

**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 March 31, 2020

or

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

For the transition period from _____ to _____

Commission File Number: 001-33288

HAYNES INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

06-1185400

(I.R.S. Employer Identification No.)

1020 West Park Avenue, Kokomo, Indiana

(Address of principal executive offices)

46904-9013

(Zip Code)

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

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value \$0.001 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
Non-accelerated filer

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 April 30, 2020, the registrant had 12,556,921 shares of Common Stock, \$0.001 par value, outstanding.

QUARTERLY REPORT ON FORM 10-Q
TABLE OF CONTENTS

	<u>Page</u>
PART I FINANCIAL INFORMATION	
Item 1. Unaudited Condensed Consolidated Financial Statements of Haynes International, Inc. and Subsidiaries	3
Consolidated Balance Sheets (Unaudited) as of September 30, 2019 and March 31, 2020	3
Consolidated Statements of Operations (Unaudited) for the Three and Six Months Ended March 31, 2019 and 2020	4
Consolidated Statements of Comprehensive Income (Loss) (Unaudited) for the Three and Six Months Ended March 31, 2019 and 2020	5
Consolidated Statement of Stockholders Equity (Unaudited) for the Three and Six Months Ended March 31, 2019 and 2020	6
Consolidated Statements of Cash Flows (Unaudited) for the Six Months Ended March 31, 2019 and 2020	7
Notes to Condensed Consolidated Financial Statements (Unaudited)	8
Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations	21
Item 3. Quantitative and Qualitative Disclosures About Market Risk	31
Item 4. Controls and Procedures	31
PART II OTHER INFORMATION	32
Item 1a. Risk Factors COVID-19	32
Item 6. Exhibits	32
Index to Exhibits	33
Signatures	34

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	March 31, 2020
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 31,038	\$ 52,406
Accounts receivable, less allowance for doubtful accounts of \$441 and \$697 at September 30, 2019 and March 31, 2020, respectively	76,979	65,970
Inventories	258,802	280,337
Income taxes receivable	1,757	377
Other current assets	3,297	4,440
Total current assets	371,873	403,530
Property, plant and equipment, net	169,966	164,720
Deferred income taxes	34,132	34,666
Other assets	7,756	9,895
Goodwill	4,789	4,789
Other intangible assets, net	5,284	5,184
Total assets	\$ 593,800	\$ 622,784
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 34,497	\$ 28,310
Accrued expenses	18,833	17,810
Income taxes payable	—	70
Accrued pension and postretirement benefits	4,250	4,250
Revolving credit facilities	—	30,000
Deferred revenue—current portion	2,500	2,500
Total current liabilities	60,080	82,940
Long-term obligations (less current portion) (Note 15)	8,609	8,598
Deferred revenue (less current portion)	15,329	14,079
Deferred income taxes	2,016	2,016
Operating lease liabilities	—	2,306
Accrued pension benefits (less current portion)	101,812	98,523
Accrued postretirement benefits (less current portion)	109,679	110,710
Total liabilities	297,525	319,172
Commitments and contingencies (Note 7)	—	—
Stockholders' equity:		
Common stock, \$0.001 par value (40,000,000 shares authorized, 12,566,969 and 12,615,830 shares issued and 12,513,500 and 12,556,921 shares outstanding at September 30, 2019 and March 31, 2020, 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	255,896
Accumulated earnings	125,296	140,297
Treasury stock, 53,469 shares at September 30, 2019 and 58,909 shares at March 31, 2020	(2,239)	(2,437)
Accumulated other comprehensive loss	(80,638)	(90,157)
Total stockholders' equity	296,275	303,612
Total liabilities and stockholders' equity	\$ 593,800	\$ 622,784

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)

	<u>Three Months Ended March 31,</u>		<u>Six Months Ended March 31,</u>	
	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>
Net revenues	\$ 127,474	\$ 111,563	\$ 234,543	\$ 220,016
Cost of sales	112,791	92,267	208,525	181,977
Gross profit	14,683	19,296	26,018	38,039
Selling, general and administrative expense	10,663	10,785	21,791	22,292
Research and technical expense	859	1,028	1,693	1,910
Operating income	3,161	7,483	2,534	13,837
Nonoperating retirement benefit expense	856	1,700	1,712	3,400
Interest income	(18)	(10)	(38)	(24)
Interest expense	284	296	525	547
Income before income taxes	2,039	5,497	335	9,914
Provision for income taxes	530	1,429	429	2,578
Net income (loss)	<u>\$ 1,509</u>	<u>\$ 4,068</u>	<u>\$ (94)</u>	<u>\$ 7,336</u>
Net income (loss) per share:				
Basic	<u>\$ 0.12</u>	<u>\$ 0.32</u>	<u>\$ (0.01)</u>	<u>\$ 0.58</u>
Diluted	<u>\$ 0.12</u>	<u>\$ 0.32</u>	<u>\$ (0.01)</u>	<u>\$ 0.58</u>
Weighted Average Common Shares Outstanding				
Basic	<u>12,449</u>	<u>12,474</u>	<u>12,440</u>	<u>12,467</u>
Diluted	<u>12,600</u>	<u>12,504</u>	<u>12,440</u>	<u>12,497</u>
Dividends declared per common share	<u>\$ 0.22</u>	<u>\$ 0.22</u>	<u>\$ 0.44</u>	<u>\$ 0.44</u>

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)

	<u>Three Months Ended March 31,</u>		<u>Six Months Ended March 31,</u>	
	2019	2020	2019	2020
Net income (loss)	\$ 1,509	\$ 4,068	\$ (94)	\$ 7,336
Other comprehensive income (loss), net of tax:				
Pension and postretirement	579	1,720	1,159	3,439
Foreign currency translation adjustment	1,031	(3,918)	(140)	325
Other comprehensive income (loss)	1,610	(2,198)	1,019	3,764
Comprehensive income	<u>\$ 3,119</u>	<u>\$ 1,870</u>	<u>\$ 925</u>	<u>\$ 11,100</u>

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 March 31, 2019

	Common Stock		Additional Paid-in Capital	Accumulated Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par					
Balance December 31, 2018	12,517,492	\$ 13	\$ 251,718	\$ 122,226	\$ (2,177)	\$ (43,156)	\$ 328,624
Net income (loss)				1,509			1,509
Dividends paid and accrued (\$0.22 per share)				(2,758)			(2,758)
Other comprehensive income (loss)						1,610	1,610
Issue restricted stock (less forfeitures)	(2,012)						—
Stock compensation			707				707
Balance March 31, 2019	12,515,480	\$ 13	\$ 252,425	\$ 120,977	\$ (2,177)	\$ (41,546)	\$ 329,692

Three Months Ended March 31, 2020

	Common Stock		Additional Paid-in Capital	Accumulated Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Par					
Balance December 31, 2019	12,556,255	\$ 13	\$ 254,999	\$ 139,010	\$ (2,437)	\$ (87,959)	\$ 303,626
Net income (loss)				4,068			4,068
Dividends paid and accrued (\$0.22 per share)				(2,781)			(2,781)
Other comprehensive income (loss)						(2,198)	(2,198)
Issue restricted stock (less forfeitures)	666						—
Stock compensation			897				897
Balance March 31, 2020	12,556,921	\$ 13	\$ 255,896	\$ 140,297	\$ (2,437)	\$ (90,157)	\$ 303,612

Six Months Ended March 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, 2018	12,504,478	\$ 13	\$ 251,053	\$ 126,588	\$ (1,869)	\$ (42,565)	\$ 333,220
Net income (loss)				(94)			(94)
Dividends paid and accrued (\$0.44 per share)				(5,517)			(5,517)
Other comprehensive income (loss)						1,019	1,019
Exercise of stock options	12,084		215				215
Issue restricted stock (less forfeitures)	8,144						—
Purchase of treasury stock	(9,226)				(308)		(308)
Stock compensation			1,157				1,157
Balance March 31, 2019	12,515,480	\$ 13	\$ 252,425	\$ 120,977	\$ (2,177)	\$ (41,546)	\$ 329,692

