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

FORM 10-Q

(Mark One)

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

For the quarterly period ended December 31, 2019

or

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

For the transition period from to

Commission File Number: 001-33288

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

Delaware (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:

Tile of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $.001 per share	**"HAYN"**	**NASDAQ Global Market**

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

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

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

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

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

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

As of January 30, 2020, the registrant had 12,556,255 shares of Common Stock, $.001 par value, outstanding.

QUARTERLY REPORT ON FORM 10-Q
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PART 1 FINANCIAL INFORMATION
Item 1. Unaudited Condensed Consolidated Financial Statements

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Unaudited)
(in thousands, except share and per share data)

	September 30, 2019	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 31,038	$ 33,619
Accounts receivable, less allowance for doubtful accounts of $441 and $464 at September 30, 2019 and December 31, 2019, respectively	76,979	66,034
Inventories	258,802	282,019
Income taxes receivable	1,757	457
Other current assets	3,297	3,668
Total current assets	371,873	385,797
Property, plant and equipment, net	169,966	167,400
Deferred income taxes	34,132	33,584
Other assets	7,756	10,164
Goodwill	4,789	4,789
Other intangible assets, net	5,284	5,233
Total assets	$ 593,800	$ 606,967
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 34,497	$ 40,197
Accrued expenses	18,833	17,615
Income taxes payable	—	481
Accrued pension and postretirement benefits	4,250	4,250
Deferred revenue—current portion	2,500	2,500
Total current liabilities	60,080	65,043
Long-term obligations (less current portion) (Note 15)	8,609	8,634
Deferred revenue (less current portion)	15,329	14,704
Deferred income taxes	2,016	2,016
Operating lease liabilities	—	2,562
Accrued pension benefits (less current portion)	101,812	100,167
Accrued postretirement benefits (less current portion)	109,679	110,215
Total liabilities	297,525	303,341
Commitments and contingencies (Note 7)	—	—
Stockholders' equity:		
Common stock, $0.001 par value (40,000,000 shares authorized, 12,566,969 and 12,615,164 shares issued and 12,513,500 and 12,556,255 shares outstanding at September 30, 2019 and December 31, 2019, respectively)	13	13
Preferred stock, $0.001 par value (20,000,000 shares authorized, 0 shares issued and outstanding)	—	—
Additional paid-in capital	253,843	254,999
Accumulated earnings	125,296	139,010
Treasury stock, 53,469 shares at September 30, 2019 and 58,909 shares at December 31, 2019	(2,239)	(2,437)
Accumulated other comprehensive loss	(80,638)	(87,959)
Total stockholders' equity	296,275	303,626
Total liabilities and stockholders' equity	$ 593,800	$ 606,967

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

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)
(in thousands, except per share data)

	Three Months Ended December 31, 2018	Three Months Ended December 31, 2019
Net revenues	$ 107,069	$ 108,453
Cost of sales	95,734	89,710
Gross profit	11,335	18,743
Selling, general and administrative expense	11,128	11,507
Research and technical expense	834	882
Operating income (loss)	(627)	6,354
Nonoperating retirement benefit expense	856	1,700
Interest income	(20)	(14)
Interest expense	241	251
Income (loss) before income taxes	(1,704)	4,417
Provision for (benefit from) income taxes	(101)	1,149
Net income (loss)	$ (1,603)	$ 3,268
Net income (loss) per share:		
Basic	$ (0.13)	$ 0.26
Diluted	$ (0.13)	$ 0.26
Weighted Average Common Shares Outstanding		
Basic	12,431	12,460
Diluted	12,431	12,502
Dividends declared per common share	$ 0.22	$ 0.22

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

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)
(in thousands)

	Three Months Ended December 31,	
	2018	2019
Net income (loss)	$ (1,603)	$ 3,268
Other comprehensive income (loss), net of tax:		
Pension and postretirement	580	1,719
Foreign currency translation adjustment	(1,171)	4,243
Other comprehensive income (loss)	(591)	5,962
Comprehensive income (loss)	$ (2,194)	$ 9,230

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

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)
(in thousands, except share data)

	Three Months Ended December 31, 2018						
	Common Stock		Additional Paid-in Capital	Accumulated Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par					
Balance September 30, 2018	12,504,478	$ 13	$ 251,053	$ 126,588	$ (1,869)	$ (42,565)	$ 333,220
Net income (loss)				(1,603)			(1,603)
Dividends paid and accrued ($0.22 per share)				(2,759)			(2,759)
Other comprehensive income (loss)						(591)	(591)
Exercise of stock options	12,084		215				215
Issue restricted stock (less forfeitures)	10,156						—
Purchase of treasury stock	(9,226)				(308)		(308)
Stock compensation			450				450
Balance December 31, 2018	12,517,492	$ 13	$ 251,718	$ 122,226	$ (2,177)	$ (43,156)	$ 328,624

	Three Months Ended December 31, 2019						
	Common Stock		Additional Paid-in Capital	Accumulated Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par					
Balance September 30, 2019	12,513,500	$ 13	$ 253,843	$ 125,296	$ (2,239)	$ (80,638)	$ 296,275
Net income (loss)				3,268			3,268
Dividends paid and accrued ($0.22 per share)				(2,837)			(2,837)
Other comprehensive income (loss)						5,962	5,962
Exercise of stock options	12,400		422				422
Tax impact of forfeited vested options							—
Tax impact of dividends on restricted stock							—
Reclass due to adoption of ASU 2018-02				13,283		(13,283)	—
Issue restricted stock (less forfeitures)	35,795						—
Purchase of treasury stock	(5,440)				(198)		(198)
Stock compensation			734				734
Balance December 31, 2019	12,556,255	$ 13	$ 254,999	$ 139,010	$ (2,437)	$ (87,959)	$ 303,626

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

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(in thousands)

	Three Months Ended December 31,	
	2018	2019
Cash flows from operating activities:		
Net income (loss)	$ (1,603)	$ 3,268
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation	4,550	4,752
Amortization	105	51
Pension and post-retirement expense - U.S. and U.K.	2,245	3,437
Change in long-term obligations	(7)	(12)
Stock compensation expense	450	734
Deferred revenue	(625)	(625)
Deferred income taxes	289	(84)
Loss on disposition of property	5	—
Change in assets and liabilities:		
Accounts receivable	8,106	11,941
Inventories	(8,815)	(19,983)
Other assets	(293)	(206)
Accounts payable and accrued expenses	(1,458)	4,207
Income taxes	5,081	1,761
Accrued pension and postretirement benefits	(934)	(2,213)
Net cash provided by (used in) operating activities	7,096	7,028
Cash flows from investing activities:		
Additions to property, plant and equipment	(2,271)	(2,296)
Net cash provided by (used in) investing activities	(2,271)	(2,296)
Cash flows from financing activities:		
Revolving credit facility borrowings	2,000	—
Revolving credit facility repayments	(2,000)	—
Dividends paid	(2,752)	(2,760)
Proceeds from exercise of stock options	215	422
Payment for purchase of treasury stock	(308)	(198)
Payments on long-term obligation	(34)	(40)
Net cash provided by (used in) financing activities	(2,879)	(2,576)
Effect of exchange rates on cash	(139)	425
Increase (decrease) in cash and cash equivalents:	1,807	2,581
Cash, cash equivalents and restricted cash:		
Beginning of period	9,802	31,038
End of period	$ 11,609	$ 33,619
Supplemental disclosures of cash flow information:		
Interest (net of capitalized interest)	$ 226	$ 236
Income taxes paid (refunded), net	$ (5,472)	$ (526)
Capital expenditures incurred, but not yet paid	$ 952	$ 106
Dividends declared but not yet paid	$ 7	$ 117

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

HAYNES INTERNATIONAL, INC. and SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)
(in thousands, except share and per share data)

Note 1. Basis of Presentation

Interim Financial Statements

The accompanying unaudited condensed interim consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”), and such principles are applied on a basis consistent with information reflected in the Company’s Annual Report on Form 10-K for the fiscal year ended September 30, 2019 filed with the Securities and Exchange Commission (“SEC”). Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to the rules and regulations promulgated by the SEC related to interim financial statements. In the opinion of management, the interim financial information includes all adjustments and accruals which are necessary for a fair presentation of results for the respective interim periods. The results of operations for the three months ended December 31, 2019 are not necessarily indicative of the results to be expected for the full fiscal year ending September 30, 2020 or any interim period.

Principles of Consolidation

The consolidated financial statements include the accounts of Haynes International, Inc. and directly or indirectly wholly-owned subsidiaries (collectively, the “Company”). All intercompany transactions and balances are eliminated.

Note 2. Recently Issued Accounting Standards

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This new guidance requires 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 15, 2018, including interim periods within those fiscal years. The Company adopted the provisions of ASU 2016-02 in the first quarter of fiscal year 2020 using the modified retrospective transition method, which did not require the Company to adjust comparative periods. The Company’s right-of-use assets (“ROU”) and lease liabilities are recognized on the lease commencement date in an amount that represents the present value of future lease payments. ROU assets are included in Other assets, and the related lease obligation is included in Operating lease liabilities on the consolidated balance sheets. The adoption of the standard had no material impact on the Consolidated Financial Statements.

The Company elected the package of practical expedients included in this guidance which allowed it to not reassess: (i) whether any expired or existing contracts contain leases; (ii) the lease classification for any expired or existing leases; and, (iii) the initial direct costs for existing leases. The Company has elected the practical expedient to not separate lease components from non-lease components for all asset classes. The Company will recognize lease expense in the consolidated statements of operations on a straight-line basis over the lease term. The Company also made a policy election to not recognize ROU asset and lease liabilities for short-term leases with an initial term of 12 months or less for all asset classes. Leases with the option to extend their term are reflected in the lease term when it is reasonably certain that the Company will exercise such options. The Company has expanded the disclosure of operating leases included in Note 16.

In February 2018, the FASB issued ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220) Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows a reclassification from accumulated other comprehensive income (loss) to accumulated earnings for standard tax effects resulting from the Tax Cuts and Jobs Act. This update is effective for fiscal years beginning after December 15, 2018. The Company adopted the provisions of this standard in the first quarter of fiscal year 2020 which had an impact of increasing accumulated other comprehensive loss and increasing accumulated earnings by $13,283.

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 June 2016, the FASB issued ASU 2016-05, *Financial Instruments – Credit Losses (Topic 326)* which introduced the expected credit losses methodology for the measurement of credit losses on financial assets measured at amortized cost basis, replacing the previous incurred loss methodology. The new current expected credit loss (CECL) methodology does not have a minimum threshold for recognition of impairment losses, and entities will need to measure expected credit losses on assets that have a low risk of loss. This update is effective for fiscal years beginning after December 15, 2019. The Company is currently evaluating the impact, if any, on the Company's Consolidated Financial Statements.

