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

o **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- 34481

Mistras Group, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**22-3341267**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
195 Clarksville Road **Princeton Junction, New Jersey**	**08550**
(Address of principal executive offices)	*(Zip Code)*

(609) 716-4000

(Registrant’s telephone number, including area code)

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

Title of each class	*Trading Symbol(s)*	*Name of each exchange on which registered*
Common Stock, $0.01 par value	MG	New York Stock Exchange

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 o 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 o 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 o	Accelerated filer x
Non-accelerated filer o	Smaller reporting company o
	Emerging Growth Company o

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. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

o Yes ☒ No

As of May 11, 2020, the registrant had 29,074,110 shares of common stock outstanding.

TABLE OF CONTENTS

PART I—FINANCIAL INFORMATION

ITEM 1. Financial Statements

Mistras Group, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)

	March 31, 2020	December 31, 2019
ASSETS	(unaudited)	
Current Assets		
Cash and cash equivalents	$ 17,027	$ 15,016
Accounts receivable, net	125,130	135,997
Inventories	13,510	13,413
Prepaid expenses and other current assets	13,151	14,729
Total current assets	168,818	179,155
Property, plant and equipment, net	94,971	98,607
Intangible assets, net	72,019	109,537
Goodwill	196,289	282,410
Deferred income taxes	1,910	1,786
Other assets	49,538	48,383
Total assets	$ 583,545	$ 719,878
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	$ 13,110	$ 15,033
Accrued expenses and other current liabilities	75,156	81,389
Current portion of long-term debt	7,240	6,593
Current portion of finance lease obligations	3,847	4,131
Income taxes payable	2,067	2,094
Total current liabilities	101,420	109,240
Long-term debt, net of current portion	250,786	248,120
Obligations under finance leases, net of current portion	12,401	13,043
Deferred income taxes	6,761	21,290
Other long-term liabilities	40,424	42,163
Total liabilities	411,792	433,856
Commitments and contingencies		
Equity		
Preferred stock, 10,000,000 shares authorized	—	—
Common stock, $0.01 par value, 200,000,000 shares authorized, 29,042,069 and 28,945,472 shares issued	290	289
Additional paid-in capital	230,472	229,205
Retained earnings (deficit)	(20,896)	77,613
Accumulated other comprehensive loss	(38,294)	(21,285)
Total Mistras Group, Inc. stockholders’ equity	171,572	285,822
Non-controlling interests	181	200
Total equity	171,753	286,022
Total liabilities and equity	$ 583,545	$ 719,878

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

Mistras Group, Inc. and Subsidiaries
Unaudited Condensed Consolidated Statements of Income (Loss)
(in thousands, except per share data)

	Three months ended	
	March 31, 2020	March 31, 2019
Revenue	$ 159,465	$ 176,787
Cost of revenue	113,324	122,417
Depreciation	5,497	5,496
Gross profit	40,644	48,874
Selling, general and administrative expenses	41,558	41,763
Bad debt provision for troubled customers, net of recoveries	—	5,491
Impairment charges	106,062	—
Pension withdrawal expense	—	534
Research and engineering	824	857
Depreciation and amortization	3,970	4,172
Acquisition-related expense (benefit), net	(542)	453
Loss from operations	(111,228)	(4,396)
Interest expense	2,789	3,527
Loss before provision (benefit) for income taxes	(114,017)	(7,923)
Benefit for income taxes	(15,495)	(2,637)
Net loss	(98,522)	(5,286)
Less: Net income (loss) attributable to non-controlling interests, net of taxes	(13)	7
Net loss attributable to Mistras Group, Inc.	$ (98,509)	$ (5,293)
Earnings (loss) per common share:		
Basic	$ (3.40)	$ (0.19)
Diluted	$ (3.40)	$ (0.19)
Weighted-average common shares outstanding:		
Basic	28,963	28,574
Diluted	28,963	28,574

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

Mistras Group, Inc. and Subsidiaries
Unaudited Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)

	Three months ended	
	March 31, 2020	March 31, 2019
Net loss	$ (98,522)	$ (5,286)
Other comprehensive income (loss):		
Foreign currency translation adjustments	(17,009)	2,131
Comprehensive loss	(115,531)	(3,155)
Less: comprehensive income (loss) attributable to non-controlling interest	(19)	9
Comprehensive loss attributable to Mistras Group, Inc.	$ (115,512)	$ (3,164)

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

Mistras Group, Inc. and Subsidiaries
Unaudited Condensed Consolidated Statements of Equity
(in thousands)

