

HAYNES

International

January 25, 2019

To My Fellow Stockholders:

It is an honor to be writing to you for the first time as the Chief Executive Officer of Haynes International. After serving as Chairman of the Board since February 2017, I agreed to serve as the interim President and CEO in May 2018. At that time, I truly had no intention of making this permanent.

What changed for me? Initially, I saw many opportunities for improvement as I gained a more in-depth understanding of our performance and the issues we have encountered. Some were market related issues, and some were under our control. In turn, I saw an opportunity to capitalize on the under-utilized potential of our recently-upgraded facilities and our talented people. I was also thrilled by the possibilities presented by our best-in-class ability to use our technical expertise to meet our customers' needs for innovative applications of our alloys. I became excited by Haynes's potential and what I believe our team can build.

Haynes has lost money, or been slightly above break-even, for the seven consecutive quarters preceding the fourth quarter of fiscal 2018. This is a record of which we are not proud, and it drives a sense of urgency. Our business was impacted in recent years by many issues, including the substantial drop in the industrial gas turbine market, lower levels of our specialty project business, the significant impact of overall lower volumes on fixed cost absorption, a cost structure that requires attention and yields that can be improved. We have invested substantial capital in recent years to upgrade our equipment and expand our capacity, but the headwinds we have encountered have delayed realization of an acceptable return on that capital, which we are addressing. The company's recent performance has led us to undertake a comprehensive review of our operations, including personnel, practices and policies at all levels, and we have been making constructive changes in each of those areas, which are beginning to yield results.

As a result, a new spirit of optimism is growing at Haynes in light of the many opportunities we have to improve our processes, performance and costs. The areas of focus that I believe will provide these opportunities and bring Haynes success are as follows:

We are improving our cold finished flats capacity. To that end, we recently concluded a long-planned comprehensive retrofitting and upgrade of a critical furnace within our cold finishing area. The Drever furnace is a 292 foot-long bright annealing furnace originally installed in 1980 which is now prepared to meet today's top-of-the-line industry standards. The furnace was required to be out of service for 12 weeks, which adversely affected our financial results for the first quarter of fiscal 2019, but it was the appropriate decision to enhance our long-term prospects. Based on our assessment of the markets and customer demand, we expect it will help drive Haynes's profitability by increasing capacity and improving on-time delivery.

We expanded our plate capacity by 50%, or three million pounds, in our Kokomo, Indiana facility a few years ago but have yet to take advantage of this investment and capacity expansion. Although plate products typically achieve a lower average selling price, plate is an easier-to-produce product that turns quickly and most importantly generates a steady base of business that facilitates favorable asset utilization and absorption. Our goal here is simple: increase plate business to achieve our overall volume level goal of at least five million pounds per quarter, which should help optimize cost absorption.

We are beginning to see a meaningful increase in production at our tubular products facility and an increase in utilization of our wire facility. More improvement is in our sights as we move forward

and continue to analyze ways to increase volumes and profitability in these products, including evaluation of opportunities for new applications.

We are relentlessly focusing on improving yields and reducing costs. The opportunity is there. We have brought in new perspectives to our manufacturing locations, including the addition of Dave Strobel as our Vice President of Operations. Dave's extensive experience and track record of success in this industry will be of great benefit to Haynes.

We have improved our pricing process by aligning our pricing more closely with market conditions and a better understanding of our costs. We have raised prices where appropriate within the aerospace market and other markets in order to capture bottom line increases. We expect to continue to optimize pricing to enhance and preserve profitability in response to market conditions.

We work closely with customers to develop new alloys and new applications for our proprietary alloys. Special project opportunities have recently increased, and the outlook appears positive for the next eighteen months. Although these projects often involve a significant investment of time before coming to fruition, we are excited about some potential new applications currently in the development phase, including projects involving HAYNES® 282® alloy and HASTELLOY® G-35® alloy.

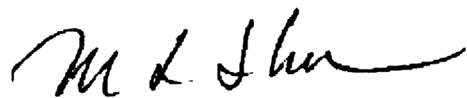
We continue to work with customers to help them solve their technical issues. For example, we assisted a major aerospace engine manufacturer in relation to an application requiring high temperature strength capability combined with low coefficient of thermal expansion, even developing a new alloy to meet the customer's criteria. This level of service is part of our continued effort to achieve best-in-class customer service. Our sales team is adept at solving our customers' problems and meeting their needs. Haynes's strong position as an alloy developer, manufacturer and distributor allows us to be closer to our customers than others in the marketplace.

We are excited about our involvement and future growth possibilities in the aerospace sector. Haynes is a significant supplier to the aerospace market. Nearly every commercial or military jet flying in the western world includes metal either invented by Haynes or produced here. We have products specified in new aircraft engines, including GE's LEAP engine and Pratt's new engines, which are used on Boeing, Airbus and other aircraft. In fact, we just finished a record year in shipments into the aerospace market. Haynes's aerospace business is a core strength that should lead to enhanced returns in the coming years.

Finally, and most importantly, we have a renewed and energized focus on safety. We are committed to improving our safety performance. We do believe that a zero-injury workplace is achievable. That remains our ultimate goal. Our team is now taking the appropriate steps to strengthen our safety culture.

I look forward to working with each member of the Haynes team to build a company of which our employees, our customers and our stockholders can continue to be proud.

Sincerely,

A handwritten signature in black ink, appearing to read "M L Shor". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael L. Shor
President and Chief Executive Officer

HAYNES International

January 25, 2019

Dear Stockholders of Haynes International, Inc.:

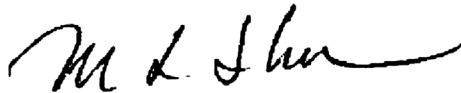
You are cordially invited to attend the Annual Meeting of Stockholders of Haynes International, Inc. (“Haynes”) to be held Wednesday, February 27, 2019 at 10:00 a.m. (EST) at the Hyatt Regency Indianapolis, One South Capitol Avenue, Indianapolis, Indiana 46204.

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 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 27, 2019

Stockholders of Haynes International, Inc.:

The Annual Meeting of Stockholders of Haynes International, Inc. (“Haynes”) will be held at the Hyatt Regency Indianapolis, One South Capitol Avenue, Indianapolis, Indiana 46204 on Wednesday, February 27, 2019 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 John C. Corey as a director of Haynes to serve for a one-year term;
3. To elect Robert H. Getz as a director of Haynes to serve for a one-year term;
4. To elect Dawne S. Hickton as a director of Haynes to serve for a one-year term;
5. To elect Michael L. Shor 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, 2019;
8. To hold an advisory vote on executive compensation; and
9. To transact such other business as may properly come before the meeting.

Only stockholders of record at the close of business on January 11, 2019 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 25, 2019
Kokomo, Indiana

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on February 27, 2019: This Notice of Annual Meeting and Proxy Statement and the Company’s Fiscal 2018 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 27, 2019

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 Wednesday, February 27, 2019, and at any adjournment thereof. The meeting will be held at the Hyatt Regency Indianapolis, One South Capitol Avenue, Indianapolis, Indiana 46204. This proxy statement and the accompanying form of proxy were first mailed to stockholders of the Company on or about January 25, 2019.

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 John C. Corey;
- (3) FOR the election of Robert H. Getz;
- (4) FOR the election of Dawne S. Hickton;
- (5) FOR the election of Michael L. Shor;
- (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, 2019;
- (8) FOR the compensation of the Named Executive Officers described herein, in a non-binding, advisory capacity; and
- (9) 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 matter.

As of the close of business on January 11, 2019, the record date for the annual meeting, there were outstanding and entitled to vote 12,517,492 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, 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 11, 2019 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 and approval of the compensation of the Company’s Named Executive Officers. 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 proposal with respect to the compensation of the Company’s Named Executive Officers because this is a non-routine matter 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 2018 Annual Report on Form 10-K, including audited financial statements and a description of operations for the fiscal year ended September 30, 2018, 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 2020 ANNUAL MEETING

Stockholders desiring to submit proposals to be included in the Proxy Statement for the 2020 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 27, 2019, provided that if the date of the 2020 Annual Meeting is more than 30 days from the anniversary of the 2019 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 2020 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 29, 2019 and not earlier than October 30, 2019, provided however, that in the event that the 2020 Annual Meeting of Stockholders is called for a date that is not within twenty-five (25) days before or after the anniversary date of the 2019 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 2020 Annual Meeting of Stockholders was mailed or public disclosure of the date of the 2020 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 2020 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 11, 2019 (assuming that their holdings have not changed from such other date as may be shown below):

<u>Name</u>	<u>Number</u>	<u>Percent⁽¹⁾</u>
BlackRock, Inc. ⁽²⁾	1,615,733	12.9%
T. Rowe Price Associates, Inc. ⁽³⁾	1,536,613	12.2%
The Vanguard Group ⁽⁴⁾	1,262,299	10.1%
Royce & Associates, LLC ⁽⁵⁾	1,137,816	9.1%
Dimensional Fund Advisors LP ⁽⁶⁾	1,056,339	8.4%

⁽¹⁾ The percentage is calculated on the basis of 12,517,492 shares of common stock outstanding as of January 11, 2019.

⁽²⁾ The address of BlackRock, Inc. is 55 East 52nd Street, New York, New York 10022. Based solely on Schedule 13G/A, filed January 18, 2018 with the Securities and Exchange Commission. Represents sole voting power over 1,582,543 shares and sole dispositive power over 1,615,733 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, 2017 with the Securities and Exchange Commission. Represents sole voting power over 234,935 shares and sole dispositive power over 1,536,613 shares.

⁽⁴⁾ The address of The Vanguard Group is 100 Vanguard Blvd., Malvern, Pennsylvania 19355. Based solely on Schedule 13G, filed September 10, 2018 with the Securities and Exchange Commission.

Represents sole voting power over 11,651 shares, shared voting power over 1,182 shares, sole dispositive power over 1,250,166 shares and shared dispositive power over 12,133 shares.

- (5) The address of Royce & Associates, LLC is 745 Fifth Avenue, New York, New York 10151. Based solely on Schedule 13G, filed January 22, 2018 with the Securities and Exchange Commission. Represents sole voting power over 1,137,816 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 February 9, 2018 with the Securities and Exchange Commission. Represents sole voting power over 1,015,621 shares and sole dispositive power over 1,056,339 shares.

SECURITY OWNERSHIP OF MANAGEMENT

The following table shows the ownership of shares of the Company’s common stock as of January 11, 2019 (except as described in any associated footnote), by each director, each person who held the office of Chief Executive Officer in fiscal 2018, the Chief Financial Officer and the other three most highly compensated officers during fiscal year 2018 (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.

<u>Name</u>	<u>Number</u>	<u>Percent⁽¹⁾</u>
Michael L. Shor ⁽²⁾	25,605	*
Mark Comerford ⁽³⁾	17,480	*
John C. Corey ⁽⁴⁾	22,449	*
Donald C. Champion ⁽⁴⁾	14,905	*
Robert H. Getz ⁽⁴⁾	15,425	*
Dawne S. Hickton ⁽⁵⁾	2,000	*
William P. Wall ⁽⁴⁾	13,906	*
Marlin C. Losch III ⁽⁶⁾	48,891	*
Daniel W. Maudlin ⁽⁷⁾	39,404	*
Scott R. Pinkham ⁽⁸⁾	49,342	*
Venkat R. Ishwar ⁽⁹⁾	42,562	*
All directors and executive officers as a group (16 persons) ⁽¹⁰⁾	407,656	3.20%

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

- (1) The percentages are calculated on the basis of 12,517,492 shares of common stock outstanding as of January 11, 2019, plus the number of shares that such person or group has the right to acquire beneficial ownership of within sixty days of January 11, 2019, including applicable shares underlying stock options held by such person or group which may be exercised within sixty days of January 11, 2019.
- (2) Shares of common stock beneficially owned by Mr. Shor include 14,105 shares of time-vesting restricted stock subject to forfeiture all of which Mr. Shor has the right to vote. 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) The information set forth in this chart and footnote is based solely on information available to the Company as of September 30, 2018 based upon the terms set forth in certain agreements relating

to Mr. Comerford's former employment with the Company. The Company has no additional information regarding Mr. Comerford's holdings or transaction activity.

- (4) 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.
- (5) Excluded from this amount are 5,800 shares of restricted stock which were deferred to a future year as elected by the participant.
- (6) Shares of common stock beneficially owned by Mr. Losch include 6,114 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Losch has the right to vote and 33,700 shares underlying stock options which may be exercised within sixty days of January 11, 2019; and 9,077 shares owned with no restrictions..
- (7) Shares of common stock beneficially owned by Mr. Maudlin include 7,718 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Maudlin has the right to vote and 28,433 shares underlying stock options which may be exercised within sixty days of January 11, 2019; and 3,253 shares owned with no restrictions.
- (8) Shares of common stock beneficially owned by Mr. Pinkham include 6,248 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Pinkham has the right to vote and 34,734 shares underlying stock options which may be exercised within sixty days of January 11, 2019; and 8,360 shares owned with no restrictions.
- (9) Shares of common stock beneficially owned by Mr. Ishwar include 6,339 shares of time-vesting restricted stock subject to forfeiture, all of which Mr. Ishwar has the right to vote and 32,783 shares underlying stock options which may be exercised within sixty days of January 11, 2019; and 3,440 shares owned with no restrictions.
- (10) Includes 208,865 shares underlying stock options that may be exercised within sixty days of January 11, 2019 and 58,650 shares of restricted stock.

PROPOSALS TO BE VOTED UPON

1 through 7. 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 six. 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 2020 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 Board of Directors has nominated six directors who served in fiscal 2018 for re-election at the annual meeting. 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 re-election (the “Nominated Directors”) are:

<u>Name</u>	<u>Age on 12/31/18</u>	<u>Current Position</u>	<u>Served as Director Since</u>
Robert H. Getz	56	Chairman of the Board; Director	2006
Donald C. Champion	70	Director	2004
John C. Corey	71	Director	2004
Dawne S. Hickton	61	Director	2017
Michael L. Shor	59	President and Chief Executive Officer; Director	2012
William P. Wall	56	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 board of several metals and mining companies and 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. Mr. Getz also serves on the board of Jaguar Mining (TSX: JAG.TO). Mr. Getz formerly served as a Director of NewMarket Gold Inc. and as Chairman of the Board of Crocodile Gold Corp prior to its acquisition by NewMarket Gold 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. Champion has been a director since August 31, 2004. Mr. Champion also serves as the Chairman of the Audit Committee and as a member of the Compensation Committee of the Board. Mr. Champion 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. Champion 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. Champion 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. Champion’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. Champion’s tax and accounting acumen also qualify him as the Company’s Audit Committee financial expert.

John C. Corey has been a director since August 31, 2004. Mr. Corey also serves as a member of the Audit Committee and Compensation Committee of the Board. From January 2006 until his retirement in March 2015, Mr. Corey served as President, Chief Executive Officer and a director of Stoneridge, Inc., a global manufacturer of electrical and electronic components, modules and systems for the automotive, medium- and heavy-duty truck, agricultural and off-highway vehicle markets. From October 2000 through December 2005, Mr. Corey served as the President, Chief Executive Officer and a director of Safety Components International, Inc., a global manufacturer of automotive airbags. From January 2014 until December 31, 2015, Mr. Corey served on the board and was Chairman of the Motor Equipment Manufacturers Association, which represents the interests of suppliers to the motor vehicle industry. Mr. Corey has also served on several company boards, both public and private. The Board believes Mr. Corey's extensive experience as a President and Chief Executive Officer, garnered in service of a New York Stock Exchange listed corporation, as well as substantial operations, international and business development experience, make him well qualified to serve as a director.

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 the President and Founding Partner of Cumberland Highstreet Partners, Inc., an executive strategic consulting firm for manufacturing businesses. She is also a member of the boards of directors of Jacobs Engineering Group (NYSE: JEC) and Triumph Group, Inc. (NYSE: TGI). 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 also a member of the board of the Federal Reserve Bank of Cleveland, the University of Pittsburgh board of trustees, the board of the International Titanium Association, where she founded Women in Titanium, 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 a benefit 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 2016 through February 2017, 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.

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 firm headquartered in Lexington, MA. 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 Altisource 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 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 in fiscal 2018: (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 Audit Committee is currently composed of four members, Messrs. Campion (who chairs the Committee), Corey and Wall and Ms. Hickton, all of whom are independent under the definitions and interpretations of NASDAQ. 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 three members, Messrs. Wall (who chairs the Committee), Campion and Corey, all of whom are independent under the definitions and interpretations of NASDAQ. 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 fiscal 2018, 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, 2018. During fiscal 2018, 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. 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, but not required, to attend Haynes' annual meetings of stockholders. All of the members of the Board of Directors attended Haynes' 2018 annual

meeting in person. The following chart shows the number of meetings in fiscal 2018 of each of the standing committees of the Board of Directors at which a quorum was present:

<u>Committee</u>	<u>Meetings in Fiscal 2018</u>
Audit Committee	8
Compensation Committee	14
Corporate Governance and Nominating Committee	6
Risk Committee	4

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 2018, the non-management directors met in executive session five times. When meeting in executive session, the presiding person was the Chairman. However, in the period from May 29, 2018 through September 1, 2018, during which time Mr. Shor served as the Chairman of the Board and the interim Chief Executive Officer, the presiding person was Mr. Wall, who was appointed as the lead independent director for that time period.

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, the Governance Committee and 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 customarily split into two positions. However, between May 29, 2018 and September 1, 2018, Mr. Shor served as both Chairman of the Board and interim Chief Executive Officer of the Company. During that time, Mr. Wall served as the lead independent director of the Board. Mr. Shor resigned as Chairman when he became the Company’s permanent Chief Executive Officer on September 1, 2018, and Mr. Getz was appointed as the Chairman of the Board at that time. 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 and stockholders. 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 10% 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 Board of Directors. 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 2018 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 business, finance and legal and regulatory compliance, 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 of other companies. 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.

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 not so recommended.

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/CodeofBusinessConductandEthics.pdf.

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 fiscal 2018, the Risk Committee acted as the primary tool to keep risk as an important part of the Board's and the various committees' deliberations throughout the year 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, 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 a Chief Risk Officer, 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 2018. 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 2018.

Name	Fees Earned or Paid in Cash (\$)	Restricted Stock Awards (\$) ⁽¹⁾	Dividends on Stock Awards (\$)	Total (\$)
R. H. Getz, Chairman	\$156,250	\$ 84,164	\$2,332	\$242,746
D. C. Campion, Director	\$122,500	\$ 84,164	\$2,332	\$208,996
J. C. Corey, Director	\$102,500	\$ 84,164	\$2,332	\$188,996
D. S. Hickton, Director	\$125,000	\$104,808	\$2,904	\$232,712
W. P. Wall, Director	\$150,000	\$ 84,164	\$2,332	\$236,496

⁽¹⁾ Represents restricted stock with a grant date fair value equal to \$31.76 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".

The compensation earned by Mr. Shor as a non-employee director during fiscal 2018 is disclosed in the Summary Compensation table.

Director Compensation Analysis

Total Rewards Strategies, the Compensation Committee's independent compensation consulting firm, reviewed the Board of Directors' total compensation in fiscal 2018, 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 2017 director compensation and the comparator group companies' (as identified under "Committee Procedures") director compensation and making recommendations with respect to Haynes' fiscal 2018 director compensation. Based upon its review of this information, the Compensation Committee, in consultation with Total Rewards Strategies, decided to maintain the existing director compensation structure for 2018.

Annual Retainer

Non-management members of the Board of Directors receive a \$60,000 annual retainer related to their Board of Directors duties and responsibilities, which is paid in four equal installments of \$15,000 each. Additionally, there is a \$40,000 annual retainer for serving as Chairman of the Board, also paid in four equal installments. The Company reimburses directors for their 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.