Note 3. Revenues from Contracts with Customers

Contract Balances

As of September 30, 2019 and December 31, 2019, accounts receivable with customers were $77,420 and $66,498, respectively. Allowance for doubtful accounts as of September 30, 2019 and December 31, 2019 were $441 and $464, respectively, and are presented within accounts receivable, less allowance for doubtful accounts on the consolidated balance sheet.

Contract liabilities are recognized when the Company has received consideration from a customer to transfer goods or services at a future point in time when the Company performs under the purchase order or contract. As of September 30, 2019 and December 31, 2019, no contract liabilities have been recorded except for $17,829 and $17,204, respectively, for the Titanium Metals Corporation agreement, as described in Note 8 to the Condensed Consolidated Financial Statements.

Disaggregation of Revenue

Revenue is disaggregated by end-use markets. The following table includes a breakdown of net revenues to the markets served by the Company for the three months ended December 31, 2018 and 2019.

	Three Months Ended December 31,	
	2018	2019
Net revenues (dollars in thousands)		
Aerospace	$ 54,607	$ 58,843
Chemical processing	18,920	16,712
Industrial gas turbine	14,083	13,763
Other markets	14,285	11,875
Total product revenue	101,895	101,193
Other revenue	5,174	7,260
Net revenues	$ 107,069	$ 108,453

Note 4. Inventories

The following is a summary of the major classes of inventories:

	September 30, 2019	December 31, 2019
Raw Materials	$ 17,935	$ 23,013
Work-in-process	138,859	146,411
Finished Goods	100,590	111,197
Other	1,418	1,398
	$ 258,802	$ 282,019

Note 5. Income Taxes

Income tax expense for the three months ended December 31, 2018 and 2019 differed from the U.S. federal statutory rate of 21.0%, primarily due to state income taxes, differing tax rates on foreign earnings and discrete tax items that impacted income tax expense in these periods. The effective tax rate for the three months ended December 31, 2018 was 5.9% on ($1,704) of loss before income taxes and 26.0% on income before income taxes of $4,417 for the three months ended December 31, 2019. Income tax expense in the first three months of fiscal 2019 was unfavorably impacted by the forfeiture of unexercised stock options, which resulted in approximately $300 of additional tax expense.

Note 6. Pension and Post-retirement Benefits

Components of net periodic pension and post-retirement benefit cost for the three months ended December 31, 2018 and 2019 were as follows:

	Three Months Ended December 31,			
	Pension Benefits		Other Benefits	
	2018	2019	2018	2019
Service cost	$ 1,310	$ 1,386	$ 79	$ 354
Interest cost	2,566	2,148	1,088	873
Expected return	(3,572)	(3,645)	—	—
Amortizations	402	1,859	372	462
Net periodic benefit cost	$ 706	$ 1,748	$ 1,539	$ 1,689

The Company contributed $1,500 to Company-sponsored domestic pension plans, $691 to its other post-retirement benefit plans and $198 to the U.K. pension plan for the three months ended December 31, 2019. The Company expects to make contributions of $4,500 to its U.S. pension plan, $3,463 to its other post-retirement benefit plan and $540 to the U.K. pension plan for the remainder of fiscal 2020.

Note 7. 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.

In January 2017, a customer based in the United Kingdom wrote to the Company making a claim in relation to certain product sold to that customer by the Company. This writing was followed up by claim correspondence in 2018 and 2019. The Company has engaged its legal advisors in the United Kingdom to respond to the claim, and correspondence between the parties' respective counsel remains ongoing. To date, the insurers have not accepted coverage responsibility for the claim but have agreed to fund expenses of legal counsel selected by the Company through the date of the determination regarding coverage. The Company intends to pursue such coverage as and if necessary while vigorously defending against the customer claim. Liability for the claim is disputed, and the amount of the claim, if any, remains unclear. Based on the facts presently known, management does not believe that the claim will have a material effect on the Company's financial position, results of operations or cash flows.

Environmental

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

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

As of September 30, 2019 and December 31, 2019, the Company has accrued $606 for post-closure monitoring and maintenance activities, of which $508 is included in long-term obligations as it is not due within one year. Accruals for these costs are calculated by estimating the cost to monitor and maintain each post-closure site and multiplying that amount by the number of years remaining in the post-closure monitoring.

Expected maturities of post-closure monitoring and maintenance activities (discounted) included in long-term obligations are as follows at December 31, 2019.

Expected maturities of post-closure monitoring and maintenance activities (discounted)

Year Ended September 30,		
2021	$	74
2022		64
2023		81
2024		60
2025 and thereafter		229
	$	508

On February 11, 2016, the Company voluntarily reported to the Louisiana Department of Environmental Quality a leak that it discovered in one of its chemical cleaning operations at its Arcadia, Louisiana facility. As a result of the discovery, the Company is working with that department to determine the extent of the issue and appropriate remediation. Management does not currently expect that any remediation costs related to this matter will have a material adverse effect on the Company's results of operations.

Note 8. Deferred Revenue

On November 17, 2006, the Company entered into a twenty-year agreement to provide conversion services to Titanium Metals Corporation (TIMET) for up to ten million pounds of titanium metal annually. TIMET paid the Company a $50,000 up-front fee and will also pay the Company for its processing services during the term of the agreement (20 years) at prices established by the terms of the agreement. TIMET may exercise an option to have ten million additional pounds of titanium converted annually, provided that it offers to loan up to $12,000 to the Company for certain capital expenditures which may be required to expand capacity. In addition to the volume commitment, the Company has granted TIMET a first priority security interest in its four-high Steckel rolling mill, along with rights of access if the Company enters into bankruptcy or defaults on any financing arrangements. The Company has agreed not to manufacture titanium products (other than cold reduced titanium tubing). The Company has also agreed not to provide titanium hot-rolling conversion services to any entity other than TIMET for the term of the Conversion Services Agreement. The agreement contains certain default provisions which could result in contract termination and damages, including liquidated damages of $25,000 and the Company being required to return the unearned portion of the up-front fee. The Company considered each provision and the likelihood of the occurrence of a default that would result in liquidated damages. Based on the nature of the events that could trigger the liquidated damages clause, and the availability of the cure periods set forth in the agreement, the Company determined and continues to believe that none of these circumstances are reasonably likely to occur. Therefore, events resulting in liquidated damages have not been factored in as a reduction to the amount of revenue recognized over the life of the contract. The cash received of $50,000 is recognized in income on a straight-line basis over the 20-year term of the agreement. If an event of default occurred and was not cured within any applicable grace period, the Company would recognize the impact of the liquidated damages in the period of default and re-evaluate revenue recognition under the contract for future periods. The portion of the up-front fee not recognized in income is shown as deferred revenue on the consolidated balance sheet.

Note 9. Goodwill and Other Intangible Assets, Net

The Company has goodwill, trademarks, customer relationships and other intangibles. As the customer relationships have a definite life, they are amortized over lives ranging from fifteen years. The Company reviews customer relationships for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of the assets is measured by a comparison of the carrying amount of the asset to the undiscounted 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 a trademark exceeds its 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 has been recognized as of December 31, 2019.

During the first three months of fiscal 2020, there were no changes in the carrying amount of goodwill.

Amortization of customer relationships and other intangibles was $105 and $51 for the three-month periods ended December 31, 2018 and 2019, respectively The following represents a summary of intangible assets at September 30, 2019 and December 31, 2019.

September 30, 2019	**Gross Amount**	**Accumulated Amortization**	**Carrying Amount**
Trademarks	3,800	—	3,800
Customer relationships	2,100	(718)	1,382
Other	291	(189)	102
	$ 6,191	$ (907)	$ 5,284

December 31, 2019	**Gross Amount**	**Accumulated Amortization**	**Carrying Amount**
Trademarks	$ 3,800	$ —	$ 3,800
Customer relationships	2,100	(754)	1,346
Other	291	(204)	87
	$ 6,191	$ (958)	$ 5,233

Estimated future Aggregate Amortization Expense: **Year Ended September 30,**	
2020	$ 147
2021	185
2022	133
2023	129
2024	126
Thereafter	713

Note 10. Net Income (Loss) Per Share

The Company accounts for earnings per share using the two-class method. The two-class method is an earnings allocation that determines net income per share for each class of common stock and participating securities according to participation rights in undistributed earnings. Non-vested restricted stock awards that include non-forfeitable rights to dividends are considered participating securities. Basic earnings per share is computed by dividing net income available to common stockholders for the period by the weighted average number of common shares outstanding for the period. The computation of diluted earnings per share is similar to basic earnings per share, except the denominator is increased to include the number of additional common shares that would have been outstanding if the potentially dilutive common shares had been issued.

The following table sets forth the computation of basic and diluted earnings (losses) per share for the periods indicated:

(in thousands, except share and per share data)	Three Months Ended December 31, 2018	Three Months Ended December 31, 2019
Numerator: Basic and Diluted		
Net income (loss)	$ (1,603)	$ 3,268
Dividends paid and accrued	(2,759)	(2,837)
Undistributed income (loss)	(4,362)	431
Percentage allocated to common shares [(a)]	100.0 %	99.3 %
Undistributed income (loss) allocated to common shares	(4,362)	428
Dividends paid on common shares outstanding	2,737	2,818
Net income (loss) available to common shares	(1,625)	3,246
Denominator: Basic and Diluted		
Weighted average common shares outstanding	12,430,785	12,459,930
Adjustment for dilutive potential common shares	—	41,582
Weighted average shares outstanding - Diluted	12,430,785	12,501,512
Basic net income (loss) per share	$ (0.13)	$ 0.26
Diluted net income (loss) per share	$ (0.13)	$ 0.26
Number of stock option shares excluded as their effect would be anti-dilutive	227,565	502,301
Number of restricted stock shares excluded as their effect would be anti-dilutive	68,700	—
Number of deferred restricted stock shares excluded as their effect would be anti-dilutive	29,050	—
Number of performance share awards excluded as their effect would be anti-dilutive	43,101	—
[(a)] Percentage allocated to common shares - Weighted average		
Common shares outstanding	12,430,785	12,459,930
Unvested participating shares	—	83,283
	12,430,785	12,543,213

Note 11. Stock-Based Compensation

Restricted Stock

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 three months ended December 31, 2019:

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2019	61,838	$ 34.94
Granted	35,795	$ 37.00
Vested	(14,350)	$ 40.86
Unvested at December 31, 2019	83,283	$ 34.81
Expected to vest	83,283	$ 34.81

Compensation expense related to restricted stock for the three months ended December 31, 2018 and 2019 was $53 and $215, respectively. The remaining unrecognized compensation expense related to restricted stock at December 31, 2019 was $2,085, to be recognized over a weighted average period of 1.81 years. During the first three months of fiscal 2020, the Company repurchased 5,440 shares of stock from employees at an average purchase price of $36.38 to satisfy required withholding taxes upon vesting of restricted stock-based compensation.

