$ (907)	$ 5,284

Estimated future Aggregate Amortization Expense: Year Ended September 30,	
2020	$ 198
2021	185
2022	133
2023	129
2024	126
Thereafter	713

G. Property, Plant and Equipment

Additions to property, plant and equipment are recorded at cost with depreciation calculated primarily by using the straight-line method based on estimated economic useful lives, which are generally as follows:

Buildings and improvements	40 years
Machinery and equipment	5 — 14 years
Land improvements	20 years

Expenditures for maintenance and repairs and minor renewals are charged to expense; major renewals are capitalized. Upon retirement or sale of assets, the cost of the disposed assets and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is credited or charged to operations.

The Company records capitalized interest for long-term construction projects to capture the cost of capital committed prior to the placed in service date as a part of the historical cost of acquiring the asset. Interest is not capitalized when the balance on the revolver is zero.

The Company reviews long-lived assets for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of long-lived assets to be held and used is measured by a comparison of the carrying amount of the asset to the undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount exceeds the fair value of the asset. No impairment was recognized during the years ended September 30, 2017, 2018 or 2019.

H. Environmental Remediation

When it is probable that a liability has been incurred or an asset of the Company has been impaired, a loss is recognized assuming the amount of the loss can be reasonably estimated. The measurement of environmental liabilities by the Company is based on currently available facts, present laws and regulations and current technology. Such estimates take into consideration the expected costs of post-closure monitoring based on historical experience.

I. Pension and Postretirement Benefits

The Company has defined benefit pension and postretirement plans covering most of its current and former employees. Significant elements in determining the assets or liabilities and related income or expense for these plans are the expected return on plan assets, the discount rate used to value future payment streams, expected trends in health care costs and other actuarial assumptions. Annually, the Company evaluates the significant assumptions to be used to value

its pension and postretirement plan assets and liabilities based on current market conditions and expectations of future costs. If actual results are less favorable than those projected by management, additional expense may be required in future periods. Salaried employees hired after December 31, 2005 and hourly employees hired after June 30, 2007 are not covered by the pension plan; however, they are eligible for an enhanced matching program of the defined contribution plan (401(k)). Effective December 31, 2007, the U.S. pension plan was amended to freeze benefits for all non-union employees in the U.S. Effective September 30, 2009, the U.K. pension plan was amended to freeze benefits for employees in the plan. Effective January 1, 2007, a plan amendment of the postretirement medical plan caps the Company's liability related to retiree health care costs at $5,000 annually.

J. Foreign Currency Exchange

The Company's foreign operating entities' financial statements are denominated in the functional currencies of each respective country, which are the local currencies. All assets and liabilities are translated to U.S. dollars using exchange rates in effect at the end of the year, and revenues and expenses are translated at the weighted average rate for the year. Translation gains or losses are recorded as a separate component of comprehensive income (loss) and transaction gains and losses are reflected in the consolidated statements of operations.

Gains and losses arising from the impact of foreign currency exchange rate fluctuations on transactions in foreign currency are included in selling, general and administrative expense. Beginning in the third quarter of fiscal 2018, the Company entered into foreign currency forward contracts (See Note 20, Foreign Currency Forward Contracts). The purpose of these forward contracts is to reduce income statement volatility resulting from the transaction gains and losses.

K. Research and Technical Costs

Research and technical costs related to the development of new products and processes are expensed as incurred. Research and technical costs for the years ended September 30, 2017, 2018 and 2019 were $3,855, $3,785 and $3,592, respectively.

L. Income Taxes

The Company accounts for deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between book and tax basis of recorded assets and liabilities. A valuation allowance is required if it is more likely than not that some portion or all of the deferred tax assets will not be realized. The determination of whether or not a valuation allowance is needed is based upon an evaluation of both positive and negative evidence. In its evaluation of the need for a valuation allowance, the Company utilizes prudent and feasible tax planning strategies. The ultimate amount of deferred tax assets realized could be different from those recorded, as influenced by potential changes in enacted tax laws and the availability of future taxable income. The Company records uncertain tax positions on the basis of a two-step process whereby (1) it is determined whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, we recognize the largest amount of tax benefit that is greater than 50 percent likely to be realized upon ultimate settlement with the related tax authority (See Note 7, Income Taxes).

M. Stock-based Compensation

As described in Note 12, the Company has incentive compensation plans that provide for the issuance of restricted stock, restricted stock units, performance shares, stock options and stock appreciation rights to key employees and non-employee directors. To date, the Company has only issued restricted stock, performance shares and stock options. The Company recognizes compensation expense under the fair-value based method as a component of operating expenses.

N. Financial Instruments and Concentrations of Risk

The Company may periodically enter into forward currency exchange contracts to minimize the variability in the Company's operating results arising from foreign exchange rate movements. The Company does not engage in foreign

currency speculation. At September 30, 2018 and 2019, the Company had no foreign currency exchange contracts outstanding. To date, all foreign currency contracts have been settled prior to the end of the month in which they were initiated.

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents and accounts receivable. At September 30, 2019, and periodically throughout the year, the Company has maintained cash balances in excess of federally insured limits. The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the relatively short maturity of these instruments.

During 2017, 2018 and 2019, the Company did not have sales to any group of affiliated customers that were greater than 10% of net revenues. The Company generally does not require collateral with the exception of letters of credit with certain foreign sales. Credit losses amounted to $228, $688 and $530 in fiscal 2017, 2018 and 2019, respectively, and were within management's expectations. The Company does not believe it is significantly vulnerable to the risk of near-term severe impact from business concentrations with respect to customers, suppliers, products, markets or geographic areas.

O. Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an on-going basis, management evaluates its estimates and judgments, including those related to bad debts, inventories, income taxes, asset impairment, retirement benefits and environmental matters. The process of determining significant estimates is fact specific and takes into account factors such as historical experience, current and expected economic conditions, product mix, pension asset mix and in some cases, actuarial techniques, and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company routinely reevaluates these significant factors and makes adjustments where facts and circumstances dictate. Actual results may differ from these estimates under different assumptions or conditions.

P. Earnings Per Share

The Company accounts for earnings per share using the two-class method. The two-class method is an earnings allocation that determines net income per share for each class of common stock and participating securities according to participation rights in undistributed earnings. Non-vested restricted stock awards that include non-forfeitable rights to dividends are considered participating securities. Basic earnings per share is computed by dividing net income available to common stockholders for the period by the weighted average number of common shares outstanding for the period. The computation of diluted earnings per share is similar to basic earnings per share, except the denominator is increased to

include the number of additional common shares that would have been outstanding if the potentially dilutive common shares had been issued.

Basic and diluted net income per share were computed as follows:

(in thousands, except share and per share data)	Years ended September 30, 2017	2018	2019
Numerator: Basic and Diluted			
Net income (loss)	$ (10,190)	$ (21,751)	$ 9,745
Dividends	(11,009)	(11,027)	(11,037)
Undistributed income (loss)	(21,199)	(32,778)	(1,292)
Percentage allocated to common shares [(a)]	100.0 %	100.0 %	100.0 %
Undistributed income (loss) allocated to common shares	(21,199)	(32,778)	(1,292)
Dividends paid on common shares outstanding	10,905	10,933	10,987
Net income (loss) available to common shares	(10,294)	(21,845)	9,695
Denominator: Basic and Diluted			
Weighted average common shares outstanding	12,397,099	12,419,564	12,445,212
Adjustment for dilutive potential common shares	—	—	35,696
Weighted average shares outstanding - Diluted	12,397,099	12,419,564	12,480,908
Basic net income (loss) per share	$ (0.83)	$ (1.75)	$ 0.78
Diluted net income (loss) per share	$ (0.83)	$ (1.75)	$ 0.78
Number of stock option shares excluded as their effect would be anti-dilutive	310,417	329,276	371,151
Number of restricted stock shares excluded as their effect would be anti-dilutive	107,854	91,008	—
[(a)] Percentage allocated to common shares - weighted average			
Common shares outstanding	12,397,099	12,419,564	12,445,212
Unvested participating shares	—	—	—
	12,397,099	12,419,564	12,445,212

Q. Recently Issued Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The objective of the update is to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This update provides a five-step analysis of transactions to determine when and how revenue is recognized, along with expanded disclosure requirements. An entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In adopting this accounting standard update using the modified retrospective method, the Company had no cumulative effect to record on the Consolidated Statement of Stockholders' Equity. See Note 3 for further explanation, including all newly expanded disclosure requirements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This standard contains principles that will require an entity to recognize leases on the balance sheet by recording a right-of-use asset and a lease liability. The standard also contains other changes to the current lease guidance that may result in changes to how entities determine which contractual arrangements qualify as a lease, the accounting for executory costs, such as property taxes and insurance, as well as which lease origination costs will be capitalizable. This standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those years. Early adoption of this standard is permitted. The standard allows the use of the modified retrospective transition method, whereby the new guidance will be applied at the beginning

of the earliest period presented in the financial statements of the period of adoption. The modified retrospective transition approach includes certain practical expedients that entities may elect to apply in transition. In July 2018, the FASB amended ASC 842 to provide another transition method, allowing a cumulative effect adjustment to the opening balance of retained earnings during the period of adoption. The Company will adopt this standard effective October 1, 2019 using the modified retrospective transition method which does not require adjustments to comparative periods or require modified disclosures for those periods. In addition, the Company anticipates electing certain practical expedients and transition reliefs, including the short-term lease recognition exemption, which excludes leases with a term of 12 months or less from recognition on the balance sheet, recognizing lease components and nonlease components together as a single lease component, and the transition relief package which, among other things, includes not reassessing the lease classification or whether a contract is or contains a lease. The Company is continuing to finalize new processes and internal controls required to comply with the new lease standard. The adoption of ASC 842 will not have a material impact on the Statement of Operations or Statement of Cash Flows. The recording of right-of-use assets and lease liabilities is expected to not have a material impact on the Company's Consolidated Balance Sheet.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230)*. This new guidance requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash and restricted cash equivalents. Therefore, amounts generally described as restricted cash and cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statement of cash flows. This update is effective for fiscal years beginning after December 15, 2017. The Company adopted this standard, effective October 1, 2018 and adjusted retrospectively. This application resulted in the addition of restricted cash of $5,446 to cash and cash equivalents for the beginning period of the year ended September 30, 2017 and reduced cash generated from restricted cash on the Consolidated Statement of Cash Flows.