Committee Fees

Directors receive an additional annual retainer of \$15,000 for each standing committee on which they serve, paid in four equal installments. In addition, there is 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 or the Risk Committee and a \$10,000 annual retainer for serving as the chairman of any other committee of the Board of Directors. In fiscal 2017, the Board of Directors formed a Strategic Committee for the purposes of reviewing and analyzing potential acquisitions and capital allocation. Committee members received retainers ranging from \$35,000 for committee members to \$50,000 for the committee chair in fiscal 2018.

Equity Compensation

On November 20, 2017, each director was granted 2,650 shares of restricted stock, except for Ms. Hickton who was granted 3,300 shares, pursuant to the Haynes International, Inc. 2016 Incentive Compensation Plan. The additional number of shares granted to Ms. Hickton was attributable to her service as a director from the time of her appointment in July 2017 through September 30, 2017. 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.

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 2018 on 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, 2018 all of the directors met the ownership goal other than Ms. Hickton who joined the

Board in 2017 and has not reached the five (5) year anniversary applicable to the goal. It is expected that Ms. Hickton will timely meet the ownership goal.

The share ownership amount for each director as of September 30, 2018 is summarized below.

<u>Name</u>	<u>Number of Shares Owned</u>	<u>Number of Deferred Shares</u>	<u>Number of Non Vested Shares</u>	<u>Total Share Ownership</u>
R. H. Getz	15,425	2,650	—	18,075
D. C. Campion	14,905	2,650	—	17,555
J. C. Corey	22,449	2,650	—	25,099
D. S. Hickton	2,000	3,300	—	5,300
W. P. Wall	13,906	2,650	—	16,556

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, 2018 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, 2018.

SUBMITTED BY THE COMPENSATION COMMITTEE

William P. Wall, Chair
Donald C. Campion
John C. Corey

Compensation Discussion and Analysis

2018 Business Summary

In fiscal 2018, the Company:

- Generated cash from operations of \$13.7 million on revenues of \$435.3 million and net loss of \$(21.8) million, which included special charges due to tax reform, strategic acquisition activity and CEO transition costs totaling \$20.9 million;
- Invested \$11.1 million into capital projects; and
- Paid approximately \$11.0 million in dividends to stockholders, resulting in a cumulative amount of approximately \$96.0 million in dividends paid to stockholders over the last 36 consecutive quarters.

Overview

This Compensation Discussion and Analysis describes the key principles and approaches used to determine the compensation in fiscal 2018 for Mark M. Comerford and Michael L. Shor, the Company's principal executive officers in fiscal 2018; Daniel W. Maudlin, the Company's principal financial officer; and Scott R. Pinkham, Venkat R. Ishwar and Marlin C. Losch III, the Company's other three most highly compensated executive officers in fiscal 2018. Detailed information regarding the compensation of these 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 2018

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. Comerford's fiscal 2018 base salary was established by the employment agreement he renewed in fiscal 2017, as modified by subsequent Compensation Committee actions. Mr. Shor's salary was established by the Interim Executive Employment Agreement between Mr. Shor and the Company for the period of May 29, 2018 through August 31, 2018 and by the Executive Employment Agreement between Mr. Shor and the Company on and after 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 based on the 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 2018 annual meeting of stockholders, the stockholders voted on a non-binding advisory proposal to approve the compensation of the Named Executive Officers. Approximately 97.34% 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 2018 proxy statement, the Compensation Committee did not implement material changes to the executive compensation programs as a result of the stockholders' advisory vote.

2018 Compensation Plan Highlights

The design of the Company's executive compensation program for 2018 was generally consistent with the design of the 2017 program. The Company made several enhancements in 2017 to further drive the pay-for-performance philosophy, combined with ongoing use of many best practices, to align executive compensation and shareholder value creation. These enhancements were continued in fiscal 2018. 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 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 2017 and fiscal 2018. Total Rewards Strategies did not provide any services to the Company other than compensation consulting to the Compensation Committee in fiscal 2017 or fiscal 2018. Total Rewards Strategies' work for the Company in fiscal 2018 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, revenue, profitability, labor markets, business model, customer markets, institutional ownership, number of employees and market capitalization. The Compensation Committee reviews the composition of the comparator group annually.

- In July 2017, the Compensation Committee approved the comparator group for fiscal 2018. The fiscal 2018 comparator group is comprised of 30 companies, including industrial metals, mineral and manufacturing companies.

Aegion	II-VI	Patrick Industries
AZZ	Insteel Industries	Quaker Chemical
Calgon Carbon	KEMET	Quanex Building Products
Carpenter Technology	L.B. Foster	Rogers
CIRCOR	LMI Aerospace	Shiloh Industries
Compass Minerals	Materion Corporation	Skyline
CTS	Myers Industries	Stoneridge
Ducommun	NN	Supreme Industries
EnPro Industries	Northwest Pipe	Titan International
Franklin Electric	Olympic Steel	Universal Stainless & Alloy

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. 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.

Setting Named Executive Officer Compensation in Fiscal 2018

Effective May 29, 2018, upon the announced departure of Mr. Comerford, Michael L. Shor was appointed interim President and Chief Executive Officer of the Company and on September 1, 2018 he was appointed permanent President and Chief Executive Officer of the Company. The disclosures regarding Mr. Shor’s fiscal 2018 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

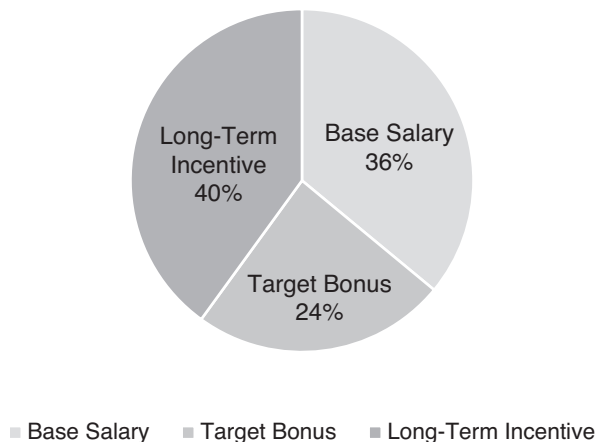
The chief components of each Named Executive Officer’s compensation in fiscal 2018 were:

- 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, 64% of the Named Executive Officers’ total target compensation, including the Chief Executive Officer’s compensation, was allocated to performance-based pay in fiscal 2018.

Fiscal 2018 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 2018. The following table provides annualized base salary information for the Named Executive Officers effective July 1, 2017 and base salary as of July 1, 2018 as a percentage of the median market rate for 2018:

<u>Named Executive Officer</u>	<u>Base Salary as of July 1, 2017</u>	<u>Base Salary as of July 1, 2018</u>	<u>Base Salary as a Percentage of Median Market Rate for 2018</u>
Michael L. Shor ⁽¹⁾	N/A	\$400,000	60%
Mark M. Comerford ⁽²⁾	\$619,000	\$619,000	92%
Daniel W. Maudlin	\$275,000	\$280,500	79%
Scott R. Pinkham	\$271,500	\$277,000	98%
Venkat R. Ishwar	\$273,500	\$279,000	99%
Marlin C. Losch III	\$262,750	\$268,100	101%

(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, at which time his salary was increased to \$560,000.

(2) Mr. Comerford departed from the position of President and Chief Executive Officer of the Company on May 29, 2018 but remained an employee of the Company through September 30, 2018.

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 2018, the target performance level was established by 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 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 2018, the Compensation Committee established income (loss) before income taxes, excluding the impacts of special charges, as the sole financial goal for MIP payouts.

The Board of Directors establishes income and performance goals in order to align the interests of management with those of the Company’s stockholders. For fiscal years 2016 and 2017, no MIP payments were made based upon the Company’s financial performance in those years. Based upon fiscal 2018’s income (loss) before income taxes, MIP payments in excess of the minimum threshold but less than target were made for fiscal 2018.

The table below lists the 2018 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:

<u>Named Executive Officer</u>	<u>MIP Incentive as % of Base Salary</u>		
	<u>Minimum</u>	<u>Target</u>	<u>Maximum</u>
Michael L. Shor ⁽¹⁾	40%	80%	120%
Mark M. Comerford	40%	80%	120%
Daniel W. Maudlin	30%	60%	90%
Scott R. Pinkham	30%	60%	90%
Venkat R. Ishwar	25%	50%	75%
Marlin C. Losch III	25%	50%	75%

⁽¹⁾ Mr. Shor's potential MIP payments were subject to pro-ration based upon the portion of the fiscal year in which he served as Chief Executive Officer.

The following table sets forth the targets for net income (loss) before income taxes, as well as actual net income (loss) before income taxes adjusted for special charges for fiscal 2018:

<u>(\$ in thousands)</u>	<u>Net Income before income taxes</u>
Threshold	\$(1,639)
Target	\$ 1,803
Maximum	\$ 8,195
Fiscal 2018 Actual Net Loss Before Income Taxes (Adjusted for Special Charges of \$2,786)	\$(1,268)

Long-Term Incentives

Stockholders approved the 2016 Incentive Compensation Plan on March 1, 2016. Grants were made under that plan in fiscal 2018. 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 2018 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 Compensation Committee intends to ensure that the Company avoids equity grants in connection with the release, or the withholding, of material non-public information, 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 2018, the equity grants to the NEOs consisted of twenty-five percent (25%) stock options, thirty-five percent (35%) performance shares and forty percent (40%) 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. If needed to comply with the final regulations when issued, the Board of Directors will make changes to that policy.

Anti-Pledging Policy

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.

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

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 a certain amount of stock (based upon value of shares owned) after meeting the ownership goal.

Stock Options

All options granted to the Company's NEOs (other than for the option grant made to Mr. Shor in fiscal 2018) 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.

The Compensation Committee granted stock options to the management team, including the Named Executive Officers who were officers at that time, in November 2017. 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 (other than to Mr. Shor), the Compensation Committee established the value of such shares underlying the options at \$9.74 for the November 2017 grant using a fair value methodology. The Compensation Committee then set a total pool of options for grant to all executive officers of approximately \$0.6 million.

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 2018, 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.

Vesting or Forfeiture of 2016 Fiscal Year Grants

On November 24, 2015, executives, including the Named Executive Officers, were granted restricted stock. Two types of restricted shares were granted: those with performance-based vesting and those with time-based vesting. For the grant of performance-based restricted shares, the Compensation Committee established a three-year net income performance goal for the period of October 1, 2015 through September 30, 2018, which determined whether those restricted shares vested or were forfeited. The performance-based shares would have vested in equal installments on the first, second, and third anniversaries of the grant date provided that (a) the recipient was still an employee of the

Company on such date, and (b) the Company had met annual net income performance goals set by the Company's Compensation Committee, provided that, if the Company had exceeded the total net income performance goal for the three year period, restricted shares that did not vest due to the Company's failure to meet the annual net income performance goals may have vested at the end of such three year period. Participants must be employees at the end of the performance period to receive a payout, except in the event of death, disability or change in control.

All of the performance-based awards were forfeited. 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, 2018 is listed in the Outstanding Equity Awards at Fiscal Year End table on page 30.

2018 Fiscal Year Grants

On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor), were granted time-based restricted stock. The number of shares and value of restricted stock as of September 30, 2018 is listed in the Outstanding Equity Awards at Fiscal Year End table on page 30. 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), 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, will not be determined until 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. Please refer to the Grants of Plan Based Awards Table for information regarding the target and maximum number of shares that may be distributed under the 2018 grant. 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 2017-2020 performance period is determined as follows.

<u>Haynes TSR Versus TSR Peer Group</u>	<u>Payout % of Target Award</u>
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%

The TSR Peer Group for the 2018 performance awards is comprised of the following 10 companies:

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

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 employees and, as of December 31, 2007, the benefits of all 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 2018, these perquisites consisted of taxable automobile usage and country club memberships for Messrs. Comerford, Ishwar and Losch. In fiscal 2018, no single perquisite exceeded \$10,000 per person.

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.

Severance; Change in Control

Mr. Comerford received certain compensation described below in connection with his departure from the Company. Pursuant to his employment agreement, Mr. Shor is entitled to compensation under certain circumstances relating to his severance from employment with the Company. In addition, the Company has entered into Termination Benefits Agreements with the Named Executive Officers (other than the Chief Executive Officer), which provide severance and change in control (CIC) compensation. The Compensation Committee regularly reviews these agreements as well as the list of executives eligible for such an agreement. We believe these agreements serve the best interests of the Company and our shareholders by allowing our executives to exercise sound business judgment without fear of significant economic loss in the event they lose their jobs as a result of a CIC. The

Compensation Committee believes from its experience, and as advised by its Compensation Consultant, that such arrangements are competitive, reasonable and necessary to attract and retain key executives. These agreements do not materially affect the Compensation Committee's annual compensation determinations.

CEO Compensation

Effective October 1, 2008, Mark M. Comerford was appointed President and CEO of the Company. With the recommendation and approval of the Compensation Committee, the Company entered into an Employment Agreement with Mr. Comerford on September 8, 2008, which was amended August 6, 2009. The agreement's initial term began at the close of business on September 30, 2008 and ended on September 30, 2011, but was subject to automatic extension for one year periods thereafter assuming mutual consent of the Company and Mr. Comerford. Pursuant to the agreement as modified by the Compensation Committee, Mr. Comerford's base salary for fiscal 2018 remained at \$619,000 per year (94% of the median Comparator Group CEO salary), with bonus targets to be determined by the Compensation Committee annually prior to or at the commencement of the applicable fiscal year.

Mr. Comerford departed from the positions of President and Chief Executive Officer of the Company on May 29, 2018 but remained an employee of the Company through September 30, 2018. In connection with Mr. Comerford's departure, Mr. Comerford and the Company entered into a Resignation and General Release Agreement (the "Departure Agreement"). Under the Departure Agreement, Mr. Comerford resigned from all positions he held as an officer or director of the Company or any of its subsidiaries and as a member of the Board effective as of May 29, 2018 (the "Departure Date") and served as an advisor to the Chief Executive Officer of the Company until September 30, 2018. Between the Departure Date and September 30, 2018, Mr. Comerford continued to receive his base salary at the same rate as in effect on the Departure Date and continued to participate in the employee health and welfare benefit plans offered by the Company to its employees, subject to the terms and conditions of such plans.

Under the Departure Agreement, and subject to the terms thereof, following Mr. Comerford's departure, he received (i) payment of earned but unpaid salary and reimbursement for outstanding reimbursable business expenses, (ii) cash payments totaling \$1,379,555, of which \$961,730 has or will be paid in equal monthly installments during the 20 month period following his departure, (iii) the ability to exercise certain vested and exercisable stock options until the earlier of November 30, 2018 or the expiration date of such stock options, (iv) acceleration of vesting of a pro rata portion (based on service by Mr. Comerford from the grant date through the Departure Date) of certain time-based restricted shares, (v) retention of his existing interest in a pro rata portion (based on service by Mr. Comerford from the grant date through the Departure Date) of certain performance-based restricted stock awards and performance share awards, which awards remained subject to the conditions and restrictions, including the achievement of performance targets, set forth in the respective award agreements, and (vi) the ability to participate with his spouse in the Haynes International, Inc. Medical Plan for Retirees, subject to the terms and conditions of that plan. The Departure Agreement provides for a general release of claims by Mr. Comerford in favor of the Company and certain non-competition, non-solicitation, non-disparagement, confidentiality and cooperation undertakings.

Effective May 29, 2018, upon the announced departure of Mr. Comerford, Michael L. Shor was appointed interim President and Chief Executive Officer of the Company. With the recommendation and approval of the Compensation Committee, 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.

Pursuant to Mr. Shor's interim employment agreement, Mr. Shor was entitled to (a) receive a base salary at a rate of \$400,000 per year, (b) participate in the Company's 2018 Management Incentive Plan ("MIP") with a \$250,000 target bonus which will be prorated based on the number of months he serves as interim President and Chief Executive Officer; provided that he will not be eligible for any bonus amount in excess of the pro-rated target bonus regardless of the performance of the Company or the achievement of the performance metrics under the MIP at a level greater than target, (c) a grant of 5,000 shares of restricted stock issued under the Company's 2016 Equity Incentive Plan (the "Plan"), (d) a grant of an option to purchase 15,000 shares of the Company's Common Stock issued pursuant to the Plan and (e) reimbursement of travel and housing expenses incurred in commuting to and from and working in Kokomo, Indiana. The restricted stock and options vest upon the earliest of the completion of Mr. Shor's tenure as President and Chief Executive Officer, one year from the grant date and Mr. Shor's death or Disability, as defined in the Plan.

Under the terms of Mr. Shor's September 1, 2018 employment agreement Mr. Shor is (a) entitled to receive an initial base salary at a rate of \$560,000 per year, (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 of the Board (the "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 the interim agreement 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 2018.

Summary Compensation Table

The narrative and footnotes below describe the total compensation disclosed in the below Summary Compensation Table for fiscal 2016, 2017 and 2018 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 2016, 2017 and 2018, 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 2016, 2017 and 2018. For options issued in fiscal 2016, 2017 and 2018, 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 2016, 2017 and 2018 by the Named Executive Officers under the 2016, 2017 and 2018 MIP.

Change in Pension Value and Nonqualified Deferred Compensation Earnings—This column represents the actuarial increase during fiscal 2016, 2017 and 2018 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 2016, 2017 and 2018 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 ⁽³⁾	Options ⁽⁴⁾	Non-Equity Incentive Plan Compensation ⁽⁵⁾	Change in Pension	All Other Comp ⁽⁶⁾	Total
M. L. Shor ⁽¹⁾ President & CEO	2018	\$138,462	\$297,064	\$208,800	\$ 46,167	N/A	\$ 102,426	\$ 792,919
M. M. Comerford ⁽²⁾ Former President & CEO	2018	\$619,000	\$641,746	\$194,800	\$417,825	N/A	\$1,430,012	\$3,303,383
	2017	\$618,635	\$713,139	\$194,350	—	N/A	\$ 64,308	\$1,590,432
	2016	\$599,422	\$490,750	\$225,492	—	N/A	\$ 61,969	\$1,377,633
D. W. Maudlin 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
	2016	\$259,856	\$132,125	\$ 59,641	—	\$12,622	\$ 22,002	\$ 486,246
S. R. Pinkham VP of Manufacturing	2018	\$276,893	\$160,437	\$ 48,700	\$ 92,066	—	\$ 23,634	\$ 601,730
	2017	\$271,346	\$175,761	\$ 47,725	—	—	\$ 23,632	\$ 518,465
	2016	\$263,367	\$128,350	\$ 58,007	—	\$35,068	\$ 21,856	\$ 506,648
V. R. Ishwar 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
	2016	\$264,850	\$128,350	\$ 58,007	—	\$45,512	\$ 36,363	\$ 533,082
M. C. Losch III 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
	2016	\$254,871	\$124,575	\$ 56,373	—	\$69,223	\$ 31,410	\$ 536,452

(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) Mr. Comerford departed from the position of President and Chief Executive Officer of the Company on May 29, 2018, but remained an employee of the Company through September 30, 2018.

(3) The amounts listed in the table above for fiscal 2018 stock awards include restricted stock and (except for Mr. Shor) 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 in fiscal 2018 will be \$297,064 for M. Shor, \$972,244 for M. Comerford, \$282,666 for D. Maudlin, \$237,630 for M. Losch III, \$243,061 for S. Pinkham and \$244,649 for V. Ishwar.

(4) The options issued in fiscal 2016, 2017 and 2018 were valued pursuant to FASB ASC Topic 718 using a fair value methodology.

(5) No amounts were earned in fiscal 2016 or fiscal 2017 under the 2016 or 2017 MIP. Please see the discussion of the MIP under "Compensation Discussion and Analysis".