Six Months Ended March 31, 2020

	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)				7,336			7,336
Dividends paid and accrued (\$0.44 per share)				(5,618)			(5,618)
Other comprehensive income (loss)						3,764	3,764
Exercise of stock options	12,400		422				422
Reclass due to adoption of ASU 2018-02				13,283		(13,283)	—
Issue restricted stock (less forfeitures)	36,461						—
Purchase of treasury stock	(5,440)				(198)		(198)
Stock compensation			1,631				1,631
Balance March 31, 2020	12,556,921	\$ 13	\$ 255,896	\$ 140,297	\$ (2,437)	\$ (90,157)	\$ 303,612

The accompanying notes are an integral part of these financial statements

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

	Six Months Ended March 31,	
	2019	2020
Cash flows from operating activities:		
Net income (loss)	\$ (94)	\$ 7,336
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation	9,296	9,639
Amortization	155	100
Pension and post-retirement expense - U.S. and U.K.	4,487	6,897
Change in long-term obligations	—	(24)
Stock compensation expense	1,157	1,631
Deferred revenue	(1,250)	(1,250)
Deferred income taxes	238	(1,782)
Loss on disposition of property	5	—
Change in assets and liabilities:		
Accounts receivable	(7,765)	11,122
Inventories	969	(21,192)
Other assets	(846)	(961)
Accounts payable and accrued expenses	4,124	(7,668)
Income taxes	4,788	1,447
Accrued pension and postretirement benefits	(3,207)	(4,488)
Net cash provided by (used in) operating activities	<u>12,057</u>	<u>807</u>
Cash flows from investing activities:		
Additions to property, plant and equipment	(5,409)	(4,100)
Net cash provided by (used in) investing activities	<u>(5,409)</u>	<u>(4,100)</u>
Cash flows from financing activities:		
Revolving credit facility borrowings	16,600	30,000
Revolving credit facility repayments	(16,600)	—
Dividends paid	(5,505)	(5,523)
Proceeds from exercise of stock options	215	422
Payment for purchase of treasury stock	(308)	(198)
Payments on long-term obligation	(71)	(82)
Net cash provided by (used in) financing activities	<u>(5,669)</u>	<u>24,619</u>
Effect of exchange rates on cash	(1)	42
Increase (decrease) in cash and cash equivalents:	978	21,368
Cash, cash equivalents and restricted cash:		
Beginning of period	9,802	31,038
End of period	<u>\$ 10,780</u>	<u>\$ 52,406</u>
Supplemental disclosures of cash flow information:		
Interest (net of capitalized interest)	\$ 496	\$ 518
Income taxes paid (refunded), net	<u>\$ (4,636)</u>	<u>\$ 2,903</u>
Capital expenditures incurred, but not yet paid	<u>\$ 809</u>	<u>\$ 708</u>
Dividends declared but not yet paid	<u>\$ 12</u>	<u>\$ 95</u>

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 and six months ended March 31, 2020 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.

COVID-19 Pandemic

In March 2020, the World Health Organization characterized the coronavirus (“COVID-19”) a pandemic, and the President of the United States declared the COVID-19 outbreak a national emergency. The rapid spread of the pandemic and the continuously evolving responses to combat it have had an increasingly negative impact on the global economy and our business. Due to the widespread impact of the COVID-19 pandemic, the Company implemented a temporary shut-down of most of the Company’s production operations beginning the week of March 23, 2020, which impacted the last week of the second quarter. The shut-down continued into the third quarter with operations resuming in mid-April in certain areas on a voluntary basis. In view of the rapidly changing business environment, unprecedented market volatility and heightened degree of uncertainty resulting from COVID-19, we cannot reasonably estimate the length or severity of the pandemic or its impact on the Company’s liquidity, results of operations, and financial condition, which could have a material adverse effect.

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 for operating leases 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 March 31, 2020, accounts receivable with customers were \$77,420 and \$66,667, respectively. Allowance for doubtful accounts as of September 30, 2019 and March 31, 2020 were \$441 and \$697, 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 March 31, 2020, no contract liabilities have been recorded except for \$17,829 and \$16,579, 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 and six months ended March 31, 2019 and 2020.

	Three Months Ended March 31,		Six Months Ended March 31,	
	2019	2020	2019	2020
Net revenues (dollars in thousands)				
Aerospace	\$ 68,858	\$ 59,172	\$ 123,465	\$ 118,015
Chemical processing	21,761	15,832	40,681	32,544
Industrial gas turbine	13,685	16,701	27,768	30,464
Other markets	16,958	12,762	31,243	24,637
Total product revenue	121,262	104,467	223,157	205,660
Other revenue	6,212	7,096	11,386	14,356
Net revenues	\$ 127,474	\$ 111,563	\$ 234,543	\$ 220,016

Note 4. Inventories

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

	<u>September 30,</u> <u>2019</u>	<u>March 31,</u> <u>2020</u>
Raw Materials	\$ 17,935	\$ 21,747
Work-in-process	138,859	142,879
Finished Goods	100,590	114,165
Other	1,418	1,546
	<u>\$ 258,802</u>	<u>\$ 280,337</u>

Note 5. Income Taxes

Income tax expense for the three and six months ended March 31, 2019 and 2020 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 March 31, 2020 was 26.0% on \$5,497 of income before income taxes compared to 26.0% on income before income taxes of \$2,039 for the three months ended March 31, 2019. The effective tax rate for the six months ended March 31, 2020 was 26.0% on \$9,914 of income before income taxes compared to 128.1% on income before income taxes of \$335 for the six months ended March 31, 2019. Income tax expense in the first six months of fiscal 2019 was unfavorably impacted by the forfeiture of unexercised stock options, which resulted in approximately \$300 of additional tax expense.

On Friday March 27, 2020 the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was signed into law. The CARES Act contains significant business tax provisions, including modifications to the rules limiting the deductibility of net operating losses (NOLs), expensing of qualified improvement property (OIP) and business interest in IRC Sections 172(a) and 163(j), respectively. The effects of the new legislation are recognized upon enactment, which (for U.S. federal legislation) is the date the President signs a bill into law. There was not significant impact to income tax expense for the three and six months ended March 31, 2020 relating to the CARES Act.

Note 6. Pension and Post-retirement Benefits

Components of net periodic pension and post-retirement benefit cost for the three and six months ended March 31, 2019 and 2020 were as follows:

	<u>Three Months Ended March 31,</u>				<u>Six Months Ended March 31,</u>			
	<u>Pension Benefits</u>		<u>Other Benefits</u>		<u>Pension Benefits</u>		<u>Other Benefits</u>	
	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>	<u>2019</u>	<u>2020</u>
Service cost	\$ 1,310	\$ 1,387	\$ 79	\$ 354	\$ 2,620	\$ 2,773	\$ 158	\$ 708
Interest cost	2,567	2,148	1,088	873	5,133	4,296	2,176	1,746
Expected return	(3,575)	(3,623)	—	—	(7,147)	(7,268)	—	—
Amortizations	401	1,859	372	462	803	3,718	744	924
Net periodic benefit cost	<u>\$ 703</u>	<u>\$ 1,771</u>	<u>\$ 1,539</u>	<u>\$ 1,689</u>	<u>\$ 1,409</u>	<u>\$ 3,519</u>	<u>\$ 3,078</u>	<u>\$ 3,378</u>

The Company contributed \$3,000 to Company-sponsored domestic pension plans, \$1,424 to its other post-retirement benefit plans and \$370 to the U.K. pension plan for the six months ended March 31, 2020. The Company expects to make contributions of \$3,000 to its U.S. pension plan, \$2,730 to its other post-retirement benefit plan and \$368 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 from 2018 through early 2020. 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, or other sites, if required. In addition, the Company occasionally has regulatory violations that may be required to be reported at the state or federal level. 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 March 31, 2020, 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 March 31, 2020.