	Three months ended							
	Common Stock							
	Shares	Amount	Additional paid-in capital	Retained earnings (deficit)	Accumulated other comprehensive income (loss)	Total Mistras Group, Inc. Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance at December 31, 2019	28,945	$ 289	$ 229,205	$ 77,613	$ (21,285)	$ 285,822	$ 200	$ 286,022
Net loss	—	—	—	(98,509)	—	(98,509)	(13)	(98,522)
Other comprehensive loss, net of tax	—	—	—	—	(17,009)	(17,009)	(6)	(17,015)
Share-based payments	—	—	1,425	—	—	1,425	—	1,425
Net settlement of restricted stock units	97	1	(158)	—	—	(157)	—	(157)
Balance at March 31, 2020	29,042	$ 290	$ 230,472	$ (20,896)	$ (38,294)	$ 171,572	$ 181	$ 171,753
Balance at December 31, 2018	28,563	$ 285	$ 226,616	$ 71,553	$ (27,557)	$ 270,897	$ 177	$ 271,074
Net income (loss)	—	—	—	(5,293)	—	(5,293)	7	(5,286)
Other comprehensive income, net of tax	—	—	—	—	2,131	2,131	2	2,133
Share-based payments	61	1	1,426	—	—	1,427	—	1,427
Net settlement of restricted stock units	—	—	(284)	—	—	(284)	—	(284)
Exercise of stock options	3	—	32	—	—	32	—	32
Balance at March 31, 2019	28,627	$ 286	$ 227,790	$ 66,260	$ (25,426)	$ 268,910	$ 186	$ 269,096

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

Mistras Group, Inc. and Subsidiaries
Unaudited Condensed Consolidated Statements of Cash Flows
(in thousands)

	Three months ended	
	March 31, 2020	March 31, 2019
Cash flows from operating activities		
Net loss	$ (98,522)	$ (5,286)
Adjustments to reconcile net loss to net cash provided by operating activities		
Depreciation and amortization	9,467	9,668
Impairment charges	106,062	—
Deferred income taxes	(13,739)	244
Share-based compensation expense	1,345	1,356
Bad debt provision for troubled customers, net of recoveries	—	5,491
Fair value adjustments to contingent consideration	(542)	305
Foreign currency (gain) loss	307	(647)
Other	76	(163)
Changes in operating assets and liabilities, net of effect of acquisitions and dispositions		
Accounts receivable	7,884	4,904
Inventories	(405)	(505)
Prepaid expenses and other assets	(985)	(5,425)
Accounts payable	(1,526)	(541)
Accrued expenses and other liabilities	(3,315)	(3,189)
Income taxes payable	—	1,965
Net cash provided by operating activities	6,107	8,177
Cash flows from investing activities		
Purchase of property, plant and equipment	(4,301)	(5,637)
Purchase of intangible assets	(87)	(88)
Proceeds from sale of equipment	184	724
Net cash used in investing activities	(4,204)	(5,001)
Cash flows from financing activities		
Repayment of finance lease obligations	(1,167)	(1,124)
Proceeds from borrowings of long-term debt	280	121
Repayment of long-term debt	(1,639)	(1,694)
Proceeds from revolver	13,500	6,500
Repayment of revolver	(8,500)	(7,500)
Payment of financing costs	(522)	—
Payment of contingent consideration for business acquisitions	(1,303)	—
Taxes paid related to net share settlement of share-based awards	(157)	(284)
Proceeds from exercise of stock options	—	32
Net cash provided by (used in) financing activities	492	(3,949)
Effect of exchange rate changes on cash and cash equivalents	(384)	(171)
Net change in cash and cash equivalents	2,011	(944)
Cash and cash equivalents at beginning of period	15,016	25,544
Cash and cash equivalents at end of period	$ 17,027	$ 24,600
Supplemental disclosure of cash paid		
Interest	$ 2,726	$ 3,428
Income taxes	$ 61	$ 1,091
Noncash investing and financing		
Equipment acquired through finance lease obligations	$ 667	$ 1,086

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

1. Description of Business and Basis of Presentation

Description of Business

Mistras Group, Inc. and subsidiaries ("the Company") is a leading “one source” global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, industrial, public infrastructure and commercial aerospace components. The Company combines industry-leading products and technologies, expertise in mechanical integrity (MI), non-destructive testing (NDT) and mechanical services and proprietary data analysis software to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity assessments and management. These mission critical solutions enhance customers’ ability to extend the useful life of their assets, increase productivity, minimize repair costs, comply with governmental safety and environmental regulations, manage risk and avoid catastrophic disasters. The Company serves a global customer base of companies with asset-intensive infrastructure, including companies in the oil and gas, commercial aerospace and defense, fossil and nuclear power, alternative and renewable energy, public infrastructure, chemicals, transportation, primary metals and metalworking, pharmaceutical/biotechnology and food processing industries and research and engineering institutions.