In March 2017, the FASB issued ASU 2017-07, *Compensation – Retirement Benefits (Topic 715)*. This new guidance requires entities to (1) disaggregate the service cost component from the other components of net benefit cost and present it with other current compensation costs for related employees in the income statement and (2) present the other components elsewhere in the income statement and outside of income from operations if that subtotal is presented. In addition, the ASU requires entities to disclose the income statement lines that contain the other components if they are not presented on appropriately described separate lines. The amendments in this ASU also only allow the service cost component to be eligible for capitalization. This new guidance was effective for fiscal years beginning after December 15, 2017, including interim periods within those annual periods, with early adoption permitted. The Company adopted the standard on October 1, 2018. The amendments are applied retrospectively for the presentation of the service cost component and the other components of net periodic pension cost and net periodic postretirement benefit cost in the income statement and prospectively, for the capitalization of the service cost component of net periodic pension cost and net periodic postretirement benefit in assets. As a result of the retrospective change in presentation, the Company reclassified $15,979 and $824 from cost of sales and selling, general and administrative expense, respectively, to nonoperating retirement benefit expense on the Consolidated Statements of Operations for the fiscal year ended September 30, 2017. For the fiscal year ended September 30, 2018, the Company reclassified $8,157 and $81 from cost of sales and selling, general and administrative expense, respectively, to nonoperating retirement benefit expense on the Consolidated Statements of Operations The Company used the practical expedient allowed in the standard upon transition that permitted entities to use their previously disclosed service cost and other costs from the prior years' pension and other postretirement benefit plan footnotes in the comparative periods as appropriate estimates when retrospectively changing the presentation of these costs in the income statement.

In February 2018, the FASB issued ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows a reclassification from accumulated other comprehensive income (loss) to accumulated earnings for standard tax effects resulting from the Tax Cuts and Jobs Act. This update is effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company will adopt this standard during the first quarter of fiscal 2020 and it is expected to have an impact of increasing accumulated other comprehensive loss and increasing retained earnings by approximately $13,300.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820)*. This new guidance removes and modifies disclosure requirements on fair value statements. This update is effective for fiscal years beginning after December 15, 2019. The Company is currently evaluating the impact, if any, on its disclosures in the Notes to Consolidated Financial Statements.

In August 2018, the FASB issued ASU 2018-14, *Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20)*. This new guidance removes and modifies disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. Some disclosure requirements that are removed include, among others, amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year and the effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits. This update is effective for fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company early adopted this standard, effective October 1, 2018.

In June 2016, the FASB issued ASU 2016-05, *Financial Instruments – Credit Losses (Topic 326)* which introduced the expected credit losses methodology for the measurement of credit losses on financial assets measured at amortized cost basis, replacing the previous incurred loss methodology. The new current expected credit loss (CECL) methodology does not have a minimum threshold for recognition of impairment losses, and entities will need to measure expected credit losses on assets that have a low risk of loss. This update is effective for fiscal years beginning after December 15, 2019. The Company is currently evaluating the impact, if any, on the Companies Consolidated Financial Statements.

Note 3. Revenues from Contracts with Customers

On October 1, 2018, the Company adopted Accounting Standards Codification Topic 606 (ASC 606), *Revenue from Contracts with Customers*. This new guidance requires the Company to apply a five-step analysis to: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when, or as, the Company satisfies a performance obligation. This new guidance was adopted using the modified retrospective method. The adoption of ASC 606 did not result in the need to recognize a cumulative effect of initial application as an adjustment to retained earnings. In accordance with ASC 606, the Company has presented reserves for sales returns within accrued expenses on the Consolidated Balance Sheet which differs from previous periods which included these reserves as contra-assets within accounts receivable.

Performance Obligations

Revenue is recognized when performance obligations under the terms of contracts with the customer are satisfied, which occurs when control of the goods and services has been transferred to the customer. This predominately occurs upon shipment or delivery of the product or when the service is performed.

The Company may occasionally have customer agreements involving production and shipment of goods that would require revenue to be recognized over time in accordance with the new guidance due to there being no alternative use for the product without significant economic loss and enforceable right to payment including a normal profit margin from the customer in the event of contract termination. Over-time recognition was a change from the accounting for these products, which was point-in-time prior to the adoption of the new standard. As of October 1, 2018 and September 30, 2019, the Company did not have any customer agreements that would require revenue to be recorded over time.

Each customer purchase order or contract for goods transferred represents a single performance obligation for which revenue is recognized at either a point in time or over-time as described in the preceding paragraph. The standard terms and conditions of a customer purchase order include limited warranties and the right of customers to have products that do not meet specifications repaired or replaced, at the Company’s option. Such warranties do not represent a separate performance obligation.

The customer agreement with Titanium Metals Corporation ("TIMET") (See Note 16) includes the performance obligation to provide conversion services for up to ten million pounds of titanium metal annually over a twenty-year period which ends in fiscal 2027. The transaction price under this contract included a $50,000 up-front fee as well as conversion service fees based upon the fulfillment of conversion services requested at the option of TIMET. In accordance with ASC 606, the $50,000 fee is allocated to the obligation to provide manufacturing capacity over time and, therefore, is recognized in income on a straight-line basis over the 20-year term of that agreement. The fees for conversion services are based on quantity of service and are recognized as revenue at the time the service is performed.

Transaction Price

Each customer purchase order or contract sets forth the transaction price for the products and services purchased under that arrangement. Some customer arrangements may include variable consideration, such as volume rebates, which generally depend upon the Company's customers meeting specified performance criteria, such as a purchasing level over a period of time. The Company exercises judgment to estimate the most likely amount of variable consideration at each reporting date.

Revenue is measured as the amount of consideration expected to be received in exchange for the transfer of goods or services to customers. Revenue is derived from product sales or conversion services, and is reported net of sales discounts, rebates, incentives, returns and other allowances offered to customers, if applicable. Payment terms vary from customer to customer depending upon credit worthiness, prior payment history and other credit considerations.

Amounts billed to customers for shipping and handling activities to fulfill the Company's promise to transfer of the goods are included in revenues and costs incurred by the Company for the delivery of goods and are classified as cost of sales in the consolidated statements of income. Shipping terms may vary for products shipped outside the United States depending on the mode of transportation, the country where the material is shipped and any agreements made with the customers.

Contract Balances

As of September 30, 2018 and September 30, 2019, accounts receivable with customers were $74,567 and $77,420, respectively. Allowance for doubtful accounts as of September 30, 2018 and September 30, 2019 were $1,130 and $441, respectively, and are presented within accounts receivable, less allowance for doubtful accounts on the consolidated balance sheet.

Contract liabilities are recognized when the Company has received consideration from a customer to transfer goods or services at a future point in time when the Company performs under the purchase order or contract. As of September 30, 2018 and September 30, 2019, no contract liabilities have been recorded except for $20,329 and $17,829, respectively, for the TIMET agreement.

Practical Expedients

The Company has elected to use the practical expedient that permits the omission of disclosure for remaining performance obligations which are expected to be satisfied within one year or less. Aside from the TIMET agreement, the Company does not have any remaining performance obligations in excess of one year or contracts that it does not have the right to invoice as of September 30, 2019.

Disaggregation of Revenue

Revenue is disaggregated by end-use markets. The following table includes a breakdown of net revenues to the markets served by the Company for the fiscal years ended September 30, 2017, 2018 and 2019.

	Year Ended September 30,		
	2017	2018	2019
Net revenues (dollars in thousands)			
Aerospace	$ 192,515	$ 226,898	$ 258,104
Chemical processing	70,467	79,169	89,651
Industrial gas turbine	61,523	52,350	59,430
Other markets	43,203	53,417	57,946
Total product revenue	367,708	411,834	465,131
Other revenue	27,501	23,492	25,084
Net revenues	$ 395,209	$ 435,326	$ 490,215

See Note 14 for revenue disaggregated by geography and product group.

Note 4. Inventories

Inventories are stated at the lower of cost or net realizeable value. The cost of inventories is determined using the first-in, first-out ("FIFO") method. The following is a summary of the major classes of inventories:

	September 30, 2018	September 30, 2019
Raw Materials	$ 17,897	$ 17,935
Work-in-process	147,921	138,859
Finished Goods	105,640	100,590
Other	1,587	1,418
	$ 273,045	$ 258,802

Note 5. Property, Plant and Equipment

The following is a summary of the major classes of property, plant and equipment:

	September 30,	
	2018	2019
Land and land improvements	$ 9,462	$ 9,446
Buildings and improvements	45,327	45,486
Machinery and equipment	281,329	293,542
Construction in process	7,292	2,770
	343,410	351,244
Less accumulated depreciation	(164,010)	(181,278)
	$ 179,400	$ 169,966

As of September 30, 2018 and 2019, the Company had $200 and $135, respectively, of assets under a capital lease for equipment related to the service center operation in Shanghai, China. Additionally, the Company had $7,483 and $7,070 of assets under capital or finance leases for two buildings at the LaPorte, Indiana service center as of September 30, 2018 and 2019, respectively.