Deferred Restricted Stock

The following table summarizes the activity under the 2016 Incentive Compensation Plan with respect to deferred restricted stock for the three months ended December 31, 2019.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested and deferred at September 30, 2019	12,500	$ 33.98
Granted	4,594	$ 37.00
Vested and deferred	(12,500)	33.98
Unvested and deferred at December 31, 2019	4,594	$ 37.00
Vested and deferred at December 31, 2019	29,050	$ 32.72

Compensation expense related to deferred restricted stock for the three months ended December 31, 2018 and 2019 was $124 and $85, respectively. The remaining recognized compensation expense related to deferred restricted stock at December 31, 2019 was $156, to be recognized over a weighted average period of 0.92 years.

Performance Shares

The following table summarizes the activity under the 2016 Incentive Compensation Plan with respect to performance shares for the three months ended December 31, 2019.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2019	38,553	$ 42.52
Granted	23,880	$ 44.13
Unvested at December 31, 2019	62,433	$ 43.14

Compensation expense related to the performance shares for the three months ended December 31, 2018 and 2019 was $121 and $176, respectively. The remaining unrecognized compensation expense related to performance shares at December 31, 2019 was $1,844, to be recognized over a weighted average period of 1.94 years.

Stock Options

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 2019 and 2020:

Grant Date	Fair Value	Dividend Yield	Risk-free Interest Rate	Expected Volatility	Expected Life
November 19, 2019	$ 9.66	2.38 %	1.65 %	35 %	5 years

The stock-based employee compensation expense for stock options for the three months ended December 31, 2018 and 2019 was $152 and $258, respectively. The remaining unrecognized compensation expense at December 31, 2019 was $2,360, to be recognized over a weighted average vesting period of 2.25 years.

The following table summarizes the activity under the stock option plans and the 2016 Incentive Compensation Plan with respect to stock options for the nine months ended December 31, 2019 and provides information regarding outstanding stock options:

	Number of Shares	Aggregate Intrinsic Value (000s)	Weighted Average Exercise Prices	Weighted Average Remaining Contractual Life
Outstanding at September 30, 2019	482,391		$ 38.05	
Granted	91,466		$ 37.00	
Exercised	(12,400)		$ 34.00	
Outstanding at September 30, 2019	561,457	$ 646	$ 37.97	7.82 yrs.
Vested or expected to vest	519,065	$ 595	$ 37.90	7.89 yrs.
Exercisable at September 30, 2019	245,517	$ 145	$ 42.17	5.76 yrs.

Note 12. Dividend

In the first quarter of fiscal 2020, the Company declared and paid a quarterly cash dividend. The dividend of $0.22 per outstanding share of the Company's common stock was paid December 16, 2019 to stockholders of record at the close of business on December 2, 2019. The dividend cash pay-out was $2,760 for the quarter based on the number of shares outstanding and $77 of dividends were recorded as deferred.

On January 30, 2020, 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 March 16, 2020 to stockholders of record at the close of business on March 2, 2020.

Note 13. 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 and classifies such items within Level 1. 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. If quoted market prices are not available, the valuation model used depends on the specific asset or liability being valued. The fair value of cash and cash equivalents is determined using Level 1 information. The Company had no Level 2 or Level 3 assets or liabilities as of September 30, 2019 or December 31, 2019.

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)*.

Note 14. 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, post-retirement and foreign currency translation adjustments, primarily caused by the strengthening of the U.S. dollar against the British pound sterling, net of tax when applicable.

Accumulated Other Comprehensive Income (Loss)

	Three Months Ended December 31, 2018			
	Pension Plan	Postretirement Plan	Foreign Exchange	Total
Accumulated other comprehensive income (loss) as of September 30, 2018	$ (21,473)	$ (11,201)	$ (9,891)	$ (42,565)
Other comprehensive income (loss) before reclassifications	—	—	(1,171)	(1,171)
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items (1)	51	—	—	51
Actuarial losses (1)	364	372	—	736
Tax benefit	(108)	(99)	—	(207)
Net current-period other comprehensive income (loss)	307	273	(1,171)	(591)
Accumulated other comprehensive income (loss) as of December 31, 2018	$ (21,166)	$ (10,928)	$ (11,062)	$ (43,156)

	Three Months Ended December 31, 2019			
	Pension Plan	Postretirement Plan	Foreign Exchange	Total
Accumulated other comprehensive income (loss) as of September 30, 2019	$ (53,811)	$ (13,316)	$ (13,511)	$ (80,638)
Other comprehensive income (loss) before reclassifications	—	—	4,243	4,243
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items (1)	51	—	—	51
Actuarial losses (1)	1,820	462	—	2,282
Tax benefit	(493)	(121)	—	(614)
Net current-period other comprehensive income (loss)	1,378	341	4,243	5,962
Reclass due to adoption of ASU 2018-02	(8,509)	(4,774)	—	(13,283)
Accumulated other comprehensive loss as of December 31, 2019	$ (60,942)	$ (17,749)	$ (9,268)	$ (87,959)

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

Note 15. Long-term Obligations

The following table sets for the components of the Company's Long-term obligations.

	September 30, 2019	December 31, 2019
Finance lease obligations	$ 7,979	$ 7,938
Environmental post-closure monitoring and maintenance activities	606	606
Long-term disability	251	266
Deferred dividends	40	117
Less amounts due within one year	(267)	(293)
Long-term obligations (less current portion)	$ 8,609	$ 8,634

Note 16. Leases

Nature of the Leases

The Company has operating and financing leases for buildings, equipment (e.g. trucks and forklifts), vehicles, and computer equipment. Leasing arrangements require fixed payments and also include an amount that is probable will be owed under residual value guarantees, if applicable. Some lease payments also include payments related to purchase or termination options when the lessee is reasonably certain to exercise the option or is not reasonably certain not to exercise the option, respectively. The leases have remaining terms of one to 17 years.

For all leases with an initial expected term of more than 12 months, the Company recorded, at the adoption date of ASC 842 or lease commencement date for leases entered into after the adoption date, a lease liability, which is the lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or to control the use of, a specified asset for the lease term. The Company utilizes its collateralized incremental borrowing rate commensurate to the lease term as the discount rate for its leases, unless the Company can specifically determine the lessor's implicit rate.

Significant Judgments and Assumptions

Determination of Whether a Contract Contains a Lease

The Company determines whether a contract is or contains a lease at the inception of the contract. The contract is or contains a lease if the contract conveys the right to control the use of identified assets for a period of time in exchange for consideration. The Company generally must also have the right to obtain substantially all of the economic benefits from use of the property, plant, and equipment and have the right to direct its use.

Practical Expedients (Policy Elections)

The Company elected certain practical expedients and transition relief, including the short-term lease recognition exemption, which excludes leases with a term of 12 months or less from recognition on the balance sheet, recognizing lease components and non-lease components together as a single lease component, and the transition relief package which, among other things, includes not reassessing the lease classification or whether a contract is or contains a lease.

The following table sets forth the components of the Company's lease cost for the three months ended December 31, 2019.

	Three Months Ended December 31, 2019
Finance lease cost:	
Amortization of right of use asset	$ 108
Interest on lease liabilities	208
Total finance lease cost	$ 316
Operating lease cost	$ 355
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from finance leases	208
Operating cash flows from operating leases	355
Financing cash flows from finance leases	40
Total cash paid for amounts included in measurement of lease liabilities	$ 603

Lease costs associated with short term leases are not material.

The following table sets forth the Company's right of use assets and lease liabilities as of December 31, 2019.

	December 31, 2019
Finance lease assets (included in Property, plant and equipment, net)	6,826
Operating right of use lease assets (included in Other assets)	2,562
Total lease assets	$ 9,388
Finance lease liabilities	
Accrued expenses	176
Long-term obligations (less current portion)	7,763
Total Finance lease liabilities	$ 7,939
Operating lease liabilities	$ 2,562

	December 31, 2019
Weighted average lease term (Years)	
Finance leases	15.9
Operating leases	3.3
Weighted average discount rate	
Finance leases	10.33 %
Operating leases	5.25 %

The following is a table of future minimum lease payments during each fiscal year under operating and finance leases and the present value of the net minimum lease payments as of December 31, 2019.

Future minimum lease payments	Finance Leases	Operating Leases
2020	$ 747	$ 1,015
2021	1,001	769
2022	1,012	387
2023	1,024	289
2024	1,031	264
Thereafter	11,540	70
Total minimum lease payments	16,355	2,794
Less: amount representing interest	(8,416)	(232)
Present value of net minimum lease payments	$ 7,939	$ 2,562

The following is a table of future minimum lease payments as of September 30, 2019.

Contractual Obligations as of September 30, 2019	Finance Leases	Operating Leases
2020	$ 993	$ 2,542
2021	1,000	1,254
2022	1,013	460
2023	1,024	277
2024	1,032	259
Thereafter	11,623	60
Total minimum lease payments	16,685	4,852
Less: amount representing interest	(8,706)	—
Present value of net minimum lease payments	$ 7,979	$ 4,852

Note 17. Foreign Currency Forward Contracts

The Company enters into foreign currency forward contracts 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 December 31, 2019, there were no contracts that remain unsettled. As a result, there was no impact to the balance sheet from those contracts as of September 30, 2019 or December 31, 2019. Foreign exchange hedging gains and losses are recorded within selling, general and administrative expenses on the Consolidated Statements of Operations along with foreign currency transactional gains and losses as follows.

	Three Months Ended December 31,	
	2018	2019
Foreign currency transactional gain (loss)	$ 340	$ (1,071)
Foreign exchange forward contract gain (loss)	$ (497)	$ 479
Net gain (loss) included in selling, general and administrative expense	$ (157)	$ (592)

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

References to years or portions of years in Management's Discussion and Analysis of Financial Condition and Results of Operations refer to the Company's fiscal years ended September 30, unless otherwise indicated.

This Quarterly Report on Form 10-Q (this "Form 10-Q") 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 Form 10-Q 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 2020 and beyond, overall volume and pricing trends, cost reduction strategies and their anticipated results, 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. 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. Some, but not all, of these risks are described in Item 1A. of Part 1 of the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019.