(6) 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	2018	\$ 6,732	\$ 570	\$1,017	—	—	\$ 94,107 ⁽¹⁾	\$ 102,426
	2017	—	—	—	—	—	—	—
	2016	—	—	—	—	—	—	—
M. M. Comerford	2018	\$19,859	\$5,156	\$6,480	\$9,572	—	1,388,945	\$1,430,012
	2017	\$26,400	\$8,160	\$6,480	\$9,348	—	\$ 13,920	\$ 64,308
	2016	\$26,576	\$6,942	\$6,480	\$9,311	—	\$ 12,660	\$ 61,969
D. W. Maudlin	2018	\$ 7,502	\$2,023	\$5,492	\$9,865	—	—	\$ 24,882
	2017	\$ 7,282	\$1,835	\$5,492	\$9,890	\$364	—	\$ 24,863
	2016	\$ 7,304	\$1,735	\$3,437	\$9,526	—	—	\$ 22,002
S. R. Pinkham	2018	\$ 6,798	\$1,994	\$5,407	\$9,435	—	—	\$ 23,634
	2017	\$ 6,930	\$1,815	\$5,407	\$9,480	—	—	\$ 23,632
	2016	\$ 7,216	\$1,761	\$3,531	\$9,348	—	—	\$ 21,856
V. R. Ishwar	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
	2016	\$ 7,216	\$1,768	\$6,538	\$9,321	—	\$ 11,520	\$ 36,363
M.C. Losch III	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
	2016	\$ 7,128	\$1,701	\$4,511	\$6,550	—	\$ 11,520	\$ 31,410

⁽¹⁾ Included in the case of Mr. Shor only, fees paid as an outside director during fiscal 2018 of \$76,667 as well as rent reimbursement of \$4,380 for the time in which he acted as interim Chief Executive Officer and relocation expenses of \$13,060.

Grants of Plan-Based Awards in Fiscal 2018

During fiscal 2018, the Named Executive Officers received four types of plan-based awards:

Management Incentive Plan—On November 21, 2017, the Named Executive Officers (other than Mr. Shor) were awarded grants under the Company’s 2018 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 2018. The amount of the cash awards could range between 40% and 120% of base salary for Mr. Comerford, 25% and 75% of base salary for Messrs. Ishwar and Losch; and 30% and 90% for Messrs. Maudlin and Pinkham, depending on the level of net income earned by the Company compared to the targeted amount. Mr. Shor’s employment agreement also provides for bonus between 40% and 120% of base salary 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 (other than Mr. Shor) on November 21, 2017 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 has an exercise price equal to the closing stock price on the trading day prior to the date of grant. In addition, Mr. Shor was granted an option to purchase 15,000 shares of the Company’s common stock on June 1, 2018, which vests upon the earliest of the completion of Mr. Shor’s tenure as President and Chief Executive Officer, one year from the grant date and Mr. Shor’s death or Disability, as defined in the 2016 Equity Incentive Plan.

Restricted Stock—On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor), 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. Mr. Shor was also granted 5,000 shares of restricted stock on June 1, 2018, which vests upon the earliest of the completion of Mr. Shor’s tenure as President and Chief Executive Officer, one year from the grant date or Mr. Shor’s death or Disability, as defined in the 2016 Equity Incentive Plan.

Performance Share Awards—On November 21, 2017, executives, including the Named Executive Officers (other than Mr. Shor) then serving as such, 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, will not be determined until 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

Grants of Plan-Based Awards

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 Option	06/01/18	\$ 41,667	\$ 83,333	\$ 83,333						\$208,800	
	Restr. Stock-Time based	11/21/17							2,650	15,000	\$ 84,164	
	Restr. Stock-Time based	06/01/18				—			5,000		\$212,900	
M. M. Comerford	MIP Option	11/21/17	\$247,600	\$495,200	\$742,800						\$194,800	
	Restr. Stock-Time based	11/21/17							9,800	20,000	\$311,248	
	Performance Share Awards ⁽¹⁾	11/21/17				—	8,600	17,200			\$330,498	
D. Maudlin	MIP Option	11/21/17	\$ 84,150	\$168,300	\$242,450						\$ 56,492	
	Restr. Stock-Time based	11/21/17							2,850	5,800	\$ 90,516	
	Performance Share Awards ⁽¹⁾	11/21/17				—	2,500	5,000			\$ 96,075	
S. R. Pinkham	MIP Option	11/21/17	\$ 83,100	\$166,200	\$249,300						\$ 48,700	
	Restr. Stock-Time based	11/21/17							2,450	5,000	\$ 77,812	
	Performance Share Awards ⁽¹⁾	11/21/17				—	2,150	4,300			\$ 82,625	
V. R. Ishwar	MIP Option	11/21/17	\$ 69,750	\$139,500	\$209,250						\$ 49,187	
	Restr. Stock-Time based	11/21/17							2,500	5,050	\$ 79,400	
	Performance Share Awards ⁽¹⁾	11/21/17				—	2,150	4,300			\$ 82,625	
M. C. Losch III	MIP Option	11/21/17	\$ 67,025	\$134,050	\$201,075						\$ 47,239	
	Restr. Stock-Time based	11/21/17							2,400	4,850	\$ 76,224	
	Performance Share Awards ⁽¹⁾	11/21/17				—	2,100	4,200			\$ 80,703	

⁽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, 2018. 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 2018 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, 2018 closing price of the Company's common stock of \$35.50 and is calculated in accordance with FASB ASC Topic 718.

Name	Option Awards				Restricted Stock Awards				Performance Share Awards	
	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 Unearned Shares That Have Not Vested ⁽³⁾	Market Value of Unearned Shares That Have Not Vested	Number of Awards Not Vested
M. L. Shor	11/21/17	—	—	—	—	2,650	\$ 94,075	—	—	
	06/01/18	15,000 ⁽⁴⁾	—	\$42.58	06/01/28	5,000 ⁽⁴⁾	\$177,500	—	—	
M. M. Comerford	10/01/08	20,000	—	\$46.83	10/01/18	—	—	—	—	
	11/24/10	8,800	—	\$40.26	11/24/20	—	—	—	—	
	11/25/11	7,000	—	\$55.88	11/25/21	—	—	—	—	
	11/20/12	12,600	—	\$47.96	11/20/22	—	—	—	—	
	11/26/13	15,000	—	\$52.78	11/26/23	—	—	—	—	
	11/25/14	27,000	—	\$46.72	11/25/24	—	—	—	—	
	11/24/15	18,400	—	\$37.75	11/24/25	6,500	\$230,750	6,500	\$230,750	
	11/22/16	5,633	—	\$40.86	11/22/26	7,600	\$269,800	—	—	3,390
	11/21/17	—	—	\$31.76	11/21/27	9,800	\$347,900	—	—	
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	4,867	2,433	\$37.75	11/24/25	1,750	\$ 62,125	1,750	\$ 62,125	
	11/22/16	1,600	3,200	\$40.86	11/22/26	2,175	\$ 77,213	—	—	1,900
	11/21/17	—	5,800	\$31.76	11/21/27	2,175	\$ 77,213	—	—	2,500
S. R. Pinkham	03/31/09	6,500	—	\$17.82	3/31/19	—	—	—	—	
	01/08/10	4,100	—	\$34.00	1/08/20	—	—	—	—	
	11/24/10	2,500	—	\$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	4,733	2,367	\$37.75	11/24/25	1,700	\$ 60,350	1,700	\$ 60,350	
	11/22/16	1,383	2,767	\$40.86	11/22/26	1,875	\$ 66,563	—	—	1,650
	11/21/17	—	5,000	\$31.76	11/21/27	1,875	\$ 66,563	—	—	2,150
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	4,733	2,367	\$37.75	11/24/25	1,700	\$ 60,350	1,700	\$ 60,350	
	11/22/16	1,400	2,800	\$40.86	11/22/26	1,875	\$ 66,563	—	—	1,650
	11/21/17	—	5,050	\$31.76	11/21/17	2,500	\$ 88,750	—	—	2,150
M. C. Losch II	03/31/09	2,084	—	\$17.82	3/31/19	—	—	—	—	
	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	4,600	2,300	\$37.75	11/24/25	1,650	\$ 58,575	1,650	\$ 58,575	
	11/22/16	1,342	2,683	\$40.86	11/22/26	1,825	\$ 64,788	—	—	1,600
	11/21/17	—	4,850	\$31.76	11/21/27	2,400	\$ 85,200	—	—	2,100

⁽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 three-year net income performance goal with respect to the fiscal 2016 grant and a relative total shareholder return goal with respect to the 2017 and 2018 grants.

⁽⁴⁾ Vests on the earlier of (i) June 1, 2019 or (ii) the date of Mr. Shor's death or disability.

Option Exercises and Stock Vested

During fiscal 2018 no options were exercised by the Named Executive Officers. The following table provides information concerning the exercise of stock options and vesting of restricted stock awards for the Named Executive Officers in fiscal 2018.

	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	—	—	2,025	\$ 65,833
M. M. Comerford	—	—	4,700	\$151,481
D. W. Maudlin	—	—	1,300	\$ 41,899
S. R. Pinkham	—	—	1,300	\$ 41,899
V. R. Ishwar	—	—	1,300	\$ 41,899
M. C. Losch II	—	—	1,300	\$ 41,899

⁽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	11/22/17	2,025	\$32.51	\$ 65,833
M.M. Comerford	Time-Based Restricted Stock	11/25/17	4,700	\$32.23	\$151,481
D.W. Maudlin	Time-Based Restricted Stock	11/21/17	1,300	\$32.23	\$ 41,899
S.R. Pinkham	Time-Based Restricted Stock	11/21/17	1,300	\$32.23	\$ 41,899
V.R. Ishwar	Time-Based Restricted Stock	11/21/17	1,300	\$32.23	\$ 41,899
M.C. Losch II	Time-Based Restricted Stock	11/21/17	1,300	\$32.23	\$ 41,899

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	2018	Defined Benefit	N/A	—
M. M. Comerford	2018	Defined Benefit	N/A	—
D. W. Maudlin	2018	Defined Benefit	13	\$ 61,471
S. R. Pinkham	2018	Defined Benefit	18	\$170,796
V. R. Ishwar	2018	Defined Benefit	33	\$449,603
M. C. Losch III	2018	Defined Benefit	30	\$438,401

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.

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. Mr. Comerford had an employment agreement with the Company and entered into the Departure Agreement described under "CEO Compensation" on page 25, which provided for certain payments and other benefits upon his departure. 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 ($\frac{2}{3}$) 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 (other than Mr. Comerford), assuming the Named Executive Officer’s employment terminated on September 30, 2018, 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 \$35.50 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 31. 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					
<u>Executive Benefits and Payments Upon Termination</u>	<u>Death</u>	<u>Disability</u>	<u>Voluntary or For Cause Term.</u>	<u>Invol. Term. Not for Cause or Term. for Good Reason</u>	<u>Change of Control</u>
Performance-based Cash					
Payment ⁽¹⁾	\$ 448,000	\$ 448,000	—	\$448,000	\$ 448,000 ⁽³⁾
Cash Severance	—	—	—	\$560,000 ⁽²⁾	\$1,120,000 ⁽³⁾
Stock Options ⁽⁴⁾	—	—	—	—	—
Restricted Stock—Performance ⁽⁵⁾	—	—	—	—	—
Restricted Stock—Time ⁽⁵⁾	\$ 177,500	\$ 177,500	—	—	\$ 177,500
Performance share awards ⁽⁶⁾	—	—	—	—	—
Life, Long-Term Disability and					
Health Insurance Benefits	\$2,240,000 ⁽⁷⁾	\$ 943,585 ⁽⁸⁾	—	—	\$ 14,505
Reduction due to 280G ⁽⁹⁾	—	—	—	—	\$ (129,971)

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⁾	\$ 168,300	\$ 168,300	—	\$168,300	\$ 168,300 ⁽¹⁰⁾
Cash Severance	—	—	—	—	\$ 280,500 ⁽¹⁰⁾
Stock Options ⁽⁴⁾	\$ 21,692	\$ 21,692	—	—	\$ 21,692
Restricted Stock—Performance ⁽⁵⁾	\$ 62,125	\$ 62,125	—	—	\$ 62,125
Restricted Stock—Time ⁽⁵⁾	\$ 240,513	\$ 240,513	—	—	\$ 240,513
Performance share awards ⁽⁶⁾	\$ 156,200	\$ 156,200	—	—	\$ 156,200
Life, Long-Term Disability and Health Insurance Benefits	\$ 561,000 ⁽⁷⁾	\$1,797,417 ⁽⁸⁾	—	—	\$ 14,740

S. R. Pinkham

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⁾	\$ 166,200	\$ 166,200	—	\$166,200	\$ 166,200 ⁽¹⁰⁾
Cash Severance	—	—	—	—	\$ 277,000 ⁽¹⁰⁾
Stock Options ⁽⁴⁾	\$ 18,700	\$ 18,700	—	—	\$ 18,700
Restricted Stock—Performance ⁽⁵⁾	\$ 60,350	\$ 60,350	—	—	\$ 60,350
Restricted Stock—Time ⁽⁵⁾	\$ 213,888	\$ 213,888	—	—	\$ 213,888
Performance share awards ⁽⁶⁾	\$ 134,900	\$ 134,900	—	—	\$ 134,900
Life, Long-Term Disability and Health Insurance Benefits	\$ 554,000 ⁽⁷⁾	\$1,901,362 ⁽⁸⁾	—	—	\$ 14,596

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⁾	\$ 139,500	\$ 139,500	—	\$139,500	\$ 139,500 ⁽¹⁰⁾
Cash Severance	—	—	—	—	\$ 279,000 ⁽¹⁰⁾
Stock Options ⁽⁴⁾	\$ 18,887	\$ 18,887	—	—	\$ 18,887
Restricted Stock—Performance ⁽⁵⁾	\$ 60,350	\$ 60,350	—	—	\$ 60,350
Restricted Stock—Time ⁽⁵⁾	\$ 215,663	\$ 215,663	—	—	\$ 215,663
Performance share awards ⁽⁶⁾	\$ 134,900	\$ 134,900	—	—	\$ 134,900
Life, Long-Term Disability and Health Insurance Benefits	\$ 558,000 ⁽⁷⁾	— ⁽⁸⁾	—	—	\$ 14,538

M. C. Losch III

<u>Executive Benefits and Payments Upon Termination</u>	<u>Death</u>	<u>Disability</u>	<u>Voluntary or For Cause Term.</u>	<u>Invol. Term. Not for Cause or Term. for Good Reason</u>	<u>Change of Control</u>
Performance-based Cash					
Payment ⁽¹⁾	\$ 134,050	\$ 134,050	—	\$134,050	\$ 134,050 ⁽¹⁰⁾
Cash Severance	—	—	—	—	\$ 268,100 ⁽¹⁰⁾
Stock Options ⁽⁴⁾	\$ 18,139	\$ 18,139	—	—	\$ 18,139
Restricted Stock—Performance ⁽⁵⁾	\$ 58,575	\$ 58,575	—	—	\$ 58,575
Restricted Stock—Time ⁽⁵⁾	\$ 208,563	\$ 208,563	—	—	\$ 208,563
Performance share awards ⁽⁶⁾	\$ 131,350	\$ 131,350	—	—	\$ 131,350
Life, Long-Term Disability and Health Insurance Benefits	\$ 536,200 ⁽⁷⁾	\$1,080,370 ⁽⁸⁾	—	—	\$ 14,812

- (1) Represents base salary as of September 30, 2018 multiplied by the target percentage of the fiscal year 2018 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 \$35.50 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 30 above.
- (5) Represents the market value of \$35.50 of all performance share awards at target in the case of death or disability and in the case of a change of controls. The number of performance share awards for each Named Executive Officer is set forth in the Outstanding Equity Awards at Fiscal Year End table at page 30 above.
- (6) Represents the market value at \$35.50 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 30 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) Code Section 280G provides guidelines that govern payments triggered by a change in control. If such payments exceed 2.99 times the annual average compensation for certain individuals, the payments may trigger adverse tax consequences and excise taxes. The Company does not provide any gross-up payments for such adverse tax consequences or excise taxes. If the change in control compensation exceeds the permissible amount under Code Section 280G, the severance value will be reduced to the amount permissible under code Section 280G. This amount represents the severance reduction for Mr. Shor.

- ⁽¹⁰⁾ 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 2018:

- the annual total compensation of the employee identified as the median employee of the Company (other than the Chief Executive Officer) was \$82,378; and
- the annual total compensation of the Chief Executive Officer for purposes of determining the CEO Pay Ratio was \$1,772,252.

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 20.9 to 1 for fiscal 2018.

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, 2018, the Company’s employee population consisted of approximately 1,150 individuals globally. The Company selected September 30, 2018, which was the last day of fiscal 2018, 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, 2018. In making this determination, the Company annualized the compensation of all newly hired employees during this period.

The Company had two individuals serving in the role of Chief Executive Officer in fiscal 2018. The Company elected to use the compensation of Mr. Shor, the active Chief Executive Officer as of September 30, 2018, for purposes of determining the CEO Pay Ratio. Mr. Shor became interim Chief Executive Officer in May 2018 and permanent Chief Executive Officer in September 2018. 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 27 to reflect his compensation as if he were permanent Chief Executive Officer for the full calendar year, by increasing his base salary and incentive compensation amounts as if he were permanent Chief Executive Officer effective October 1, 2017. For purposes of calculating the CEO Pay Ratio, this resulted in total annual compensation of \$1,772,252 for the Chief Executive Officer as opposed to the amount shown on Summary Compensation Table of \$792,919.

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, 2018 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 Statement on Auditing Standards No. 61, as amended. 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, 2018, 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
William P. Wall

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires the Company's executive officers, directors and greater than 10% stockholders to file reports of ownership and changes in ownership of Haynes securities with the Securities and Exchange Commission. The Company's employees prepare these reports for the directors and executive officers on the basis of information obtained from them and from the Company's records. Based on information provided to the Company and representations made by

reporting persons, the Company believes that all filing requirements applicable to its executive officers, directors and greater than 10% stockholders were met during fiscal 2018.

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, 2019, 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, 2017 and 2018, including fees for an integrated audit which included the Sarbanes-Oxley attestation audit and reporting to the Securities and Exchange Commission (SEC), of \$989,957 and \$1,027,266, respectively.

Audit-Related Fees—The Company has paid, or expects to pay, fees (including cost reimbursements) to Deloitte for audit-related services during fiscal 2017 and 2018 of \$72,218 and \$601,381 (comprised primarily of fees relating to due diligence for an acquisition that was not completed), 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 related to tax compliance, tax advice and planning service rendered during fiscal 2017 and 2018 of \$314,710 and \$371,117, respectively. Services include 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, 2017 and 2018.

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 2017 and 2018.

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

8. 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 fiscal 2016 or 2017, and MIP payments for fiscal 2018 were made at levels slightly above the minimum payment level. Similarly, equity awards for which vesting depended upon achievement of a measurement of income for those periods were forfeited. The Board believes that these outcomes demonstrate the intent to align realized compensation with stockholder interests. Please read the “Compensation Discussion and Analysis” beginning on page 15 for additional details about the Company’s executive compensation philosophy and programs, including information about the Fiscal Year 2018 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 2018 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.

9. 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 25, 2019

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**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, 2018

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
(State or other jurisdiction of
incorporation or organization)

06-1185400
(I.R.S. Employer Identification No.)

1020 West Park Avenue, Kokomo, Indiana
(Address of principal executive offices)

46904-9013
(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
Common Stock, par value \$.001 per share

Name of each exchange on which registered
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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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, 2018, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$296,922,788 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.

12,504,478 shares of Haynes International, Inc. common stock were outstanding as of November 15, 2018.

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 27, 2019 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 2019 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 waste incineration, 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 60% of net product revenues in fiscal 2018. The Company also produces its products as seamless and welded tubulars, and in slab, 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 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 2018, 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. The Company has launched a series of focus initiatives designed to unlock the potential of the Company by increasing volumes, improving targeted pricing, strengthening mix management and reducing costs. This includes effectively utilizing open capacity on major assets and managing mix at constrained assets in order to, among other things, derive a meaningful return on investment from the \$120 million in growth capital the Company has invested since 2012. In addition, these initiatives include programs designed to take advantage of the Company’s expert technical abilities in delivering innovative products and applications combined with its niche manufacturing and value-added service capabilities to penetrate end markets.