Note 6. Accrued Expenses

The following is a summary of the major classes of accrued expenses:

	September 30,	
	2018	2019
Employee compensation	$ 8,825	$ 9,936
Taxes, other than income taxes	2,673	2,744
Employee termination liabilities	1,562	384
Professional fees	1,225	471
Management incentive compensation	1,104	2,297
Utilities	982	924
Accrued product returns	—	985
Capital lease obligation, current	147	170
Other	945	922
	$ 17,463	$ 18,833

Note 7. Income Taxes

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act ("the Act"), which made significant changes to U.S. federal income tax law including, among other things, lowering corporate income tax rates, permitting bonus depreciation that will allow for full expensing of qualified property and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. Beginning October 1, 2017 and continuing through September 30, 2018, the Company's U.S. income was taxed at a 24.5% federal tax rate after which time the federal tax rate applicable to the Company was lowered to 21.0%. During fiscal 2018, deferred tax assets were revalued to the lower statutory rates of 21.0% which resulted in increased tax expense during fiscal 2018 of $16,633. An additional component of the Act, the transition tax applied on accumulated earnings and profits of controlled foreign corporations, resulted in increased tax expense of $2,170 during fiscal 2018.

On December 22, 2017, the United States Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Act. As of September 30, 2019, the Company has completed its accounting for the income tax effects of the Act..

The components of income (loss) before provision for income taxes and the provision for income taxes are as follows:

	Year Ended September 30,		
	2017	2018	2019
Income (loss) before income taxes:			
U.S.	$ (25,090)	$ (16,650)	$ 790
Foreign	7,873	12,596	12,580
Total	$ (17,217)	$ (4,054)	$ 13,370
Provision for (benefit from) income taxes:			
Current:			
U.S. Federal	$ 933	$ (7,690)	$ (267)
Foreign	1,652	2,404	2,259
State	401	(137)	2
Total	2,986	(5,423)	1,994
Deferred:			
U.S. Federal	(8,781)	25,141	1,423
Foreign	—	—	132
State	(1,427)	(2,496)	62
Valuation allowance	195	475	14
Total	(10,013)	23,120	1,631
Total provision for (benefit from) income taxes	$ (7,027)	$ 17,697	$ 3,625

The provision for income taxes applicable to results of operations differed from the U.S. federal statutory rate as follows:

	Year Ended September 30,		
	2017	2018	2019
Statutory federal tax rate	35.00 %	24.53 %	21.00 %
Tax provision for income taxes at the statutory rate	$ (6,026)	$ (1,059)	$ 2,808
Foreign tax rate differentials	(1,103)	(685)	(157)
Provision for state taxes, net of federal taxes	(371)	(45)	247
U.S. tax on distributed and undistributed earnings of foreign subsidiaries	452	240	486
Manufacturer's deduction	—	(86)	—
Tax credits	(409)	(511)	(499)
Transition tax	—	2,170	—
Federal and state tax rate change impact on deferred tax asset	192	16,633	314
Net operating loss carryback	—	407	—
Change in valuation allowance	195	475	14
Stock compensation	—	—	655
Other, net	43	158	(243)
Provision for income taxes at effective tax rate	$ (7,027)	$ 17,697	$ 3,625
Effective tax rate	40.8 %	(436.5)%	27.1 %

During fiscal 2017, the Company's effective tax rate was higher than the federal statutory rate, primarily due to the Company incurring a pre-tax loss in the United States and pre-tax income in the United Kingdom which has a lower effective tax rate than the statutory rate. When incurring a pre-tax loss, the effective tax rate of the Company will be higher than the statutory rate if certain tax jurisdictions with lower tax rates incur pre-tax income as a partial offset to the pre-tax loss in the United States.

During fiscal 2018, the Company's effective tax rate was negative relative to the statutory rate primarily due to the Act that resulted in significant impacts on the value of the deferred tax asset as well a one-time transition tax on income generated by foreign entities. The Act lowered the statutory rate from 35% to 21%, however, the 2018 statutory rate is calculated to be 24.53% based on the fiscal year-end date of September 30, 2018.

During fiscal 2019, the Company's effective tax rate was higher than the federal statutory rate primarily due to state income taxes, the global intangible low-tax income tax (GILTI) and the forfeiture of stock options, restricted stock and performance share awards that occurred during the year.

Deferred tax assets (liabilities) are comprised of the following:

	September 30, 2018	September 30, 2019
Deferred tax assets:		
Pension and postretirement benefits	$ 38,343	$ 48,367
TIMET Agreement	4,775	4,163
Inventories	2,091	1,706
Accrued compensation and benefits	1,387	770
Accrued expenses and other	2,977	3,308
Tax attributes	4,178	4,441
Valuation allowance	(1,661)	(1,675)
Total deferred tax assets	$ 52,090	$ 61,080
Deferred tax liabilities:		
Property, plant and equipment, net	$ (27,521)	$ (27,873)
Intangible and other	(1,034)	(1,091)
Total deferred tax liabilities	$ (28,555)	$ (28,964)
Net deferred tax assets (liabilities)	$ 23,535	$ 32,116

As of September 30, 2019, the Company had state tax net operating loss carryforwards of $14,093, tax credits of $3,719 and foreign net operating loss carryforwards of $1,786. These tax attributes begin to expire in 2026, 2024, and 2020, respectively. The Company has recorded a valuation allowance against the foreign net operating loss carryforwards of $415 and federal and state tax credits of $1,260 because management does not believe that it is more likely than not that net operating loss carryforwards will be realized.

Undistributed earnings of certain of the Company's foreign subsidiaries amounted to approximately $71,311 at September 30, 2019. The Company considers those earnings reinvested indefinitely and, accordingly, aside from the one-time transition tax associated with the Act, no additional provision for U.S. income taxes has been provided. Determination of the amount of unrecognized deferred U.S. income tax liability is not practicable because of the complexities associated with its hypothetical calculation.

As of September 30, 2019, the Company is open to examination in the U.S. for the 2016 through 2019 tax years and in various foreign jurisdictions from 2016 through 2019. The Company is also open to examination in various states in the U.S., none of which were individually material.

As of September 30, 2018 and 2019, the Company had no uncertain tax positions.

Note 8. Debt

U.S. revolving credit facility

The Company and Wells Fargo Capital Finance, LLC ("Wells Fargo") entered into a Third Amended and Restated Loan and Security Agreement (the "Amended Agreement") with certain other lenders with an effective date of July 14, 2011. On July 7, 2016, the Company amended the agreement to, among other things, extend the term through July 7, 2021 and reduce unused line fees and certain administrative fees. The maximum revolving loan amount under the Amended Agreement is $120.0 million, subject to a borrowing base formula and certain reserves. The Amended Agreement permits an increase in the maximum revolving loan amount from $120.0 million up to an aggregate amount of $170.0 million at the request of the Company. Borrowings under the U.S. revolving credit facility bear interest, at the Company's option, at either Wells Fargo's "prime rate," plus up to 0.75% per annum, or the adjusted Eurodollar rate used by the lender, plus up

to 2.0% per annum. As of September 30, 2019, the U.S. revolving credit facility had a zero balance. In addition, the Company must pay monthly, in arrears, a commitment fee of 0.20% per annum on the unused amount of the U.S. revolving credit facility total commitment. For letters of credit, the Company must pay 1.5% per annum on the daily outstanding balance of all issued letters of credit, plus customary fees for issuance, amendments and processing. The Company is subject to certain covenants such as fixed charge coverage ratios and other customary covenants, including covenants restricting the incurrence of indebtedness, the granting of liens and the sale of assets. The covenant pertaining to fixed charge coverage ratios is only effective in the event the amount of excess availability under the revolver is less than 10.0% of the maximum credit revolving loan amount. The Company is permitted to pay dividends and repurchase common stock if certain financial metrics are met (which do not apply in the case of regular quarterly dividends less than $20.0 million in the aggregate in a year and repurchases in connection with the vesting of shares of restricted stock). Borrowings under the U.S. revolving credit facility are collateralized by a pledge of substantially all of the U.S. assets of the Company, including the equity interests in its U.S. subsidiaries, but excluding the four-high Steckel rolling mill and related assets, which are pledged to Titanium Metals Corporation ("TIMET") to secure the performance of the Company's obligations under a Conversion Services Agreement with TIMET (see discussion of TIMET at Note 16). The U.S. revolving credit facility is also secured by a pledge of a 65% equity interest in each of the Company's direct foreign subsidiaries.

The Company's U.K. subsidiary (Haynes International Ltd.) has an overdraft facility of 1,700 Pounds Sterling ($2,093), all of which was available on September 30, 2019. The Company's French subsidiary (Haynes International, S.A.R.L.) has an overdraft banking facility of 240 Euro ($261), all of which was available on September 30, 2019. The Company's Swiss subsidiary (Haynes International AG) has an overdraft banking facility of 400 Swiss Francs ($406), all of which was available on September 30, 2019.

Note 9. Pension Plan and Retirement Benefits

Defined Contribution Plans

The Company sponsors a defined contribution plan (401(k)) for substantially all U.S. employees. The Company contributes an amount equal to 50% of an employee's contribution to the plan up to a maximum contribution of 3% of the employee's salary, except for all salaried employees and certain hourly employees (those hired after June 30, 2007 that are not eligible for the U.S. pension plan). The Company contributes an amount equal to 60% of an employee's contribution to the plan up to a maximum contribution of 6% of the employee's salary for these groups. Expenses associated with this plan for the years ended September 30, 2017, 2018 and 2019 totaled $1,590, $1,811 and $1,940, respectively.

The Company sponsors certain profit sharing plans for the benefit of employees meeting certain eligibility requirements. There were no contributions to these plans for the years ended September 30, 2017, 2018 and 2019.

Defined Benefit Plans

The Company has non-contributory defined benefit pension plans which cover most employees in the U.S. and the U.K.

Benefits provided under the Company's U.S. defined benefit pension plan are based on years of service and the employee's final compensation. The Company's funding policy is to contribute annually an amount deductible for federal income tax purposes based upon an actuarial cost method using actuarial and economic assumptions designed to achieve adequate funding of benefit obligations.

The Company has non-qualified pensions for former executives of the Company. Non-qualified pension plan expense for the years ended September 30, 2017, 2018 and 2019 was $19, $34 and $98, respectively. Accrued liabilities in the amount of $716 and $719 for these benefits are included in accrued pension and postretirement benefits liability at September 30, 2018 and 2019, respectively.