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
	<u>\$</u>	<u>508</u>

On February 11, 2016, the Company voluntarily reported to the Louisiana Department of Environmental Quality a leak that it discovered in one of its chemical cleaning operations at its Arcadia, Louisiana facility. As a result of the discovery, the Company is working with that department to determine the extent of the issue and appropriate remediation. 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 a life of sixteen 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 March 31, 2020.

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

Amortization of customer relationships and other intangibles was \$50 and \$49 for the three-month periods ended March 31, 2019 and 2020, respectively and \$155 and \$100 for the six-month periods ended March 31, 2019 and 2020, respectively. The following represents a summary of intangible assets at September 30, 2019 and March 31, 2020.

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

March 31, 2020	Gross Amount	Accumulated Amortization	Carrying Amount
Trademarks	\$ 3,800	\$ —	\$ 3,800
Customer relationships	2,100	(789)	1,311
Other	291	(218)	73
	\$ 6,191	\$ (1,007)	\$ 5,184

Estimated future Aggregate Amortization Expense: Year Ended September 30,

2020	\$	98
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 March 31,		Six Months Ended March 31,	
	2019	2020	2019	2020
<i>Numerator: Basic and Diluted</i>				
Net income (loss)	\$ 1,509	\$ 4,068	\$ (94)	\$ 7,336
Dividends paid and accrued	(2,758)	(2,781)	(5,517)	(5,618)
Undistributed income (loss)	(1,249)	1,287	(5,611)	1,718
Percentage allocated to common shares ^(a)	100.0 %	99.3 %	100.0 %	99.3 %
Undistributed income (loss) allocated to common shares	(1,249)	1,279	(5,611)	1,707
Dividends paid on common shares outstanding	2,738	2,763	5,475	5,581
Net income (loss) available to common shares	1,489	4,042	(136)	7,288
<i>Denominator: Basic and Diluted</i>				
Weighted average common shares outstanding	12,448,792	12,473,881	12,439,689	12,466,867
Adjustment for dilutive potential common shares	151,500	30,182	—	30,082
Weighted average shares outstanding - Diluted	12,600,292	12,504,063	12,439,689	12,496,949
Basic net income (loss) per share	\$ 0.12	\$ 0.32	\$ (0.01)	\$ 0.58
Diluted net income (loss) per share	\$ 0.12	\$ 0.32	\$ (0.01)	\$ 0.58
Number of stock option shares excluded as their effect would be anti-dilutive	313,028	561,457	313,787	561,457
Number of restricted stock shares excluded as their effect would be anti-dilutive	66,688	—	67,694	—
Number of deferred restricted stock shares excluded as their effect would be anti-dilutive	29,050	—	29,050	—
Number of performance share awards excluded as their effect would be anti-dilutive	55,762	—	49,432	—
^(a) Percentage allocated to common shares - Weighted average				
Common shares outstanding	12,448,792	12,473,881	12,439,689	12,466,867
Unvested participating shares	—	81,652	—	82,468
	12,448,792	12,555,533	12,439,689	12,549,335

Note 11. Stock-Based Compensation

Restricted Stock

The following table summarizes the activity under the 2009 restricted stock plan and the 2016 and 2020 Incentive Compensation Plans with respect to restricted stock for the six months ended March 31, 2020:

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested at September 30, 2019	61,838	\$ 34.94
Granted	37,011	\$ 36.67
Forfeited / Canceled	(550)	\$ 34.00
Vested	(16,647)	\$ 40.33
Unvested at March 31, 2020	81,652	\$ 34.62
Expected to vest	81,652	\$ 34.62

Compensation expense related to restricted stock for the three months ended March 31, 2019 and 2020 was \$219 and \$340, respectively, and for the six months ended March 31, 2019 and 2020 was \$272 and \$556, respectively. The remaining unrecognized compensation expense related to restricted stock at March 31, 2020 was \$1,759, to be recognized over a weighted average period of 1.62 years. During the first six 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 and 2020 Incentive Compensation Plans with respect to deferred restricted stock for the six months ended March 31, 2020.

	Number of Shares	Weighted Average Fair Value At Grant Date
Unvested and deferred at September 30, 2019	12,500	\$ 33.98
Granted	7,449	\$ 33.39
Vested and deferred	(12,500)	33.98
Unvested and deferred at March 31, 2020	7,449	\$ 33.39
Vested and deferred at March 31, 2020	29,050	\$ 32.72

Compensation expense related to deferred restricted stock for the three months ended March 31, 2019 and 2020 was \$106 and \$58, respectively, and for the six months ended March 31, 2019 and 2020 was \$229 and \$143, respectively. The remaining recognized compensation expense related to deferred restricted stock at March 31, 2020 was \$176, to be recognized over a weighted average period of 0.67 years.

Performance Shares

The following table summarizes the activity under the 2016 and 2020 Incentive Compensation Plans with respect to performance shares for the six months ended March 31, 2020.

	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 March 31, 2020	62,433	\$ 43.14

Compensation expense related to the performance shares for the three months ended March 31, 2019 and 2020 was \$204 and \$238, respectively, and for the six months ended March 31, 2019 and 2020 was \$325 and \$414, respectively. The remaining unrecognized compensation expense related to performance shares at March 31, 2020 was \$1,606, to be recognized over a weighted average period of 1.69 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 year 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 March 31, 2019 and 2020 was \$178 and \$261, respectively, and for the six months ended March 31, 2019 and 2020 was \$331 and \$518, respectively. The remaining unrecognized compensation expense at March 31, 2020 was \$2,100, to be recognized over a weighted average vesting period of 2.00 years.

The following table summarizes the activity under the stock option plans and the 2016 and 2020 Incentive Compensation Plans with respect to stock options for the six months ended March 31, 2020 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 March 31, 2020	561,457	\$ —	\$ 37.97	7.57 yrs.
Vested or expected to vest	519,065	\$ —	\$ 37.90	7.64 yrs.
Exercisable at March 31, 2020	245,517	\$ —	\$ 42.17	5.51 yrs.

Note 12. Dividend

In the first and second quarters of fiscal 2020, the Company declared and paid quarterly cash dividends of \$0.22 per outstanding share of the Company's common stock. The first quarter dividend was paid on December 16, 2019 to stockholders of record at the close of business on December 2, 2019 and the second quarter dividend was paid on March 16, 2020 to stockholders of record at the close of business on March 2, 2020. The dividend cash pay-outs were \$2,760 and \$2,763 for the first and second quarters of fiscal 2020, respectively, and \$77 and \$18 of dividends were recorded as deferred in the first and second quarters, respectively.

On April 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 June 15, 2020 to stockholders of record at the close of business on June 1, 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 March 31, 2020.

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 or weakening of the U.S. dollar against the British pound sterling, net of tax when applicable.