Recent Developments

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus (COVID-19) as a pandemic, which continues to spread throughout the United States. The COVID-19 pandemic has caused significant volatility in domestic and international markets. There is on-going uncertainty around the breadth and duration of business disruptions related to COVID-19, as well as its impact on the U.S. and international economies. In addition, oil prices have dropped significantly, and airline traffic has experienced a significant decline. These declines were driven by the uncertainty surrounding the COVID-19 pandemic and, in the case of the oil and gas market, other macroeconomic events such as the geopolitical tensions between OPEC and Russia, which also resulted in a significant drop in oil prices.

The COVID-19 pandemic and significant drop in oil prices has adversely affected the Company's workforce and operations, as well as the operations of its customers, suppliers and contractors. These negative factors have also resulted in significant volatility and uncertainty in the markets in which the Company operates. To successfully navigate through this unprecedented period, the Company continues to focus on the following key priorities:

- Ensuring the health and safety of its employees and those of its customers and suppliers;
- Maintaining business continuity and financial strength and stability; and
- Serving its customers as they provide essential products and services to the world.

While the Company cannot fully assess the impact that the COVID-19 pandemic or the significant drop in oil prices will have on its operations at this time, there are certain impacts that the Company has identified:

- The financial market volatility that resulted from COVID-19 and the drop in oil prices required the Company to reassess the goodwill it had recorded related to various prior acquisitions under the guidance of ASC 350. The Company determined that the fair values of various reporting units were less than their carrying values (including goodwill). As a result, the Company recorded an impairment charge related to goodwill of approximately $77.1 million in the three months ended March 31, 2020. See Note 8–*Goodwill*.
- This same financial market volatility required the Company to reassess the tangible and intangible assets recorded under the guidance of ASC 360. The Company determined that the fair values of certain asset groups were less than their carrying values (excluding goodwill). As a result, the Company recorded impairment charges related to intangible assets of approximately $28.8 million and a right-of-use asset of approximately $0.2 million in the three months ended March 31, 2020. See Note 9–*Intangible Assets* and Note 13–*Leases*.
- As of March 31, 2020, the Company was in compliance with the terms of its $300 million revolving line of credit and $100 million senior secured term loan A facility provided by its banking group. Given the uncertainty of the Company's projected cash flows as a result of the impact of the COVID-19 pandemic and the drop in oil prices, the Company entered into an amendment on May 15, 2020 with its banking group that, among other provisions, modifies

the current financial covenants. The Company believes that it is probable, based on the amended covenants, that the Company will be able to comply with the amended covenants and fulfil its obligations under the credit agreement; however, such matters cannot be predicted with certainty. See Note 11–*Long-Term Debt*.

To respond to the economic downturn resulting from the COVID-19 pandemic and the drop in oil prices, the Company has initiated a cost reduction and efficiency program. All named executive officers of the Company have voluntarily taken temporary salary reductions ranging from 25% to 45% of their base salary. In addition, the Company instituted a reduction for its other salaried employees, at lower percentages, and suspended the Company's voluntary match under the Company sponsored savings plans for its U.S. and Canadian employees. These reductions are for the second quarter of 2020. If the economic downturn continues beyond the second quarter and there is no sign of economic recovery for the Company or its industry, the Company will assess whether to change these cost saving measures. In addition, the Company's non-employee directors voluntarily agreed to a $3,750 reduction in their second quarter 2020 payment.

The Company is currently unable to predict with certainty the overall impact that the COVID-19 pandemic and drop in oil prices may have on its business, results of operations, or liquidity. The Company may be impacted by the pandemic and drop in oil prices in other ways which the Company cannot yet determine. The Company will continue to monitor market conditions and respond accordingly.

Basis of Presentation

The condensed consolidated financial statements contained in this report are unaudited. In the opinion of management, the condensed consolidated financial statements include all adjustments, which are of a normal recurring nature, necessary for a fair presentation of the results for the interim periods of the years ending December 31, 2020 and December 31, 2019. Certain items included in these statements are based on management's estimates. Actual results may differ from those estimates. The results of operations for any interim period are not necessarily indicative of the results expected for the year. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the notes to the audited consolidated financial statements contained in the 2019 Annual Report.

Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of Mistras Group, Inc. and its wholly and majority-owned subsidiaries. For subsidiaries in which the Company's ownership interest is less than 100%, the non-controlling interests are reported in stockholders' equity in the accompanying Condensed Consolidated Balance Sheets. The non-controlling interests in net results, net of tax, is classified separately in the accompanying Unaudited Condensed Consolidated Statements of Income (Loss). All significant intercompany accounts and transactions have been eliminated in consolidation.