In addition to providing pension benefits, the Company provides certain health care and life insurance benefits for retired employees. Substantially all domestic employees become eligible for these benefits, if they reach normal

retirement age while working for the Company. The Company's liability related to total retiree health care costs is limited to $5,000 annually.

The Company made contributions of $6,000, $8,000, and $4,500 to fund its domestic Company-sponsored pension plan for the years ended September 30, 2017, 2018 and 2019, respectively. The Company's U.K. subsidiary made contributions of $804, $782 and $737 for the years ended September 30, 2017, 2018 and 2019, respectively, to the U.K. pension plan.

During the fourth quarter of fiscal 2018, the Company transferred assets of $13,576 to a third-party insurance company in exchange for the assumption of pension liability for approximately 397 retired participants. The pension liability for those retirees is not included in the projected benefit obligation as of September 30, 2018 or September 30, 2019.

The Company uses a September 30 measurement date for its plans. The status of employee pension benefit plans and other postretirement benefit plans is summarized below:

	Defined Benefit Pension Plans Year Ended September 30,		Postretirement Health Care Benefits Year Ended September 30,	
	2018	2019	2018	2019
Change in Benefit Obligation:				
Projected benefit obligation at beginning of year	$ 310,803	$ 278,280	$ 117,424	$ 108,013
Service cost	5,536	5,239	336	318
Interest cost	10,801	10,652	4,311	4,353
Actuarial gains (losses)	(19,756)	42,130	(10,395)	4,245
Benefits paid	(14,178)	(13,734)	(3,663)	(3,095)
Transfer to third-party insurance company	(13,576)	—	—	—
Administrative expenses	(1,350)	(1,089)	—	—
Projected benefit obligation at end of year	$ 278,280	$ 321,478	$ 108,013	$ 113,834
Change in Plan Assets:				
Fair value of plan assets at beginning of year	$ 224,094	$ 222,273	$ —	$ —
Actual return on assets	18,501	13,230	—	—
Employer contributions	8,782	5,237	3,663	3,095
Benefits paid	(14,178)	(13,734)	(3,663)	(3,095)
Transfer to third-party insurance company	(13,576)	—	—	—
Administrative expenses	(1,350)	(1,089)	—	—
Fair value of plan assets at end of year	$ 222,273	$ 225,917	$ —	$ —
Funded Status of Plan:				
Unfunded status	$ (56,007)	$ (95,561)	$ (108,013)	$ (113,834)

The actuarial gains incurred during the fiscal year ended September 30, 2018 were primarily driven from an increases in discount rates applied against future expected benefit payments and resulted in a decrease in the benefit obligation for both the Defined Benefit Pension Plan and Postretirement Health Care Plan. Conversely, the actuarial losses incurred during the fiscal year ended September 30, 2019 were primarily driven from a decrease in discount rates applied against future expected benefit payments and resulted in an increase in the benefit obligation for both the Defined Benefit Pension Plan and Postretirement Health Care Plan. The benefit obligation, as of September 30, 2018 was also reduced by the transfer of a portion of the benefit obligation to a third-party insurance company in the amount of $13,576.

Amounts recognized in the consolidated balance sheets are as follows:

	Defined Benefit Pension Plans		Postretirement Health Care Benefits		Non-Qualified Pension Plans		All Plans Combined	
	September 30,		September 30,		September 30,		September 30,	
	2018	2019	2018	2019	2018	2019	2018	2019
Accrued pension and postretirement benefits:								
Current	$ —	$ —	$ (5,000)	$ (4,155)	$ (95)	$ (95)	$ (5,095)	$ (4,250)
Non-current	(56,007)	(95,561)	(103,013)	(109,679)	(621)	(624)	(159,641)	(205,864)
Accrued pension and postretirement benefits	$ (56,007)	$ (95,561)	$ (108,013)	$ (113,834)	$ (716)	$ (719)	$ (164,736)	$ (210,114)
Accumulated other comprehensive loss:								
Net loss	38,808	80,711	21,891	24,650	—	—	60,699	105,361
Prior service cost	1,839	2,066	—	—	—	—	1,839	2,066
Total accumulated other comprehensive loss	$ 40,647	$ 82,777	$ 21,891	$ 24,650	$ —	$ —	$ 62,538	$ 107,427

The non-current portion of the defined benefit pension plan portion of accrued pension and postretirement benefits amounts to $56,007 and $95,561 in fiscal 2018 and 2019, respectively. These amounts include the UK pension plan net pension asset of $5,444 and $5,627, respectively, which is included in Other assets on the consolidated balance sheets as well as the US pension plan accrued pension liability of $61,451 and $101,188, respectively, which are recorded in accrued pension benefit (less current portion) on the consolidated balance sheet.

The accumulated benefit obligation for the pension plans was $269,386 and $309,410 at September 30, 2018 and 2019, respectively.

The cost of the Company's postretirement benefits is accrued over the years employees provide service to the date of their full eligibility for such benefits. The Company's policy is to fund the cost of claims on an annual basis.

The components of net periodic pension cost and postretirement health care benefit cost are as follows:

	Defined Benefit Pension Plans		
	Year Ended September 30,		
	2017	2018	2019
Service cost	$ 6,282	$ 5,536	$ 5,239
Interest cost	10,577	10,801	10,652
Expected return on assets	(14,419)	(15,157)	(14,907)
Amortization of prior service cost	808	374	228
Recognized actuarial loss	11,267	4,910	1,449
Net periodic cost	$ 14,515	$ 6,464	$ 2,661

	Postretirement Health Care Benefits		
	Year Ended September 30,		
	2017	2018	2019
Service cost	$ 350	$ 336	$ 318
Interest cost	4,292	4,311	4,353
Recognized actuarial loss	4,278	2,999	1,487
Net periodic cost	$ 8,920	$ 7,646	$ 6,158

Assumptions

A 5.0% (5.0%-2018) annual rate of increase for the costs of covered health care benefits for ages under 65 and a 5.0% (5.0%-2018) annual rate of increase for ages over 65 were assumed for 2019 and remained at 5.0% for the under 65 and over 65 age groups in the years thereafter.

The actuarial present value of the projected pension benefit obligation and postretirement health care benefit obligation for the plans at September 30, 2018 and 2019 were determined based on the following assumptions:

	September 30, 2018	**September 30, 2019**
Discount rate (postretirement health care)	4.13 %	3.13 %
Discount rate (U.S. pension plan)	4.00 %	2.88 %
Discount rate (U.K. pension plan)	2.80 %	1.70 %
Rate of compensation increase (U.S. pension plan only)	2.50 %	2.50 %

The net periodic pension and postretirement health care benefit costs for the plans were determined using the following assumptions:

	Defined Benefit Pension and Postretirement Health Care Plans		
	Year Ended September 30,		
	2017	**2018**	**2019**
Discount rate (postretirement health care plan)	3.50 %	3.75 %	4.13 %
Discount rate (U.S. pension plan)	3.25 %	3.63 %	4.00 %
Discount rate (U.K. pension plan)	2.30 %	2.50 %	2.80 %
Expected return on plan assets (U.S. pension plan)	7.50 %	7.25 %	7.25 %
Expected return on plan assets (U.K. pension plan)	2.70 %	3.30 %	3.20 %
Rate of compensation increase (U.S. pension plan only)	3.50 %	2.50 %	2.50 %

Plan Assets and Investment Strategy

The Company's pension plan assets by level within the fair value hierarchy at September 30, 2018 and 2019, are presented in the table below. The pension plan assets were accounted for at fair value. A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Investments in U.S and International equities, and Fixed Income are held in mutual funds and common /

collective funds which are valued using net asset value (NAV) provided by the administrator of the fund. For more information on a description of the fair value hierarchy, see Note 17.

	September 30, 2018			
	Level 1 Active Markets for Identical Assets	Level 2 Other Observable Inputs	NAV	Total
U.S. Pension Plan Assets:				
U.S. common stock mutual funds	$ —	$ —	$ 72,947	$ 72,947
Common /collective funds				
Bonds	—	—	80,250	80,250
U.S. common stock	—	—	32,547	32,547
International equity	—	—	16,152	16,152
Total U.S.	$ —	$ —	$ 201,896	$ 201,896
U.K. Plan Assets:				
Equities	$ —	$ —	$ 8,150	$ 8,150
Bonds	—	—	9,781	9,781
Other	—	—	2,446	2,446
Total U.K.	$ —	$ —	$ 20,377	$ 20,377
Total pension plan assets	$ —	$ —	$ 222,273	$ 222,273

	September 30, 2019			
	Level 1 Active Markets for Identical Assets	Level 2 Other Observable Inputs	NAV	Total
U.S. Pension Plan Assets:				
U.S. common stock mutual funds	$ —	$ —	$ 67,954	$ 67,954
Common /collective funds				
Bonds	—	—	81,871	81,871
U.S. common stock	—	—	30,292	30,292
International equity	—	—	24,561	24,561
Total U.S.	$ —	$ —	$ 204,678	$ 204,678
U.K. Plan Assets:				
Equities	$ —	$ —	$ 6,585	$ 6,585
Bonds	—	—	12,106	12,106
Other	—	—	2,548	2,548
Total U.K.	$ —	$ —	$ 21,239	$ 21,239
Total pension plan assets	$ —	$ —	$ 225,917	$ 225,917

The primary financial objectives of the plans are to minimize cash contributions over the long term and preserve capital while maintaining a high degree of liquidity. A secondary financial objective is, where possible, to avoid significant downside risk in the short run. The objective is based on a long-term investment horizon so that interim fluctuations should be viewed with appropriate perspective.

It is the policy of the U.S. pension plan to invest assets with an allocation to equities as shown below. The balance of the assets is maintained in fixed income investments, and in cash holdings, to the extent permitted by the plan documents.

Asset classes as a percent of total assets:

Asset Class	Target[1]
Equity	60 %
Fixed Income	40 %
Real Estate and Other	— %

(1) From time to time the Company may adjust the target allocation by an amount not to exceed 10%.