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

- *Increase revenues by inventing new alloys, developing new applications for existing alloys and expanding into new markets.* The Company believes that it is the 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, manufacture and test new high-performance alloys. Since fiscal 2003, the Company's technical programs have yielded nine new proprietary alloys, an accomplishment that the Company believes distinguishes it from its competitors. The Company expects continued emphasis on product innovation to yield similar future results.

Developing new applications for existing alloys is also a key strength and strategy of the Company. The Company leverages its technical expertise to find unique applications for its products, especially proprietary and specialty alloys that can yield higher margins.

Through development of new alloys and new applications for existing alloys, the Company is seeking to develop 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 (such as solar), fuel cells, clean-coal, waste-to-energy, oil and gas, flue-gas desulfurization in China, automotive, consumer electronics, heat treatment, medical and nuclear industries all present 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 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. In addition, the Company's rapid response time and enhanced processing services for products shipped from its service and sales centers offers the opportunity for the Company to provide more timely service to its customers.
- *Capitalize on strategic equipment investment and optimize processes with lean manufacturing improvements.* The Company expects to continue to improve operations through prior and ongoing capital investment in manufacturing facilities and equipment, including information technology, and focus on operational excellence. Ongoing investment in equipment is expected to improve the Company's operations by increasing capacity, reducing unplanned downtime and manufacturing costs and improving product quality and working capital management. Management believes that the Company's capital investments will enable it to continue to satisfy long-term customer demand for value-added products that meet increasingly precise specifications. For additional discussion of capital spending, see "Summary of Capital Spending" in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, contained elsewhere in this Annual Report on Form 10-K.
- *Continue to expand the maintenance, repair and overhaul business.* The Company believes that its maintenance, repair and overhaul, or MRO, business serves a growing market and 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.
- *Expand product capability through strategic acquisitions and alliances.* The Company will continue to examine opportunities that enable it to offer customers an enhanced and more competitive product line to complement its core flat products. These opportunities may include product line enhancement and market expansion opportunities. 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. that 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 2016, 2017 and 2018, HTA products accounted for approximately 81% of the Company's net revenues, and sales of the Company's CRA products accounted for approximately 19% 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”):

<u>Alloy and Year Introduced</u>	<u>End Markets and Applications⁽¹⁾</u>	<u>Features</u>
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”):

<u>Alloy and Year Introduced</u>	<u>End Markets and Applications⁽¹⁾</u>	<u>Features</u>
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

- ⁽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 25 published U.S. patents and applications and approximately 267 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 2016, 2017 and 2018. HAYNES 282 alloy, which management believes will have significant commercial potential for the Company in the long term, is the subject of a U.S. patent issued in 2011. HAYNES 282 alloy has excellent formability, fabricability and forgeability. The commercial launch of HAYNES 282 alloy occurred in October 2005 and, since that time, 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, as well as for automotive and other high-temperature applications. The alloy has been specified into major aerospace and industrial gas turbine components. The Company will continue to actively promote HAYNES 282 alloy through customer engineering visits and technical presentations and papers. Another new alloy for use in the aerospace and industrial gas turbine markets is HAYNES 244 alloy (U.S. patent filed in 2012 and granted in 2013). 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 of HASTELLOY C-22HS alloy has also continued, and the alloy has already found applications in the oil and gas industry. Testing, evaluation and promotion of this alloy are ongoing with special emphasis on applications for this industry. 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. Commercialization is also ongoing for HASTELLOY HYBRID-BC1[®] alloy and HAYNES HR-224[®] 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. HAYNES HR-224 alloy is an HTA product with superior resistance to oxidation and excellent fabricability.

In addition to the commercialization of the above alloys, the Company continues to develop applications for new alloys not yet ready to begin the commercialization process. HAYNES HR-235[®] was introduced in fiscal 2013. This alloy has excellent resistance to metal dusting in carbonaceous high temperature environments. Potential uses include applications in petrochemical production and syngas plants. Scale-up of this alloy is well underway and material is currently being evaluated by certain key customers. Most recently, HAYNES 233[™] alloy was introduced. This alloy offers excellent oxidation resistance at temperatures to 2100°F or higher coupled with superior clasp strength, a combination of properties believed not to have been achieved previously in a readily fabricated alloy. The alloy is currently being scaled-up and 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 continue to 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 such items as specific annealing temperature, processing speeds and reduction per rolling pass. Management believes that the current alloy development program 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, 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 specifications within very precise tolerances and achieving new product performance standards. Stringent safety standards and continuous efforts to reduce equipment weight and develop more fuel-efficient designs require close coordination between the Company 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 specializes in the static parts included in the hot sections of the jet engine. The hot sections are subjected to substantial wear and tear and accordingly 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 applications driven by demand for key end-use markets such as automobiles, housing, health care, agriculture and metals production. CRA products 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 products in the chemical processing market.

Industrial gas turbine. Demand for the Company's products in the industrial gas turbine market is driven by the construction of cogeneration facilities such as base load for electric utilities or as backup sources to fossil fuel-fired utilities during times of peak demand. Demand for the Company's alloys in the industrial gas turbine markets has also been driven by concerns regarding lowering emissions from generating facilities powered by fossil fuels. Industrial gas turbine generating facilities have gained acceptance as clean, low-cost alternatives to fossil fuel-fired electric generating facilities. Industrial gas turbines are also used in power barges with mobility and as temporary base-load-generating units for countries that have numerous islands and a large coastline. Demand is also generated by mechanical drive units used for oil and gas production and pipeline transportation, as well as microturbines that are used as back-up sources of power generation for hospitals and shopping malls.

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, 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. 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 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 2018 was generated by the Company's direct sales organization. The remaining 25% of the Company's fiscal 2018 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, capital investment in increased capacity, 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 2018 net revenues generated through each of the Company's distribution channels.

	<u>From Domestic Locations</u>	<u>From Foreign Locations</u>	<u>Total</u>
Company mill direct/service and sales centers	47 %	28 %	75 %
Independent distributors/sales agents	25 %	— %	25 %
Total	<u>72 %</u>	<u>28 %</u>	<u>100 %</u>

The Company's top twenty customers accounted for approximately 41%, 38% and 36% of the Company's net revenues in fiscal 2016, 2017 and 2018, respectively. No customer or group of affiliated customers of the Company accounted for more than 10% of the Company's net revenues in fiscal 2016, 2017 or 2018.

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 electroslog 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 has 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 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

	<u>2014</u>	<u>2015</u>	<u>2016</u> (in millions)	<u>2017</u>	<u>2018</u>
1 st quarter	\$ 180.2	\$ 215.5	\$ 204.7	\$ 167.3	\$ 205.7
2 nd quarter	202.3	220.4	193.5	170.8	212.3
3 rd quarter	204.7	192.9	187.2	180.9	220.6
4 th quarter	221.3	185.8	168.3	177.3	216.0

Raw Materials

Raw materials represented an estimated 36% of cost of sales in fiscal 2018. Nickel, a major component of many of the Company's products, accounted for approximately 34% of raw material costs, or approximately 12% of total cost of sales in fiscal 2018. 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, 2016, 2017 and 2018, as reported by the London Metals Exchange, was \$4.63, \$5.10 and \$5.68 respectively. Prices for certain other raw materials which are significant in the manufacture of the Company's products, such as molybdenum, cobalt and chrome were higher in fiscal 2018 compared to fiscal 2017.

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, 2018, the technology, engineering and technological testing staff consisted of 25 persons, 11 of whom have engineering or science degrees, including 5 with doctoral degrees, with the majority of degrees in the field of metallurgical engineering or materials science.

During fiscal 2018, 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. For example, recent tariff increases between the U.S. and China, among other changes could lead to a "trade war" that could adversely affect the Company's competitive position. 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, 2018, the Company employed 1,157 full-time employees worldwide. All eligible hourly employees at the Kokomo, Indiana and Arcadia, Louisiana plants (541 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'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 \$2.8 million for fiscal 2018 and are currently expected to be approximately \$2.5 million for fiscal 2019.

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 \$1.1 million were made for pollution control improvements during fiscal 2018, with additional expenditures of approximately \$1.4 million for similar improvements planned for fiscal 2019.

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.

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, 2018. Except as indicated in the following paragraphs, the principal occupations of these persons have not changed during the past five years.

<u>Name</u>	<u>Age</u>	<u>Position with Haynes International, Inc.</u>
Michael L. Shor	59	President and Chief Executive Officer
Daniel W. Maudlin	52	Vice President—Finance, Treasurer and Chief Financial Officer
Janice W. Gunst	46	Vice President—General Counsel & Corporate Secretary
Venkat R. Ishwar	66	Vice President—Marketing & Technology
Marlin C. Losch	58	Vice President—Sales & Distribution
Jean C. Neel	59	Vice President—Corporate Affairs
Scott R. Pinkham	51	Vice President—Tube & Wire
David L. Strobel	57	Vice President—Operations
David S. Van Bibber	47	Controller and Chief Accounting Officer
Jeffrey L. Young	61	Vice President & Chief Information 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, Chairman of the Board of the Company from February 2017 through September 2018 and 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. Van Bibber has served as Controller and Chief Accounting Officer of the Company since December 2012.

Mr. Young has served as Vice President & Chief Information Officer of the Company since November 2005.

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 2018, represented approximately 36% 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. 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 52.1% of our total sales in fiscal 2018. Our industrial gas turbine and chemical processing sales constituted 12.0% and 18.2%, respectively, of our total sales in fiscal 2018.

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 and the political environments of numerous countries. The availability of fuels and related prices also have a large impact on demand. Reductions in demand for our products sold into the industrial gas turbine industry may have a material adverse effect on our business. In addition, in the event demand in this industry does not return, our business could be materially and adversely affected.

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.

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 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.

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. 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 2016 that provide for the performance of certain titanium conversion services through November 2026. 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 business with TIMET has been declining.

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 price of nickel may materially adversely affect our business.

To the extent that we are unable to adjust to rapid fluctuations in the price of nickel, there may be a negative effect on our gross profit margins. In fiscal 2018, nickel, a major component of many of our products, accounted for approximately 34% of our raw material costs, or approximately 12% 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 prices to our customers. In other cases, we fix the nickel 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 nickel inventory, but which does not allow us to offset an unexpected rise in the price of nickel. We may not be able to successfully offset rapid increases in the price of nickel 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 results of operations may also be negatively impacted if both customer demand and nickel 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 nickel supply. If we enter into a forward purchase agreement which is not matched to one or more customer contracts with fixed nickel prices, a rapid or prolonged decrease in the price of nickel 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 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, 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 and other countries where we do business have been considering changes in 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 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 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 enhancing the properties of our existing alloys, by timely developing new applications for our existing products, and by timely developing, commercializing, marketing and selling new products. If we are not successful in these efforts, or if our new 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, the appropriate 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. In addition, our systems could be subject to sabotage by employees or third parties, which could slow or stop production or otherwise adversely affect our business. Any misappropriation or corruption of our systems and information or disruption of our operations 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, 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.

We may be adversely affected by environmental, health and safety laws, regulations, costs 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 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. A decline in the value of plan investments in the future, an increase in costs or liabilities or unfavorable changes in laws or regulations that govern pension plan funding could materially change the timing and amount of required pension funding. 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. 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, taxes, trade restrictions, license obligations and other non-tariff barriers to trade;
- 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; 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 52% 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. 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.

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. 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.

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. We recently implemented an IT system change. If we do not effectively utilize the new system or it does not operate as envisioned, our business could be harmed. 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.

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 the expansion of our operations could materially adversely affect our business, financial condition and results of operations.

We have undertaken 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 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 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 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 legislation has 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 and are expected to continue to increase our annual employee healthcare cost obligations going forward. This area of law is expected to continue to change, and we cannot predict the effect that healthcare legislation or regulation 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, raw materials or energy;
- market conditions in the end markets into which our customers sell their products, principally aerospace, power generation and chemical processing;
- 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.

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, continuous annealing furnaces, 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 strip mills and three bright anneal 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 7 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:

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

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 18. Long-term Obligation).

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. The Company is currently in the process of modifying its facilities to meet its current and anticipated future business needs. Consistent therewith, in May 2016, the Company announced the relocation of its Lebanon, Indiana service center operations to LaPorte, Indiana which was completed during fiscal 2018.

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. 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, 2018, there were approximately 42 holders of record of the Company’s common stock.

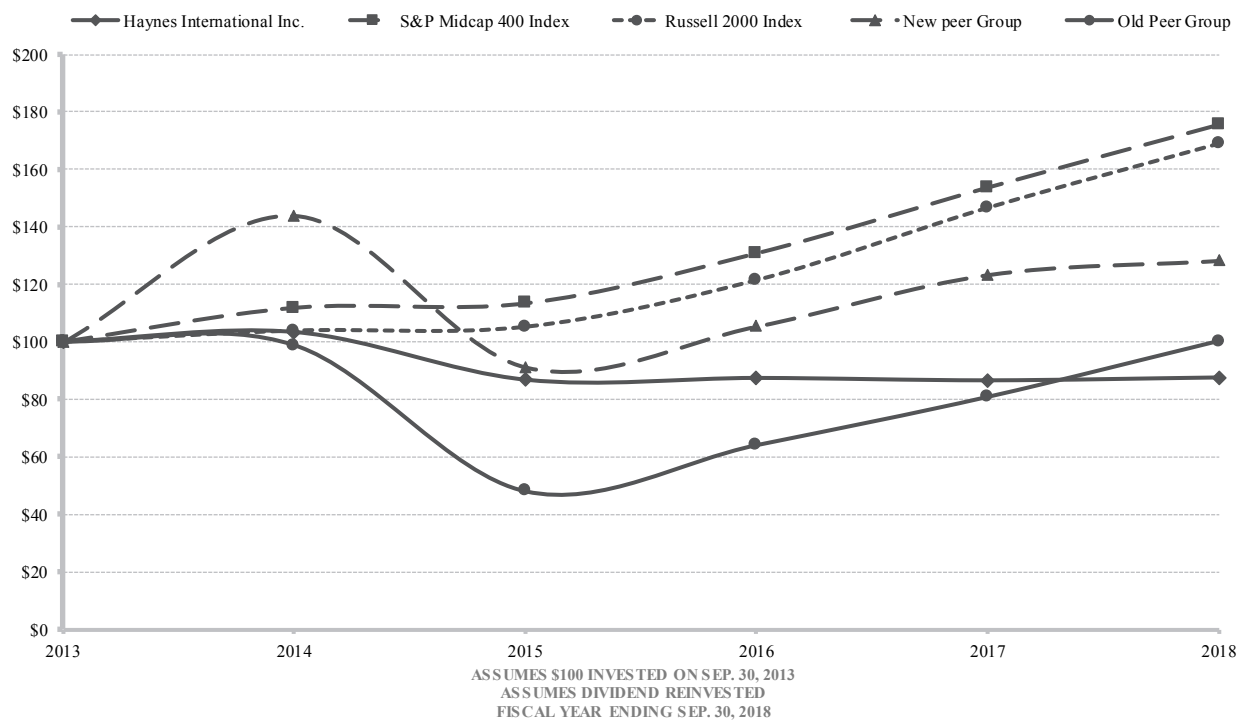
The Company has historically paid quarterly cash dividends. While it is the Company’s intention to continue to pay quarterly cash dividends for fiscal 2019 and beyond, any decision to pay future cash dividends will be made by the Company’s Board of Directors and will depend upon the Company’s earnings, 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 Peer Groups for each of the last five fiscal years ended September 30. The cumulative total return assumes an investment of \$100 on September 30, 2013 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 New Peer Group Index: 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.. The companies included in the Old Peer Group Index are: Allegheny Technologies, Inc., Universal Stainless & Alloy Products, Inc., A. M. Castle & Co. and Carpenter Technology Corp. The Company chose to expand the number of companies into a new peer group as A.M. Castle & Co. ceased trading on a public exchange which left the old peer group with only three comparable companies. Management believes that the companies included in the Peer Groups, 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 groups 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**

COMPARISON OF CUMULATIVE TOTAL RETURN



	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Haynes International, Inc.	100.00	103.37	86.79	87.39	86.59	87.60
Russell 2000	100.00	103.93	105.23	121.50	146.70	169.06
S&P MidCap 400	100.00	111.82	113.38	130.76	153.66	175.49
Old Peer Group	100.00	98.67	48.04	64.05	80.82	100.21
New Peer Group	100.00	143.96	91.25	105.45	123.37	128.31

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,				
	2014	2015	2016	2017	2018
Statement of Operations Data:					
Net revenues	\$ 455,410	\$ 487,635	\$ 406,359	\$ 395,209	\$ 435,326
Cost of sales	408,112	393,971	358,779	365,499	387,648
Selling, general and administrative expense	38,693	42,572	39,684	42,393	47,111
Research and technical expense	3,556	3,598	3,698	3,855	3,785
Operating income (loss)	5,049	47,494	4,198	(16,538)	(3,218)
Interest expense (income), net	(71)	318	447	679	836
Provision for (benefit from) income taxes	1,369	16,690	(1,269)	(7,027)	17,697
Net income (loss)	\$ 3,751	\$ 30,486	\$ 5,020	\$ (10,190)	\$ (21,751)
Net income (loss) per share:					
Basic	\$ 0.30	\$ 2.45	\$ 0.40	\$ (0.83)	\$ (1.75)
Diluted	\$ 0.30	\$ 2.45	\$ 0.40	\$ (0.83)	\$ (1.75)
Dividends declared per common share	\$ 0.88	\$ 0.88	\$ 0.88	\$ 0.88	\$ 0.88
Weighted average shares outstanding:					
Basic	12,291,881	12,331,805	12,361,483	12,397,099	12,419,564
Diluted	12,321,700	12,344,209	12,366,197	12,397,099	12,419,564

	September 30,				
	2014	2015	2016	2017	2018
Balance Sheet Data:					
Working capital	\$ 322,591	\$ 332,015	\$ 310,872	\$ 300,468	\$ 304,151
Property, plant and equipment, net	174,083	185,351	199,182	192,556	179,400
Total assets	610,771	638,191	649,601	621,819	588,694
Total debt	745	4,574	8,256	7,896	8,127
Long-term portion of debt	745	4,574	8,256	7,896	7,980
Accrued pension and postretirement benefits ⁽¹⁾	177,797	217,837	255,346	208,476	170,180
Stockholders' equity	346,730	341,989	311,299	333,772	333,220
Cash dividends paid	10,906	10,952	10,988	11,009	11,013
Consolidated Backlog at Fiscal Quarter End⁽²⁾:					
1 st quarter	\$ 180.2	\$ 215.5	\$ 204.7	\$ 167.3	\$ 205.7
2 nd quarter	202.3	220.4	193.5	170.8	212.3
3 rd quarter	204.7	192.9	187.2	180.9	220.6
4 th quarter	221.3	185.8	168.3	177.3	216.0

	Year Ended September 30,				
	2014	2015	2016	2017	2018
Average nickel price per pound⁽³⁾	\$ 8.20	\$ 4.49	\$ 4.63	\$ 5.10	\$ 5.68

⁽¹⁾ Significant increases in the pension and postretirement benefits liability occurred in fiscal 2015, primarily due to a change to a new mortality table, and in fiscal 2016, which was mostly 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 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,									
	2014		2015		2016		2017		2018	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Net Revenues										
(dollars in millions)										
Aerospace	\$ 195.2	42.9 %	\$ 215.1	44.1 %	\$ 197.4	48.6 %	\$ 192.5	48.7 %	\$ 226.9	52.1 %
Chemical processing	113.4	24.9	111.6	22.9	72.3	17.8	70.5	17.8	79.2	18.2
Industrial gas turbine	86.7	19.0	74.4	15.3	68.1	16.8	61.5	15.6	52.4	12.0
Other markets	44.4	9.8	59.8	12.2	45.0	11.0	43.2	10.9	53.4	12.3
Total product	439.7	96.6	460.9	94.5	382.8	94.2	367.7	93.0	411.9	94.6
Other revenue ⁽¹⁾	15.7	3.4	26.7	5.5	23.6	5.8	27.5	7.0	23.4	5.4
Net revenues	\$ 455.4	100.0 %	\$ 487.6	100.0 %	\$ 406.4	100.0 %	\$ 395.2	100.0 %	\$ 435.3	100.0 %
U.S.	\$ 261.6	57.4 %	\$ 287.7	59.0 %	\$ 233.6	57.5 %	\$ 235.5	59.6 %	\$ 258.3	59.3 %
Foreign	\$ 193.8	42.6 %	\$ 199.9	41.0 %	\$ 172.8	42.5 %	\$ 159.7	40.4 %	\$ 177.0	40.7 %
Shipments by Market										
(millions of pounds)										
Aerospace	8.8	40.7 %	9.2	45.3 %	8.7	48.3 %	8.8	48.6 %	9.8	53.3 %
Chemical processing	5.2	24.2	4.3	21.2	2.8	15.6	3.2	17.7	3.9	21.2
Industrial gas turbine	5.9	27.2	4.7	23.2	5.0	27.8	4.5	24.9	2.9	15.8
Other markets	1.7	7.9	2.1	10.3	1.5	8.3	1.6	8.8	1.8	9.8
Total Shipments	21.7	100.0 %	20.3	100.0 %	18.0	100.0 %	18.1	100.0 %	18.4	100.0 %
Average Selling Price Per Pound										
Aerospace	\$ 22.10		\$ 23.27		\$ 22.64		\$ 21.76		\$ 23.05	
Chemical processing	21.63		25.97		26.68		22.28		20.54	
Industrial gas turbine	14.74		15.99		13.71		13.77		18.27	
Other markets	26.11		28.98		30.74		26.36		29.14	
Total product ⁽²⁾	20.30		22.75		21.31		20.30		22.38	
Total average selling price	21.02		24.07		22.62		21.81		23.66	

(1) Other revenue consists of toll conversion, royalty income, scrap sales and revenue recognized from the TIMET agreement (see Note 15 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 the first half of fiscal 2014 was negatively impacted by customer destocking within the supply chain. This period of low demand began to recover in the latter half of fiscal 2014, and the recovery continued through fiscal 2015, which 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% and represented 52.1% of the Company's overall revenue. Boeing and Airbus have reported sizeable backlog increases along with forecasted increases in production schedules and continued emphasis on accelerating production. Management also 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 both fiscal 2014 and 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. Demand for large volume orders has been at relatively low levels during the past several years. 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. Increased sales to the chemical processing industry in fiscal 2018 were related to improvement in global spending in the chemical processing sector. 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.