Accumulated Other Comprehensive Income (Loss)

	Three Months Ended March 31, 2019			Total
	Pension Plan	Postretirement Plan	Foreign Exchange	
Accumulated other comprehensive income (loss) as of December 31, 2018	\$ (21,166)	\$ (10,928)	\$ (11,062)	\$ (43,156)
Other comprehensive income (loss) before reclassifications	—	—	1,031	1,031
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items ⁽¹⁾	52	—	—	52
Actuarial losses ⁽¹⁾	363	371	—	734
Tax benefit	(109)	(98)	—	(207)
Net current-period other comprehensive income (loss)	306	273	1,031	1,610
Accumulated other comprehensive income (loss) as of March 31, 2019	<u>\$ (20,860)</u>	<u>\$ (10,655)</u>	<u>\$ (10,031)</u>	<u>\$ (41,546)</u>

	Three Months Ended March 31, 2020			Total
	Pension Plan	Postretirement Plan	Foreign Exchange	
Accumulated other comprehensive income (loss) as of December 31, 2019	\$ (60,942)	\$ (17,749)	\$ (9,268)	\$ (87,959)
Other comprehensive income (loss) before reclassifications	—	—	(3,918)	(3,918)
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items ⁽¹⁾	52	—	—	52
Actuarial losses ⁽¹⁾	1,822	463	—	2,285
Tax benefit	(494)	(123)	—	(617)
Net current-period other comprehensive income (loss)	1,380	340	(3,918)	(2,198)
Accumulated other comprehensive income (loss) as of March 31, 2020	<u>\$ (59,562)</u>	<u>\$ (17,409)</u>	<u>\$ (13,186)</u>	<u>\$ (90,157)</u>

	Six Months Ended March 31, 2019			Total
	Pension Plan	Postretirement Plan	Foreign Exchange	
Accumulated other comprehensive income (loss) as of September 30, 2018	\$ (21,473)	\$ (11,201)	\$ (9,891)	\$ (42,565)
Other comprehensive income (loss) before reclassifications	—	—	(140)	(140)
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items ⁽¹⁾	103	—	—	103
Actuarial losses ⁽¹⁾	727	743	—	1,470
Tax benefit	(217)	(197)	—	(414)
Net current-period other comprehensive income (loss)	613	546	(140)	1,019
Accumulated other comprehensive loss as of March 31, 2019	<u>\$ (20,860)</u>	<u>\$ (10,655)</u>	<u>\$ (10,031)</u>	<u>\$ (41,546)</u>

	Six Months Ended March 31, 2020			Total
	Pension Plan	Postretirement Plan	Foreign Exchange	
Accumulated other comprehensive income (loss) as of September 30, 2019	\$ (53,811)	\$ (13,316)	\$ (13,511)	\$ (80,638)
Other comprehensive income (loss) before reclassifications	—	—	325	325
Amounts reclassified from accumulated other comprehensive income (loss)				
Amortization of Pension and Postretirement Plan items ⁽¹⁾	103	—	—	103
Actuarial losses ⁽¹⁾	3,642	925	—	4,567
Tax benefit	(987)	(244)	—	(1,231)
Net current-period other comprehensive income (loss)	2,758	681	325	3,764
Reclass due to adoption of ASU 2018-02	(8,509)	(4,774)	—	(13,283)
Accumulated other comprehensive loss as of March 31, 2020	<u>\$ (59,562)</u>	<u>\$ (17,409)</u>	<u>\$ (13,186)</u>	<u>\$ (90,157)</u>

(1) 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.

	<u>September 30,</u> <u>2019</u>	<u>March 31,</u> <u>2020</u>
Finance lease obligations	\$ 7,979	\$ 7,896
Environmental post-closure monitoring and maintenance activities	606	606
Long-term disability	251	261
Deferred dividends	40	135
Less amounts due within one year	(267)	(300)
Long-term obligations (less current portion)	<u>\$ 8,609</u>	<u>\$ 8,598</u>

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 and six months ended March 31, 2020.

	<u>Three Months Ended March 31, 2020</u>	<u>Six Months Ended March 31, 2020</u>
Finance lease cost:		
Amortization of right of use asset	\$ 107	\$ 215
Interest on lease liabilities	207	415
Total finance lease cost	<u>\$ 314</u>	<u>\$ 630</u>
Operating lease cost	<u>\$ 375</u>	<u>\$ 730</u>
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from finance leases	207	415
Operating cash flows from operating leases	375	730
Financing cash flows from finance leases	42	82
Total cash paid for amounts included in measurement of lease liabilities	<u>\$ 624</u>	<u>\$ 1,227</u>

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 March 31, 2020.

	<u>March 31, 2020</u>
Finance lease assets (included in Property, plant and equipment, net)	6,719
Operating right of use lease assets (included in Other assets)	2,306
Total lease assets	<u>\$ 9,025</u>
Finance lease liabilities	
Accrued expenses	182
Long-term obligations (less current portion)	7,714
Total Finance lease liabilities	<u>\$ 7,896</u>
Operating lease liabilities	<u>\$ 2,306</u>
	<u>March 31, 2020</u>
Weighted average lease term (Years)	
Finance leases	15.6
Operating leases	3.2
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 March 31, 2020.

Future minimum lease payments	Finance Leases	Operating Leases
2020	\$ 498	\$ 683
2021	1,001	839
2022	1,012	426
2023	1,024	293
2024	1,031	281
Thereafter	11,540	71
Total minimum lease payments	16,106	2,593
Less: amount representing interest	(8,210)	(287)
Present value of net minimum lease payments	\$ 7,896	\$ 2,306

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 March 31, 2020, 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 March 31, 2020. 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 March 31,		Six Months Ended March 31,	
	2019	2020	2019	2020
Foreign currency transactional gain (loss)	\$ (93)	\$ 724	\$ 247	\$ (347)
Foreign exchange forward contract gain (loss)	\$ 198	\$ (501)	\$ (299)	\$ (22)
Net gain (loss) included in selling, general and administrative expense	\$ 105	\$ 223	\$ (52)	\$ (369)

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, dividends and the impact of COVID-19 on the economy, demand for our products and our operations, including the measures taken by governmental authorities to address it, which may precipitate or exacerbate other risks and/or uncertainties. 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, including our expectations of the impact of the recent COVID-19 pandemic. 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 II of this Quarterly Report and Item 1A. of Part I 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.

COVID-19 Pandemic

In March 2020, the World Health Organization characterized the coronavirus (“COVID-19”) as a pandemic, and the President of the United States declared the COVID-19 outbreak a national emergency. The rapid spread of the pandemic, and the continuously evolving responses to combat it, have had an increasingly negative impact on the global economy and our business. Due to the widespread impact of the COVID-19 pandemic, the Company implemented a temporary shut-down of most of the Company’s production operations beginning the week of March 23, 2020, which impacted the last week of the second quarter. The shut-down continued into the third quarter with operations resuming in mid-April in certain areas on a voluntary basis.

Due to the current unprecedented market and economic conditions in the U.S. and internationally, the expected impact of the COVID-19 pandemic on the Company’s operations cannot be reasonably estimated. However, we expect our results from operations and cash flows for the remainder of fiscal 2020 to be adversely impacted by the pandemic. See Item 1A. Risk Factors in Part II. Other

Information for further information regarding the risks associated with the COVID-19 pandemic. Also, see Liquidity and Capital Resources below for certain actions taken by the Company in response to the COVID-19 pandemic.

Dividends Paid and Declared

In the first and second quarters 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 first quarter dividend was paid on December 16, 2019 to stockholders of record at the close of business on December 2, 2018 and the second quarter dividend was paid on March 16, 2020 to stockholders of record at the close of business on March 2, 2020. The dividend cash pay-outs in each of the first and second quarters were approximately \$2.8 million based on the number of shares outstanding and equal to approximately \$11.0 million on an annualized basis.

On April 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 June 15, 2020 to stockholders of record at the close of business on June 1, 2020.

Capital Spending

During the first six months of fiscal 2020, capital investment was \$4.1 million, and total planned capital expenditures for fiscal 2020 are expected to be between \$10.0 and \$12.0 million.