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.

Business Overview

Haynes International, Inc. ("Haynes" or "the Company") is one of the world's largest producers of high-performance nickel and cobalt based alloys in 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, gas turbine engines, and industrial heating and heat treatment equipment. CRA products are used in applications that require resistance to very corrosive media found in chemical processing, power plant emissions control and hazardous waste treatment. Management believes Haynes is one of the principal producers of high-performance alloy flat products in sheet, coil and plate forms, and sales of these forms, in the aggregate, represented approximately 58% of net product revenues in fiscal 2019. The Company also produces its products as seamless and welded tubulars, and in slab, bar, billet and wire forms.

The Company has 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.

Dividends Paid and Declared

In the first quarter of fiscal 2020, the Company declared and paid a regular quarterly cash dividend of $0.22 per outstanding share of the Company's common stock. The dividend was paid on December 16, 2019 to stockholders of record at the close of business on December 2, 2019. The dividend cash pay-out in the first quarter was approximately $2.8 million based on the number of shares outstanding and equal to approximately $11.0 million on an annualized basis.

On January 30, 2020, 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 March 16, 2020 to stockholders of record at the close of business on March 2, 2020.

Capital Spending

During the first three months of fiscal 2020, capital investment was $2.3 million, and total planned capital expenditures for fiscal 2020 are expected to be approximately $12.0 million.

Volumes, Competition and Pricing

Overall shipments during the first quarter of fiscal 2020 declined from the prior quarter and prior year's first quarter due to a number of factors. Volume shipped in the first quarter of fiscal 2020 was 4.2 million pounds, which was 1.2 million pounds lower sequentially than the fourth quarter of fiscal 2019 and 0.1 million pounds lower than last year's first quarter, which was impacted by a planned equipment outage. Volume shipped into the aerospace market in the first quarter of fiscal 2020 was 0.4 million pounds lower sequentially compared to the fourth quarter of fiscal 2019 but higher than last year's first quarter by 0.2 million pounds. Uncertainty is elevated in the aerospace market with the Boeing announcement that it has temporarily suspended production of the grounded 737 MAX and the corresponding impact in the aerospace supply chain. The Company has also seen adjustments in the ordering patterns for supply chains other than the Boeing 737 MAX. These headwinds are detrimental to current and near-term shipments into the aerospace market. The Company believes the demand drivers in the aerospace market are favorable long-term. Volume shipped into the chemical processing market in the first quarter of fiscal 2020 was lower sequentially by 0.5 million pounds compared to the fourth quarter of fiscal 2019 and lower than the first quarter of fiscal year 2019 by 0.1 million pounds driven by lower base-business volumes which the Company attributes to trade tariffs and global economic uncertainty. However, the lower base-business was slightly offset by higher specialty application projects. Pounds shipped in the first quarter of fiscal 2020 into the industrial gas turbine market were 0.1 million pounds lower sequentially compared to the fourth quarter of fiscal 2019 but slightly higher than last year's first quarter. The primary industrial gas turbine market activity was attributable to a slight improvement in demand for large-frame turbines, while small/medium frame engine builds have slowed down primarily due to the oil and gas market. Volume shipped into the other markets category in the first quarter of fiscal 2020 was lower sequentially by 0.1 million pounds compared to the fourth quarter of fiscal 2019 and lower by 0.2 million pounds compared to last year's first quarter, driven by a reduction in flue gas desulfurization shipments.

The product average selling price per pound in the first quarter of fiscal 2020 was $23.97, which is higher sequentially compared to the fourth quarter of fiscal 2019 and higher than last year's first quarter. The increase is primarily driven by favorable product mix and price increases. The Company continues to emphasize price increases in our high-value differentiated products

Set forth below are selected data relating to the Company's net revenues, gross profit, backlog, the 30-day average nickel price per pound as reported by the London Metals Exchange and a breakdown of net revenues, shipments and average selling prices to the markets served by the Company for the periods shown. The data 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 Form 10-Q.

Net Revenue and Gross Profit Margin Performance:

	Quarter Ended				
(dollars in thousands)	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Net Revenues	$ 107,069	$ 127,474	$ 126,032	$ 129,640	$ 108,453
Gross Profit Margin	$ 11,335	$ 14,683	$ 18,175	$ 21,310	$ 18,743
Gross Profit Margin %	10.6 %	11.5 %	14.4 %	16.4 %	17.3 %

The gross profit margin percentage improved in the first quarter of fiscal 2020 to 17.3% as compared to 16.4% in the fourth quarter of fiscal 2019, even on lower topline net revenues, and continued the sequential improvement in each quarter since the beginning of fiscal 2019 with the progression being 10.6%, 11.5%, 14.4%, 16.4% and 17.3%. Continued traction of the Company's improvement initiatives related to price increases and cost reductions continue to favorably impact gross margins.

Backlog

	Quarter Ended				
	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Backlog[1]					
Dollars (in thousands)	$ 237,802	$ 253,003	$ 254,947	$ 235,204	$ 237,620
Pounds (in thousands)	8,392	8,855	9,072	8,064	8,231
Average selling price per pound	$ 28.34	$ 28.57	$ 28.10	$ 29.17	$ 28.87
Average nickel price per pound					
London Metals Exchange[2]	$ 4.92	$ 5.93	$ 5.43	$ 8.02	$ 6.26

(1) 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 nine months and approximately 90% have shipped within 12 months. The backlog figures do not reflect that portion of the business conducted at service and sales centers on a spot or “just-in-time” basis.

(2) 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 $237.6 million at December 31, 2019, an increase of $2.4 million, or 1.0%, from $235.2 million at September 30, 2019. Backlog pounds at December 31, 2019 increased sequentially during the first quarter of fiscal 2020 by 2.1% as compared to September 30, 2019. The average selling price of products in the Company’s backlog decreased to $28.87 per pound at December 31, 2019 from $29.17 per pound at September 31, 2019, reflecting a change in product mix and lower market prices for raw materials.

Quarterly Market Information

	Quarter Ended				
	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Net revenues (in thousands)					
Aerospace	$ 54,607	$ 68,858	$ 66,321	$ 68,318	$ 58,843
Chemical processing	18,920	21,761	21,197	27,773	16,712
Industrial gas turbines	14,083	13,685	15,870	15,792	13,763
Other markets	14,285	16,958	15,666	11,037	11,875
Total product revenue	101,895	121,262	119,054	122,920	101,193
Other revenue	5,174	6,212	6,978	6,720	7,260
Net revenues	$ 107,069	$ 127,474	$ 126,032	$ 129,640	$ 108,453
Shipments by markets (in thousands of pounds)					
Aerospace	2,112	2,857	2,579	2,731	2,303
Chemical processing	898	971	1,126	1,315	788
Industrial gas turbines	811	757	893	946	825
Other markets	509	580	523	432	306
Total shipments	4,330	5,165	5,121	5,424	4,222
Average selling price per pound					
Aerospace	$ 25.86	$ 24.10	$ 25.72	$ 25.02	$ 25.55
Chemical processing	21.07	22.41	18.83	21.12	21.21
Industrial gas turbines	17.36	18.08	17.77	16.69	16.68
Other markets	28.06	29.24	29.95	25.55	38.81
Total product (product only; excluding other revenue)	23.53	23.48	23.25	22.66	23.97
Total average selling price (including other revenue)	$ 24.73	$ 24.68	$ 24.61	$ 23.90	$ 25.69

Results of Operations for the Three Months Ended December 31, 2019 Compared to the Three Months Ended December 31, 2018

	Three Months Ended December 31,				Change	
($ in thousands)	2018		2019		Amount	%
Net revenues	$ 107,069	100.0 %	$ 108,453	100.0 %	$ 1,384	1.3 %
Cost of sales	95,734	89.4 %	89,710	82.7 %	(6,024)	(6.3)%
Gross profit	11,335	10.6 %	18,743	17.3 %	7,408	65.4 %
Selling, general and administrative expense	11,128	10.4 %	11,507	10.6 %	379	3.4 %
Research and technical expense	834	0.8 %	882	0.8 %	48	5.8 %
Operating income (loss)	(627)	(0.6)%	6,354	5.9 %	6,981	(1,113.4)%
Nonoperating retirement benefit expense	856	0.8 %	1,700	1.6 %	844	98.6 %
Interest income	(20)	(0.0)%	(14)	(0.0)%	6	(30.0)%
Interest expense	241	0.2 %	251	0.2 %	10	4.1 %
Income (loss) before income taxes	(1,704)	(1.6)%	4,417	4.1 %	6,121	(359.2)%
Provision for (benefit from) income taxes	(101)	(0.1)%	1,149	1.1 %	1,250	(1,237.6)%
Net income (loss)	$ (1,603)	(1.5)%	$ 3,268	3.0 %	$ 4,871	(303.9)%

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.

	Three Months Ended December 31,		Change	
	2018	2019	Amount	%
Net revenues (dollars in thousands)				
Aerospace	$ 54,607	$ 58,843	$ 4,236	7.8 %
Chemical processing	18,920	16,712	(2,208)	(11.7)%
Industrial gas turbine	14,083	13,763	(320)	(2.3)%
Other markets	14,285	11,875	(2,410)	(16.9)%
Total product revenue	101,895	101,193	(702)	(0.7)%
Other revenue	5,174	7,260	2,086	40.3 %
Net revenues	$ 107,069	$ 108,453	$ 1,384	1.3 %
Pounds by market (in thousands)				
Aerospace	2,112	2,303	191	9.0 %
Chemical processing	898	788	(110)	(12.2)%
Industrial gas turbine	811	825	14	1.7 %
Other markets	509	306	(203)	(39.9)%
Total shipments	4,330	4,222	(108)	(2.5)%
Average selling price per pound				
Aerospace	$ 25.86	$ 25.55	$ (0.31)	(1.2)%
Chemical processing	21.07	21.21	0.14	0.7 %
Industrial gas turbine	17.36	16.68	(0.68)	(3.9)%
Other markets	28.06	38.81	10.75	38.3 %
Total product (excluding other revenue)	23.53	23.97	0.44	1.9 %
Total average selling price (including other revenue)	$ 24.73	$ 25.69	$ 0.96	3.9 %

Net Revenues. Net revenues were $108.5 million in the first three months of fiscal 2020, an increase of 1.3% from $107.1 million in the same period of fiscal 2019. Volume was 4.2 million pounds in the first three months of fiscal 2020, a decrease of 2.5% from 4.3 million pounds in the same period of fiscal 2019. The decrease in volume was primarily due to declining chemical processing sales (partly due to retaliatory tariffs in China) as well as declining volume in flue-gas desulfurization (included within other markets), partially offset by an increase in aerospace volume. The product-sales average selling price was $23.97 per pound in the first three months of fiscal 2020, an increase of 1.9% from $23.53 per pound in the same period of fiscal 2019. The average selling price increased as a result of improved pricing and a higher value mix within the industrial gas turbine and other markets as compared to the same period of fiscal 2019, in the amount of approximately $0.45 per pound, partially offset by lower raw material market prices, which decreased average selling price per pound by approximately $0.01.