Reclassification

Certain amounts in prior periods have been reclassified to conform to the current year presentation. Such reclassifications did not have a material effect on the Company's financial condition or results of operations as previously reported.

Customers

For each of the three months ended March 31, 2020 and 2019, no customer represented 10% or more of the Company's revenue.

Significant Accounting Policies

The Company's significant accounting policies are disclosed in Note 1–*Summary of Significant Accounting Policies and Practices* in the 2019 Annual Report. On an ongoing basis, the Company evaluates its estimates and assumptions, including among other things, those related to revenue recognition, long-lived assets, goodwill and acquisitions. Since the date of the 2019 Annual Report, there have been no material changes to the Company's significant accounting policies.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and tax credit carry-forwards. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred income tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is provided if it is more likely than not that some or all of a deferred income tax asset will not be realized. Financial accounting standards prescribe a minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. These standards also provide guidance on de-recognition, measurement, and classification of amounts relating to uncertain tax positions, accounting for and disclosure of interest and penalties, accounting in interim periods and disclosures required. Interest and penalties related to unrecognized tax positions are recognized as incurred within “provision for income taxes” in the consolidated statements of income. ASC 740-270, Income Taxes-Interim Reporting, requires the Company to use an estimated annual effective tax rate (EAETR) for calculating its tax provision for interim periods. At each interim period, the Company is required, with certain exceptions and limitations, to estimate its forecasted worldwide EAETR, which is applied to the Company's year-to-date consolidated ordinary income or loss resulting in the year-to-date income tax provision before considering items not included in ordinary income or loss. The tax effects of events or transactions not considered to represent ordinary income or loss are accounted for discretely in the interim period and are not included in the determination of the EAETR.

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security Act (“CARES Act”) was signed into law on March 27, 2020. The CARES Act, among other things, includes tax provisions relating to deferment of employer’s social security payments, net operating loss utilization and carryback periods, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property (QIP). The ultimate impact of the CARES Act may differ from the estimated impact the Company recorded during this interim period due to changes in interpretations and guidance that may be issued and actions the Company may take in response to the CARES Act. The Company will continue to assess the impact that various provisions will have on its business.

The Company continues to evaluate its deferred tax assets each period to determine if a valuation allowance is required based on whether it is more likely than not that some portion of these deferred tax assets will not be realized. As of March 31, 2020, management concluded that it is more likely than not that a substantial portion of the Company's deferred tax assets will be realized. As part of the Company's analysis, it considered both positive and negative factors that impact profitability and whether those factors would lead to a change in the estimate of the Company's deferred tax assets that may be realized in the future. In the current period, the Company began to see impacts on its business as a result of the COVID-19 pandemic. The Company will continue to monitor the impacts of the COVID-19 pandemic on its business, and any sustained or prolonged reductions in future earnings periods may change the Company's conclusions on whether it is more likely than not to realize portions of the Company's deferred tax assets.

The Company’s effective income tax rate was approximately 14% and 33% for the three months ended March 31, 2020 and 2019, respectively. The effective income tax rate for the three months ended March 31, 2020 was lower than the statutory rate primarily due to impairments recorded during the interim period for which no income tax benefits will be realized by us. However, this unfavorable impact on the Company's effective income tax rate was partially offset by income tax benefits of the CARES Act. The CARES Act provides a five-year carryback of net operating losses generated in years 2018-2020. As the statutory federal income tax rate applicable to certain years within the carryback period is 35%, carryback to those years of the Company's estimated 2020 annual tax loss provides a tax benefit in excess of the current federal statutory rate of 21%, resulting in an increased income tax benefit. The Company projects that the income tax effects of the CARES Act will result in additional income tax benefit recognized throughout the 2020 tax year as part of the estimated annual effective tax rate, and a cash refund in 2021 of taxes paid in prior years. The effective income tax rate for the three months ended March 31, 2019 was higher than the statutory rate due to the impact of discrete items, the global intangible low-taxes income (GILTI), and executive compensation, and other provisions resulting from the December 22, 2017 passage of the Tax Cuts and Jobs Act and foreign tax rates different than statutory rates in the U.S.

Recent Accounting Pronouncements

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes (“ASU 2019-12”). ASU 2019-12 simplifies the accounting for income taxes by eliminating certain exceptions related to the approach for intra-period tax allocation, the methodology for calculating income taxes in an interim period, and the recognition of deferred tax liabilities related to outside basis differences. The standard is effective for interim and annual periods beginning January 1, 2021, with certain amendments applied prospectively and others requiring retrospective application. Early adoption is permitted, with any adjustments reflected as of the beginning of the fiscal year of adoption. If early adoption is elected, all changes as a result of the standard must be adopted in the same period. The Company is currently evaluating the impact of this guidance on its consolidated financial position, results of operations, and cash flows.