Volumes, Competition and Pricing

Due to the widespread impact of the COVID-19 pandemic, the Company implemented a temporary shut-down of most of the Company's production operations beginning the week of March 23, 2020, which impacted the last week of the second quarter. The shut-down continued into the third quarter with operations resuming in mid-April in certain areas on a voluntary basis. Volume shipped in the second quarter of fiscal 2020 was 4.3 million pounds, which was 0.1 million pounds higher sequentially than the first quarter of fiscal 2020, which was impacted by seasonality, and 0.9 million pounds, or 16.2%, lower than last year's second quarter.

Volume shipped into the aerospace market in the second quarter of fiscal 2020 was slightly lower sequentially compared to the first quarter of fiscal 2020 and 0.6 million pounds lower than last year's second quarter. Volumes going forward in aerospace are expected to significantly decline due to both Boeing's continuing issues with the 737 MAX and the demand reductions stemming from the COVID-19 pandemic. The pandemic has had effects across the aerospace industry with announced industry-wide shutdowns and reduced production levels.

Volume shipped into the chemical processing market in the second quarter of fiscal 2020 was lower sequentially by 0.1 million pounds compared to the first quarter of fiscal 2020 and lower than the second quarter of fiscal year 2019 by 0.3 million pounds, driven by lower base-business volumes, which the Company attributes to global economic uncertainty resulting from COVID-19, continued trade tariffs and the chemical industry's reaction to the significant drop in the market price of oil.

Volume shipped in the second quarter of fiscal 2020 into the industrial gas turbine market was 0.2 million pounds higher sequentially compared to the first quarter of fiscal 2020 and 0.2 million pounds higher than last year's second quarter. This was attributable to an easing of the inventory destocking in this market along with the initial impact of the Company's share gain initiative.

Volume shipped into the other markets category in the second quarter of fiscal 2020 was higher sequentially by 0.1 million pounds compared to the first quarter of fiscal 2020 and lower by 0.2 million pounds compared to last year's second quarter, the latter fluctuation driven by a reduction in flue gas desulfurization shipments.

The product average selling price per pound in the second quarter of fiscal 2020 was \$24.15, which is higher sequentially compared to the first quarter of fiscal 2020 and higher than last year's second quarter. The increase is primarily driven by favorable product mix and the impact of 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:

(dollars in thousands)	Comparison by Quarter of Net Revenues, Gross Profit Margin and Gross Profit Margin Percentage for Fiscal 2019 and 2020					
	Quarter Ended					
	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019	March 31, 2020
Net Revenues	\$ 107,069	\$ 127,474	\$ 126,032	\$ 129,640	\$ 108,453	\$ 111,563
Gross Profit Margin	\$ 11,335	\$ 14,683	\$ 18,175	\$ 21,310	\$ 18,743	\$ 19,296
Gross Profit Margin %	10.6 %	11.5 %	14.4 %	16.4 %	17.3 %	17.3 %

The temporary shut-down of most of the Company's production operations beginning the week of March 23, 2020 impacted the last week of the second quarter. Margins in January and February averaged over 18% with a drop in margins in March. Unfavorable fixed cost absorption compressed March margins due to the shutdown and lower volumes. Overall for the second quarter, gross profit margin percentage was 17.3%, even with gross profit margin percentage for the first quarter of fiscal 2020. Gross margin exceeded gross margin in last year's second quarter by \$4.6 million, or 580 basis points in spite of lower revenue of \$15.9 million. The Company's continued initiatives to improve pricing, improve yields and reduce costs have lowered its volume breakeven point and have been favorable for gross margins.

Backlog

	Quarter Ended					
	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019	March 31, 2020
Backlog⁽¹⁾						
Dollars (in thousands)	\$ 237,802	\$ 253,003	\$ 254,947	\$ 235,204	\$ 237,620	\$ 204,709
Pounds (in thousands)	8,392	8,855	9,072	8,064	8,231	6,930
Average selling price per pound	\$ 28.34	\$ 28.57	\$ 28.10	\$ 29.17	\$ 28.87	\$ 29.54
Average nickel price per pound						
London Metals Exchange ⁽²⁾	\$ 4.92	\$ 5.93	\$ 5.43	\$ 8.02	\$ 6.26	\$ 5.39

⁽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.

The Company has experienced lower order entry levels attributable to the grounding of the Boeing 737 MAX and the uncertainty from the global COVID-19 pandemic and its unprecedented impact on the economy, significant supply chain inventory reductions, continued trade tariffs and the significant drop in the oil prices. Backlog was \$204.7 million at March 31, 2020, a decrease of \$32.9 million, or 13.9%, from \$237.6 million at December 31, 2019. Backlog pounds at March 31, 2020 decreased sequentially during the second quarter of fiscal 2020 by 15.8% as compared to December 31, 2019. The average selling price of products in the Company's backlog increased to \$29.54 per pound at March 31, 2020 from \$28.87 per pound at December 31, 2019, reflecting a favorable change in product mix. Visibility with respect to the remainder of fiscal 2020 and beyond, is limited due to the uncertainty surrounding the ultimate impact of COVID-19 and the mitigation measures that are being pursued by governmental authorities.

Quarterly Market Information

	Quarter Ended					
	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019	March 31, 2020
Net revenues (in thousands)						
Aerospace	\$ 54,607	\$ 68,858	\$ 66,321	\$ 68,318	\$ 58,843	\$ 59,172
Chemical processing	18,920	21,761	21,197	27,773	16,712	15,832
Industrial gas turbines	14,083	13,685	15,870	15,792	13,763	16,701
Other markets	14,285	16,958	15,666	11,037	11,875	12,762
Total product revenue	101,895	121,262	119,054	122,920	101,193	104,467
Other revenue	5,174	6,212	6,978	6,720	7,260	7,096
Net revenues	\$ 107,069	\$ 127,474	\$ 126,032	\$ 129,640	\$ 108,453	\$ 111,563
Shipments by markets (in thousands of pounds)						
Aerospace	2,112	2,857	2,579	2,731	2,303	2,261
Chemical processing	898	971	1,126	1,315	788	689
Industrial gas turbines	811	757	893	946	825	990
Other markets	509	580	523	432	306	386
Total shipments	4,330	5,165	5,121	5,424	4,222	4,326
Average selling price per pound						
Aerospace	\$ 25.86	\$ 24.10	\$ 25.72	\$ 25.02	\$ 25.55	\$ 26.17
Chemical processing	21.07	22.41	18.83	21.12	21.21	22.98
Industrial gas turbines	17.36	18.08	17.77	16.69	16.68	16.87
Other markets	28.06	29.24	29.95	25.55	38.81	33.06
Total product (product only; excluding other revenue)	23.53	23.48	23.25	22.66	23.97	24.15
Total average selling price (including other revenue)	\$ 24.73	\$ 24.68	\$ 24.61	\$ 23.90	\$ 25.69	\$ 25.79

Results of Operations for the Three Months Ended March 31, 2020 Compared to the Three Months Ended March 31, 2019

	Three Months Ended March 31,				Change	
	2019		2020		Amount	%
Net revenues	\$ 127,474	100.0 %	\$ 111,563	100.0 %	\$ (15,911)	(12.5)%
Cost of sales	112,791	88.5 %	92,267	82.7 %	(20,524)	(18.2)%
Gross profit	14,683	11.5 %	19,296	17.3 %	4,613	31.4 %
Selling, general and administrative expense	10,663	8.4 %	10,785	9.7 %	122	1.1 %
Research and technical expense	859	0.7 %	1,028	0.9 %	169	19.7 %
Operating income (loss)	3,161	2.5 %	7,483	6.7 %	4,322	136.7 %
Nonoperating retirement benefit expense	856	0.7 %	1,700	1.5 %	844	98.6 %
Interest income	(18)	(0.0)%	(10)	(0.0)%	8	(44.4)%
Interest expense	284	0.2 %	296	0.3 %	12	4.2 %
Income (loss) before income taxes	2,039	1.6 %	5,497	4.9 %	3,458	169.6 %
Provision for (benefit from) income taxes	530	0.4 %	1,429	1.3 %	899	169.6 %
Net income (loss)	\$ 1,509	1.2 %	\$ 4,068	3.6 %	\$ 2,559	169.6 %

The following table sets forth certain financial information as a percentage of net revenues for the periods indicated and compares such information between periods.