Sales to the aerospace market were $58.8 million in the first three months of fiscal 2020, an increase of 7.8% from $54.6 million in the same period of fiscal 2019, due to a 9.0%, or 0.2 million pound, increase in volume, partially offset by a 1.2%, or $0.31, decrease in average selling price per pound. The increase in volume is due to the planned equipment that was undertaken in the first three months of fiscal 2019. Partially offsetting this were lower shipments as the supply chain began to be impacted by the grounding, production slow-down and eventually temporary suspension of production of the Boeing 737 MAX. The average selling price per pound decrease reflects a lower value product mix, which decreased average selling price per pound by approximately $0.76, partially offset by improved pricing of $0.38 and an increase in raw material market prices, which increased average selling price per pound by approximately $0.07.

Sales to the chemical processing market were $16.7 million in the first three months of fiscal 2020, a decrease of 11.7% from $18.9 million in the same period of fiscal 2019, due to a 12.2% decrease in volume. Base-business volumes have decreased in the first three months of fiscal 2020 from the same period of fiscal 2019. However, partially offsetting base-business decline was an increase in specialty application project revenue in the first three months of fiscal 2020 compared to the same period last year. The average selling price per pound reflects improved pricing and an increase in raw material market prices, which increased average selling price per pound by approximately $0.48 and $0.39, respectively, partially offset by a lower-value product mix, which decreased average selling price per pound by approximately $0.73.

Sales to the industrial gas turbine market were $13.8 million in the first three months of fiscal 2020, a decrease of 2.3% from $14.1 million for the same period of fiscal 2019, due to a decrease of 3.9%, or $0.68, in average selling price per pound, partially offset by a 1.7%, increase in volume. The increase in volume is primarily attributable to a slight improvement in demand for large-frame turbines, while small/medium frame engine builds have slowed down primarily due to the oil and gas market. The decrease in average selling price per pound primarily reflects declined pricing due to competition and other factors, which decreased average selling price per pound by approximately $1.23, partially offset by a higher-value product mix, which increased the average selling price per pound by approximately $0.55.

Sales to other markets were $11.9 million in the first three months of fiscal 2020, a decrease of 16.9% from $14.3 million in the same period of fiscal 2019, due to a 39.9% decrease in volume, partially offset by a 38.3% increase in average selling price per pound. The decrease in volume was primarily due to a decline in sales to the flue-gas desulfurization market. The increase in average selling price reflects a higher-value product mix and improved pricing, which increased average selling price per pound by approximately $12.47, partially offset by lower raw material market prices, which decreased average selling price per pound by approximately $1.72.

Other Revenue. Other revenue was $7.3 million in the first three months of fiscal 2020, an increase of 40.3% from $5.2 million in the same period of fiscal 2019. The increase was due primarily to increased toll conversion particularly in titanium.

Cost of Sales. Cost of sales was $89.7 million, or 82.7% of net revenues, in the first three months of fiscal 2020 compared to $95.7 million, or 89.4% of net revenues, in the same period of fiscal 2019. This decrease was primarily due to lower volumes sold combined with continued traction in the Company's cost reduction initiatives and lower raw material prices.

Gross Profit. As a result of the above factors, gross profit was $18.7 million for the first three months of fiscal 2020, an increase of $7.4 million from the same period of fiscal 2019. Gross profit as a percentage of net revenue increased to 17.3% in the first three months of fiscal 2020 as compared to 10.6% in the same period of fiscal 2019. The improvement in gross profit was primarily attributable to improved pricing and cost saving initiatives. Fiscal 2019 was impacted by the temporary inefficiencies caused by the delayed start-up of cold-finish operations after the planned equipment upgrade in the first three months of fiscal 2019.

Selling, General and Administrative Expense. Selling, general and administrative expense was $11.5 million for the first three months of fiscal 2020, an increase of $0.4 million from the same period of fiscal 2019. This increase is primarily attributable to higher expense due to foreign exchange losses. Selling, general and administrative expense as a percentage of net revenues increased to 10.6% for the first three months of fiscal 2020 compared to 10.4% for the same period of fiscal 2019.

Research and Technical Expense. Research and technical expense was $0.9 million, or 0.8% of net revenue, for the first three months of fiscal 2020, compared to $0.8 million, or 0.8% of net revenue, in the same period of fiscal 2019.

Operating Income/(Loss). As a result of the above factors, operating income in the first three months of fiscal 2020 was $6.4 million compared to an operating loss of $(0.6) million in the same period of fiscal 2019.

Nonoperating retirement benefit expense. Nonoperating retirement benefit expense was $1.7 million compared to $0.9 million in the same period of fiscal 2019. The increase in expense was primarily driven by lower discount rates in the September 30, 2019 valuation which resulted in higher retirement liabilities and ultimately higher expense for the first quarter of fiscal 2020.

Income Taxes. Income tax expense was $1.1 million in the first three months of fiscal 2020, an increase of $1.2 million from a benefit of $0.1 million in the same period of fiscal 2019. The effective tax rate (ETR) in the first quarter of fiscal 2020 of 26.0% was higher than the ETR during the same period of fiscal 2019 due to the prior year forfeiture of stock options which had an adverse impact of $0.3 million during the first quarter of fiscal 2019. This adverse impact lowered the ETR in a period which the Company had pre-tax losses.

Net Income/(Loss). As a result of the above factors, net income for the first three months of fiscal 2020 was $3.3 million, a difference of $4.9 million from a net loss of $(1.6) million in the same period of fiscal 2019.

Working Capital

Controllable working capital, which includes accounts receivable, inventory, accounts payable and accrued expenses, was $290.2 million at December 31, 2019, an increase of $7.8 million, or 2.8%, from $282.5 million at September 30, 2019. This increase resulted primarily from inventory increasing $23.2 million, partially offset by accounts receivable decreasing by $10.9 million during the first quarter of fiscal 2020 and accounts payable and accrued expenses increasing by $4.5 million during the first quarter of fiscal 2020.

Liquidity and Capital Resources

Comparative cash flow analysis

The Company had cash and cash equivalents of $33.6 million, inclusive of $9.9 million that was held by foreign subsidiaries in various currencies, compared to $31.0 million at September 30, 2019. Additionally, there were zero borrowings against the line of credit outstanding as of December 31, 2019.

Net cash provided by operating activities in the first three months of fiscal 2020 was $7.0 million compared to net cash provided by operating activities of $7.1 million in the first three months of fiscal 2019, a decrease of $0.1 million. Cash flow from operating activities in the first three months of fiscal 2020 was adversely impacted by greater increases in inventory and lower income tax refunds as compared to the same period of fiscal 2019, partially offset by higher net income and greater decreases in accounts receivable in the first three months of fiscal 2020 as compared to the same period of fiscal 2019.

Net cash used in investing activities was $2.3 million in the first three months of fiscal 2020 which was comparable to the same period of fiscal 2019.

Net cash used in financing activities was $2.6 million in the first three months of fiscal 2020, which was lower than cash used in financing activities during the same period of fiscal 2018 of $2.9 million, primarily as a result of, among other factors, proceeds received from the exercise of stock options during the three months of fiscal 2020 as compared to the same period of fiscal 2019. Stock options were exercised by certain members of management just prior to their 10 year expiration dates.

Future sources of liquidity

The Company's sources of liquidity for fiscal 2020 are expected to consist primarily of cash generated from operations, cash on hand and, if needed, borrowings under the U.S. revolving credit facility. At December 31, 2019, the Company had cash of $33.6 million, an outstanding balance of zero on the U.S. revolving credit facility and access to a total of approximately $120.0 million under the U.S. revolving credit facility, subject to a borrowing base formula and certain reserves. Management believes that the resources described above will be sufficient to fund planned capital expenditures, regular quarterly dividends and working capital requirements over the next twelve months.

U.S. revolving credit facility

The Company and Wells Fargo Capital Finance, LLC ("Wells Fargo") entered into a Third Amended and Restated Loan and Security Agreement (the "Amended Agreement") with certain other lenders with an effective date of July 14, 2011. On July 7, 2016, the Company amended the agreement to, among other things, extend the term through July 7, 2021 and reduce unused line fees and certain administrative fees. The maximum revolving loan amount under the Amended Agreement is $120.0 million, subject to a borrowing base formula and certain reserves. The Amended Agreement permits an increase in the maximum revolving loan amount from $120.0 million up to an aggregate amount of $170.0 million at the request of the borrower. Borrowings under the U.S. revolving credit facility bear interest, at the Company's option, at either Wells Fargo's "prime rate", plus up to 0.75% per annum, or the adjusted Eurodollar rate used by the lender, plus up to 2.0% per annum. As of December 31, 2019, the U.S. revolving credit facility had a zero balance.

The Company must pay monthly, in arrears, a commitment fee of 0.20% per annum on the unused amount of the U.S. revolving credit facility total commitment. For letters of credit, the Company must pay 1.5% per annum on the daily outstanding balance of all issued letters of credit, plus customary fees for issuance, amendments and processing.

The Company is subject to certain covenants as to fixed charge coverage ratios and other customary covenants, including covenants restricting the incurrence of indebtedness, the granting of liens and the sale of assets. The covenant pertaining to fixed charge coverage ratios is only effective in the event the amount of excess availability under the revolver is less than 10.0% of the maximum credit revolving loan amount. The Company is permitted to pay dividends and repurchase common stock if certain financial metrics are met (most of which do not apply in the case of regular quarterly dividends less than $20.0 million in the aggregate in a year and repurchases in connection with the vesting of shares of restricted stock). As of December 31, 2019, the most recent required measurement date under the Amended Agreement, management believes the Company was in compliance with all applicable financial covenants under the Amended Agreement. Borrowings under the U.S. revolving credit facility are collateralized by a pledge of substantially all of the U.S. assets of the Company, including the equity interests in its U.S. subsidiaries, but excluding the four-high Steckel rolling mill and related assets, which are pledged to Titanium Metals Corporation ("TIMET") to secure the performance of the Company's obligations under a Conversion Services Agreement with TIMET (see discussion of TIMET at Note 8 in the Notes to Condensed Consolidated Financial Statements in this report). 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 the first three months of fiscal 2020 was $2.3 million, and the forecast for capital spending in fiscal 2020 is approximately $12.0 million.