Sales to the industrial gas turbine market have declined each year from fiscal 2014 to 2018. The collapse of oil prices in 2014 had an adverse impact on small-frame industrial gas turbines used to power oil platforms and transmission systems. As oil prices have moderately recovered, demand has shown improvement in the small-frame turbines. 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. While this period of weak demand is not expected to recover quickly, 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 favored 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. As the large-turbine overbuilt situation improves, demand for industrial gas turbines is expected to increase.

Volume shipped into the other markets category increased from fiscal 2014 to 2015, then moderated in fiscal 2016 and improved in both fiscal 2017 and 2018. 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 overall in non-traditional markets such as fuel cells and alternative energy applications in the long term.

Planned Equipment Outage and Upgrade

The Company is undergoing a significant planned equipment outage and upgrade in the Company’s cold-finishing production area during the first quarter of fiscal 2019. Certain components of one of the three annealing lines will be down for a planned upgrade which began in mid-October 2018. The duration is expected to be ten to twelve weeks, with the upgraded annealing line put back into service at the end of December 2018 or early January 2019. The additional capital expenditure related to this outage is approximately \$2.0 million. This outage is necessary to attain the higher capacity levels expected from the Company’s recent capital investments. Production levels through the cold-finishing production area before the upgrade were at 13.5 million pounds, and the upgrade is expected to increase capacity to 18.0 million pounds. This outage is expected to have a significant impact on the Company’s financial results in the first quarter of fiscal 2019, with reduced revenue and reduced profitability to below breakeven. However, once complete, this line is expected to be one of the key drivers to revenue growth and strengthening profitability over the balance of fiscal 2019.

Summary of Capital Spending

Capital spending was \$15.0 million and \$11.1 million in fiscal 2017 and 2018, respectively, and the forecast for capital spending in fiscal 2019 is approximately \$16.0 million. The \$16.0 million of planned capital spending in fiscal 2019 includes the completion of bright annealing upgrades of approximately \$2.0 million.

Strategic Acquisition Activity

Growth through strategic acquisitions is an important part of the Company's overall strategy to increase shareholder value. During the third quarter of fiscal 2018, we recorded an expense of \$1.5 million 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. The Company remains committed to pursuing alternative strategies to increase shareholder value and strengthen the Company.

Chief Executive Officer Transition

During the third quarter of fiscal 2018, Mark M. Comerford informed the Board of Directors of his intention to retire as President and Chief Executive Officer and a director of the Company. Effective as of May 29, 2018, the Board of Directors appointed Michael L. Shor as interim President and Chief Executive Officer of the Company. Effective September 1, 2018, the Board of Directors unanimously appointed Mr. Shor as the Company's President and Chief Executive Officer. In connection with his interim appointment, Mr. Shor resigned as a member of the Corporate Governance and Nominating Committee of the Company's Board and then, upon accepting the permanent position, Mr. Shor stepped down from his role as Chairman of the Board but remains a member of the Board. Robert H. Getz, a director of the Company since 2006, has been elected by the Board to replace Mr. Shor as Chairman.

Mr. Shor has been a director of the Company since August 1, 2012. Mr. Shor retired as Executive Vice President—Advanced Metals Operations & Premium Alloys Operations of Carpenter Technology Corporation ("Carpenter") on July 1, 2011 after a thirty-year career with Carpenter. At Carpenter, Mr. Shor held managerial positions in technology, marketing and operations before assuming full responsibility for the performance of Carpenter's operating divisions. The Board believes Mr. Shor's extensive management experience, and specific specialty materials experience, well qualify him for his role as President and Chief Executive Officer.

In connection with Mr. Comerford's retirement, the Company entered into a Resignation and General Release Agreement (the "Retirement Agreement"). Under the Retirement Agreement, Mr. Comerford resigned from all positions he held as an officer or director of the Company or any of its subsidiaries and as a member of the Board effective as of May 29, 2018 (the "Resignation Date") and served as an advisor to the Chief Executive Officer of the Company until September 30, 2018. Between the Resignation Date and September 30, 2018, Mr. Comerford continued to receive his base salary at the same rate as in effect on the Resignation Date and participated in the employee health and welfare benefit plans offered by the Company to its employees, subject to the terms and conditions of such plans. In connection with Mr. Comerford's retirement, the Company recorded costs in the amount of \$1.3 million as a charge to expense during fiscal 2018.

Impact of the Tax Cuts and Jobs Act on Deferred Tax Assets

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was signed into law. Among other changes was a permanent reduction in the federal corporate income tax rate from 35% to 21%, which the Company expects will positively impact the Company's future effective tax rate and after-tax earnings in the United States. As a result of the Act, the Company's blended federal corporate income tax rate for fiscal 2018 was 24.5%.

As a result of the reduction in the federal corporate income tax rate, the Company was required to revalue its net deferred tax asset to account for the future impact of lower corporate tax rates on this deferred amount and record any change in the value of such asset as a one-time non-cash charge on its income statement. This resulted in a discrete tax expense adjustment of \$16.6 million, which increased the Company's reported net loss for fiscal 2018. Additionally, the Act resulted in the recording of a one-time tax on foreign sourced income which amounted to \$2.2 million, for a total impact of \$18.8 million, which further increased the Company's reported net loss for fiscal 2018.

Expansion of LaPorte, Indiana Operations

The Company announced on May 2, 2016 its decision to expand and streamline its distribution footprint by investing in new plant and equipment at its processing facility located in LaPorte, Indiana. In connection with the

expansion, the Company relocated its service center operations in Lebanon, Indiana to LaPorte. The project began in the first quarter of fiscal 2016 and was completed by the end of the first quarter of fiscal 2018. During fiscal 2018, the Company expensed \$1.5 million for costs related to the relocation, including but not limited to, physical relocation costs, employee retention costs and duplicate lease costs.

Volumes, Competition and Pricing

Volumes remained at a low-level through fiscal 2018 with volumes for fiscal 2016, 2017 and 2018 at 18.0 million, 18.1 million and 18.4 million pounds, respectively. Fiscal 2016 and 2017 lower volume levels were driven by low chemical processing base business levels due to the collapse of the oil & gas market and its impact on capital spending decisions in the chemical processing market. Also, special projects were at weak levels in certain quarters. In fiscal 2018, volumes improved in aerospace, chemical processing base business and special projects, however volumes in industrial gas turbines declined dramatically. In fiscal 2018, volumes into the aerospace market, chemical processing and other markets increased 11.3%, 21.9% and 11.8%, respectively, while volumes into the industrial gas turbine market declined 35.9%. Volumes below the 20-million-pound level (or 5 million pounds per quarter) create a significant margin headwind. Several initiatives are underway to improve volume levels. Volume in the fourth quarter of fiscal 2018 improved, and the 5-million-pound level was achieved, together with expansion of margins and profitability.

Product average selling price per pound in fiscal 2018 increased overall within each market with the exception of chemical processing, compared to fiscal 2017. The decline in the chemical processing product average selling price per pound was related to a higher amount of base-business commodity products. Several focus initiatives are underway to improve pricing and margins in certain products, especially proprietary alloys and those manufactured on constrained equipment, as well as reducing costs and improving volume levels. These initiatives include effectively utilizing open capacity on major assets and managing mix at constrained assets in order to, among other things, derive a proper return on investment from the \$120 million in growth capital the Company has invested since 2012. In addition, these initiatives include programs designed to take advantage of the Company’s expert technical abilities in delivering innovative products and applications combined with its niche manufacturing and value-added service capabilities to penetrate end markets.

The average market price of nickel as reported by the London Metals Exchange in fiscal 2014 was \$7.51 per pound, which declined 20.9% to \$5.94 per pound for fiscal 2015, declined 30.3% further to \$4.14 per pound in fiscal 2016, then increased moderately to \$4.70 in fiscal 2017 and increased 30.0% to \$5.95 in fiscal 2018. The London Metals Exchange price for the 30-days ending September 30, 2018 was \$5.68 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 2017 and fiscal 2018.

	Trend of Gross Profit Margin and Gross Profit Margin Percentage for Fiscal 2017			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	\$ 93,355	\$ 103,112	\$ 97,977	\$ 100,765
Gross Profit Margin	10,487	9,788	3,662	5,773
Gross Profit Margin %	11.2 %	9.5 %	3.7 %	5.7 %

**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	7,010	11,452	13,270	15,946
Gross Profit Margin %	7.8 %	10.4 %	11.7 %	13.0 %

After hitting extremely low levels in the second half of fiscal 2017, gross margins have improved ending with gross margin in the fourth quarter of fiscal 2018 at \$15.9 million and gross margin as a percentage of net sales at 13.0%. 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 5.0 million pounds, which was higher than previous quarters and at a level that begins to decrease the headwind of poor absorption of fixed costs. Gross margin dollars also improved due to better levels of specialty application projects in fiscal 2018 and better pricing levels.

Working Capital

Controllable working capital, which includes accounts receivable, inventory, accounts payable and accrued expenses, was \$291.9 million at September 30, 2018, an increase of \$32.7 million or 12.6% from \$259.1 million at September 30, 2017. This increase of \$32.7 million includes an increase in inventory of \$28.6 million and accounts receivable of \$11.8 million, partially offset by increases in accounts payable and accrued expenses of \$7.7 million. The higher level of inventory is driven by the high backlog levels and higher production levels over the course of fiscal 2018.

Dividends Declared

On November 15, 2018, 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 17, 2018 to stockholders of record at the close of business on December 3, 2018. 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, 2016	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018
Backlog								
Dollars (in thousands)	\$ 167,286	\$ 170,848	\$ 180,922	\$ 177,300	\$ 205,718	\$ 212,312	\$ 220,596	\$ 216,020
Pounds (in thousands)	6,795	6,960	7,496	6,453	8,073	7,764	7,646	7,260
Average selling price per pound	\$ 24.62	\$ 24.55	\$ 24.14	\$ 27.48	\$ 25.48	\$ 27.35	\$ 28.85	\$ 29.75
Average nickel price per pound								
London Metals Exchange ⁽¹⁾	\$ 5.00	\$ 4.64	\$ 4.05	\$ 5.10	\$ 5.18	\$ 6.08	\$ 6.85	\$ 5.68

⁽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 \$216.0 million at September 30, 2018, a decrease of approximately \$4.6 million, or 2.1%, from \$220.6 million at June 30, 2018. The backlog dollars decreased during the fourth quarter of fiscal 2018 due to a 5.0% decrease in backlog pounds partially offset by a 3.1% increase in backlog average selling price. The primary driver for

the reduction in backlog was lower order entry which is typical during the summer months especially from the Company's European customers. The increase in average selling price is due to a higher-value product mix and higher selling prices in the backlog.

The backlog increased by \$38.7 million, or 21.8%, from \$177.3 million at September 30, 2017 to \$216.0 million at September 30, 2018 due to a 12.5% increase in backlog pounds combined with an 8.3% increase in backlog average selling price. The increase in backlog pounds was primarily driven by increases in demand in the aerospace, chemical processing and other markets. This overall increase in backlog underlies management's optimism for improving financial results going forward.

Revenues by geographic area

Net revenues in fiscal 2016, 2017 and 2018 were generated primarily by the Company's U.S. operations. Sales to domestic customers comprised approximately 58%, 60% and 59% of the Company's net revenues in fiscal 2016, 2017 and 2018, 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 \$172.8 million, \$159.7 million and \$177.0 million for fiscal 2016, 2017 and 2018, respectively. Additional information concerning foreign operations and export sales is set forth in Note 13 to the Consolidated Financial Statements included in this Annual Report on Form 10-K.

Quarterly Market Information

	Quarter Ended				Quarter Ended			
	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018	June 30, 2018	September 30, 2018
<i>Net revenues</i> (in thousands)								
Aerospace	\$ 45,784	\$ 49,536	\$ 46,895	\$ 50,300	\$ 46,839	\$ 59,033	\$ 59,646	\$ 61,380
Chemical processing . . .	19,128	18,081	15,017	18,241	13,356	21,148	21,364	23,301
Industrial gas turbine . . .	14,593	17,827	14,731	14,372	13,421	11,755	11,866	15,308
Other markets	8,429	9,923	14,379	10,472	9,238	12,724	14,863	16,592
Total product revenue . .	87,934	95,367	91,022	93,385	82,854	104,660	107,739	116,581
Other revenue	5,421	7,745	6,955	7,380	6,839	5,546	5,375	5,732
Net revenues	\$ 93,355	\$ 103,112	\$ 97,977	\$ 100,765	\$ 89,693	\$ 110,206	\$ 113,114	\$ 122,313
<i>Shipments by markets</i> (in thousands of pounds)								
Aerospace	2,017	2,322	2,207	2,301	2,023	2,578	2,645	2,598
Chemical processing . . .	605	771	858	929	687	1,000	1,018	1,150
Industrial gas turbine . . .	1,039	1,403	1,011	1,015	876	640	622	728
Other markets	316	350	501	472	332	479	498	524
Total shipments	3,977	4,846	4,577	4,717	3,918	4,697	4,783	5,000
<i>Average selling price per pound</i>								
Aerospace	\$ 22.70	\$ 21.33	\$ 21.25	\$ 21.86	\$ 23.15	\$ 22.90	\$ 22.55	\$ 23.63
Chemical processing . . .	31.62	23.45	17.50	19.64	19.44	21.15	20.99	20.26
Industrial gas turbine . . .	14.05	12.71	14.57	14.16	15.32	18.37	19.08	21.03
Other markets	26.67	28.35	28.70	22.19	27.83	26.56	29.85	31.66
Total average selling price (product only; excluding other revenue)	22.11	19.68	19.89	19.80	21.15	22.28	22.53	23.32
Total average selling price (including other revenue) . . .	23.47	21.28	21.41	21.36	22.89	23.46	23.65	24.46

Results of Operations

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	365,499	92.5 %	387,648	89.0 %	22,149	6.1 %
Gross profit	29,710	7.5 %	47,678	11.0 %	17,968	60.5 %
Selling, general and administrative expense	42,393	10.7 %	47,111	10.8 %	4,718	11.1 %
Research and technical expense	3,855	1.0 %	3,785	0.9 %	(70)	(1.8)%
Operating income (loss)	(16,538)	(4.2)%	(3,218)	(0.7)%	13,320	(80.5)%
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	<u>367,708</u>	<u>411,834</u>	<u>44,126</u>	<u>12.0 %</u>
Other revenue	27,501	23,492	(4,009)	(14.6)%
Net revenues	<u>\$ 395,209</u>	<u>\$ 435,326</u>	<u>\$ 40,117</u>	<u>10.2 %</u>
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	<u>18,117</u>	<u>18,398</u>	<u>281</u>	<u>1.6 %</u>
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)	<u>20.30</u>	<u>22.38</u>	<u>2.08</u>	<u>10.2 %</u>
Total average selling price (including other revenue)	<u>\$ 21.81</u>	<u>\$ 23.66</u>	<u>\$ 1.85</u>	<u>8.5 %</u>

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 \$387.6 million, or 89.0% of net revenues, in fiscal 2018 compared to \$365.5 million, or 92.5% of net revenues, in fiscal 2017. Cost of sales in fiscal 2018 increased by \$22.1 million 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 \$47.7 million for fiscal 2018, an increase of \$18.0 million from \$29.7 million in fiscal 2017. Gross margin as a percentage of net revenue increased to 11.0% in fiscal 2018 as compared to 7.5% in fiscal 2017.

Selling, General and Administrative Expense. Selling, general and administrative expense was \$47.1 million for fiscal 2018, an increase of \$4.7 million, or 11.1%, from \$42.4 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 10.7% 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 loss in fiscal 2018 was \$(3.2) million, compared to operating loss of \$(16.5) million in fiscal 2017.

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 assets based on the lowering of the statutory tax rate of 35% to 21% (24.5% in fiscal 2018). The section entitled "Impact of the Tax Cuts and Jobs Act on Deferred Tax Assets" and Note 6 to the consolidated financial statements in this Annual Report on Form 10-K for the year ended September 30, 2018 set 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 of \$11.6 million from net loss of \$(10.2) million in fiscal 2017.