In March 2020, the FASB issued ASU 2020-04, “Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.” The guidance provides optional expedients and exceptions for applying U.S. GAAP to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another rate that is expected to be discontinued. The amendments in ASU 2020-04 are effective for all entities as of March 12, 2020 through December 31, 2022. The Company is currently evaluating the impact of this guidance on its consolidated financial position, results of operations, and cash flows.

2. Revenue

The majority of the Company's revenues are derived from providing services on a time and material basis and are short-term in nature. The Company accounts for revenue in accordance with ASC Topic 606, *Revenue from Contracts with Customers*.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in ASC Topic 606. A contract’s transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The majority of the Company's contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and is, therefore, not distinct. The Company provides highly integrated and bundled inspection services to its customers. Some of the Company's contracts have multiple performance obligations, most commonly due to the contract providing both goods and services. For contracts with multiple performance obligations, the Company allocates the contract’s transaction price to each performance obligation using its best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is a relative selling price based on price lists.

Contract modifications are not routine in the performance of the Company contracts. Generally, when contracts are modified, the modification is to account for changes in scope to the goods and services that are provided. In most instances, contract modifications are for goods or services that are distinct, and, therefore, are accounted for as a separate contract.

The Company's performance obligations are satisfied over time as work progresses or at a point in time. The majority of the Company's revenue recognized over time as work progresses is related to its service deliverables, which includes providing testing, inspection and mechanical services to the Company's customers. Revenue is recognized over time based on time and material incurred to date which best portrays the transfer of control to the customer. The Company also utilizes an available practical expedient that provides for revenue to be recognized in an amount that corresponds directly with the value to the customer of the entity’s performance completed to date. Fixed fee arrangements are determined based on expected labor, material, and overhead to be consumed on fulfillment of such services. Revenue is recognized on a cost-to-cost method tracked on an input basis.

The majority of the Company's revenue recognized at a point in time is related to product sales when the customer obtains control of the asset, which is generally upon shipment to the customer. Contract costs include labor, material and overhead.

The Company expects any significant remaining performance obligations to be satisfied within one year.

(tabular dollars and shares in thousands, except per share data)

Contract Estimates

The majority of the Company's revenues are short-term in nature. The Company has many master service agreements (MSAs) that specify an overall framework and contract terms when the Company and customers agree upon services or products to be provided. The actual contracting to provide services or furnish products is triggered by a work order, purchase order, or some similar document issued pursuant to a MSA which sets forth the scope of services and/or identifies the products to be provided. From time-to-time, the Company may enter into long-term contracts, which can range from several months to several years. Revenue on such long-term contracts is recognized as work is performed based on total costs incurred to date in relation to the total estimated costs for the performance of the contract at completion. This includes contract estimates of costs to be incurred for the performance of the contract. Cost estimation is based upon the professional knowledge and experience of the Company's project managers, engineers and financial professionals. Factors that are considered in estimating the work to be completed include the availability of materials, the effect of any delays in the Company's project performance and the recoverability of any claims. Whenever revisions of estimates, contract costs and/or contract values indicate that the contract costs will exceed estimated revenues, thus creating a loss, a provision for the total estimated loss is recorded in that period.

Revenue by Category

The following series of tables present the Company's disaggregated revenues:

Revenue by industry was as follows:

Three Months Ended March 31, 2020	Services	International	Products	Corp/Elim	Total
Oil & Gas	$ 83,299	$ 9,104	$ 95	$ —	$ 92,498
Aerospace & Defense	14,652	7,415	147	—	22,214
Industrials	12,867	4,919	488	—	18,274
Power generation & Transmission	5,095	1,697	854	—	7,646
Other Process Industries	6,004	2,120	3	—	8,127
Infrastructure, Research & Engineering	4,517	2,461	560	—	7,538
Other	2,439	1,351	665	(1,287)	3,168
Total	$ 128,873	$ 29,067	$ 2,812	$ (1,287)	$ 159,465

Three Months Ended March 31, 2019	Services	International	Products	Corp/Elim	Total
Oil & Gas	$ 91,666	$ 9,704	$ 15	$ —	$ 101,385
Aerospace & Defense	12,794	11,654	307	—	24,755
Industrials	16,123	5,075	432	—	21,630
Power generation & Transmission	6,262	1,422	1,380	—	9,064
Other Process Industries	6,319	2,242	5	—	8,566
Infrastructure, Research & Engineering	2,590	2,733	847	—	6,170
Other	4,544	2,332	446	(2,105)	5,217
Total	$ 140,298	$ 35,162	$ 3,432	$ (2,105)	$ 176,787

(tabular dollars and shares in thousands, except per share data)

Revenue per key geographic location was as follows:

Three Months Ended March 31, 2020	Services	International	Products	Corp/Elim	Total
United States	$ 109,581	$ 154	$ 1,559	$ (711)	$ 110,583
Other Americas	18,735	1,505	278	(153)	20,365
Europe	108	26,235	340	(379)	26,304
Asia-Pacific	449	1,173	635	(44)	2,213
Total	$ 128,873	$ 29,067	$ 2,812	$ (1,287)	$ 159,465

Three Months Ended March 31, 2019	Services	International	Products	Corp/Elim	Total
United States	$ 113,136	$ 276	$ 1,970	$ (1,282)	$ 114,100
Other Americas	26,708	2,229	66	(56)	28,947
Europe	428	31,540	421	(763)	31,626
Asia-Pacific	26	1,117	975	(4)	2,114
Total	$ 140,298	$ 35,162	$ 3,432	$ (2,105)	$ 176,787

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities) on the Condensed Consolidated Balance Sheets. Amounts are generally billed as work progresses in accordance with agreed-upon contractual terms, generally at periodic intervals (e.g., weekly, bi-weekly or monthly). Generally, billing occurs subsequent to revenue recognition, resulting in contract assets. However, the Company sometimes receives advances or deposits from its customers before revenue is recognized, resulting in contract liabilities. These assets and liabilities are aggregated on an individual contract basis and reported on the Condensed Consolidated Balance Sheets at the end of each reporting period within accounts receivables or accrued expenses and other current liabilities.

Revenue recognized during the three months ended March 31, 2020 and 2019 that was included in the contract liability balance at the beginning of such year was $1.6 million and $1.8 million, respectively. Changes in the contract asset and liability balances during these periods were not materially impacted by any other factors. The Company has elected to utilize a practical expedient to expense incremental costs incurred related to obtaining a contract. The Company’s expenses are expected to be amortized over a period less than one year.

3. Share-Based Compensation

The Company has share-based incentive awards outstanding to its eligible employees and non-employee directors under two equity incentive plans: (i) the 2009 Long-Term Incentive Plan (the "2009 Plan") and (ii) the 2016 Long-Term Incentive Plan (the "2016 Plan"). No further awards may be granted under the 2009 Plan, although awards granted under the 2009 Plan remain outstanding in accordance with their terms. Awards granted under the 2016 Plan may be in the form of stock options, restricted stock units and other forms of share-based incentives, including performance restricted stock units, stock appreciation rights and deferred stock rights.

Stock Options

For the three months ended March 31, 2020 and 2019, the Company did not recognize any share-based compensation expense related to stock option awards, as all outstanding stock options awards were then already fully vested. No unrecognized compensation costs remained related to stock option awards as of March 31, 2020.

(tabular dollars and shares in thousands, except per share data)

The following table sets forth a summary of the stock option activity, weighted-average exercise prices and options outstanding as of March 31, 2020 and March 31, 2019:

	Three months ended March 31,			
	2020		2019	
	Common Stock Options	Weighted Average Exercise Price	Common Stock Options	Weighted Average Exercise Price
Outstanding at beginning of period:	5	$ 22.35	2,105	$ 13.47
Granted	—	$ —	—	$ —
Exercised	—	$ —	(4)	$ 10.00
Expired or forfeited	—	$ —	—	$ —
Outstanding at end of period:	5	$ 22.35	2,101	$ 13.47

Restricted Stock Unit Awards

For the three months ended March 31, 2020 and March 31, 2019, the Company recognized share-based compensation expense related to restricted stock unit awards of $1.1 million and $0.9 million, respectively. As of March 31, 2020, there was $5.8 million of unrecognized compensation costs, net of estimated forfeitures, related to restricted stock unit awards, which is expected to be recognized over a remaining weighted-average period of 2.2 years. Upon vesting, restricted stock units are generally net share-settled to cover the required withholding tax and the remaining amount is converted into an equivalent number of shares of common stock.

A summary of the vesting activity of restricted stock unit awards, with the respective fair value of the awards, is as follows:

	Three months ended March 31,	
	2020	2019
Restricted stock awards vested	120	50
Fair value of awards vested	$ 454	$ 693

A summary of the fully-vested common stock the Company issued to its six non-employee directors, in connection with its non-employee director compensation plan, is as follows:

	Three months ended March 31,	
	2020	2019
Awards issued	—	14
Grant date fair value of awards issued	$ —	$ 200

A summary of the Company's outstanding, non-vested restricted share units is as follows:

	Three months ended March 31,			
	2020		2019	
	Units	Weighted Average Grant-Date Fair Value	Units	Weighted Average Grant-Date Fair Value
Outstanding at beginning of period:	559	$ 16.92	443	$ 20.55
Granted	—	$ —	334	$ 14.04
Released	(120)	$ 15.87	(50)	$ 19.21
Forfeited	(3)	$ 16.34	(8)	$ 20.78
Outstanding at end of period:	436	$ 17.21	719	$ 17.61

(tabular dollars and shares in thousands, except per share data)

Performance Restricted Stock Units

The Company maintains Performance Restricted Stock Units (PRSUs) that have been granted to select executives and senior officers whose ultimate payout is based on the Company's performance over a one-year period based on specific metrics approved by the Compensation Committee of the Board of Directors of the Company. For 2019, three metrics, as defined: (1) Operating Income, (2) Adjusted EBITDAS (defined as net income attributable to MISTRAS Group, Inc. plus: interest expense, provision for income taxes, depreciation and amortization, share-based compensation expense and certain acquisition related costs (including transaction due diligence costs and adjustments to the fair value of contingent consideration), foreign exchange (gain) loss and, if applicable, certain special items which are noted) and (3) Revenue. There also is a discretionary portion of the PRSUs based on individual performance, granted at the discretion of the Compensation Committee (Discretionary PRSUs). PRSUs and Discretionary PRSUs generally vest ratably on each of the first four anniversary dates upon completion of the performance period, for a total requisite service period of up to five years and have no dividend rights.

PRSUs are equity-classified and compensation costs are initially measured using the fair value of the underlying stock at the date of grant, assuming that the target performance conditions will be achieved. Compensation costs related to the PRSUs are subsequently adjusted for changes in the expected outcomes of the performance conditions.

Discretionary PRSUs are liability-classified and adjusted to fair value (with a corresponding adjustment to compensation expense) based upon the targeted number of shares to be awarded and the fair value of the underlying stock each reporting period until approved by the Compensation Committee, at which point they are equity-classified.

A summary of the Company's PRSU activity is as follows:

	Three months ended March 31,					
	2020			2019		
	Units		Weighted Average Grant-Date Fair Value	Units		Weighted Average Grant-Date Fair Value
Outstanding at beginning of period:	260	$	16.77	277	$	17.80
Granted	—	$	—	—	$	—
Performance condition adjustments	1	$	13.63	(3)	$	18.46
Released	(19)	$	19.46	(17)	$	20.22
Forfeited	—	$	—	—	$	—
Outstanding at end of period:	242	$	15.42	257	$	17.35

During the three months ended March 31, 2020 and March 31, 2019, the Compensation Committee approved the final calculation of the award metrics for calendar year 2019 and calendar year 2018, respectively. As a result, the calendar year 2019 PRSUs increased by approximately 1,000 units and the calendar year 2018 PRSUs decreased by approximately 3,000 units.

For the three months ended March 31, 2020 and March 31, 2019, the Company recognized aggregate share-based compensation expense related to the awards described above of approximately $0.3 million and $0.2 million, respectively. At March 31, 2020, there was $1.2 million of total unrecognized compensation costs related to approximately 242,000 non-vested PRSUs, which is expected to be recognized over a remaining weighted-average period of 1.9 years.

For 2020, the Compensation Committee is changing the criteria to four metrics with no discretionary portion. Revenue and Adjusted EBITDAS are being retained, and two additional metrics, free cash flow as a percentage of revenue and return on average book equity, will replace Operating Income. These two newly-added metrics are relative metrics, the performance of which are based upon how the Company performs relative to a peer group. However, due to the COVID-19 pandemic and the health and economic upheaval it has created, no targets have been established yet for the Revenue and Adjusted EBITDAS metrics for 2020. In addition, the Company does not have sufficient shares remaining in the 2016 Plan for the 2020 target grants, so no grants will be made unless and until the Company's shareholders approve a proposed amendment to the 2016 Plan to increase the number of shares authorized for issuance under the plan. Approval of the proposed amendment is being sought at the 2020 annual shareholders meeting scheduled for May 19, 2020. As such, no shares have been granted, in the first quarter of 2020, as noted in the table above. The Company expects these awards to be finalized and approved by its Compensation Committee during the second quarter of 2020 if shareholders approve the proposed amendment to the 2016 Plan.

(tabular dollars and shares in thousands, except per share data)

4. Earnings (loss) per Share

Basic earnings (loss) per share is computed by dividing net income by the weighted-average number of shares outstanding during the period. Diluted earnings per share is computed by dividing net income by the sum of (1) the weighted-average number of shares of common stock outstanding during the period, and (2) the dilutive effect of assumed conversion of equity awards using the treasury stock method. With respect to the number of weighted-average shares outstanding (denominator), diluted shares reflects: (i) the exercise of options to acquire common stock to the extent that the options' exercise prices are less than the average market price of common shares during the period and (ii) the pro forma vesting of restricted stock units.