Contractual Obligations

The following table sets forth the Company's contractual obligations for the periods indicated, as of December 31, 2019:

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 Years**	**3-5 Years**	**More than 5 years**
			(in thousands)		
Credit facility fees[1]	$ 440	$ 280	$ 160	$ —	$ —
Operating lease obligations	4,474	2,486	1,454	534	—
Finance lease obligations	16,438	996	2,018	2,060	11,364
Raw material contracts (primarily nickel)	24,671	24,671	—	—	—
Capital projects and other commitments	1,987	1,987	—	—	—
Pension plan[2]	100,167	6,000	12,000	10,500	71,667
Non-qualified pension plans	695	95	190	190	220
Other postretirement benefits[3]	47,234	4,155	9,281	9,859	23,939
Environmental post-closure monitoring	606	97	144	151	214
Total	$ 196,712	$ 40,767	$ 25,247	$ 23,294	$ 107,404

(1) As of December 31, 2019, the revolver balance was zero, therefore no interest is due. However, the Company is obligated to the Bank for unused line fees and quarterly management fees.

(2) The Company has a funding obligation to contribute $100,167 to the domestic pension plan. These payments will be tax deductible. All benefit payments under the domestic pension plan are provided by the plan and not the Company.

(3) Represents expected post-retirement benefits only based upon anticipated timing of payments.

New Accounting Pronouncements

See Note 2. New Accounting Pronouncements in the Notes to Consolidated Financial Statements.

Critical Accounting Policies and Estimates

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Assumptions and estimates were based on the facts and circumstances known at December 31, 2019. However, future events rarely develop exactly as forecasted and the best estimates routinely require adjustment. The accounting policies discussed in Item 7 of the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019 are considered by management to be the most important to an understanding of the financial statements because their application places the most significant demands on management's judgment and estimates about the effect of matters that are inherently uncertain. These policies are also discussed in Note 2 of the consolidated financial statements included in Item 8 of that report. For the quarter ended December 31, 2019 included herein, there have been no material changes to the critical accounting policies and estimates.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

As of December 31, 2019, there were no material changes in the market risks described in "Quantitative and Qualitative Disclosures about Market Risk" in the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2019.

Item 4. Controls and Procedures

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 and the design and operation of the Company's disclosure controls and procedures (as defined by Exchange Act rules 13a-15(e) and 15d-15(e)) pursuant to Rule 13a-15(b) of the Exchange Act 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 December 31, 2019.

There were no changes in the Company's internal control over financial reporting during the quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II OTHER INFORMATION

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Set forth below is information regarding the Company's stock repurchases during the period covered by this report, comprising shares repurchased by the Company from employees to satisfy share-based compensation.

Period	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
October 1-31, 2019	—	$ —	—	—
November 1-30, 2019	5,440	36.38	—	—
December 1-31, 2019	—	—	—	—
Total	5,440	$ 36.38	—	—

Item 6. Exhibits

Exhibits. See Index to Exhibits.

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., as amended through February 28, 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).
31.1**	Rule 13a-14(a)/15d-4(a) Certification of Chief Executive Officer
31.2**	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
32.1*	Section 1350 Certifications
101	The following materials from the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2019 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.

*Furnished not filed.
** Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HAYNES INTERNATIONAL, INC.

/s/ Michael Shor
Michael Shor
President and Chief Executive Officer
Date: January 30, 2020

/s/ Daniel Maudlin
Daniel Maudlin
Vice President — Finance and Chief Financial Officer
Date: January 30, 2020

Exhibit 3.2

AMENDED AND RESTATED BY-LAWS

OF

HAYNES INTERNATIONAL, INC.

(As amended through February 28, 2018)

ARTICLE I

Offices

SECTION 1. Registered Office. The registered office of Haynes International, Inc. (the "Corporation") in the State of Delaware shall be in the City of Wilmington, County of New Castle, and the registered agent in charge thereof shall be The Corporation Trust Company.

SECTION 2. Other Offices. The Corporation may also have offices at such other places, both within or without the State of Delaware, as the Board of Directors may from time to time determine.

ARTICLE II

Meetings of the Stockholders

SECTION 1. Time and Place of Meetings. All meetings of the stockholders shall be held at such place, either within or without the State of Delaware, on such date and at such time as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that a meeting of the stockholders shall not be held at any place, but may instead be held by means of remote communication in the manner authorized by the General Corporation Law of the State of Delaware (the "DGCL").

SECTION 2. Annual Meetings. Annual meetings of the stockholders shall be held to elect the directors and transact such other business as may properly be brought before the meeting.

SECTION 3. Special Meetings. Unless otherwise required by law or by the Second Restated Certificate of Incorporation of the Corporation, as amended and/or restated from time to time (the "Certificate of Incorporation"), special meetings of the stockholders, for any purpose or purposes, may be called by either (a) a resolution adopted by a majority of the Board of Directors, (b) the Chairman of the Board of Directors, if there be one, or (c) the President of the Corporation. The ability of the stockholders to call a special meeting of the stockholders is specifically denied.

SECTION 4. Nature of Business at Meetings of Stockholders. No business may be transacted at an annual meeting of stockholders, other than business that is either (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors (or any duly authorized committee thereof), (b) otherwise properly brought before the annual meeting by or at the direction of the Board of Directors (or any duly authorized committee thereof), or (c) otherwise properly brought before the annual meeting by any stockholder of the Corporation (i) who is a stockholder of record on the date of the giving of the notice provided for in this Section 4 and on the record date for the determination of stockholders entitled to notice of and to vote at such annual meeting and (ii) who complies with the notice procedures set forth in this Section 4.

In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a stockholder, such stockholder must have given timely notice thereof in proper written form to the Secretary of the Corporation.

To be timely, a stockholder's notice to the Secretary must be delivered to or mailed and received at the principal executive offices of the Corporation not less than ninety (90) days nor more than one hundred twenty (120) 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 (25) 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 (10th) day following the day on which such notice of the date of the annual meeting was mailed or such public disclosure of the date of the annual meeting was made, whichever first occurs.

To be in proper written form, a stockholder's notice to the Secretary must set forth as to each matter such stockholder proposes to bring before the annual meeting (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 such stockholder, (c) the class or series and number of shares of capital stock of the Corporation which are owned beneficially or of record by such stockholder, (d) a description of all arrangements or understandings between such stockholder and any other person or persons (including their names) in connection with the proposal of such business by such stockholder and any material interest of such stockholder in such business and (e) a representation that such stockholder intends to appear in person or by proxy at the annual meeting to bring such business before the meeting.

No business shall be conducted at an annual meeting except business brought before the annual meeting in accordance with the procedures set forth in this Section 4; provided, however, that, once business has been properly brought before the annual meeting in accordance with such procedures, nothing in this Section 4 shall be deemed to preclude discussion by any stockholder of any such business. If the chairman of an annual meeting determines that business was not properly brought before the annual meeting in accordance with the foregoing procedures, the chairman shall declare to the meeting that the business was not properly brought before the meeting and such business shall not be transacted.

SECTION 5. Notice of Meetings. Whenever the stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise provided by the DGCL, written notice of any meeting shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting. If mailed, such notice is given when deposited in the United States mail, with postage thereon prepaid, directed to the stockholder at his address as it appears on the record of stockholders. In the event of a change of address, such stockholder shall file with the Secretary of the Corporation a written request that such stockholder's address be changed in the records of the Corporation, in which event notices to such stockholder shall be directed to such stockholder at such other address. Any meeting of the stockholders may be adjourned from time to time to reconvene at the same or some other place, and notice need not be given of any such adjourned meeting if the time and place, if any, thereof and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or after the adjournment a new record date is fixed by the Board of Directors for the adjourned meeting, a notice, pursuant to this Section 5, of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

SECTION 6. Quorum, Adjournments. Unless otherwise required by law or the Certificate of Incorporation, the holders of a majority of the issued and outstanding capital stock entitled to vote, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business. When a specified item of business is required to be voted on by a class or classes, a majority of the shares of such class or classes in person or represented by proxy shall constitute a quorum entitled to take action with respect to the transaction of such specified item of business. If a quorum is not present, the Chairman of the Board of Directors, the President or the holders of a majority of the shares present in person or represented by proxy at the meeting, and entitled to vote at the meeting, may adjourn the meeting to another time or place, in the manner provided in Section 5 hereof, until a quorum shall be present or represented.

SECTION 7. Voting. Unless otherwise required by law, the Certificate of Incorporation, these By-Laws or a Certificate of Designation governing the rights and preferences of a series of Preferred Stock, each stockholder at every meeting of the stockholders shall be entitled to one (1) vote for each outstanding share of capital stock of the Corporation held by such stockholder. Unless otherwise required by law, the Certificate of Incorporation, these By-Laws, or a Certificate of Designation governing the rights and preferences of a series of Preferred Stock, so long as a quorum is present at a meeting of the stockholders, the affirmative vote of a majority of the shares of capital stock of the Corporation present, in person or by proxy, at a meeting of the stockholders and entitled to vote on the subject matter shall be the act of the respective stockholders.

SECTION 8. Proxies. Each stockholder entitled to vote at a meeting of the stockholders may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. Without limiting the manner in which a stockholder may authorize another person or persons to act for such stockholder as proxy, the following shall constitute a valid means by which a stockholder may grant such authority:

(a) A stockholder may execute a writing authorizing another person or persons to act for such stockholder as proxy. Execution may be accomplished by the stockholder or such stockholder's authorized officer, director, partner, member, employee or agent signing such writing or causing such person's signature to be affixed to such writing by any reasonable means, including, but not limited to, by facsimile signature.

(b) A stockholder may authorize another person or persons to act for such stockholder as proxy by transmitting or authorizing the transmission of a facsimile, telegram or cablegram to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that any such facsimile, telegram or cablegram must either set forth or be submitted with information from which it can be determined that the facsimile, telegram or cablegram was authorized by the stockholder. If it is determined that such facsimiles, telegrams or cablegrams or other transmissions are valid, the inspectors or, if there are no inspectors, such other persons making that determination shall specify the information on which they relied.

Any copy, facsimile telecommunication or other reliable production of the writing or transmission authorizing another person or persons to act as proxy for a stockholder may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used; provided, however, that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

SECTION 9. List of the Stockholders Entitled to Vote. The officer of the Corporation who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of the stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation shall take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

SECTION 10. Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of the stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of the stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of the stockholders of record entitled to notice of or to vote at a meeting of the stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

SECTION 11. Stock Ledger. The stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by Section 9 of this Article II or the books of the Corporation, or to vote in person or by proxy at any meeting of the stockholders.