In determining the expected rate of return on U.S. plan assets, the Company takes into account the target plan's allocation at September 30, 2019 of 60% equities and 40% fixed income. The Company assumes an approximately 3.00% to 4.00% equity risk premium above the broad bond market yields of 4.00% to 6.00%. Note that over very long historical periods, the realized risk premium has been higher. The Company believes that its assumption of a 7.25% long-term rate of return on plan assets is comparable to other companies, given the target allocation of the plan assets; however, there exists the potential for the use of a lower rate in the future.

The U.K. pension plan assets follow a more conservative investment objective due to the higher funding status of the plan.

Contributions and Benefit Payments

The Company has not yet determined the amounts to contribute to its domestic pension plans, domestic other postretirement benefit plans and the U.K. pension plan in fiscal 2020.

Pension and postretirement health care benefits, which include expected future service, are expected to be paid out of the respective plans as follows:

Fiscal Year Ending September 30	Pension	Postretirement Health Care
2020	$ 14,858	$ 4,155
2021	15,282	4,487
2022	15,830	4,794
2023	16,281	4,965
2024	16,682	4,894
2025 - 2029 (in total)	86,758	23,939

Note 10. Commitments

The Company leases certain transportation vehicles, warehouse facilities, office space and machinery and equipment under cancelable and non-cancelable leases, most of which expire within 10 years and may be renewed by the Company. Rent expense under such arrangements totaled $4,082, $3,892 and $3,500 for the years ended September 30, 2017, 2018 and 2019, respectively. Rent expense does not include income from sub-lease rentals totaling $153, $156 and $147 for the years ended September 30, 2017, 2018 and 2019, respectively. Future minimum rental commitments under non-cancelable operating leases at September 30, 2019, are as follows:

	Operating
2020	$ 2,542
2021	1,254
2022	460
2023	277
2024	259
2025 and thereafter	60
	$ 4,852

Future minimum rental commitments under non-cancelable operating leases have not been reduced by minimum sub-lease rentals of $73 due in the future.

Note 11. Legal, Environmental and Other Contingencies

Legal

The Company is regularly involved in litigation, both as a plaintiff and as a defendant, relating to its business and operations, including environmental, commercial, employment and federal and/or state Equal Employment Opportunity Commission administrative actions. Future expenditures for environmental, employment, intellectual property and other legal matters cannot be determined with any degree of certainty. In January 2017, a customer based in the United Kingdom wrote to the Company making a claim in relation to certain product sold to that customer by the Company. This writing was followed up by claim correspondence in 2018 and 2019. The Company has engaged its legal advisors in the United Kingdom to respond to the claim, and correspondence between the parties' respective counsel remains ongoing. To date, the insurers have not accepted coverage responsibility for the claim but have agreed to fund expenses of legal counsel selected by the Company through the date of the determination regarding coverage. The Company intends to pursue such coverage as and if necessary while vigorously defending against the customer claim. Liability for the claim is disputed, and the amount of the claim, if any, remains unclear. Based on the facts presently known, management does not believe that the claim will have a material effect on the Company's financial position, results of operations or cash flows.

Environmental

The Company has received permits from the Indiana Department of Environmental Management and the North Carolina Department of Environment and Natural Resources to close and provide post-closure environmental monitoring and care for certain areas of its Kokomo, Indiana and Mountain Home, North Carolina facilities, respectively.

The Company is required to, among other things, monitor groundwater and to continue post-closure maintenance of the former disposal areas at each site. As a result, the Company is aware of elevated levels of certain contaminants in the groundwater, and additional testing and corrective action by the Company could be required. The Company is unable to estimate the costs of any further corrective action at these sites, if required. Accordingly, the Company cannot assure that the costs of any future corrective action at these or any other current or former sites would not have a material effect on the Company's financial condition, results of operations or liquidity.

As of September 30, 2019, the Company has accrued $606 for post-closure monitoring and maintenance activities, of which $508 is included in long-term obligations as it is not due within one year. Accruals for these costs are calculated by estimating the cost to monitor and maintain each post-closure site and multiplying that amount by the number of years remaining in the post-closure monitoring.

Expected maturities of post-closure monitoring and maintenance activities (discounted) included in long-term obligations are as follows at September 30, 2019.

2021	$	74
2022		64
2023		81
2024		60
2025 and thereafter		229
	$	508

On February 11, 2016, the Company voluntarily reported to the Louisiana Department of Environmental Quality a leak that it discovered in one of its chemical cleaning operations at its Arcadia, Louisiana facility. As a result of the discovery, the Company is working with that department to determine the extent of the issue and appropriate remediation.

Note 12. Stock-based Compensation

Restricted Stock Plan

On February 23, 2009, the Company adopted a restricted stock plan that reserved 400,000 shares of common stock for issuance. Additionally, on March 1, 2016, the Company adopted the 2016 Incentive Compensation Plan which provides for grants of restricted stock, restricted stock units and performance shares, among other awards. Up to 275,000 shares of restricted stock, restricted stock units and performance shares may be granted in the aggregate under this plan. Following the adoption of the 2016 Incentive Compensation Plan, the Company ceased granting awards from the 2009 restricted stock plan, although awards remain outstanding thereunder.

Grants of restricted stock are comprised of shares of the Company's common stock subject to transfer restrictions, which vest in accordance with the terms and conditions established by the Compensation Committee. The Compensation Committee may set vesting requirements based on the achievement of specific performance goals or the passage of time.

Restricted shares are subject to forfeiture if employment or service terminates prior to the vesting date or if any applicable performance goals are not met. The Company will assess, on an ongoing basis, the probability of whether the performance criteria will be achieved. The Company will recognize compensation expense over the performance period if it is deemed probable that the goals will be achieved. The fair value of the Company's restricted stock is determined based upon the closing price of the Company's common stock on the trading day immediately preceding the grant date. The plan provides for the adjustment of the number of shares covered by an outstanding grant and the maximum number of shares for which restricted stock may be granted in the event of a stock split, extraordinary dividend or distribution or similar recapitalization event.

The shares of time-based restricted stock granted to employees vest on the third anniversary of their grant date if the recipient is still an employee of the Company on such date. The shares of restricted stock granted to non-employee directors will vest on the earlier of (a) the first anniversary of the date of grant or (b) the failure of such non-employee director to be re-elected at an annual meeting of the stockholders of the Company as a result of such non-employee director being excluded from the nominations for any reason other than cause.

The following table summarizes the activity under the 2009 restricted stock plan and the 2016 Incentive Compensation Plan with respect to restricted stock for the year ended September 30, 2019:

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2018	81,993	$ 37.28
Granted	28,238	$ 33.96
Forfeited / Canceled	(19,944)	$ 37.41
Vested	(28,449)	$ 39.02
Unvested at September 30, 2019	61,838	$ 34.94
Expected to vest	61,838	$ 34.94

Compensation expense related to restricted stock for the years ended September 30, 2017, 2018 and 2019 was $1,340, $836, and $631, respectively. The remaining unrecognized compensation expense related to restricted stock at September 30, 2019 was $976, to be recognized over a weighted average period of 1.36 years. During fiscal 2019, the Company repurchased 11,356 shares of stock from employees at an average purchase price of $32.60 to satisfy required withholding taxes upon vesting of restricted stock-based compensation.

Deferred Restricted Stock

On November 20, 2017, the Company adopted a deferred compensation plan that allows directors and officers the option to defer receipt of cash and stock compensation. Beginning on November 21, 2017, the Company granted

shares of restricted stock from the 2016 Incentive Compensation Plan with respect to which elections were made by certain individuals to defer receipt to a future period. Such shares vest in accordance with the parameters of the 2016 Incentive Compensation Plan, however, receipt of the shares and any corresponding dividends are deferred until the end of the deferral period. In the event the deferred shares are forfeited prior to the vesting date, deferred dividends pertaining to those shares will also be forfeited. During the deferral period, the participants who elected to defer shares will not have voting rights with respect to those shares.

The following table summarizes the activity under the 2016 Incentive Compensation Plan with respect to deferred restricted stock for the year ended September 30, 2019.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested and deferred at September 30, 2018	16,550	$ 31.76
Granted	12,500	$ 33.98
Vested and deferred	(16,550)	31.76
Unvested and deferred at September 30, 2019	12,500	$ 33.98
Vested and deferred at September 30, 2019	16,550	$ 31.76

Compensation expense related to deferred restricted stock for the year ended September 30, 2017, 2018 and 2019 was $0, $438 and $442, respectively. The remaining unrecognized compensation expense related to restricted stock at September 30, 2019 was $71, to be recognized over a weighted average period of 0.17 years.

Performance Shares

Beginning in fiscal 2017, the Company granted to certain employees target numbers of performance shares under the 2016 Incentive Compensation Plan. The number of performance shares that will ultimately be earned, as well as the number of shares that will be distributed in settling those earned performance shares, if any, will not be determined until the end of the performance period. Performance shares earned will depend on the calculated total shareholder return of the Company at the end of the three-year period commencing from the beginning of the fiscal year in which the award was granted as compared to the total shareholder return of the Company's peer group, as defined by the Compensation Committee for this purpose. The fair value of the performance shares is estimated as of the date of the grant using a Monte Carlo simulation model.

The following table summarizes the activity under the 2016 Incentive Compensation Plan with respect to performance shares for the nine months ended September 30, 2019.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2018	30,344	$ 49.32
Granted	24,282	$ 44.93
Forfeited / Canceled	(16,073)	$ 58.99
Unvested at September 30, 2019	38,553	$ 42.52

Compensation expense related to the performance shares for the years ended September 30, 2017, 2018 and 2019 was $336, $500 and $738, respectively. The remaining unrecognized compensation expense related to performance shares at September 30, 2019 was $967, to be recognized over a weighted average period of 1.17 years.