By market	Three Months Ended		Change	
	March 31,		Amount	%
	2019	2020		
Net revenues (dollars in thousands)				
Aerospace	\$ 68,858	\$ 59,172	\$ (9,686)	(14.1)%
Chemical processing	21,761	15,832	(5,929)	(27.2)%
Industrial gas turbine	13,685	16,701	3,016	22.0 %
Other markets	16,958	12,762	(4,196)	(24.7)%
Total product revenue	121,262	104,467	(16,795)	(13.9)%
Other revenue	6,212	7,096	884	14.2 %
Net revenues	\$ 127,474	\$ 111,563	\$ (15,911)	(12.5)%
Pounds by market (in thousands)				
Aerospace	2,857	2,261	(596)	(20.9)%
Chemical processing	971	689	(282)	(29.0)%
Industrial gas turbine	757	990	233	30.8 %
Other markets	580	386	(194)	(33.4)%
Total shipments	5,165	4,326	(839)	(16.2)%
Average selling price per pound				
Aerospace	\$ 24.10	\$ 26.17	\$ 2.07	8.6 %
Chemical processing	22.41	22.98	0.57	2.5 %
Industrial gas turbine	18.08	16.87	(1.21)	(6.7)%
Other markets	29.24	33.06	3.82	13.1 %
Total product (excluding other revenue)	23.48	24.15	0.67	2.9 %
Total average selling price (including other revenue)	\$ 24.68	\$ 25.79	\$ 1.11	4.5 %

Net Revenues. Net revenues were \$111.6 million in the second quarter of fiscal 2020, a decrease of 12.5% from \$127.5 million in the same period of fiscal 2019. Volume was 4.3 million pounds in the second quarter of fiscal 2020, a decrease of 16.2% from 5.2 million pounds in the same period of fiscal 2019. The decrease in volume is primarily attributable to COVID-19 and impacts on the aerospace supply chain due to the 737 MAX. The product average selling price was \$24.15 per pound in the second quarter of fiscal 2020, an increase of 2.9% from \$23.48 per pound in the same period of fiscal 2019. The increase in average selling price per pound largely reflects improved pricing combined with a higher value product mix most notably in aerospace and other markets as compared to the same period of last year, both of which increased average selling price per pound by approximately \$0.79. These increases were partially offset by lower market prices of raw materials which decreased average selling price per pound by approximately \$0.12.

Sales to the aerospace market were \$59.2 million in the second quarter of fiscal 2020, a decrease of 14.1% from \$68.9 million in the same period of fiscal 2019, due to a 20.9% decrease in volume, partially offset by an 8.6% increase in average selling price per pound. Demand in the aerospace market declined due to issues in the supply chain due to the 737 MAX and COVID-19. The increase in average selling price per pound largely reflects a higher value product mix, combined with pricing increases taken over the past year, which increased average selling price per pound by approximately \$2.17, partially offset by lower market prices of raw materials, which decreased average selling price per pound by approximately \$0.10 per pound.

Sales to the chemical processing market were \$15.8 million in the second quarter of fiscal 2020, a decrease of 27.2% from \$21.8 million in the same period of fiscal 2019, due to a 29.0% decrease in volume, partially offset by a 2.5% increase in average selling price per pound. Volume was lower primarily due to decreased demand caused by COVID-19. This was partially offset by increased special project shipments. The increase in average selling price per pound reflects higher pricing, which increased average selling price per pound by approximately \$0.77, partially offset by a lower value product mix and lower market prices of raw materials, which decreased average selling price per pound by approximately \$0.20.

Sales to the industrial gas turbine market were \$16.7 million in the second quarter of fiscal 2020, an increase of 22.0% from \$13.7 million for the same period of fiscal 2019, due to an increase in volume of 30.8%, partially offset by a decrease in average selling price per pound of 6.7%. The increase in volume is primarily attributable an easing of inventory destocking in the industry, the initial impact of our share gain initiative and a slight improvement in demand for large-frame turbines, while small/medium frame engine builds have slowed down. The decrease in average selling price per pound reflects a lower value product mix, which decreased average selling

price per pound by approximately \$1.12, combined with lower market prices of raw materials, which decreased average selling price per pound by approximately \$0.09.

Sales to other markets were \$12.8 million in the second quarter of fiscal 2020, a decrease of 24.7% from \$17.0 million in the same period of fiscal 2019, due to a decrease in volume of 33.4%, partially offset by a 13.1% increase in average selling price per pound. The decrease in volume was primarily due to decreases in sales to the flue-gas desulfurization market. The average selling price per pound increase reflects a higher-value product mix, which increased average selling price per pound by approximately \$4.38, partially offset by increased pricing competition and lower market prices of raw materials, which decreased average selling price per pound by approximately \$0.56.

Other Revenue. Other revenue was \$7.1 million in the second quarter of fiscal 2020, an increase of 14.2% from \$6.2 million in the same period of fiscal 2019. The increase was due primarily to increased toll conversion.

Cost of Sales. Cost of sales was \$92.3 million, or 82.7% of net revenues, in the second quarter of fiscal 2020 compared to \$112.8 million, or 88.5% of net revenues, in the same period of fiscal 2019. The decrease was primarily due to lower volumes, combined with the Company's cost reduction initiatives and lower raw material prices.

Gross Profit. As a result of the above factors, gross profit was \$19.3 million for the second quarter of fiscal 2020, an increase of \$4.6 million from the same period of fiscal 2019. Gross margin as a percentage of net revenue increased to 17.3% in the second quarter of fiscal 2020 as compared to 11.5% in the same period of fiscal 2019, primarily attributable to improved pricing, higher value product mix and cost savings initiatives. Margins increased despite challenges from plant shutdowns in March for safety measures to reduce the risk of spread of COVID-19.

Selling, General and Administrative Expense. Selling, general and administrative expense was \$10.8 million for the second quarter of fiscal 2020. Selling, general and administrative expense as a percentage of net revenues increased to 9.7% for the second quarter of fiscal 2020 compared to 8.4% for the same period of fiscal 2019.

Research and Technical Expense. Research and technical expense was \$1.0 million, or 0.9% of net revenue, for the second quarter of fiscal 2020, compared to \$0.9 million, or 0.7% of net revenue, in the same period of fiscal 2019. The increase was primarily due to increased employment levels because of our ongoing investment in this core competency.

Operating Income/(Loss). As a result of the above factors, operating income in the second quarter of fiscal 2020 was \$7.5 million compared to operating income of \$3.2 million in the same period of fiscal 2019.

Nonoperating retirement benefit expense. Nonoperating retirement benefit expense was \$1.7 million in the second quarter of fiscal 2020 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 second quarter of fiscal 2020.

Income Taxes. Income tax expense was \$1.4 million in the second quarter of fiscal 2020, a difference of \$0.9 million from expense of \$0.5 million in the second quarter of fiscal 2019, driven by higher income before income taxes.

Net Income/(Loss). As a result of the above factors, net income in the second quarter of fiscal 2020 was \$4.1 million, compared to \$1.5 million in the same period of fiscal 2019.