SECTION 12. Organization. At each meeting of the stockholders, the Chairman of the Board of Directors, if one shall have been elected, or in his or her absence or if one shall not have been elected, the President) shall act as chairperson of the meeting. The Secretary (or in his or her absence or inability to act, the person whom the chairperson of the meeting shall appoint as secretary of the meeting) shall act as secretary of the meeting.

SECTION 13. Inspectors of Election. In advance of any meeting of the stockholders, the Board of Directors shall appoint one or more inspectors to act at the meeting and make a written report thereof. One or more other persons may be designated as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of the stockholders, the chairman of the meeting shall appoint one or more inspectors to act at the meeting. Unless otherwise required by applicable law, inspectors may be officers, employees or agents of the Corporation. Each inspector, before entering upon the discharge of the duties of inspector, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability. The inspector shall have the duties prescribed by law and shall take charge of the polls and, when the vote is completed, shall make a certificate of the result of the vote taken and of such other facts as may be required by applicable law. Inspectors need not be stockholders.

ARTICLE III

Directors

SECTION 1. General Powers. Except as otherwise provided in the Certificate of Incorporation, the business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors which may exercise all such powers of the Corporation and do all such lawful acts and things as are not reserved to the stockholders by applicable Law, the Certificate of Incorporation or these By-Laws.

SECTION 2. Number, Election and Term of Office. The number of directors which shall constitute the whole board shall be fixed from time to time by resolution of the Board of Directors but shall not be less than three (3) nor more than nine (9). The directors shall be elected at the annual meeting of the stockholders, except as provided in Section 13 of this Article III, and each director so elected shall hold office until such director’s successor is elected and qualified or until his earlier death, resignation or removal. Directors need not be stockholders. Election of directors need not be by ballot.

SECTION 3. Nomination of Directors. Only persons who are nominated in accordance with the following procedures shall be eligible for election as directors of the Corporation. Nominations of persons for election to the Board of Directors may be made at any annual meeting of stockholders, or at any special meeting of stockholders called for the purpose of electing directors, (a) by or at the direction of the Board of Directors (or any duly authorized committee thereof) or (b) by any stockholder of the Corporation (i) who is a stockholder of record on the date of the giving of the notice provided for in this Section 3 and on the record date for the determination of stockholders entitled to notice of and to vote at such meeting and (ii) who complies with the notice procedures set forth in this Section 3.

In addition to any other applicable requirements, for a nomination to be made by a stockholder, such stockholder must have given timely notice thereof in proper written form to the Secretary of the Corporation.

To be timely, a stockholder's notice to the Secretary must be delivered to or mailed and received at the principal executive offices of the Corporation (a) in the case of an annual meeting, not less than ninety (90) days nor more than one hundred twenty (120) 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 (25) 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 (10th) day following the day on which such notice of the date of the annual meeting was mailed or such public disclosure of the date of the annual meeting was 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 (10th) day following the day on which notice of the date of the special meeting was mailed or public disclosure of the date of the special meeting was made, whichever first occurs.

If mailed, such notice is given when deposited in the United States mail, with postage thereon prepaid, directed to the stockholder at his address as it appears on the record of stockholders. In the event of a change of address, such stockholder shall file with the Secretary of the Corporation a written request that such stockholder’s address be changed in the records of the Corporation, in which event notices to such stockholder shall be directed to such stockholder at such other address.

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 Corporation 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 Securities Exchange Act of 1934, as amended (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 Corporation 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 serve as a director if elected.

No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth in this Section 3. If the chairman of the meeting determines that a nomination was not made in accordance with the foregoing procedures, the chairman shall declare to the meeting that the nomination was defective and such defective nomination shall be disregarded.

SECTION 4. Quorum, Manner of Acting, Adjournment. Unless the Certificate of Incorporation or these By-Laws require a greater number, a majority of the total number of directors shall constitute a quorum for the transaction of business, and the affirmative vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the Board of Directors. If a quorum shall not be present at any meeting of the Board of Directors the directors present thereat may adjourn the meeting, from time to time, without notice other than announcement at the meeting, until a quorum shall be present. When a meeting is adjourned to another time or place (whether or not a quorum is present), notice need not be given of the adjourned meeting if the time and place thereof are announced at the original meeting at which the adjournment is taken. At the adjourned meeting, the Board of Directors may transact any business which might have been transacted at the original meeting.

SECTION 5. Time and Place of Meetings. The Board of Directors shall hold its meetings at such place, either within or without the State of Delaware, and at such time as may be determined from time to time by the Board of Directors (or the Chairman in the absence of a determination by the Board of Directors).

SECTION 6. Annual Meeting. The Board of Directors shall meet for the purpose of organization, the election of officers and the transaction of other business, as soon as practicable after each annual meeting of the stockholders, on the same day and at the same place where such annual meeting shall be held. Notice of such meeting need not be given. In the event such annual meeting is not so held, the annual meeting of the Board of Directors may be held at such place either within or without the State of Delaware, on such date and at such time as shall be specified in a notice thereof given as hereinafter provided in Section 8 of this Article III or in a waiver of notice thereof signed by any director who chooses to waive the requirement of notice.

SECTION 7. Regular Meetings. After the place and time of regular meetings of the Board of Directors shall have been determined and notice thereof shall have been once given to each member of the Board of Directors, regular meetings may be held without further notice being given.

SECTION 8. Special Meetings. Special meetings of the Board of Directors may be called by the Chairman of the Board or the President and shall be called by the Chairman of the Board, President, or Secretary on the written request of three directors. Notice of special meetings of the Board of Directors shall be given to each director in such manner as is determined by the Board of Directors at least three (3) days before the date of the meeting.

SECTION 9. Committees. The Board of Directors may, by resolution passed by a majority of the whole board, designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to amending the Certificate of Incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all or substantially all of the Corporation's property and assets, recommending to the stockholders a dissolution of the Corporation or a revocation of a dissolution, or amending the by-laws of the Corporation; and unless the resolution of the Board of Directors or the Certificate of Incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

SECTION 10. Action by Consent. Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof maybe taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board or committee.

SECTION 11. Telephonic Meetings. Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or such committee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

SECTION 12. Resignation. Any director may resign at any time by giving written notice to the Board of Directors or to the secretary of the Corporation. The resignation of any director shall take effect upon receipt of notice thereof or at such later time as shall be specified in such notice; and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

SECTION 13. Vacancies. Unless otherwise provided in the Certificate of Incorporation, vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director. Each director so elected shall hold office until his successor is elected and qualified, or until his earlier death, resignation or removal. If there are no directors in office, then an election of directors may be held in accordance with the DGCL. Unless otherwise provided in the Certificate of Incorporation, when one or more directors shall resign from the board, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have the power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office as provided in the filling of other vacancies.

SECTION 14. Removal. Except as otherwise required by applicable law, any director or the entire Board of Directors may be removed from office at any time, with or without cause, by the affirmative vote of the holders of a majority of the voting power of the Corporation's then outstanding capital stock entitled to vote generally in the election of directors.

SECTION 15. Compensation. Unless otherwise restricted by the Certificate of Incorporation or these By-Laws, the Board of Directors (or a duly authorized committee thereof) shall have authority to fix the compensation of directors, including fees and reimbursement of expenses.

SECTION 16. Interested Directors. No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, association or other organization in which one or more of its directors or officers are directors or officers or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or committee thereof which authorizes the contract or transaction, or solely because any such director's or officer's vote is counted for such purpose if: (a) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board of Directors or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or (b) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or (c) the contract or transaction is fair as to the Corporation as determined on a good faith basis by the Board of Directors as of the time it is authorized, approved or ratified by the Board of Directors, a committee thereof or the stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

ARTICLE IV

Officers

SECTION 1. General. The officers of the Corporation shall be chosen by the Board of Directors and shall be a President, a Secretary and a Treasurer. The Board of Directors, in its discretion, also may choose a Chairman of the Board of Directors (who must be a director) and one or more Vice Presidents, Assistant Secretaries, Assistant Treasurers and other officers. Any number of offices may be held by the same person, unless otherwise prohibited by law, the Certificate of Incorporation or these By-Laws. The officers of the Corporation need not be stockholders of the Corporation nor, except in the case of the Chairman of the Board of Directors, need such officers be directors of the Corporation.

SECTION 2. Election. The Board of Directors, at its first meeting held after each annual meeting of stockholders, shall elect the officers of the Corporation who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors; and each officer of the Corporation shall hold office until such officer's successor is elected and qualified, or until such officer's earlier death, resignation or removal. Any officer elected by the Board of Directors may be removed with or without cause at any time by the Board of Directors. Any vacancy occurring in any office of the Corporation shall be filled by the Board of Directors. The compensation of all officers of the Corporation shall be fixed by the Board of Directors or a duly authorized committee thereof.

SECTION 3. Voting Securities Owned by the Corporation. Powers of attorney, proxies, waivers of notice of meeting, consents and other instruments relating to securities owned by the Corporation may be executed in the name of and on behalf of the Corporation by the President or any Vice President or any other officer authorized to do so by the Board of Directors and any such officer may, in the name of and on behalf of the Corporation, take all such action as any such officer may deem advisable to vote in person or by proxy at any meeting of security holders of any corporation or other entity in which the Corporation may own securities and at any such meeting shall possess and may exercise any and all rights and power incident to the ownership of such securities and which, as the owner thereof, the Corporation might have exercised and possessed if present. The Board of Directors may, by resolution, from time to time confer like powers upon any other person or persons.

SECTION 4. Chairman of the Board of Directors. The Chairman of the Board of Directors, if there be one, shall preside at all meetings of the stockholders and of the Board of Directors. The Chairman of the Board of Directors shall also perform such other duties and may exercise such other powers as may from time to time be assigned by these By-Laws or by the Board of Directors.

SECTION 5. President. The President shall, subject to the control of the Board of Directors and, if there be one, the Chairman of the Board of Directors, have general supervision of the business of the Corporation, shall see that all orders and resolutions of the Board of Directors are carried into effect and shall be the Chief Executive Officer of the Corporation. The President shall execute all bonds, mortgages, contracts and other instruments of the Corporation requiring a seal, under the seal of the Corporation, except where required or permitted by law to be otherwise signed and executed and except that the other officers of the Corporation may sign and execute documents when so authorized by these By-Laws, the Board of Directors or the President. In the absence or disability of the Chairman of the Board of Directors, or if there be none, the President shall preside at all meetings of the stockholders and, provided the President is also a director, the Board of Directors. The President shall also perform such other duties and may exercise such other powers as may from time to time be assigned to such officer by these By-Laws or by the Board of Directors.