Stock Option Plans

The Company's 2016 Incentive Compensation Plan and its previous stock option plans authorize, or formerly authorized, the granting of non-qualified stock options to certain key employees and non-employee directors for the

purchase of a maximum of 1,925,000 shares of the Company's common stock. On March 1, 2016, the Company adopted the 2016 Incentive Compensation Plan which provides for grants of up to 425,000 stock options and stock appreciation rights. Following the adoption of the 2016 Incentive Compensation Plan, the Company ceased granting awards from its previous stock option plans, although awards remain outstanding from a plan that was adopted in January 2007, which provided for the grant of options to purchase up to 500,000 shares of the Company's common stock. Each plan provides for the adjustment of the maximum number of shares for which options may be granted in the event of a stock split, extraordinary dividend or distribution or similar recapitalization event. Unless the Compensation Committee determines otherwise, options are exercisable for a period of ten years from the date of grant and vest 33 1/3% per year over three years from the grant date. The amount of compensation cost recognized in the financial statements is measured based upon the grant date fair value.

The Company has elected to use the Black-Scholes option pricing model to estimate fair value, which incorporates various assumptions including volatility, expected life, risk-free interest rates and dividend yields. The volatility is based on historical volatility of the Company's common stock over the most recent period commensurate with the estimated expected term of the stock option granted. The Company uses historical volatility because management believes such volatility is representative of prospective trends. The expected term of an award is based on historical exercise data. The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of the awards. The dividend yield assumption is based on the Company's history and expectations regarding dividend payouts at the time of the grant. The following assumptions were used for grants during fiscal years 2017, 2018 and 2019:

Grant Date	Fair Value	Dividend Yield	Risk-free Interest Rate	Expected Volatility	Expected Life
May 24, 2019 (Part 1)	$ 8.75	2.88 %	2.11 %	40 %	5 years
May 24, 2019 (Part 2)	$ 7.94	2.88 %	2.11 %	40 %	5 years
May 24, 2019 (Part 3)	$ 7.23	2.88 %	2.11 %	40 %	5 years
February 25, 2019	$ 10.86	2.52 %	2.47 %	41 %	5 years
November 21, 2018	$ 10.61	2.59 %	2.88 %	41 %	5 years
September 17, 2018	$ 11.03	2.55 %	2.89 %	40 %	5 years
June 1, 2018	$ 13.92	2.07 %	2.68 %	41 %	5 years
November 21, 2017	$ 9.74	2.77 %	2.06 %	42 %	5 years
November 22, 2016	$ 11.50	2.15 %	1.79 %	37 %	5 years

The stock-based employee compensation expense for stock options for the years ended September 30, 2017, 2018 and 2019 was $433, $546 and $764, respectively. The remaining unrecognized compensation expense at September 30, 2019 was $1,823, to be recognized over a weighted average vesting period of 1.62 years.

The following table summarizes the activity under the stock option plans for the year ended September 30, 2019:

	Number of Shares	Aggregate Intrinsic Value (000s)	Weighted Average Exercise Prices	Weighted Average Remaining Contractual Life
Outstanding at September 30, 2018	410,675		$ 42.72	
Granted	235,483		$ 33.86	
Exercised	(12,084)		$ 17.82	
Canceled	(151,683)		$ 45.79	
Outstanding at September 30, 2019	482,391	$ 682	$ 38.05	7.47 yrs.
Vested or expected to vest	439,999	$ 630	$ 37.98	4.38 yrs.
Exercisable at September 30, 2019	213,040	$ 84	$ 43.24	5.14 yrs.

Note 13. Quarterly Data (unaudited)

The unaudited quarterly results of operations of the Company for the years ended September 30, 2018 and 2019 are as follows:

	2018			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	$ 89,693	$ 110,206	$ 113,114	$ 122,313
Gross profit	9,075	13,513	15,363	17,884
Gross profit percentage of net revenues	10.1%	12.3%	13.6%	14.6%
Net income (loss)	(22,526)	(2,068)	713	2,130
Net income (loss) per share:				
Basic	$ (1.82)	$ (0.17)	$ 0.06	$ 0.17
Diluted	$ (1.82)	$ (0.17)	$ 0.06	$ 0.17

	2019			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	$ 107,069	$ 127,474	$ 126,032	$ 129,640
Gross profit	11,335	14,683	18,175	21,310
Gross profit percentage of net revenues	10.6%	11.5%	14.4%	16.4%
Net income (loss)	(1,603)	1,509	3,802	6,037
Net income (loss) per share:				
Basic	$ (0.13)	$ 0.12	$ 0.30	$ 0.48
Diluted	$ (0.13)	$ 0.12	$ 0.30	$ 0.48

Note that the Company implemented ASU 2017-07, Compensation – Retirement Benefits (Topic 715) on October 1, 2018 on a retrospective basis. This guidance requires non-service costs components of retirement expense to be reclassified outside of operating income to a new category titled "Nonoperating retirement benefit expense" in the statement of operations. Gross margins were favorably impacted by the reclassification of the non-service cost components of retirement expense. All prior periods have been adjusted for this change in accounting.

Note 14. Segment Reporting

The Company operates in one business segment: the design, manufacture, marketing and distribution of technologically advanced, high-performance alloys for use in the aerospace, industrial gas turbine, chemical processing and other industries. The Company has operations in the United States, Europe and Asia, which are summarized below.

Sales between geographic areas are made at negotiated selling prices. Revenues from external customers are attributed to the geographic areas presented based on the destination of product shipments.

	Year Ended September 30,		
	2017	2018	2019
Net Revenue by Geography:			
United States	$ 235,500	$ 258,275	$ 300,728
Europe	98,096	113,967	119,246
China	18,997	24,640	24,329
Other	42,616	38,444	45,912
Net Revenues	$ 395,209	$ 435,326	$ 490,215
Net Revenue by Product Group:			
High-temperature resistant alloys	$ 320,119	$ 352,614	$ 392,172
Corrosive-resistant alloys	75,090	82,712	98,043
Net revenues	$ 395,209	$ 435,326	$ 490,215

	September 30,	
	2018	2019
Long-lived Assets by Geography:		
United States	$ 172,689	$ 163,158
Europe	6,522	6,661
China	189	147
Total long-lived assets	$ 179,400	$ 169,966

Note 15. Valuation and Qualifying Accounts

	Balance at Beginning of Period	Charges (credits) to Expense	Deductions[1]	Balance at End of Period
Allowance for doubtful accounts receivables:				
September 30, 2019	1,130	530	(1,219)	441
September 30, 2018	620	688	(178)	1,130
September 30, 2017	402	228	(10)	620

(1) Uncollectible accounts written off net of recoveries.

Note 16. Deferred Revenue

On November 17, 2006, the Company entered into a twenty-year agreement to provide conversion services to Titanium Metals Corporation (TIMET) for up to ten million pounds of titanium metal annually. TIMET paid the Company a $50,000 up-front fee and will also pay the Company for its processing services during the term of the agreement (20 years) at prices established by the terms of the agreement. TIMET may exercise an option to have ten million additional pounds of titanium converted annually, provided that it offers to loan up to $12,000 to the Company for certain capital expenditures which may be required to expand capacity. In addition to the volume commitment, the Company has granted TIMET a first priority security interest in its four-high Steckel rolling mill, along with rights of access if the Company enters into bankruptcy or defaults on any financing arrangements. The Company has agreed not to manufacture titanium products (other than cold reduced titanium tubing). The Company has also agreed not to provide titanium hot-rolling conversion services to any entity other than TIMET for the term of the Conversion Services Agreement. The agreement contains certain default provisions which could result in contract termination and damages, including liquidated damages of $25,000 and the Company being required to return the unearned portion of the up-front fee. The Company considered each provision and the likelihood of the occurrence of a default that would result in liquidated damages. Based on the nature of the events that could trigger the liquidated damages clause, and the availability of the cure periods set forth in the agreement, the Company determined and continues to believe that none of these circumstances are reasonably likely to occur. Therefore, events resulting in liquidated damages have not been factored in as a reduction to the amount of

revenue recognized over the life of the contract. The cash received of $50,000 is recognized in income on a straight-line basis over the 20-year term of the agreement. If an event of default occurred and was not cured within any applicable grace period, the Company would recognize the impact of the liquidated damages in the period of default and re-evaluate revenue recognition under the contract for future periods. The portion of the up-front fee not recognized in income is shown as deferred revenue on the consolidated balance sheet.

Note 17. Fair Value Measurements

The fair value hierarchy has three levels based on the inputs used to determine fair value:

- Level 1—Quoted prices in active markets that are unadjusted and accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2—Quoted prices for identical assets and liabilities in markets that are not active, quoted prices for similar assets and liabilities in active markets or financial instruments for which significant inputs are observable, either directly or indirectly; and
- Level 3—Prices or valuations that require inputs that are both significant to the fair value measurement and unobservable.

When available, the Company uses unadjusted quoted market prices to measure fair value. If quoted market prices are not available, fair value is based upon internally-developed models that use, where possible, current market-based or independently-sourced market parameters such as interest rates and currency rates. Items valued using internally-generated models are classified according to the lowest level input or value driver that is significant to the valuation. The valuation model used depends on the specific asset or liability being valued.

U.S and International equities, Fixed Income, and Other Investments held in the Company's pension plan are held in mutual funds and common / collective funds which are valued using net asset value (NAV) provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. These investments are not classified in the fair value hierarchy in accordance with guidance included in ASU 2015-07, *Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)*.

The fair value of Cash and Cash Equivalents is determined using Level 1 information.

The following table represents the Company's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of September 30, 2018 and 2019:

	September 30, 2018 Fair Value Measurements at Reporting Date Using:				
Assets:	Level 1	Level 2	Level 3	NAV	Total
Pension plan assets	$ —	$ —	$ —	$ 222,273	$ 222,273
Total fair value	$ —	$ —	$ —	$ 222,273	$ 222,273

	September 30, 2019 Fair Value Measurements at Reporting Date Using:				
	Level 1	Level 2	Level 3	NAV	Total
Assets:					
Pension plan assets	$ —	$ —	$ —	$ 225,917	$ 225,917
Total fair value	$ —	$ —	$ —	$ 225,917	$ 225,917

The Company had no other financial assets or liabilities as of September 30, 2018 or 2019.