Year Ended September 30, 2017 Compared to Year Ended September 30, 2016

(\$ in thousands, except per share figures)

	Year Ended September 30,				Change	
	2016		2017		Amount	%
Net revenues	\$ 406,359	100.0 %	\$ 395,209	100.0 %	\$ (11,150)	(2.7)%
Cost of sales	358,779	88.3 %	365,499	92.5 %	6,720	1.9 %
Gross profit	47,580	11.7 %	29,710	7.5 %	(17,870)	(37.6)%
Selling, general and administrative expense	39,684	9.8 %	42,393	10.7 %	2,709	6.8 %
Research and technical expense	3,698	0.9 %	3,855	1.0 %	157	4.2 %
Operating income (loss)	4,198	1.0 %	(16,538)	(4.2)%	(20,736)	(493.9)%
Interest income	(108)	(0.0)%	(186)	(0.0)%	(78)	72.2 %
Interest expense	555	0.1 %	865	0.2 %	310	55.9 %
Income (loss) before income taxes	3,751	0.9 %	(17,217)	(4.4)%	(20,968)	(559.0)%
Provision for (benefit from) income taxes	(1,269)	(0.3)%	(7,027)	(1.8)%	(5,758)	453.7 %
Net income (loss)	\$ 5,020	1.2 %	\$ (10,190)	(2.6)%	\$ (15,210)	(303.0)%
Net income (loss) per share:						
Basic	\$ 0.40		\$ (0.83)			
Diluted	\$ 0.40		\$ (0.83)			
Weighted average shares outstanding:						
Basic	12,361,483		12,397,099			
Diluted	12,366,197		12,397,099			

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	
	2016	2017	Amount	%
Net revenues (dollars in thousands)				
Aerospace	\$ 197,445	\$ 192,515	\$ (4,930)	(2.5)%
Chemical processing	72,316	70,467	(1,849)	(2.6)%
Industrial gas turbine	68,063	61,523	(6,540)	(9.6)%
Other markets	45,033	43,203	(1,830)	(4.1)%
Total product revenue	382,857	367,708	(15,149)	(4.0)%
Other revenue	23,502	27,501	3,999	17.0 %
Net revenues	\$ 406,359	\$ 395,209	\$ (11,150)	(2.7)%
Pounds by market (in thousands)				
Aerospace	8,720	8,847	127	1.5 %
Chemical processing	2,816	3,163	347	12.3 %
Industrial gas turbine	4,965	4,468	(497)	(10.0)%
Other markets	1,465	1,639	174	11.9 %
Total shipments	17,966	18,117	151	0.8 %
Average selling price per pound				
Aerospace	\$ 22.64	\$ 21.76	\$ (0.88)	(3.9)%
Chemical processing	25.68	22.28	(3.40)	(13.2)%
Industrial gas turbine	13.71	13.77	0.06	0.4 %
Other markets	30.74	26.36	(4.38)	(14.2)%
Total product (excluding other revenue)	21.31	20.30	(1.01)	(4.7)%
Total average selling price (including other revenue)	\$ 22.62	\$ 21.81	\$ (0.81)	(3.6)%

Net Revenues. Net revenues were \$395.2 million in fiscal 2017, a decrease of 2.7% from \$406.4 million in fiscal 2016, due to a decrease in average selling price per pound partially offset by an increase in volume. The average product selling price was \$20.30 per pound in fiscal 2017, a decrease of 4.7%, or \$(1.01), from \$21.31 per pound in fiscal 2016. Volume was 18.1 million pounds in fiscal 2017, an increase of 0.8% from 18.0 million pounds in fiscal 2016 with increases in the aerospace, chemical processing and other markets. The average product selling price per pound decreased as a result of pricing competition and lower levels of specialty application projects, which decreased average selling price per pound by approximately \$1.35, and a lower-value product mix, which decreased average selling price per pound by approximately \$0.43, partially offset by higher raw material market prices, which increased average selling price by approximately \$0.77 per pound.

Sales to the aerospace market were \$192.5 million in fiscal 2017, a decrease of 2.5% from \$197.4 million in fiscal 2016, due to a 3.9%, or \$0.88, decrease in the average selling price per pound, partially offset by a 1.5% increase in volume. The increase in volume reflects solid aerospace demand especially with respect to new generation engines. The average selling price per pound decrease reflects an increase in pricing competition and a change to a lower-value product mix, which decreased average selling price per pound by approximately \$1.03 and \$0.63, respectively, partially offset by a change in market prices of raw materials, which increased average selling price per pound by approximately \$0.78.

Sales to the chemical processing market were \$70.5 million in fiscal 2017, a decrease of 2.6% from \$72.3 million in fiscal 2016, due to a 13.2%, or \$3.40, decrease in the average selling price per pound, partially offset by a 12.3% increase in volume. Volumes increased in fiscal 2017 from very low levels. The decrease in the average selling price per pound reflects a change to a lower-value product mix and increased pricing competition, which decreased average selling price per pound by approximately \$2.69 and \$1.16, respectively, partially offset by higher raw material market prices, which increased average selling price per pound by approximately \$0.45.

Sales to the industrial gas turbine market were \$61.5 million in fiscal 2017, a decrease of 9.6% from \$68.1 million in fiscal 2016, due to a 10.0% decrease in volume partially offset by a 0.4%, or \$0.06, increase in the average selling price per pound. The decrease in volume was due primarily to a decreased level of transactional business in this market, along with a lower level of ingot orders shipped. The increase in average selling price per pound reflects a change to a higher-value product mix and higher raw material market prices, which increased average selling price per pound by approximately \$1.04 and \$0.84, respectively, partially offset by increased pricing competition, which decreased average selling price per pound by approximately \$1.82.

Sales to other markets were \$43.2 million in fiscal 2017, a decrease of 4.1% from \$45.0 million in fiscal 2016, due to a 14.2% decrease in average selling price per pound, partially offset by an 11.9% increase in volume. The increase in volume is due primarily to small increases in volume in the flue-gas desulfurization and oil and gas markets, along with small improvements in transactional orders in other markets. The decrease in the average selling price reflects a change in product mix to lower-value forms and alloys and increased pricing competition, which decreased average selling price per pound by approximately \$3.31 and \$2.23, respectively, partially offset by an increase in raw material market prices, which increased average selling price per pound by approximately \$1.15.

Other Revenue. Other revenue was \$27.5 million in fiscal 2017, an increase of 17.0% from \$23.5 million in fiscal 2016. The increase in other revenue was primarily attributable to increased conversion services and miscellaneous revenue combined with adjustments to sales reserves.

Cost of Sales. Cost of sales was \$365.5 million, or 92.5% of net revenues, in fiscal 2017 compared to \$358.8 million, or 88.3% of net revenues, in fiscal 2016. Cost of sales in fiscal 2017 increased by \$6.7 million as compared to fiscal 2016 primarily due to higher volume, higher raw material costs and increased pension expense, partially offset by a lower-value product mix sold.

Gross Profit. As a result of the above factors, gross margin was \$29.7 million for fiscal 2017, a decrease of \$17.9 million from \$47.6 million in fiscal 2016 driven by less favorable product mix as a result of less specialty application projects. Gross margin as a percentage of net revenue decreased to 7.5% in fiscal 2017 as compared to 11.7% in fiscal 2016.

Selling, General and Administrative Expense. Selling, general and administrative expense was \$42.4 million for fiscal 2017, an increase of \$2.7 million, or 6.8%, from \$39.7 million in fiscal 2016. The increase in expense was primarily driven by fluctuations in foreign currencies of \$2.1 million. Higher pension expense and higher bad debt expense also contributed to the increased expense. Selling, general and administrative expenses as a percentage of net revenues increased to 10.7% for fiscal 2017, compared to 9.8% for fiscal 2016.

Research and Technical Expense. Research and technical expense was \$3.9 million, or 1.0% of revenue, for fiscal 2017, compared to \$3.7 million, or 0.9% of net revenue, in fiscal 2016.

Operating Income/(Loss). As a result of the above factors, operating loss in fiscal 2017 was \$(16.5) million, compared to operating income of \$4.2 million in fiscal 2016.

Income Taxes. A benefit from income taxes of \$7.0 million was incurred in fiscal 2017, a difference of \$5.8 million from a tax benefit of \$1.3 million in fiscal 2016. The effective tax rate for fiscal 2017 was 40.8%, compared to 33.8% in fiscal 2016. The higher tax rate in fiscal 2017 was attributed to a higher proportion of net loss recorded in the higher-rate United States jurisdiction in fiscal 2017 as compared to fiscal 2016.

Net Income/(Loss). As a result of the above factors, net loss for fiscal 2017 was \$(10.2) million, a decrease of \$15.2 million from net income of \$5.0 million in fiscal 2016.

Liquidity and Capital Resources

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, however 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 \$13.1 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. Additionally, the absence of cash provided in fiscal 2018 from restricted cash contributed to lower cash generated in fiscal 2018 as compared to fiscal 2017 of approximately \$5.4 million. 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.

Comparative cash flow analysis (2016 to 2017)

During fiscal 2017, the Company's primary sources of cash were cash on-hand and cash from operations, as detailed below. At September 30, 2017, the Company had cash and cash equivalents of \$46.3 million compared to \$59.3 million (excluding restricted cash of \$5.4 million) at September 30, 2016. As of September 30, 2017, the Company had cash and cash equivalents of \$13.4 million that was held by foreign subsidiaries in various currencies.

Net cash provided by operating activities was \$13.1 million in fiscal 2017 compared to \$54.0 million in fiscal 2016. The lower cash provided in fiscal 2017 was largely driven by net losses of \$10.2 million in fiscal 2017 compared to net income of \$5.0 million in fiscal 2016 as well as changes in working capital, in particular, cash used from higher inventories of \$7.0 million in fiscal 2017 compared to cash generated from lower inventories of \$6.6 million in fiscal 2016 and cash generated from lower accounts receivable of \$0.8 million in fiscal 2017 compared to cash generated from lower accounts receivable of \$11.0 million in fiscal 2016. Additionally, cash paid for income taxes was \$2.3 million in fiscal 2017 compared to cash refunded of \$6.5 million in fiscal 2016. This was partially offset by cash provided from increases in accounts payable and accrued expenses of \$3.5 million in fiscal 2017 compared to cash used from decreases in accounts payable in fiscal 2016.

Net cash used in investing activities in fiscal 2017 of \$15.0 million was lower than cash used in investing activities in fiscal 2016 of \$31.6 million by \$16.6 million as a result of lower additions to property, plant and equipment, as the Company's capacity expansion in sheet manufacturing was completed during fiscal 2017.

Net cash used in financing activities in fiscal 2017 of \$11.4 million included \$11.0 million of dividend payments and approximately \$0.3 million of stock re-purchases made to satisfy taxes in relation to the vesting of restricted stock, which is comparable to the prior year.

Future sources of liquidity

The Company's sources of liquidity for fiscal 2019 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, 2018, the Company had cash of \$9.8 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 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, 2018, 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, 2018, 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 15 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 2018 was \$11.1 million, and the plan for capital spending in fiscal 2019 is \$16.0 million. See “Summary of Capital Spending” in this Annual Report on Form 10-K for additional discussion of actual and planned capital spending.

Contractual Obligations

The following table sets forth the Company’s contractual obligations for the periods indicated, as of September 30, 2018:

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⁾	\$ 790	\$ 280	\$ 510	\$ —	\$ —
Operating lease obligations	4,527	2,681	1,714	132	—
Capital and finance lease obligations	17,696	1,011	1,994	2,036	12,655
Raw material contracts (primarily nickel)	26,104	26,104	—	—	—
Capital projects and other commitments	7,821	7,821	—	—	—
Pension plan ⁽²⁾	61,452	4,000	12,000	12,000	33,452
Non-qualified pension plans	716	95	190	190	241
Other postretirement benefits ⁽³⁾	50,000	5,000	10,000	10,000	25,000
Environmental post-closure monitoring	504	55	120	110	219
Total	\$ 169,610	\$ 47,047	\$ 26,528	\$ 24,468	\$ 71,567

(1) As of September 30, 2018, 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 \$61,452 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

While neither inflation nor deflation has had, nor does the Company expect them to have, a material impact on operating results, there can be no assurance that the Company’s business will not be affected by inflation or deflation in the future. Historically, the Company has had the ability to pass on to customers both increases in consumable costs and material costs because of the value-added contribution the material makes to the final product. Raw material comprises the most significant portion of product costs. Nickel, cobalt and molybdenum, the primary raw materials used to manufacture the Company’s products, all have experienced significant fluctuations in price. In the future, the Company may not be able to successfully offset rapid increases in the price of nickel or other raw materials. 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

Revenue is recognized when collectability is reasonably assured and when title passes to the customer which is generally at the time of shipment (F.O.B. shipping point or at a foreign port for certain export customers) or, in the case of conversion services, when the service is performed. Allowances for sales returns are recorded as a component of net revenues in the periods in which the related sales are recognized. Management determines this allowance based on historical experience. Should returns increase above historical experience, additional allowances may be required. 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 15 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 of 7.25% is reasonable, 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 \$493,000. 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 \$170,000 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 \$8.2 million higher liability for the U.S. pension plan and \$4.4 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 6.8 and 7.5 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.

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 is at a variable rate at September 30, 2017 and 2018. The Company's outstanding variable rate debt was zero at September 30, 2017 and 2018. 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. Any exposure aggregating more than \$500,000 requires approval from the Company's Vice President of Finance. The Company is not currently party to any currency contracts.

Fluctuations in the price of nickel, the Company's most significant raw material, 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, 2018 and 2017 and for the years ended September 30, 2018, September 30, 2017 and September 30, 2016

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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, 2018 and 2017, 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, 2018, 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, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2018, 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, 2018, 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 15, 2018

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, 2017	September 30, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 46,328	\$ 9,802
Accounts receivable, less allowance for doubtful accounts of \$620 and \$1,130 at September 30, 2017 and September 30, 2018, respectively	61,602	73,437
Inventories	244,457	273,045
Income taxes receivable	—	7,240
Other current assets	2,781	2,825
Total current assets	355,168	366,349
Property, plant and equipment, net	192,556	179,400
Deferred income taxes	58,133	25,454
Other assets	5,107	7,163
Goodwill	4,789	4,789
Other intangible assets, net	6,066	5,539
Total assets	\$ 621,819	\$ 588,694
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 32,802	\$ 37,140
Accrued expenses	14,108	17,463
Income taxes payable	195	—
Accrued pension and postretirement benefits	5,095	5,095
Deferred revenue—current portion	2,500	2,500
Total current liabilities	54,700	62,198
Long-term obligations (less current portion) (Note 18)	7,896	8,443
Deferred revenue (less current portion)	20,329	17,829
Deferred income taxes	1,741	1,919
Accrued pension benefits (less current portion)	90,957	62,072
Accrued postretirement benefits (less current portion)	112,424	103,013
Total liabilities	288,047	255,474
Commitments and contingencies (Notes 9 and 10)	—	—
Stockholders' equity:		
Common stock, \$0.001 par value (40,000,000 shares authorized, 12,544,933 and 12,546,591 shares issued and 12,509,757 and 12,504,478 shares outstanding at September 30, 2017 and September 30, 2018, respectively)	13	13
Preferred stock, \$0.001 par value (20,000,000 shares authorized, 0 shares issued and outstanding)	—	—
Additional paid-in capital	248,733	251,053
Accumulated earnings	159,366	126,588
Treasury stock, 35,176 shares at September 30, 2017 and 42,113 shares at September 30, 2018	(1,646)	(1,869)
Accumulated other comprehensive loss	(72,694)	(42,565)
Total stockholders' equity	333,772	333,220
Total liabilities and stockholders' equity	\$ 621,819	\$ 588,694

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)

	<u>Year Ended September 30, 2016</u>	<u>Year Ended September 30, 2017</u>	<u>Year Ended September 30, 2018</u>
Net revenues	\$ 406,359	\$ 395,209	\$ 435,326
Cost of sales	358,779	365,499	387,648
Gross profit	47,580	29,710	47,678
Selling, general and administrative expense	39,684	42,393	47,111
Research and technical expense	3,698	3,855	3,785
Operating income (loss)	4,198	(16,538)	(3,218)
Interest income	(108)	(186)	(82)
Interest expense	555	865	918
Income (loss) before income taxes	3,751	(17,217)	(4,054)
Provision for (benefit from) income taxes	(1,269)	(7,027)	17,697
Net income (loss)	<u>\$ 5,020</u>	<u>\$ (10,190)</u>	<u>\$ (21,751)</u>
Net income (loss) per share:			
Basic	<u>\$ 0.40</u>	<u>\$ (0.83)</u>	<u>\$ (1.75)</u>
Diluted	<u>\$ 0.40</u>	<u>\$ (0.83)</u>	<u>\$ (1.75)</u>
Weighted Average Common Shares Outstanding			
Basic	<u>12,361</u>	<u>12,397</u>	<u>12,420</u>
Diluted	<u>12,366</u>	<u>12,397</u>	<u>12,420</u>
Dividends declared per common share	<u>\$ 0.88</u>	<u>\$ 0.88</u>	<u>\$ 0.88</u>

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)

	<u>Year Ended September 30, 2016</u>	<u>Year Ended September 30, 2017</u>	<u>Year Ended September 30, 2018</u>
Net income (loss)	\$ 5,020	\$ (10,190)	\$ (21,751)
Other comprehensive income (loss), net of tax:			
Pension and postretirement	(19,569)	39,624	32,029
Foreign currency translation adjustment	<u>(7,001)</u>	<u>2,205</u>	<u>(1,900)</u>
Other comprehensive income (loss)	<u>(26,570)</u>	<u>41,829</u>	<u>30,129</u>
Comprehensive income (loss)	<u>\$ (21,550)</u>	<u>\$ 31,639</u>	<u>\$ 8,378</u>

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, 2015	12,446,000	\$ 12	\$ 244,488	\$ 186,533	\$ (1,091)	\$ (87,953)	\$ 341,989
Net income (loss)				5,020			5,020
Dividends paid (\$0.88 per share) . .				(10,988)			(10,988)
Other comprehensive loss						(26,570)	(26,570)
Exercise of stock options	10,000		310				310
Tax impact of forfeited vested options			(114)				(114)
Tax impact of dividends on restricted stock			(39)				(39)
Issue restricted stock (less forfeitures)	42,810						—
Purchase of treasury stock	(7,661)				(289)		(289)
Stock compensation			1,980				1,980
Balance September 30, 2016	<u>12,491,149</u>	<u>\$ 12</u>	<u>\$ 246,625</u>	<u>\$ 180,565</u>	<u>\$ (1,380)</u>	<u>\$ (114,523)</u>	<u>\$ 311,299</u>
Net income (loss)				(10,190)			(10,190)
Dividends paid (\$0.88 per share) . .				(11,009)			(11,009)
Other comprehensive loss						41,829	41,829
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	<u>12,509,757</u>	<u>\$ 13</u>	<u>\$ 248,733</u>	<u>\$ 159,366</u>	<u>\$ (1,646)</u>	<u>\$ (72,694)</u>	<u>\$ 333,772</u>
Net income (loss)				(21,751)			(21,751)
Dividends paid and accrued (\$0.88 per share)				(11,027)			(11,027)
Other comprehensive income						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	<u>12,504,478</u>	<u>\$ 13</u>	<u>\$ 251,053</u>	<u>\$ 126,588</u>	<u>\$ (1,869)</u>	<u>\$ (42,565)</u>	<u>\$ 333,220</u>

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	<u>Year Ended September 30, 2016</u>	<u>Year Ended September 30, 2017</u>	<u>Year Ended September 30, 2018</u>
Cash flows from operating activities:			
Net income (loss)	\$ 5,020	\$ (10,190)	\$ (21,751)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation	20,533	21,601	22,627
Amortization	503	496	527
Pension and post-retirement expense - U.S. and U.K.	19,048	23,435	14,110
Change in long-term obligations	73	(15)	(7)
Stock compensation expense	1,980	2,109	2,320
Excess tax expense from restricted stock vesting	153	—	—
Deferred revenue	2,488	(7,488)	(2,500)
Deferred income taxes	1,428	(10,072)	23,115
Loss on disposition of property	438	612	250
Change in assets and liabilities:			
Restricted cash	(5,446)	5,446	—
Accounts receivable	10,965	755	(12,590)
Inventories	6,611	(6,982)	(29,905)
Other assets	237	287	(2,120)
Accounts payable and accrued expenses	(1,782)	3,476	10,220
Income taxes	3,773	709	(7,406)
Accrued pension and postretirement benefits	(12,035)	(11,052)	(10,627)
Net cash provided by (used in) operating activities	<u>53,987</u>	<u>13,127</u>	<u>(13,737)</u>
Cash flows from investing activities:			
Additions to property, plant and equipment	<u>(31,633)</u>	<u>(15,006)</u>	<u>(11,085)</u>
Net cash provided by (used in) investing activities	<u>(31,633)</u>	<u>(15,006)</u>	<u>(11,085)</u>
Cash flows from financing activities:			
Revolving credit facility borrowings	—	—	4,200
Revolving credit facility repayments	—	—	(4,200)
Dividends paid	(10,988)	(11,009)	(11,013)
Proceeds from exercise of stock options	310	—	—
Payment for purchase of treasury stock	(289)	(266)	(223)
Excess tax expense from restricted stock vesting	(153)	—	—
Payment for debt issuance cost	(291)	—	—
Payments on long-term obligation	(91)	(166)	(258)
Net cash provided by (used in) financing activities	<u>(11,502)</u>	<u>(11,441)</u>	<u>(11,494)</u>
Effect of exchange rates on cash	<u>(600)</u>	<u>351</u>	<u>(210)</u>
Increase (decrease) in cash and cash equivalents:	10,252	(12,969)	(36,526)
Cash and cash equivalents:			
Beginning of period	49,045	59,297	46,328
End of period	<u>\$ 59,297</u>	<u>\$ 46,328</u>	<u>\$ 9,802</u>
Supplemental disclosures of cash flow information:			
Interest (net of capitalized interest)	<u>\$ 486</u>	<u>\$ 807</u>	<u>\$ 860</u>
Income taxes paid (refunded), net	<u>\$ (6,471)</u>	<u>\$ 2,335</u>	<u>\$ 1,965</u>
Capital expenditures incurred, but not yet paid	<u>\$ 1,869</u>	<u>\$ 1,910</u>	<u>\$ 703</u>
Dividends declared but not yet paid	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 14</u>
Lease obligation incurred	<u>\$ —</u>	<u>\$ 4,100</u>	<u>\$ —</u>

The accompanying notes are an integral part of these consolidated financial statements.