SECTION 6. Vice Presidents. At the request of the President or in the President's absence or in the event of the President's inability or refusal to act (and if there be no Chairman of the

Board of Directors), the Vice President, or the Vice Presidents if there are more than one (in the order designated by the Board of Directors), shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. Each Vice President shall perform such other duties and have such other powers as the Board of Directors from time to time may prescribe. If there be no Chairman of the Board of Directors and no Vice President, the Board of Directors shall designate the officer of the Corporation who, in the absence of the President or in the event of the inability or refusal of the President to act, shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President.

SECTION 7. Secretary. The Secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings thereat in a book or books to be kept for that purpose; the Secretary shall also perform like duties for committees of the Board of Directors when required. The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors, the Chairman of the Board of Directors or the President, under whose supervision the Secretary shall be. If the Secretary shall be unable or shall refuse to cause to be given notice of all meetings of the stockholders and special meetings of the Board of Directors, and if there be no Assistant Secretary, then either the Board of Directors or the President may choose another officer to cause such notice to be given. The Secretary shall have custody of the seal of the Corporation and the Secretary or any Assistant Secretary, if there be one, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by the signature of the Secretary or by the signature of any such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest to the affixing by such officer's signature. The Secretary shall see that all books, reports, statements, certificates and other documents and records required by law to be kept or filed are properly kept or filed, as the case may be.

SECTION 8. Treasurer. The Treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the President and the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all transactions as Treasurer and of the financial condition of the Corporation.

SECTION 9. Assistant Secretaries. Assistant Secretaries, if there be any, shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors, the President, any Vice President, if there be one, or the Secretary, and in the absence of the Secretary or in the event of the Secretary's inability or refusal to act, shall perform the duties of the Secretary, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Secretary.

SECTION 10. Assistant Treasurers. Assistant Treasurers, if there be any, shall perform such duties and have such powers as from time to time may be assigned to them by the Board of

Directors, the President, any Vice President, if there be one, or the Treasurer, and in the absence of the Treasurer or in the event of the Treasurer's inability or refusal to act, shall perform the duties of the Treasurer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Treasurer.

SECTION 11. Other Officers. Such other officers as the Board of Directors may choose shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors. The Board of Directors may delegate to any other officer of the Corporation the power to choose such other officers and to prescribe their respective duties and powers.

ARTICLE V

General Provisions

SECTION 1. Certificates of Stock. Each stockholder is entitled to a certificate signed (manually or in facsimile) by the President or a Vice President and the Secretary or an Assistant Secretary, setting forth (a) the name of the Corporation and that it was organized under Delaware law, (b) the name of the person to whom issued, and (c) the number, class, and, if applicable, series of shares represented. The Board of Directors shall prescribe the form of certificate.

SECTION 2. Lost or Destroyed Certificates. Any person claiming a certificate to be lost or destroyed shall make an affidavit or affirmation of that fact and shall give the Corporation, if the Board of Directors or the President shall so require, and/or the transfer agents and registrars, if they shall so require, a bond of indemnity, in form and with one or more sureties satisfactory to the Board of Directors or the President and/or the transfer agents and registrars, in such amount as the Board of Directors or the President may direct and/or the transfer agents and registrars may require, whereupon a new certificate may be issued of the same tenor and for the same number of shares as the one alleged to be lost or destroyed.

SECTION 3. Dividends. Subject to limitations contained in the DGCL and the Certificate of Incorporation, the Board of Directors may declare and pay dividends upon the shares of capital stock of the Corporation, which dividends may be paid either in cash, in property, or in shares of the capital stock of the Corporation.

SECTION 4. Fiscal Year. The fiscal year of the Corporation shall commence on October 1 and end on September 30 of each year.

SECTION 5. Corporate Seal. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware". The seal may be used by causing it or a facsimile thereof to be impressed, affixed or otherwise reproduced.

SECTION 6. Transfers. Stock of the Corporation shall be transferable in the manner prescribed by applicable law and in these By-Laws. Transfers of stock shall be made on the books of the Corporation only by the person named in the certificate or by such person’s attorney lawfully constituted in writing and upon the surrender of the certificate therefore, properly endorsed for transfer and payment of all necessary transfer taxes; provided, however, that such surrender and endorsement or payment of taxes shall not be required in any case in which the officers of the Corporation shall determine to waive such requirement. Every certificate exchanged, returned or surrendered to the Corporation shall be marked "Cancelled," with the date of cancellation, by the Secretary or Assistant Secretary of the Corporation or the transfer agent thereof. No transfer of stock shall be valid as against the corporation for any purpose until it shall have been entered in the stock records of the Corporation by an entry showing from and to whom transferred.

SECTION 7. Record Owners. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise required by law.

SECTION 8. Transfer and Registry Agents. The Corporation may from time to time maintain one or more transfer offices or agencies and registry offices or agencies at such place or places as may be determined from time to time by the Board of Directors.

ARTICLE VI

Indemnification

SECTION 1. Power to Indemnify in Actions, Suits or Proceedings other than Those by or in the Right of the Corporation. Subject to Section 3 of this Article VI, the Corporation shall indemnify and hold harmless any person who was or is made or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation), by reason of the fact that such person or a person for whom such person is the legal representative, is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, nonprofit entity or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

SECTION 2. Power to Indemnify in Actions, Suits or Proceedings by or in the Right of the Corporation. Subject to Section 3 of this Article VI, the Corporation shall indemnify and hold harmless any person who was or is made or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the Corporation, or a person for whom such person is the legal representative, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against all judgments, penalties (including excise and similar taxes), fines, settlements, expenses and liability suffered or incurred (including attorneys' fees and court costs, each of which are actually and reasonably incurred) by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

SECTION 3. Authorization of Indemnification. Any indemnification under this Article VI (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the present or former director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 1 or Section 2 of this Article VI, as the case may be. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or (iv) by the stockholders. Such determination shall be made, with respect to former directors and officers, by any person or persons having the authority to act on the matter on behalf of the Corporation. To the extent, however, that a present or former director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith, without the necessity of authorization in the specific case.

SECTION 4. Good Faith Defined. For purposes of any determination under Section 3 of this Article VI, a person shall be deemed to have acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe such person's conduct was unlawful, if such person's action is based on the records or books of account of the Corporation or another enterprise, or on information supplied to such person by the officers of the Corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the Corporation or another enterprise or on information or records given or reports made to the Corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Corporation or another enterprise. The provisions of this Section 4 shall not be deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 1 or Section 2 of this Article VI, as the case may be.

SECTION 5. Indemnification by a Court. Notwithstanding any contrary determination in the specific case under Section 3 of this Article VI, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery of the State of Delaware or any other court of competent jurisdiction in the State of Delaware for indemnification to the extent otherwise permissible under Section 1 or Section 2 of this Article VI. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 1 or Section 2 of this Article VI, as the case may be. Neither a contrary determination in the specific case under Section 3 of this Article VI nor the absence of any determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct. Notice of any application for indemnification pursuant to this Section 5 shall be given to the Corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification shall also be entitled to be paid the expense of prosecuting such application.

SECTION 6. Expenses Payable in Advance. Expenses incurred (including attorneys' fees and court costs, each of which are actually and reasonably incurred) by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding shall be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized in this Article VI. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the Corporation deems appropriate.

SECTION 7. Nonexclusivity of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Certificate of Incorporation, these By-Laws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, it being the policy of the Corporation that indemnification of the persons specified in Section 1 and Section 2 of this Article VI shall be made to the fullest extent permitted by law. The provisions of this Article VI shall not be deemed to preclude the indemnification of any person who is not specified in Section 1 or Section 2 of this Article VI but whom the Corporation has the power or obligation to indemnify under the provisions of the DGCL, or otherwise.

SECTION 8. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who is or was a director or officer of the Corporation, or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article VI.

SECTION 9. Certain Definitions. For purposes of this Article VI, references to "the Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VI with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. The term "another enterprise" as used in this Article VI shall mean any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise of which such person is or was serving at the request of the Corporation as a director, officer, employee or agent. For purposes of this Article VI, references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article VI.

SECTION 10. Survival of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VI shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

SECTION 11. Limitation on Indemnification. Notwithstanding anything contained in this Article VI to the contrary, except for proceedings to enforce rights to indemnification (which shall be governed by Section 5 of this Article VI), the Corporation shall not be obligated to indemnify any director or officer (or his or her heirs, executors or personal or legal representatives) or advance expenses in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors of the Corporation.

SECTION 12. Indemnification of Employees and Agents. The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article VI to directors and officers of the Corporation.

ARTICLE VII

Amendments

SECTION 1. By the Board of Directors. These By-Laws may be altered, amended or repealed or new by-laws may be adopted by the affirmative vote of a majority of the entire Board of Directors.

SECTION 2. By the Stockholders. These By-Laws may be altered, amended or repealed or new by-laws may be adopted by the affirmative vote of the holders of at least a majority of the voting power of the shares of the capital stock of the Corporation issued and outstanding and entitled to vote in the election of directors at any regular meeting of the stockholders, or at any special meeting of the stockholders, provided notice of such alteration, amendment, repeal or adoption of new by-laws shall have been stated in the notice of such special meeting.

Exhibit 31.1

CERTIFICATIONS

I, Michael L. Shor, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: January 30, 2020

/s/ MICHAEL L. SHOR

Michael L. Shor

President and Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Daniel W. Maudlin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: January 30, 2020

/s/ DANIEL W. MAUDLIN

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

Exhibit 32.1

**Certifications Pursuant to 18 U.S.C. Section 1350
As Adopted Pursuant to Section 906 of the
Sarbanes—Oxley Act of 2002**

I, Daniel W. Maudlin, the Vice President Finance and Chief Financial Officer of Haynes International, Inc., certify that (i) the Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Haynes International, Inc. as of the dates and for the periods set forth therein.

/s/ DANIEL W. MAUDLIN
Daniel W. Maudlin
Vice President Finance and
Chief Financial Officer

January 30, 2020
Date

I, Michael, L. Shor, the President and Chief Executive Officer of Haynes International, Inc., certify that (i) the Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2019 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Haynes International, Inc. as of the dates and for the periods set forth therein.

/s/ MICHAEL L. SHOR
Michael, L. Shor
President and Chief Executive Officer

January 30, 2020
Date