Note 18. Comprehensive Income (Loss) and Changes in Accumulated Other Comprehensive Income (Loss) by Component

Comprehensive income (loss) includes changes in equity that result from transactions and economic events from non-owner sources. Comprehensive income (loss) consists of net income (loss) and other comprehensive income (loss) items, including pension and foreign currency translation adjustments, net of tax when applicable.

Comprehensive Income (Loss)

	Year Ended September 30,								
	2017			2018			2019		
	Pre-tax	Tax	Net	Pre-tax	Tax	Net	Pre-tax	Tax	Net
Net income (loss)			$ (10,190)			$ (21,751)			$ 9,745
Other comprehensive income (loss):									
Pension and postretirement:									
Net gain (loss) arising during period	$ 46,401	$ (17,095)	29,306	$ 33,518	$ (7,576)	25,942	$ (48,052)	11,266	(36,786)
Amortization of prior service cost	808	(298)	510	374	(99)	275	228	(58)	170
Amortization of (gain) loss	15,517	(5,709)	9,808	7,887	(2,075)	5,812	2,935	(772)	2,163
Foreign currency translation adjustment	2,205	—	2,205	(1,900)	—	(1,900)	(3,620)	—	(3,620)
Other comprehensive income (loss)	$ 64,931	$ (23,102)	41,829	$ 39,879	$ (9,750)	30,129	$ (48,509)	$ 10,436	(38,073)
Total comprehensive income (loss)			$ 31,639			$ 8,378			$ (28,328)

Accumulated Other Comprehensive Income (Loss)

	Year Ended September 30, 2018			
	Pension Plan	Postretirement Plan	Foreign Exchange	Total
Accumulated other comprehensive income (loss) as of September 30, 2017	$ (43,012)	$ (21,691)	$ (7,991)	$ (72,694)
Other comprehensive income (loss) before reclassifications	17,658	8,284	(1,900)	24,042
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items [1]	374	—	—	374
Actuarial losses [1]	4,888	2,999	—	7,887
Tax benefit	(1,381)	(793)	—	(2,174)
Net current-period other comprehensive income (loss)	21,539	10,490	(1,900)	30,129
Accumulated other comprehensive income (loss) as of September 30, 2018	$ (21,473)	$ (11,201)	$ (9,891)	$ (42,565)

	Year Ended September 30, 2019			
	Pension Plan	Postretirement Plan	Foreign Exchange	Total
Accumulated other comprehensive income (loss) as of September 30, 2018	$ (21,473)	$ (11,201)	$ (9,891)	$ (42,565)
Other comprehensive income (loss) before reclassifications	(33,578)	(3,209)	(3,620)	(40,407)
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items [1]	228	—	—	228
Actuarial losses [1]	1,449	1,487	—	2,936
Tax benefit	(437)	(393)	—	(830)
Net current-period other comprehensive income (loss)	(32,338)	(2,115)	(3,620)	(38,073)
Accumulated other comprehensive loss as of September 30, 2019	$ (53,811)	$ (13,316)	$ (13,511)	$ (80,638)

(1) These accumulated other comprehensive income components are included in the computation of net periodic pension cost.

Note 19. Long-term Obligations

On January 1, 2015, the Company entered into a capital lease agreement for the building that houses the assets and operations of LaPorte Custom Metal Processing (LCMP). The capital asset and obligation are recorded at the present value of the minimum lease payments. The asset is included in Property, plant and equipment, net on the Consolidated Balance Sheet and is depreciated over the 20 year lease term. The long term component of the capital lease obligation is included in Long term obligations.

The Company entered into a twenty-year “build-to-suit” lease for a building that houses the assets and operations of the service center located in LaPorte, Indiana that was relocated from Lebanon, Indiana. During the first quarter of fiscal 2017, the Company took occupancy of the building. The Company retained substantially all of the construction risk and was deemed to be the owner of the facility for accounting purposes, even though it is not the legal owner. Construction costs incurred relative to the buildout of the facility of approximately $4,100 are included in Property, plant and equipment, net on the Consolidated Balance Sheet and depreciated over the 20-year lease term. The Company accounts for the related build-to-suit liability as a financing obligation.

As of September 30, 2019, future minimum lease rental payments applicable to the lease obligations were as follows.

2020	$ 995
2021	1,000
2022	1,012
2023	1,024
2024	1,032
Thereafter	11,540
Total minimum lease payments	16,603
Less amounts representing interest	(8,624)
Present value of net minimum lease payments	7,979
Less current obligation	(170)
Total long-term lease obligation	$ 7,809

The lease obligations are included in Long-term obligations (less current portion) on the Consolidated Balance Sheet.

	September 30, 2018	September 30, 2019
Capital lease rental payments	$ 4,207	$ 4,126
Finance lease rental payments	3,920	3,853
Environmental post-closure monitoring and maintenance activities	504	606
Long-term disability	—	251
Deferred dividends	14	40
Less amounts due within one year	(202)	(267)
Long-term obligations (less current portion)	$ 8,443	$ 8,609

Note 20. Foreign Currency Forward Contracts

Beginning in the third quarter of fiscal 2018, the Company entered into foreign currency forward contracts. The purpose of these forward contracts is to reduce income statement volatility resulting from foreign currency denominated transactions. The Company has not designated the contacts as hedges; therefore, changes in fair value are recognized in earnings. All of these contracts are designed to be settled within the same fiscal quarter they are entered into and, accordingly, as of September 30, 2018 and 2019, there are no contracts that remain unsettled. As a result, there is no impact to the balance sheet as of September 30, 2018 or September 30, 2019. Foreign exchange hedging gains and losses are recorded within Selling, General and Administrative expenses on the Consolidated Statements of Operations along with foreign currency transactional gains and losses as follows.

	Year Ended September 30, 2018	Year Ended September 30, 2019
Foreign currency transactional gain (loss)	$ 411	$ 1,071
Foreign exchange forward contract gain (loss)	(918)	(1,638)
Net gain (loss) included in selling, general and administrative expense	$ (507)	$ (567)

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 that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the U.S. Securities and Exchange Commission, including to ensure that information required to be disclosed by the Company that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and financial officers, as appropriate to allow timely decisions regarding required disclosure. Pursuant to Rule 13a-15(b) of the Exchange Act the Company has performed, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, an evaluation of the effectiveness of the Company's disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of September 30, 2019.

Changes in Internal Control Over Financial Reporting

During the quarter ended September 30, 2019, the Company has not had any material changes to its internal control over Financial Reporting.

Management's Annual Report on Internal Control Over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting (as defined by Exchange Act rules 13a-15(f) and 15d-15(f)) for the Company. With the participation of the Chief Executive Officer and Chief Financial Officer, management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting based on the framework and criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations (COSO) of The Treadway Commission (2013). Based on the Company's assessment, management has concluded that, as of September 30, 2019, the Company's internal control over financial reporting is effective based on those criteria.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. 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.

The Company's effectiveness of internal control over financial reporting as of September 30, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in its attestation report which is included herein.

Michael L. Shor
President & Chief Executive Officer
November 14, 2019

Daniel W. Maudlin
Vice President of Finance and Chief Financial Officer
November 14, 2019

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information included under the caption “Business—Executive Officers of the Company” in this Annual Report on Form 10-K, and under the captions “Election of Directors”, “Corporate Governance—Code of Ethics”, “Corporate Governance—Corporate Governance Committee and Director Nominations”, “Corporate Governance—Board Committee Structure”, “Corporate Governance—Family Relationships” and “Corporate Governance—Independence of the Board of Directors and Committee Members” in the Proxy Statement to be issued in connection with the meeting of the Company’s stockholders on February 25, 2020 is incorporated herein by reference.

Item 11. Executive Compensation

The information included under the captions “Executive Compensation”, “Corporate Governance—Compensation Committee Interlocks and Insider Participation” and “Corporate Governance—Director Compensation Program” in the Proxy Statement to be issued in connection with the meeting of the Company’s stockholders on February 25, 2020 is incorporated herein by reference in response to this item.

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

The information contained under the captions “Security Ownership of Certain Beneficial Owners” and “Security Ownership of Management” in the Proxy Statement to be issued in connection with the meeting of the Company’s stockholders on February 25, 2020 is incorporated herein by reference in response to this item. For additional information regarding the Company’s stock option plans, please see Note 12 in the Notes to Consolidated Financial Statements in this report.

Equity Compensation Plan Information

The following table provides information as of September 30, 2019 regarding shares of the Company’s common stock issuable pursuant to its stock option and restricted stock plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column)
Equity compensation plans approved by security holders[1].	482,391	$ 38.05	213,580 [2]

[1] For a description of the Company’s equity compensation plans, see Note 12 to the Consolidated Financial Statements in Item 8.

[2] Includes (i) 104,009 shares of stock options or stock appreciation rights and (ii) 109,571 shares of restricted stock, restricted stock units, performance shares or performance units.

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

The information contained under the caption “Corporate Governance—Independence of Board of Directors and Committee Members” and under “Conflict of Interest and Related Party Transactions” in the Proxy Statement to be issued in connection with the meeting of the Company’s stockholders on February 25, 2020 is incorporated herein by reference in response to this item.

Item 14. Principal Accountant Fees and Services

The information included under the caption “Ratification of the Appointment of Independent Registered Public Accounting Firm” in the Proxy Statement to be issued in connection with the meeting of the Company’s stockholders on February 25, 2020 is incorporated herein by reference in response to this item.

Part IV

Item 15. Exhibits, Financial Statement Schedules

(a) *Documents filed as part of this Report.*

1. *Financial Statements:*

   The Financial Statements are set forth under Item 8 in this Annual Report on Form 10-K.

2. *Financial Statement Schedules:*

   Financial Statement Schedules are omitted as they are not required, are not applicable or the information is shown in the Notes to the Consolidated Financial Statements.