HAYNES INTERNATIONAL, INC. AND SUBSIDIARIES

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 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 collectability is reasonably assured and when title passes to the customer, which is generally at the time of shipment with freight terms of free on board (FOB) shipping point or at a foreign port for certain export customers. 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 15 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 market. 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, patents, trademarks, customer relationships and other intangibles. As the patents and customer relationships have a definite life, they are amortized over lives ranging from two to sixteen years. The Company reviews patents and 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, 2016, 2017 or 2018 because the fair value exceeded the carrying values.

During fiscal 2018, there were no changes in the carrying amount of goodwill.

Amortization of the patents, customer relationships and other intangibles was \$503, \$496 and \$527 for the years ended September 30, 2016, 2017 and 2018, respectively. The following represents a summary of intangible assets at September 30, 2017 and 2018:

<u>September 30, 2017</u>	<u>Gross Amount</u>	<u>Accumulated Amortization</u>	<u>Carrying Amount</u>
Patents	\$ 4,030	\$ (3,656)	\$ 374
Trademarks	3,800	—	3,800
Customer relationships	2,100	(426)	1,674
Other	291	(73)	218
	<u>\$ 10,221</u>	<u>\$ (4,155)</u>	<u>\$ 6,066</u>

<u>September 30, 2018</u>	<u>Gross Amount</u>	<u>Accumulated Amortization</u>	<u>Carrying Amount</u>
Patents	\$ 4,030	\$ (3,977)	\$ 53
Trademarks	3,800	—	3,800
Customer relationships	2,100	(574)	1,526
Other	291	(131)	160
	<u>\$ 10,221</u>	<u>\$ (4,682)</u>	<u>\$ 5,539</u>

Estimated future Aggregate Amortization Expense:
Year Ended September 30,

2019	\$ 255
2020	199
2021	179
2022	133
2023	129
Thereafter	844

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, 2016, 2017 or 2018.

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 19.). 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, 2016, 2017 and 2018 were \$3,698, \$3,855 and \$3,785, 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 6, Income Taxes).

M. Stock-based Compensation

As described in Note 11, 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. 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, 2017 and 2018, the Company had no foreign currency exchange contracts outstanding.

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents and accounts receivable. At September 30, 2018, 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 2016, 2017 and 2018, 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 \$688 in fiscal 2018 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. Per share amounts are computed by dividing net income attributable to common shareholders by the weighted average shares outstanding during each period. 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,		
	2016	2017	2018
<i>Numerator: Basic and Diluted</i>			
Net income (loss)	\$ 5,020	\$ (10,190)	\$ (21,751)
Dividends	(10,988)	(11,009)	(11,027)
Undistributed income (loss)	(5,968)	(21,199)	(32,778)
Percentage allocated to common shares ^(a)	99.0 %	100.0 %	100.0 %
Undistributed income (loss) allocated to common shares	(5,910)	(21,199)	(32,778)
Dividends paid on common shares outstanding	10,881	10,905	10,933
Net income (loss) available to common shares	4,971	(10,294)	(21,845)
<i>Denominator: Basic and Diluted</i>			
Weighted average common shares outstanding	12,361,483	12,397,099	12,419,564
Adjustment for dilutive potential common shares	4,714	—	—
Weighted average shares outstanding - Diluted	12,366,197	12,397,099	12,419,564
Basic net income (loss) per share	\$ 0.40	\$ (0.83)	\$ (1.75)
Diluted net income (loss) per share	\$ 0.40	\$ (0.83)	\$ (1.75)
Number of stock option shares excluded as their effect would be anti-dilutive	378,852	310,417	329,276
Number of restricted stock shares excluded as their effect would be anti-dilutive	121,285	107,854	91,008
^(a) Percentage allocated to common shares - weighted average			
Common shares outstanding	12,361,483	12,397,099	12,419,564
Unvested participating shares	121,185	—	—
	12,482,668	12,397,099	12,419,564

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. ASU 2015-14 deferred the effective date of the update to annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. 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. The Company will adopt this accounting standard update using the modified retrospective method, with the cumulative effect of initially applying this update, recognized in the first quarter of fiscal 2019. The Company has evaluated the impact of this standard on individual customer contracts and based on this evaluation determined that from time to time, the Company may have customer agreements that require revenue to be recognized over time due to there being no alternative use for the product without significant economic loss and an enforceable right to payment including a normal profit margin from the customer in the event of contract termination. As of September 30, 2018, there were not any outstanding contracts that would require a cumulative adjustment to retained earnings under the modified retrospective method of implementation. Certain liabilities for estimated product returns will be re-classified to accrued expenses from a contra-asset within accounts receivable, less allowance for doubtful accounts.

In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330)*. The objective of this update is to simplify the measurement of inventory valuation at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. It is effective for annual reporting periods beginning after December 15, 2016 and interim periods within fiscal years

beginning after December 15, 2017. The Company adopted these changes in the first quarter of fiscal 2018, which did not result in a material impact to the Company's consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This new guidance will require that a lessee recognize assets and liabilities on the balance sheet for all leases with a lease term of more than twelve months, with the result being the recognition of a right of use asset and a lease liability. The new lease accounting requirements are effective for fiscal years beginning after December 18, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact of the new guidance on its consolidated financial statements.

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, and is to be adjusted retrospectively.

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 is effective for fiscal years beginning after December 15, 2017, including interim periods within those annual periods, with early adoption permitted. The amendments are to be 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, on and after the effective date, for the capitalization of the service cost component of net periodic pension cost and net periodic postretirement benefit in assets. The Company will adopt the standard on October 1, 2018. As a result of the retrospective change in presentation, the adoption of this guidance will result in the reclassification of cost of goods sold of \$14,997 and \$7,040, and selling, general and administrative expense of \$1,806 and \$1,198, for the fiscal years ended September 30, 2017 and 2018, respectively, to Nonoperating retirement benefit expense on the Consolidated Statements of Operations.

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.

Note 3. Inventories

Inventories are stated at the lower of cost or market. 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:

	<u>September 30,</u> <u>2017</u>	<u>September 30,</u> <u>2018</u>
Raw Materials	\$ 18,731	\$ 17,897
Work-in-process	130,019	147,921
Finished Goods	94,331	105,640
Other	1,376	1,587
	<u>\$ 244,457</u>	<u>\$ 273,045</u>

Note 4. Property, Plant and Equipment

The following is a summary of the major classes of property, plant and equipment:

	<u>September 30,</u>	
	<u>2017</u>	<u>2018</u>
Land and land improvements	\$ 9,345	\$ 9,462
Buildings and improvements	44,705	45,327
Machinery and equipment	289,035	281,329
Construction in process	5,692	7,292
	<u>348,777</u>	<u>343,410</u>
Less accumulated depreciation	<u>(156,221)</u>	<u>(164,010)</u>
	<u>\$ 192,556</u>	<u>\$ 179,400</u>

As of September 30, 2018, the Company has \$200 of assets under a capital lease for equipment related to the service center operation in Shanghai, China and \$7,483 of assets under capital or finance leases for two buildings at the LaPorte, Indiana service center.

Note 5. Accrued Expenses

The following is a summary of the major classes of accrued expenses:

	<u>September 30,</u>	
	<u>2017</u>	<u>2018</u>
Employee compensation	\$ 7,791	\$ 8,825
Taxes, other than income taxes	2,422	2,673
Employee termination liabilities	—	1,562
Professional fees	746	1,225
Management incentive compensation	—	1,104
Utilities	909	982
Capital lease obligation, current	926	147
Other	1,314	945
	<u>\$ 14,108</u>	<u>\$ 17,463</u>

Note 6. 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 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, 2018 the Company has completed its accounting for the income tax effects of the Act with the exception of the provisions related to Global Intangible Low Taxed Income (“GILTI”).

Because of the complexity of the new GILTI tax rules, we are continuing to evaluate this provision of the Tax Act and the application of ASC 740. Under U.S. GAAP, we are allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the “period cost method”) or (2) factoring such amounts into a company’s measurement of its deferred taxes (the “deferred method”). Our selection of an accounting policy with respect to the new GILTI tax rules will depend, in part, on analyzing our global income to determine whether we expect to have future U.S. inclusions in taxable income related to GILTI and, if so, what the impact is expected to be. Because whether we expect to have future U.S. inclusions in taxable income related to GILTI depends on a number of different aspects of our estimated future results of global operations, we are not yet able to reasonably estimate the effect of this provision of the Tax Act. Therefore, we have not made any adjustments related to potential GILTI tax in our financial statements and have not made a policy decision regarding whether to record deferred taxes on GILTI.

The components of income (loss) before provision for income taxes and the provision for income taxes are as follows:

	Year Ended September 30,		
	2016	2017	2018
Income (loss) before income taxes:			
U.S.	\$ (4,160)	\$ (25,090)	\$ (16,650)
Foreign	7,911	7,873	12,596
Total	<u>\$ 3,751</u>	<u>\$ (17,217)</u>	<u>\$ (4,054)</u>
Provision for (benefit from) income taxes:			
Current:			
U.S. Federal	\$ (4,427)	\$ 933	\$ (7,690)
Foreign	1,368	1,652	2,404
State	(141)	401	(137)
Total	<u>(3,200)</u>	<u>2,986</u>	<u>(5,423)</u>
Deferred:			
U.S. Federal	4,582	(8,781)	25,141
Foreign	(105)	—	—
State	(2,954)	(1,427)	(2,496)
Valuation allowance	408	195	475
Total	<u>1,931</u>	<u>(10,013)</u>	<u>23,120</u>
Total provision for (benefit from) income taxes	<u>\$ (1,269)</u>	<u>\$ (7,027)</u>	<u>\$ 17,697</u>

The provision for income taxes applicable to results of operations differed from the U.S. federal statutory rate as follows:

	Year Ended September 30,		
	2016	2017	2018
Statutory federal tax rate	35.00 %	35.00 %	24.53 %
Tax provision for income taxes at the statutory rate	\$ 1,313	\$ (6,026)	\$ (1,059)
Foreign tax rate differentials	(1,505)	(1,103)	(685)
Provision for state taxes, net of federal taxes	778	(371)	(45)
U.S. tax on distributed and undistributed earnings of foreign subsidiaries	523	452	240
Manufacturer's deduction	(98)	—	(86)
Tax credits	(1,198)	(409)	(511)
Transition tax	—	—	2,170
Federal and state tax rate change impact on deferred tax asset	(1,819)	192	16,633
Net operating loss carryback	—	—	407
Change in valuation allowance	408	195	475
Other, net	329	43	158
Provision for income taxes at effective tax rate	<u>\$ (1,269)</u>	<u>\$ (7,027)</u>	<u>\$ 17,697</u>
Effective tax rate	(33.8)%	40.8 %	(436.5)%

During fiscal 2016, the Company's effective tax rate was negative relative to the statutory rate, primarily due to an increase in the value of the Company's deferred tax assets driven by a higher state tax rate and research credits. Additionally, the Company earned a greater proportion of profitability in foreign jurisdictions.

During fiscal 2017, the Company's effective tax rate was higher than the 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 tax reform 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 tax reform 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.

Deferred tax assets (liabilities) are comprised of the following:

	<u>September 30,</u>	
	<u>2017</u>	<u>2018</u>
Deferred tax assets:		
Pension and postretirement benefits	\$ 74,602	\$ 38,343
TIMET Agreement	8,417	4,775
Inventories	2,080	2,091
Accrued compensation and benefits	2,107	1,387
Accrued expenses and other	5,277	2,977
Tax attributes	11,579	4,178
Valuation allowance	(1,017)	(1,661)
Total deferred tax assets	<u>\$ 103,045</u>	<u>\$ 52,090</u>
Deferred tax liabilities:		
Property, plant and equipment, net	\$ (45,155)	\$ (27,521)
Intangible and other	(1,498)	(1,034)
Total deferred tax liabilities	<u>\$ (46,653)</u>	<u>\$ (28,555)</u>
Net deferred tax assets (liabilities)	<u>\$ 56,392</u>	<u>\$ 23,535</u>

As of September 30, 2018, the Company had state tax net operating loss carryforwards of \$18,477, tax credits of \$3,113 and foreign net operating loss carryforwards of \$2,236. These tax attributes begin to expire in 2026, 2020, and 2020, respectively. The Company has recorded a valuation allowance against the foreign net operating loss carryforwards of \$1,526 and federal and state tax credits of \$1,152 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 \$65,750 at September 30, 2018. 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, 2018, the Company is open to examination in the U.S. for the 2015 through 2018 tax years and in various foreign jurisdictions from 2016 through 2018. The Company is also open to examination in various states in the U.S., none of which were individually material. The Company is currently under examination by the Internal Revenue Service for the 2015 tax year.

Note 7. 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, 2018, 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 15 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.

The Company’s U.K. subsidiary (Haynes International Ltd.) has an overdraft facility of 1,700 Pounds Sterling (\$2,215), all of which was available on September 30, 2018. The Company’s French subsidiary (Haynes International, S.A.R.L.) has an overdraft banking facility of 240 Euro (\$278), all of which was available on September 30, 2018. The Company’s Swiss subsidiary (Haynes International AG) has an overdraft banking facility of 400 Swiss Francs (\$407), all of which was available on September 30, 2018.

Note 8. 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, 2016, 2017 and 2018 totaled \$1,652, \$1,590 and \$1,811, 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, 2016, 2017 and 2018.

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, 2016, 2017 and 2018 was \$91, \$19 and \$34, respectively. Accrued liabilities in the amount of \$777 and \$716 for these benefits are included in accrued pension and postretirement benefits liability at September 30, 2017 and 2018, 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, \$6,000, and \$8,000 to fund its domestic Company-sponsored pension plan for the years ended September 30, 2016, 2017 and 2018, respectively. The Company’s U.K. subsidiary made

contributions of \$778, \$804 and \$782 for the years ended September 30, 2016, 2017 and 2018, 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.

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:

	<u>Defined Benefit Pension Plans</u>		<u>Postretirement Health Care Benefits</u>	
	<u>Year Ended September 30,</u>		<u>Year Ended September 30,</u>	
	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
Change in Benefit Obligation:				
Projected benefit obligation at beginning of year	\$ 337,338	\$ 310,803	\$ 125,117	\$ 117,424
Service cost	6,282	5,536	350	336
Interest cost	10,577	10,801	4,292	4,311
Actuarial losses	(27,246)	(19,756)	(8,072)	(10,395)
Benefits paid	(14,682)	(14,178)	(4,263)	(3,663)
Transfer to third-party insurance company	—	(13,576)	—	—
Administrative expenses	(1,466)	(1,350)	—	—
Projected benefit obligation at end of year	<u>\$ 310,803</u>	<u>\$ 278,280</u>	<u>\$ 117,424</u>	<u>\$ 108,013</u>
Change in Plan Assets:				
Fair value of plan assets at beginning of year	\$ 207,963	\$ 224,094	\$ —	\$ —
Actual return on assets	25,475	18,501	—	—
Employer contributions	6,804	8,782	4,263	3,663
Benefits paid	(14,682)	(14,178)	(4,263)	(3,663)
Transfer to third-party insurance company	—	(13,576)	—	—
Administrative expenses	(1,466)	(1,350)	—	—
Fair value of plan assets at end of year	<u>\$ 224,094</u>	<u>\$ 222,273</u>	<u>\$ —</u>	<u>\$ —</u>
Funded Status of Plan:				
Unfunded status	<u>\$ (86,709)</u>	<u>\$ (56,007)</u>	<u>\$ (117,424)</u>	<u>\$ (108,013)</u>

Amounts recognized in the consolidated balance sheets are as follows:

	<u>Defined Benefit Pension Plans</u>		<u>Postretirement Health Care Benefits</u>		<u>Non-Qualified Pension Plans</u>		<u>All Plans Combined</u>	
	<u>September 30,</u>		<u>September 30,</u>		<u>September 30,</u>		<u>September 30,</u>	
	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>	<u>2018</u>
Accrued pension and postretirement benefits:								
Current	\$ —	\$ —	\$ (5,000)	\$ (5,000)	\$ (95)	\$ (95)	\$ (5,095)	\$ (5,095)
Non-current	(86,709)	(56,007)	(112,424)	(103,013)	(682)	(621)	(199,815)	(159,641)
Accrued pension and postretirement benefits	<u>\$ (86,709)</u>	<u>\$ (56,007)</u>	<u>\$ (117,424)</u>	<u>\$ (108,013)</u>	<u>\$ (777)</u>	<u>\$ (716)</u>	<u>\$ (204,910)</u>	<u>\$ (164,736)</u>
Accumulated other comprehensive loss:								
Net loss	66,819	38,808	35,286	21,891	—	—	102,105	60,699
Prior service cost	2,213	1,839	—	—	—	—	2,213	1,839
Total accumulated other comprehensive loss	<u>\$ 69,032</u>	<u>\$ 40,647</u>	<u>\$ 35,286</u>	<u>\$ 21,891</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 104,318</u>	<u>\$ 62,538</u>
Amounts expected to be recognized from AOCI into the statement of operations in the following year:								
Amortization of net loss	\$ 4,910	\$ 1,464	\$ 2,999	\$ 1,487	\$ —	\$ —	\$ 7,909	\$ 2,951
Amortization of prior service cost	374	205	—	—	—	—	374	205
	<u>\$ 5,284</u>	<u>\$ 1,669</u>	<u>\$ 2,999</u>	<u>\$ 1,487</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 8,283</u>	<u>\$ 3,156</u>

The non-current portion of the defined benefit pension plan portion of accrued pension and postretirement benefits amounts to \$86,709 and \$56,007 in fiscal 2017 and 2018, respectively. These amounts comprise the UK pension plan net

pension asset of \$3,566 and \$5,444, respectively, which is included in Other assets on the consolidated balance sheets as well as the US pension plan accrued pension liability of \$90,275 and \$61,451, 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 \$299,197 and \$269,386 at September 30, 2017 and 2018, 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,		
	2016	2017	2018
Service cost	\$ 4,080	\$ 6,282	\$ 5,536
Interest cost	12,050	10,577	10,801
Expected return on assets	(14,380)	(14,419)	(15,157)
Amortization of prior service cost	808	808	374
Recognized actuarial loss	8,838	11,267	4,910
Net periodic cost	<u>\$ 11,396</u>	<u>\$ 14,515</u>	<u>\$ 6,464</u>

	Postretirement Health Care Benefits		
	Year Ended September 30,		
	2016	2017	2018
Service cost	\$ 232	\$ 350	\$ 336
Interest cost	4,595	4,292	4,311
Recognized actuarial loss	2,825	4,278	2,999
Net periodic cost	<u>\$ 7,652</u>	<u>\$ 8,920</u>	<u>\$ 7,646</u>

Assumptions

A 5.0% (5.0%-2017) annual rate of increase for the costs of covered health care benefits for ages under 65 and a 5.0% (5.0%-2017) annual rate of increase for ages over 65 were assumed for 2018 and remained at 5.0% for the under 65 and over 65 age groups in the years thereafter. A one percentage point change in assumed health care cost trend rates would have no effect on the total of service and interest cost components of postretirement health care expense in fiscal 2018 or on the accumulated postretirement benefit obligation as of September 30, 2018. The effect on total of service and interest cost components and the effect on accumulated postretirement benefit obligation is zero due to the plan amendment that caps the Company costs at \$5,000 on an undiscounted basis per year.