Results of Operations for the Six Months Ended March 31, 2020 Compared to the Six Months Ended March 31, 2019

(\$ in thousands)	Six Months Ended March 31,				Change	
	2019		2020		Amount	%
Net revenues	\$ 234,543	100.0 %	\$ 220,016	100.0 %	\$ (14,527)	(6.2)%
Cost of sales	208,525	88.9 %	181,977	82.7 %	(26,548)	(12.7)%
Gross profit	26,018	11.1 %	38,039	17.3 %	12,021	46.2 %
Selling, general and administrative expense	21,791	9.3 %	22,292	10.1 %	501	2.3 %
Research and technical expense	1,693	0.7 %	1,910	0.9 %	217	12.8 %
Operating income (loss)	2,534	1.1 %	13,837	6.3 %	11,303	446.1 %
Nonoperating retirement benefit expense	1,712	0.7 %	3,400	1.5 %	1,688	98.6 %
Interest income	(38)	(0.0)%	(24)	(0.0)%	14	(36.8)%
Interest expense	525	0.2 %	547	0.2 %	22	4.2 %
Income (loss) before income taxes	335	0.1 %	9,914	4.5 %	9,579	2,859.4 %
Provision for (benefit from) income taxes	429	0.2 %	2,578	1.2 %	2,149	500.9 %
Net income (loss)	\$ (94)	(0.0)%	\$ 7,336	3.3 %	\$ 7,430	(7,904.3)%

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.

	Six Months Ended March 31,		Change	
	2019	2020	Amount	%
Net revenues (dollars in thousands)				
Aerospace	\$ 123,465	\$ 118,015	\$ (5,450)	(4.4)%
Chemical processing	40,681	32,544	(8,137)	(20.0)%
Industrial gas turbine	27,768	30,464	2,696	9.7 %
Other markets	31,243	24,637	(6,606)	(21.1)%
Total product revenue	223,157	205,660	(17,497)	(7.8)%
Other revenue	11,386	14,356	2,970	26.1 %
Net revenues	\$ 234,543	\$ 220,016	\$ (14,527)	(6.2)%
Pounds by market (in thousands)				
Aerospace	4,969	4,564	(405)	(8.2)%
Chemical processing	1,869	1,477	(392)	(21.0)%
Industrial gas turbine	1,568	1,815	247	15.8 %
Other markets	1,089	692	(397)	(36.5)%
Total shipments	9,495	8,548	(947)	(10.0)%
Average selling price per pound				
Aerospace	\$ 24.85	\$ 25.86	\$ 1.01	4.1 %
Chemical processing	21.77	22.03	0.26	1.2 %
Industrial gas turbine	17.71	16.78	(0.93)	(5.3)%
Other markets	28.69	35.60	6.91	24.1 %
Total product (excluding other revenue)	23.50	24.06	0.56	2.4 %
Total average selling price (including other revenue)	\$ 24.70	\$ 25.74	\$ 1.04	4.2 %

Net Revenues. Net revenues were \$220.0 million in the first six months of fiscal 2020, a decrease of 6.2% from \$234.5 million in the same period of fiscal 2019. Volume was 8.5 million pounds in the first six months of fiscal 2020, a decrease of 10.0% from 9.5 million pounds in the same period of fiscal 2019. The decrease in volume was primarily caused by COVID-19 and issues in the aerospace supply chain due to the 737 MAX, partially offset by increased volumes in the industrial gas turbine market. The product average selling price was \$24.06 per pound in the first six months of fiscal 2020, an increase of 2.4% from \$23.50 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 as compared to the same period of fiscal 2019, in the amount of approximately \$0.65 per pound, partially offset by lower raw material market prices, which decreased average selling price per pound by approximately \$0.09.

Sales to the aerospace market were \$118.0 million in the first six months of fiscal 2020, a decrease of 4.4% from \$123.5 million in the same period of fiscal 2019, due to an 8.2%, or 0.4 million pound, decrease in volume, partially offset by a 4.1%, or \$1.01, increase in average selling price per pound. The decrease in volume is due to COVID-19 and the reduced demand in the supply chain for the

Boeing 737 MAX. The average selling price per pound increase reflects a higher value product mix and improved pricing, which increased average selling price per pound by approximately \$1.03, partially offset by lower raw material market prices, which decreased average selling price per pound by approximately \$0.02.

Sales to the chemical processing market were \$32.5 million in the first six months of fiscal 2020, a decrease of 20.0% from \$40.7 million in the same period of fiscal 2019, due to a 21.0% decrease in volume, partially offset by a 1.2%, or \$0.26, increase in average selling price per pound. Base-business volumes decreased in the first six months of fiscal 2020 from the same period of fiscal 2019, primarily due to COVID-19. However, partially offsetting base-business decline was an increase in specialty application project revenue in the first six 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 \$0.53, partially offset by a lower-value product mix, which decreased average selling price per pound by approximately \$0.27.

Sales to the industrial gas turbine market were \$30.5 million in the first six months of fiscal 2020, an increase of 9.7% from \$27.8 million for the same period of fiscal 2019, due to an increase in volume of 15.8%, partially offset by a decrease in average selling price per pound of 5.3%, or \$0.93. The increase in volume is primarily attributable an easing of inventory destocking in the industry, the initial impact of our share gain initiative and a slight improvement in demand for large-frame turbines, while small/medium frame engine builds have slowed down. The decrease in average selling price per pound primarily reflects declined pricing due to competition and other factors combined with lower market prices for raw materials, which decreased average selling price per pound by approximately \$1.12, partially offset by a higher-value product mix, which increased the average selling price per pound by approximately \$0.19.

Sales to other markets were \$24.6 million in the first six months of fiscal 2020, a decrease of 21.1% from \$31.2 million in the same period of fiscal 2019, due to a 36.5% decrease in volume, partially offset by a 24.1% 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, which increased average selling price per pound by approximately \$7.99, partially offset by lower raw material market prices and increased competition and other factors, which decreased average selling price per pound by approximately \$1.08.

Other Revenue. Other revenue was \$14.4 million in the first six months of fiscal 2020, an increase of 26.1% from \$11.4 million in the same period of fiscal 2019. The increase was due primarily to increased toll conversion.

Cost of Sales. Cost of sales was \$182.0 million, or 82.7% of net revenues, in the first six months of fiscal 2020 compared to \$208.5 million, or 88.9% 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 \$38.0 million for the first six months of fiscal 2020, an increase of \$12.0 million from the same period of fiscal 2019. Gross profit as a percentage of net revenue increased to 17.3% in the first six months of fiscal 2020 as compared to 11.1% 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 \$22.3 million for the first six months of fiscal 2020, an increase of \$0.5 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 10.1% for the first six months of fiscal 2020 compared to 9.3% for the same period of fiscal 2019.

Research and Technical Expense. Research and technical expense was \$1.9 million, or 0.9% of net revenue, for the first six months of fiscal 2020, compared to \$1.7 million, or 0.7% of net revenue, in the same period of fiscal 2019. The increase was primarily due to higher salary expenses.

Operating Income/(Loss). As a result of the above factors, operating income in the first six months of fiscal 2020 was \$13.8 million compared to an operating income of \$2.5 million in the same period of fiscal 2019.

Nonoperating retirement benefit expense. Nonoperating retirement benefit expense was \$3.4 million in the first six months of fiscal 2020 compared to \$1.7 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 six months of fiscal 2020.

Income Taxes. Income tax expense was \$2.6 million in the first six months of fiscal 2020, an increase of \$2.1 million from expense of \$0.4 million in the same period of fiscal 2019. The effective tax rate (ETR) in the first six months of fiscal 2020 of 26.0% was lower

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 six months of fiscal 2019.

Net Income/(Loss). As a result of the above factors, net income for the first six months of fiscal 2020 was \$7.3 million, a difference of \$7.4 million from a net loss of \$(0.1) million in the same period of fiscal 2019.