(b) *Exhibits*. See Index to Exhibits, which is incorporated herein by reference.

(c) *Financial Statement Schedules:* None

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Second Restated Certificate of Incorporation of Haynes International, Inc. (incorporated by reference to Exhibit 3.1 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
3.2	Amended and Restated By-laws of Haynes International, Inc. (incorporated by reference to Exhibit 3.2 to the Haynes International, Inc. Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2018).
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.01 to the Haynes International, Inc. Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2009).
10.1	Form of Termination Benefits Agreements by and between Haynes International, Inc. and certain of its employees, conformed to give effect to all amendments thereto (incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the year ended September 30, 2011).
10.2	Third Amended and Restated Loan and Security Agreement by and among Haynes International, Inc., Haynes Wire Company, the Lenders (as defined therein), Wells Fargo Capital Finance, LLC, as agent for the Lenders, and JPMorgan Chase Bank, N.A., as documentation agent (incorporated by reference to Exhibit 10.1 to Haynes International, Inc. Current Report on Form 8-K filed July 20, 2011).
10.3	Form of Director Indemnification Agreement between Haynes International, Inc. and certain of its directors named in the schedule to the Exhibit (incorporated by reference to Exhibit 10.21 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.4	Conversion Services Agreement by and between the Company and Titanium Metals Corporation, dated November 17, 2006 (incorporated by reference to Exhibit 10.22 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194). Portions of this exhibit have been omitted pursuant to a request for confidential treatment and filed separately with the Securities and Exchange Commission.
10.5	Access and Security Agreement by and between the Company and Titanium Metals Corporation, dated November 17, 2006 (incorporated by reference to Exhibit 10.23 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.6	Haynes International, Inc. 2007 Stock Option Plan as adopted by the Board of Directors on January 18, 2007 (incorporated by reference to Exhibit 10.25 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.7	Form of Non-Qualified Stock Option Agreement used in conjunction with grants made pursuant to the Haynes International, Inc. 2007 Stock Option Plan (incorporated by reference to Exhibit 10.26 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.8	Second Amended and Restated Haynes International, Inc. Stock Option Plan as adopted by the Board of Directors on January 22, 2007 (incorporated by reference to Exhibit 10.27 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.9	Form of Non-Qualified Stock Option Agreements between Haynes International, Inc. and certain of its executive officers and directors named in the schedule to the Exhibit pursuant to the Haynes International, Inc. Second Amended and Restated Stock Option Plan (incorporated by reference to Exhibit 10.28 to the Haynes International, Inc. Registration Statement on Form S-1, Registration No. 333-140194).
10.11	Haynes International, Inc. 2009 Restricted Stock Plan (incorporated by reference to Exhibit 10.02 to the Haynes International, Inc. Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2009).
10.12	Summary of 2019 Management Incentive Plan and Deferred Compensation Plan (incorporated by reference to Item 5.02 of the Haynes International, Inc. Form 8-K filed November 21, 2018).
10.13	Amendment No.1 to the Haynes International, Inc. 2009 Restricted Stock Plan (incorporated by reference to Exhibit 10.02 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended December 31, 2011).
10.14	Amendment No. 2 to the Haynes International, Inc. 2009 Restricted Stock Plan (incorporated by reference to Exhibit 10.01 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended March 31, 2013).
10.15	Amendment No. 3 to the Haynes International, Inc. 2009 Restricted Stock Plan (incorporated by reference to Exhibit 10.01 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended December 31, 2014).
10.16	Amendment No. 4 to the Haynes International, Inc. 2009 Restricted Stock Plan (incorporated by reference to Exhibit 10.02 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended December 31, 2014).

Exhibit Number	Description
10.17	Amendment No. 1 to Third Amended and Restated Loan and Security Agreement by and among Haynes International, Inc., Haynes Wire Company, the Lenders (as defined therein), Wells Fargo Capital Finance, LLC, as agent for the Lenders, and JPMorgan Chase Bank, N.A., as documentation agent (incorporated by reference to Exhibit 10.1 to the Haynes International, Inc. Current Report on Form 8-K filed September 20, 2013).
10.18	Amendment No. 2 to Third Amended and Restated Loan and Security Agreement by and among Haynes International, Inc., the Lenders (as defined therein), Wells Fargo Capital Finance, LLC, as agent for the Lenders, and JPMorgan Chase Bank, N.A., as documentation agent (incorporated by reference to Exhibit 10.1 to the Haynes International, Inc. Current Report on Form 8-K filed July 13, 2016).
10.19	Haynes International, Inc. 2016 Incentive Compensation Plan (incorporated by reference to Exhibit 10.1 to the Haynes International, Inc. Current Report on Form 8-K filed March 7, 2016).
10.20	Form of Restricted Stock Award Agreement between Haynes International, Inc. and certain of its directors, issued pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan (incorporated by reference to Exhibit 10.22 to the Haynes International, Inc. Form 10-K for the fiscal year ended September 30, 2017).
10.21	Form of Performance Share Award Agreement between Haynes International, Inc. of certain of its officers, issued pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan (incorporated by reference to Exhibit 10.23 to the Haynes International, Inc. Form 10-K for the fiscal year ended September 30, 2017).
10.22	Form of Non-Qualified Stock Option Agreement between Haynes International, Inc. and certain of its officers, issued pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan (incorporated by reference to Exhibit 10.24 to the Haynes International, Inc. Form 10-K for the fiscal year ended September 30, 2017).
10.23	Form of Restricted Stock Award Agreement between Haynes International, Inc. and certain of its officers and other employees, issued pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan (incorporated by reference to Exhibit 10.25 to the Haynes International, Inc. Form 10-K for the fiscal year ended September 30, 2017).
10.24	Form of Indemnification Agreement between the Company and certain of its officers (incorporated by reference to Exhibit 10.24 the Haynes International Form 10K filed November 15, 2018).
10.25	Executive Employment Agreement, effective as of September 1, 2018, by and between the Company and Michael L. Shor (incorporated by reference to Exhibit 10.25 to the Haynes International, Inc. Form 10-K filed November 15, 2018).
10.26	Resignation and General Release Agreement, effective as of May 29, 2018, by and between the Company and Mark M. Comerford (incorporated by reference to Exhibit 10.2 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended June 30, 2018).
21.1	Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 to the Haynes International, Inc. Form 10-K for the fiscal year ended September 30, 2018).
23.1**	Consent of Deloitte & Touche LLP.
31.1**	Rule 13a-14(a)/15d-4(a) Certification of Chief Executive Officer
31.2**	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
32.1**	Section 1350 Certifications
101**	The following materials from the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Balance Sheets; (11) the Consolidated Statements of Operations; (iii) the Consolidated Statements of Comprehensive Income (Loss); (iv) the Consolidated Statements of Stockholders Equity; (v) the Consolidated Statements of Cash Flows; and (vi) related notes.

** Filed herewith

SIGNATURES

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

HAYNES INTERNATIONAL, INC.

By: /s/ MICHAEL L. SHOR
Michael L. Shor
President and Chief Executive Officer
Date: November 14, 2019

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

Signature	Title	Date
/s/ MICHAEL L. SHOR Michael L. Shor	President and Chief Executive Officer; Director (Principal Executive Officer)	November 14, 2019
/s/ DANIEL W. MAUDLIN Daniel W. Maudlin	Vice President of Finance and Chief Financial Officer (Principal Financial Officer)	November 14, 2019
/s/ DAVID S. VAN BIBBER David S. Van Bibber	Controller and Chief Accounting Officer (Principal Accounting Officer)	November 14, 2019
/s/ ROBERT H. GETZ Robert H. Getz	Chairman of the Board, Director	November 14, 2019
/s/ DONALD C. CAMPION Donald C. Campion	Director	November 14, 2019
/s/ JOHN C. COREY John C. Corey	Director	November 14, 2019
/s/ DAWNE S. HICKTON Dawne S. Hickton	Director	November 14, 2019
/s/ WILLIAM P. WALL William P. Wall	Director	November 14, 2019

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-215172, 333-145499 and 333-134989 on Form S-8 of our report dated November 14, 2019, relating to the consolidated financial statements of Haynes International, Inc. and the effectiveness of Haynes International, Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Haynes International, Inc. for the year ended September 30, 2019.

/s/ Deloitte & Touche LLP

Indianapolis, Indiana
November 14, 2019

Exhibit 31.1

CERTIFICATIONS

I, Michael L. Shor, certify that:

1. I have reviewed this Annual Report on Form 10-K of Haynes International, Inc.;

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-159f) and 15(d)-15(f)) for the registrant and have:

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

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

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

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

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

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 14, 2019

/s/ MICHAEL L. SHOR

Michael L. Shor
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Daniel W. Maudlin, certify that:

1. I have reviewed this Annual Report on Form 10-K of Haynes International, Inc.;

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

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

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-159f) and 15(d)-15(f)) for the registrant and have:

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

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

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

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

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

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: November 14, 2019

/s/ DANIEL W. MAUDLIN

Daniel W. Maudlin
Vice President of Finance and
Chief Financial Officer

Exhibit 32.1

Certifications Pursuant to 18 U.S.C. Section 1350
As Adopted Pursuant to Section 906 of the
Sarbanes—Oxley Act of 2002

I, Daniel W. Maudlin, the Vice President Finance and Chief Financial Officer of Haynes International, Inc., certify that (i) the Annual Report on Form 10-K for the fiscal year ended September 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Haynes International, Inc. as of the dates and for the periods set forth therein.

/s/ DANIEL W. MAUDLIN
Daniel W. Maudlin
Vice President Finance and
Chief Financial Officer

November 14, 2019
Date

I, Michael L. Shor, the President and Chief Executive Officer of Haynes International, Inc., certify that (i) the Annual Report on Form 10-K for the fiscal year ended September 30, 2019 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Haynes International, Inc. as of the dates and for the periods set forth therein.

/s/ MICHAEL L. SHOR
Michael L. Shor
President and Chief Executive Officer

November 14, 2019
Date

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