The actuarial present value of the projected pension benefit obligation and postretirement health care benefit obligation for the plans at September 30, 2017 and 2018 were determined based on the following assumptions:

	September 30,	September 30,
	2017	2018
Discount rate (postretirement health care)	3.75 %	4.13 %
Discount rate (U.S. pension plan)	3.63 %	4.00 %
Discount rate (U.K. pension plan)	2.50 %	2.80 %
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,		
	2016	2017	2018
Discount rate (postretirement health care plan)	4.25 %	3.50 %	3.75 %
Discount rate (U.S. pension plan)	4.00 %	3.25 %	3.63 %
Discount rate (U.K. pension plan)	3.70 %	2.30 %	2.50 %
Expected return on plan assets (U.S. pension plan)	7.50 %	7.50 %	7.25 %
Expected return on plan assets (U.K. pension plan)	4.10 %	2.70 %	3.30 %
Rate of compensation increase (U.S. pension plan only)	3.50 %	3.50 %	2.50 %

Plan Assets and Investment Strategy

The Company's pension plan assets by level within the fair value hierarchy at September 30, 2017 and 2018, 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 16.

	September 30, 2017			
	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	\$ —	\$ —	\$ 73,430	\$ 73,430
Common /collective funds				
Bonds	—	—	81,702	81,702
U.S. common stock	—	—	32,784	32,784
International equity	—	—	16,341	16,341
Total U.S.	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 204,257</u>	<u>\$ 204,257</u>
U.K. Plan Assets:				
Equities	\$ —	\$ —	\$ 8,913	\$ 8,913
Bonds	—	—	7,750	7,750
Other	—	—	3,174	3,174
Total U.K.	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 19,837</u>	<u>\$ 19,837</u>
Total pension plan assets	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 224,094</u>	<u>\$ 224,094</u>

	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.	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 201,896</u>	<u>\$ 201,896</u>
U.K. Plan Assets:				
Equities	\$ —	\$ —	\$ 8,150	\$ 8,150
Bonds	—	—	9,781	9,781
Other	—	—	2,446	2,446
Total U.K.	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 20,377</u>	<u>\$ 20,377</u>
Total pension plan assets	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 222,273</u>	<u>\$ 222,273</u>

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, 2018 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 2019.

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
2019	\$ 14,226	\$ 5,000
2020	14,768	5,000
2021	15,251	5,000
2022	15,790	5,000
2023	16,243	5,000
2024 - 2028 (in total)	85,854	25,000

Note 9. 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 \$3,726, \$4,082 and \$3,892 for the years ended September 30, 2016, 2017 and 2018, respectively. Rent expense does not include income from sub-lease rentals totaling \$120, \$153 and \$156 for the years ended September 30, 2016, 2017 and 2018, respectively. Future minimum rental commitments under non-cancelable operating leases at September 30, 2018, are as follows:

2019	<u>Operating</u> \$ 2,681
2020	1,401
2021	313
2022	115
2023	17
2024 and thereafter	—
	<u>\$ 4,527</u>

Future minimum rental commitments under non-cancelable operating leases have not been reduced by minimum sub-lease rentals of \$78 due in the future.

Note 10. 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; however, based on the facts presently known, management does not believe that such costs 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, 2018, the Company has accrued \$504 for post-closure monitoring and maintenance activities, of which \$449 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, 2018.

2020	\$	52
2021		59
2022		49
2023		48
2024 and thereafter		241
	\$	<u>449</u>

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 11. 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 grant date, which is determined based upon the closing price of the Company's common stock on the trading date 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, 2018:

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2017	107,210	\$ 41.36
Granted	37,750	\$ 33.29
Forfeited / Canceled	(36,092)	\$ 39.83
Vested	<u>(26,875)</u>	\$ 44.51
Unvested at September 30, 2018	<u>81,993</u>	\$ 37.28
Expected to vest	<u>68,638</u>	\$ 37.19

Compensation expense related to restricted stock for the years ended September 30, 2016, 2017 and 2018 was \$1,466, \$1,340, and \$836, respectively. The remaining unrecognized compensation expense related to restricted stock at September 30, 2018 was \$890, to be recognized over a weighted average period of 0.69 years. During fiscal 2018, the Company repurchased 6,937 shares of stock from employees at an average purchase price of \$32.23 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. On November 21, 2017, the Company granted shares of restricted stock from the 2016 Incentive Compensation Plan in which elections were made by certain individuals to defer receipt to a future period. Those shares will 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 are also 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, 2018.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2017	—	\$ —
Granted	16,550	\$ 31.76
Unvested at September 30, 2018	<u>16,550</u>	\$ 31.76
Expected to vest	<u>16,550</u>	\$ 31.76

Compensation expense related to deferred restricted stock for the year ended September 30, 2017 and 2018 was \$0 and \$438, respectively. The remaining unrecognized compensation expense related to restricted stock at September 30, 2018 was \$88, to be recognized over a weighted average period of 0.17 years.

Performance Shares

On November 22, 2016 and November 21, 2017, the Company granted a target of 19,000 and 24,800, respectively, performance share awards to certain key employees. 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 ending September 30, 2019 and September 30, 2020, respectively, as compared to the total shareholder return of the Company's peer group, as defined by the Compensation

Committee for this purpose. During the third and fourth quarters of fiscal 2018, a target amount of 11,910 and 1,546 performance share awards were forfeited, respectively. The fair value of the performance shares granted on November 22, 2016 and November 21, 2017 is \$60.09 and \$38.43, per share, respectively, which is estimated as of the date of the grant using a Monte Carlo simulation model. Compensation expense related to the performance shares for the years ended September 30, 2017 and 2018 was \$336 and \$500, respectively. The remaining unrecognized compensation expense related to performance shares at September 30, 2018 was \$661, to be recognized over a weighted average period of 1.45 years.

Stock Option Plans

The Company's 2016 Incentive Compensation Plan and its two 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. The first option plan was adopted in August 2004 and provided for the grant of options to purchase up to 1,000,000 shares of the Company's common stock. In January 2007, the Company's Board of Directors adopted a second option plan that provides for the grant of options to purchase up to 500,000 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 two previous stock option plans, although awards remain outstanding thereunder. 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 33¹/₃% 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 2016, 2017 and 2018:

Grant Date	Fair Value	Dividend Yield	Risk-free Interest Rate	Expected Volatility	Expected Life
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
November 24, 2015.....	\$ 8.37	2.33 %	1.70 %	30 %	5 years

The stock-based employee compensation expense for stock options for the years ended September 30, 2016, 2017 and 2018 was \$514, \$433 and \$546, respectively. The remaining unrecognized compensation expense at September 30, 2018 was \$666, to be recognized over a weighted average vesting period of 0.83 years.

The following table summarizes the activity under the stock option plans for the year ended September 30, 2018:

	Number of Shares	Aggregate Intrinsic Value (000s)	Weighted Average Exercise Prices	Weighted Average Remaining Contractual Life
Outstanding at September 30, 2017	425,326		\$ 44.93	
Granted	77,550		\$ 34.08	
Exercised	—		\$ 0.00	
Canceled	(92,201)		\$ 45.64	
Outstanding at September 30, 2018	410,675	\$ 373	\$ 42.72	5.72 yrs.
Vested or expected to vest	376,160	\$ 366	\$ 42.58	5.69 yrs.
Exercisable at September 30, 2018	316,775	\$ 232	\$ 44.51	4.82 yrs.

In March 2016, the FASB issued ASU 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. The objective of this update was to simplify the accounting for share-based payment transactions, including the income tax consequences of awards as either equity or liabilities, and classification on the statement of cash flows. As permitted, the Company early adopted this standard prospectively for the fiscal year beginning October 1, 2016. Prior periods were not retrospectively adjusted.

Note 12. Quarterly Data (unaudited)

The unaudited quarterly results of operations of the Company for the years ended September 30, 2017 and 2018 are as follows:

	2017			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	\$ 93,355	\$ 103,112	\$ 97,977	\$ 100,765
Gross profit	10,487	9,788	3,662	5,773
Net income (loss)	(672)	(1,890)	(3,967)	(3,661)
Net income (loss) per share:				
Basic	\$ (0.06)	\$ (0.15)	\$ (0.32)	\$ (0.30)
Diluted	\$ (0.06)	\$ (0.15)	\$ (0.32)	\$ (0.30)
	2018			
	Quarter Ended			
	December 31	March 31	June 30	September 30
Net revenues	\$ 89,693	\$ 110,206	\$ 113,114	\$ 122,313
Gross profit	7,010	11,452	13,270	15,946
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

Note 13. 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,		
	2016	2017	2018
Net Revenue by Geography:			
United States	\$ 233,612	\$ 235,500	\$ 258,275
Europe	101,853	98,096	113,967
China	13,808	18,997	24,640
Other	57,086	42,616	38,444
Net Revenues	<u>\$ 406,359</u>	<u>\$ 395,209</u>	<u>\$ 435,326</u>
Net Revenue by Product Group:			
High-temperature resistant alloys	\$ 329,151	\$ 320,119	\$ 352,614
Corrosive-resistant alloys	77,208	75,090	82,712
Net revenues	<u>\$ 406,359</u>	<u>\$ 395,209</u>	<u>\$ 435,326</u>

	September 30,	
	2017	2018
Long-lived Assets by Geography:		
United States	\$ 185,413	\$ 172,689
Europe	6,879	6,522
China	264	189
Total long-lived assets	<u>\$ 192,556</u>	<u>\$ 179,400</u>

Note 14. 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, 2018	620	688	(178)	1,130
September 30, 2017	402	228	(10)	620
September 30, 2016	869	(156)	(311)	402

⁽¹⁾ Uncollectible accounts written off net of recoveries.

Note 15. 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 \$25.0 million 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 of 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 16. 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, 2017 and 2018:

September 30, 2017 Fair Value Measurements at Reporting Date Using:					
	Level 1	Level 2	Level 3	NAV	Total
Assets:					
Pension plan assets	\$ —	\$ —	\$ —	\$ 224,094	\$ 224,094
Total fair value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 224,094</u>	<u>\$ 224,094</u>
September 30, 2018 Fair Value Measurements at Reporting Date Using:					
	Level 1	Level 2	Level 3	NAV	Total
Assets:					
Pension plan assets	\$ —	\$ —	\$ —	\$ 222,273	\$ 222,273
Total fair value	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 222,273</u>	<u>\$ 222,273</u>

The Company had no other financial assets or liabilities as of September 30, 2017 or 2018.

Note 17. 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,								
	2016			2017			2018		
	Pre-tax	Tax	Net	Pre-tax	Tax	Net	Pre-tax	Tax	Net
Net income (loss)			\$ 5,020			\$ (10,190)			\$ (21,751)
Other comprehensive income (loss):									
Pension and postretirement:									
Net gain (loss) arising during period . . .	\$ (18,299)	\$ 6,609	(11,690)	\$ 46,401	\$ (17,095)	29,306	\$ 33,518	\$ (7,576)	25,942
Amortization of prior service cost	(808)	299	(509)	808	(298)	510	374	(99)	275
Amortization of (gain) loss	(11,663)	4,293	(7,370)	15,517	(5,709)	9,808	7,887	(2,075)	5,812
Foreign currency translation adjustment	(7,001)	—	(7,001)	2,205	—	2,205	(1,900)	—	(1,900)
Other comprehensive income (loss)	\$ (37,771)	\$ 11,201	(26,570)	\$ 64,931	\$ (23,102)	41,829	\$ 39,879	\$ (9,750)	30,129
Total comprehensive income (loss)			\$ (21,550)			\$ 31,639			\$ 8,378

Accumulated Other Comprehensive Income (Loss)

	Year Ended September 30, 2017			
	Pension Plan	Postretirement Plan	Foreign Exchange	Total
Accumulated other comprehensive income (loss) as of September 30, 2016	\$ (74,742)	\$ (29,585)	\$ (10,196)	\$ (114,523)
Other comprehensive income (loss) before reclassifications	24,109	5,197	2,205	31,511
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items ⁽¹⁾	808	—	—	808
Actuarial losses ⁽¹⁾	11,239	4,278	—	15,517
Tax benefit	(4,426)	(1,581)	—	(6,007)
Net current-period other comprehensive income (loss)	31,730	7,894	2,205	41,829
Accumulated other comprehensive income (loss) as of September 30, 2017	\$ (43,012)	\$ (21,691)	\$ (7,991)	\$ (72,694)
	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 ^(a)	374	—	—	374
Actuarial losses ^(a)	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 loss as of September 30, 2018	\$ (21,473)	\$ (11,201)	\$ (9,891)	\$ (42,565)

⁽¹⁾ These accumulated other comprehensive income components are included in the computation of net periodic pension cost.

Note 18. Long-term Obligation

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, 2018, future minimum lease rental payments applicable to the lease obligations were as follows.

2019	\$	989
2020		994
2021		1,001
2022		1,012
2023		1,024
Thereafter		<u>12,572</u>
Total minimum lease payments		17,592
Less amounts representing interest		<u>(9,466)</u>
Present value of net minimum lease payments		8,126
Less current obligation		<u>(147)</u>
Total long-term lease obligation	\$	<u><u>7,979</u></u>

The lease obligations is included in Long-term obligations (less current portion) on the Consolidated Balance Sheet.

	<u>September 30,</u>	
	<u>2017</u>	<u>2018</u>
Capital lease rental payments	\$ 4,275	\$ 4,207
Finance lease rental payments	4,017	3,920
Environmental post-closure monitoring and maintenance activities	633	504
Deferred dividends	—	14
Less amounts due within one year	<u>(1,029)</u>	<u>(202)</u>
Long-term obligations (less current portion)	<u>\$ 7,896</u>	<u>\$ 8,443</u>

Note 19. 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 contracts 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, there are no contracts that remain unsettled. As a result, there is no impact to the balance sheet as of September 30, 2018. 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
Foreign Currency Transactional Gain (Loss)	\$ 411
Foreign Exchange Forward Contract Gain (Loss)	<u>(918)</u>
Net gain (loss) included in Selling, General and administrative expense	<u><u>\$ (507)</u></u>

The net loss from foreign currency transactions during fiscal 2018 includes \$643 of loss incurred prior to third quarter of fiscal 2018 when the Company began to enter into foreign currency forward contracts. The Company began using forward currency forward contracts as a mechanism to reduce income statement volatility from foreign currency denominated transactions at the beginning of the third quarter of fiscal 2018.

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, 2018.

Changes in Internal Control Over Financial Reporting

During the quarter ended September 30, 2018, 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, 2018, 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, 2018 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 15, 2018

Daniel W. Maudlin
Vice President of Finance and Chief Financial Officer
November 15, 2018

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”, “Section 16(a) Beneficial Ownership Reporting Compliance”, “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 27, 2019 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 27, 2019 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 27, 2019 is incorporated herein by reference in response to this item. For additional information regarding the Company’s stock option plans, please see Note 11 in the Notes to Consolidated Financial Statements in this report.

Equity Compensation Plan Information

The following table provides information as of September 30, 2018 regarding shares of the Company’s common stock issuable pursuant to its stock option and restricted stock plans:

<u>Plan Category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in the second column)</u>
Equity compensation plans approved by security holders ⁽¹⁾ .	410,675	\$ 42.72	540,687 ⁽²⁾

⁽¹⁾ For a description of the Company’s equity compensation plans, see Note 11 to the Consolidated Financial Statements in Item 8.

⁽²⁾ Includes (i) 341,726 shares of stock options or stock appreciation rights and (ii) 198,961 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 27, 2019 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 27, 2019 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).
10.10	Non-Qualified Stock Option Agreement by and between Haynes International, Inc. and Mark Comerford, dated October 1, 2008 (incorporated by reference to Exhibit 10.2 to Haynes International, Inc. Form 8-K filed October 7, 2008).
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 2018 Management Incentive Plan and Deferred Compensation Plan (incorporated by reference to Item 5.02 of the Haynes International, Inc. Form 8-K filed November 27, 2017).

Exhibit Number	Description
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).
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.
10.25**	Executive Employment Agreement, effective as of September 1, 2018, by and between the Company and Michael L. Shor.
10.26	Interim Executive Employment Agreement, dated as of June 1, 2018 by and between the Company and Michael L. Shor (incorporated by reference to Exhibit 10.1 to the Haynes International, Inc. Form 10-Q for the fiscal quarter ended June 30, 2018).
10.27	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.
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

Exhibit Number	Description
101**	The following materials from the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2018 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Balance Sheets; (ii) 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 15, 2018

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MICHAEL L. SHOR</u> Michael L. Shor	President and Chief Executive Officer; Director (Principal Executive Officer)	November 15, 2018
<u>/s/ DANIEL W. MAUDLIN</u> Daniel W. Maudlin	Vice President of Finance and Chief Financial Officer (Principal Financial Officer)	November 15, 2018
<u>/s/ DAVID S. VAN BIBBER</u> David S. Van Bibber	Controller and Chief Accounting Officer (Principal Accounting Officer)	November 15, 2018
<u>/s/ ROBERT H. GETZ</u> Robert H. Getz	Chairman of the Board, Director	November 15, 2018
<u>/s/ DONALD C. CAMPION</u> Donald C. Campion	Director	November 15, 2018
<u>/s/ JOHN C. COREY</u> John C. Corey	Director	November 15, 2018
<u>/s/ DAWNE S. HICKTON</u> Dawne S. Hickton	Director	November 15, 2018
<u>/s/ WILLIAM P. WALL</u> William P. Wall	Director	November 15, 2018

HAYNES INTERNATIONAL, INC. SUBSIDIARIES

<u>Subsidiary</u>	<u>Jurisdiction of Organization</u>
LaPorte Custom Metal Processing, LLC (Wholly owned subsidiary in LaPorte, Indiana)	Delaware
Haynes International, Ltd. (Wholly owned subsidiary in Openshaw, England)	United Kingdom
Haynes International, S.A.R.L. (Wholly owned subsidiary in Paris, France)	France
Haynes International, AG (Wholly owned subsidiary in Zurich, Switzerland)	Switzerland
Haynes International, S.r.l. (Wholly owned subsidiary of Haynes International, AG in Italy)	Italy
Haynes Pacific Pte. Ltd. (Wholly owned subsidiary in Singapore)	Singapore
Haynes International (China) Ltd. (Wholly owned subsidiary of Haynes Pacific Pte. Ltd.)	People's Republic of China
Haynes International (China) Trading Co., Ltd. (Wholly owned subsidiary of Haynes Pacific Pte. Ltd.)	People's Republic of China
Haynes International K. K. (Wholly owned subsidiary of Haynes Pacific Pte. Ltd.)	Japan

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 and on Forms S-8 of our report dated November 15, 2018, 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, 2018.

/s/ Deloitte & Touche LLP

Indianapolis, Indiana
November 15, 2018

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-15(f) 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 15, 2018

/s/ MICHAEL L. SHOR

Michael L. Shor
President and Chief Executive Officer

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 15, 2018

/s/ DANIEL W. MAUDLIN

Daniel W. Maudlin
*Vice President of Finance and
Chief Financial Officer*

**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, 2018 (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 15, 2018

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, 2018 (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 15, 2018

Date

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