Working Capital

Controllable working capital, which includes accounts receivable, inventory, accounts payable and accrued expenses, was \$300.2 million at March 31, 2020, an increase of \$17.7 million, or 6.3%, from \$282.5 million at September 30, 2019. This increase resulted primarily from inventory increasing \$21.5 million and accounts payable and accrued expenses decreasing by \$7.2 million, partially offset by accounts receivable decreasing by \$11.0 million during the first six months of fiscal 2020.

Liquidity and Capital Resources

Comparative cash flow analysis

The Company had cash and cash equivalents of \$52.4 million at March 31, 2020, inclusive of \$8.1 million that was held by foreign subsidiaries in various currencies, compared to \$31.0 million at September 30, 2019. Additionally, the Company has borrowings against its line of credit outstanding of \$30.0 million as of March 31, 2020 compared to zero borrowed as of September 30, 2019.

Net cash provided by operating activities in the first six months of fiscal 2020 was \$0.8 million compared to net cash provided by operating activities of \$12.1 million in the first six months of fiscal 2019, a decrease of \$11.3 million. Cash flow from operating activities in the first six months of fiscal 2020 was adversely impacted by higher tax payments as compared to the same period of fiscal 2019, an increase in inventory as compared to a decrease in the same period of fiscal 2019 and a decrease in accounts payable and accrued expenses as compared to an increase in the same period of fiscal 2019. These impacts were partially offset by higher net income in the first six months of fiscal 2020 as compared to the same period of fiscal 2019 and a decrease in accounts receivable in the first six months of fiscal 2020 as compared to an increase in the same period of fiscal 2019.

Net cash used in investing activities was \$4.1 million in the first six months of fiscal 2020 which was lower than cash used in investing activities during the same period of fiscal 2019 due to lower additions to property, plant and equipment.

Net cash provided by financing activities was \$24.6 million in the first six months of fiscal 2020, primarily driven by the borrowing of \$30.0 million against the revolving line of credit. This source of cash was partially offset by cash used in financing activities of \$(5.4) million primarily attributable to dividends paid, which amount was comparable to the same period of fiscal 2019.

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, additional borrowings under the U.S. revolving credit facility. At March 31, 2020, the Company had cash of \$52.4 million and an outstanding balance of \$30 million under its \$120.0 million U.S. revolving credit facility with access to an additional \$90.0 million, 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.

During the second quarter of fiscal 2020 the Company undertook measures to further secure its liquidity position and to provide financial flexibility given uncertain market conditions as a result of the COVID-19 outbreak, including drawing \$30.0 million available under the line of credit. In addition, the Company temporarily reduced the base salaries of the President and Chief Executive Officer, the Vice-Presidents and other members of the executive team by 10%, and the members of the Board of Directors also temporarily reduced their total cash compensation by 10%.

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 0.00% to 0.75% per annum, or the

adjusted Eurodollar rate used by the lender, plus 1.5% to 2.0% per annum (depending on the amount borrowed). The Company is currently borrowing in the lowest point in the range. As of March 31, 2020, the U.S. revolving credit facility had a balance of \$30.0 million.

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 March 31, 2020, 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 six months of fiscal 2020 was \$4.1 million, and the forecast for capital spending in fiscal 2020 is between \$10.0 and \$12.0 million.

Contractual Obligations

The following table sets forth the Company’s contractual obligations for the periods indicated, as of March 31, 2020:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1-3 Years	3-5 Years	More than 5 years
			(in thousands)		
Credit facility fees ⁽¹⁾	\$ 30,526	\$ 30,436	\$ 90	\$ —	\$ —
Operating lease obligations	3,954	2,097	1,310	547	—
Finance lease obligations	16,190	998	2,024	2,063	11,105
Raw material contracts (primarily nickel)	16,767	16,767	—	—	—
Capital projects and other commitments	2,902	2,902	—	—	—
Pension plan ⁽²⁾	98,523	6,000	12,000	9,000	71,523
Non-qualified pension plans	671	95	190	190	196
Other postretirement benefits ⁽³⁾	47,234	4,155	9,281	9,859	23,939
Environmental post-closure monitoring	606	97	144	151	214
Total	\$ 217,373	\$ 63,547	\$ 25,039	\$ 21,810	\$ 106,977

⁽¹⁾ As of March 31, 2020, the revolver balance was \$30,000 with interest due along with unused line fees and quarterly management fees.

⁽²⁾ The Company has a funding obligation to contribute \$98,523 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 March 31, 2020. 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 March 31, 2020 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 March 31, 2020, 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 March 31, 2020.

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 1a. Risk Factors

In addition to the risk factors previously disclosed in Part I Item IA of our Annual Report on Form 10-K for the fiscal year ended September 30, 2019, we are exposed to certain additional risks and uncertainties which could have a material adverse impact on our business, financial condition and operating results as a result of the recent outbreak of COVID-19.

The risks described herein and in our Annual Report on Form 10-K are not the only risks we face. New risk factors or risks that we currently deem immaterial emerge from time to time and it is not possible for us to predict all such risk factors, nor to assess the impact such risk factors might have on our business, financial condition and operating results, or the extent to which any such risk factor or combination of risk factors may impact our business, financial condition and operating results.

Our results of operations, financial condition, cash flows have and may continue to be adversely affected by pandemics, epidemics or other public health emergencies, such as the recent outbreak of COVID-19.

Our business, results of operations, financial condition, cash flows and stock price have and may continue to be adversely affected by pandemics, epidemics or other public health emergencies, such as the recent outbreak of COVID-19 which has spread from China to many other countries, including the United States. In March 2020, the World Health Organization characterized COVID-19 as a pandemic, and the President of the United States declared the COVID-19 outbreak a national emergency. The outbreak has resulted in governments around the world implementing increasingly stringent measures to help control the spread of the virus, including quarantines, “shelter in place” and “stay at home” orders, travel restrictions, business curtailments, school closures, and other measures. In addition, governments and central banks in several parts of the world have enacted fiscal and monetary stimulus measures to counteract the impacts of COVID-19.

The outbreak of COVID-19 and preventive or protective actions taken by governmental authorities may continue to have a material adverse effect on our operations, supply chain, customers and transportation networks, including business shutdowns or disruptions. The extent to which COVID-19 may continue to adversely impact our business depends on future developments, which are highly uncertain and unpredictable, depending upon the severity and duration of the outbreak and the effectiveness of actions taken globally to contain or mitigate its effects. Future financial impact cannot be estimated reasonably at this time, but may materially adversely affect our business, results of operations, financial condition and cash flows. The aerospace market, our largest market, has been particularly hit hard by the addition of COVID-19 issues to the pre-existing issues with the Boeing 737MAX, and we cannot determine what further effect that exacerbating factor will have on the aerospace market. Even after the COVID-19 pandemic has subsided, we may experience materially adverse impacts to our business due to any resulting economic recession or depression. Additionally, concerns over the economic impact of COVID-19 have caused extreme volatility in financial and other capital markets which has and may continue to adversely impact our stock price and our ability to access capital markets. Our indebtedness may increase due to our need to increase borrowing to fund operations during a period of reduced revenue. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in our Annual Report on Form 10-K.

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).
10.1	Haynes International, Inc. 2020 Incentive Compensation Plan (incorporated by reference to Exhibit 99.1 to the for 8-K filed by the Company on February 27, 2020).
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: April 30, 2020

/s/ Daniel Maudlin

Daniel Maudlin
Vice President — Finance and Chief Financial Officer
Date: April 30, 2020

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.

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: April 30, 2020

/s/ MICHAEL L. SHOR

Michael L. Shor
President and Chief Executive Officer

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: April 30, 2020

/s/ DANIEL W. MAUDLIN

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

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

I, Daniel W. Maudlin, the Vice President Finance and Chief Financial Officer of Haynes International, Inc., certify that (i) the Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2020 (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*

April 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 March 31, 2020 (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

April 30, 2020

Date