The following table sets forth the computations of basic and diluted earnings per share:

	Three months ended	
	March 31, 2020	March 31, 2019
Basic earnings (loss) per share:		
Numerator:		
Net loss attributable to Mistras Group, Inc.	$ (98,509)	$ (5,293)
Denominator:		
Weighted-average common shares outstanding	28,963	28,574
Basic earnings (loss) per share	$ (3.40)	$ (0.19)
Diluted earnings (loss) per share:		
Numerator:		
Net loss attributable to Mistras Group, Inc.	$ (98,509)	$ (5,293)
Denominator:		
Weighted-average common shares outstanding	28,963	28,574
Dilutive effect of stock options outstanding[(1), (2)]	—	—
Dilutive effect of restricted stock units outstanding[(1), (2)]	—	—
	28,963	28,574
Diluted earnings (loss) per share	$ (3.40)	$ (0.19)

[(1)] For the three months ended March 31, 2020, 99 shares related to restricted stock were excluded from the calculation of diluted EPS due to the net loss for the period.
[(2)] For the three months ended March 31, 2019, 212 and 168 shares related to stock options and restricted stock, respectively, were excluded from the calculation of diluted EPS due to the net loss for the period.

5. Acquisitions and Dispositions

Acquisitions

The Company did not complete any acquisitions during the three months ended March 31, 2020 or 2019, respectively. During September 2019, the Company completed one acquisition that provides pipeline integrity management software and services to energy transportation companies. The Company acquired all the equity interest of the acquiree in exchange for aggregate consideration of $4.4 million in cash, contingent consideration of up to $4.3 million to be earned based upon the acquired business achieving specific performance metrics over the initial three years of operations from the acquisition date and working capital adjustments. The goodwill recorded is primarily attributable to expected synergies and is generally fully deductible for tax purposes. The Company is still in the process of completing its valuation of the assets acquired and liabilities assumed. The Company accounted for this transaction in accordance with the acquisition method of accounting for business combinations.

(tabular dollars and shares in thousands, except per share data)

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed, the Company's allocation of purchase price and any subsequent adjustments made for the September 2019 acquisition:

Cash paid	$	4,380
Working capital adjustments		(152)
Fair value of contingent consideration		1,142
Total consideration	$	5,370
Current net assets	$	142
Other assets		34
Property, plant and equipment		65
Intangibles		3,594
Goodwill		1,535
Net assets acquired	$	5,370

Acquisition-Related Expense

In the course of its acquisition activities, the Company incurs costs in connection with due diligence, such as professional fees, and other expenses. Additionally, the Company adjusts the fair value of acquisition-related contingent consideration liabilities on a quarterly basis. These amounts are reported as Acquisition-related expense, net on the Unaudited Condensed Consolidated Statements of Income (Loss) and were as follows for the three months ended March 31, 2020 and 2019:

	Three months ended March 31,			
	2020		2019	
Due diligence, professional fees and other transaction costs	$	—	$	148
Adjustments to fair value of contingent consideration liabilities		(542)		305
Acquisition-related expense, net	$	(542)	$	453

The Company's contingent consideration liabilities are included in Accrued expenses and other current liabilities and Other long-term liabilities on the Condensed Consolidated Balance Sheets.

6. Accounts Receivable, net

Accounts receivable consisted of the following:

	March 31, 2020		December 31, 2019	
Trade accounts receivable	$	132,905	$	144,282
Allowance for doubtful accounts		(7,775)		(8,285)
Accounts receivable, net	$	125,130	$	135,997

The Company had $19.1 million and $22.2 million of unbilled revenues accrued as of March 31, 2020 and December 31, 2019, respectively. These amounts are included in the trade accounts receivable balances above. Unbilled revenues are generally billed in the subsequent quarter to their revenue recognition.

(tabular dollars and shares in thousands, except per share data)

The Company was contracted to perform inspections of welds on various pipeline projects in Texas for a customer. As of March 31, 2020, approximately $1.4 million of past due receivables were outstanding from this customer. The Company received notice from the customer in December 2019, alleging that the work performed was not in compliance with the contract. The Company filed a lawsuit to recover the $1.4 million and other amounts due to the Company and the customer filed a counterclaim, alleging breach of contract and seeking its damages. Accordingly, the Company recorded a full reserve in the amount of $1.4 million during the second half of 2019 for these past due receivables. There have not been any changes during 2020. See Note 14–*Commitments and Contingencies* for additional details.

In the fourth quarter of 2018, the Company recorded a reserve of $0.7 million for a renewable energy industry customer, based in part on the available information about the financial difficulties of the customer. During the first quarter of 2019, the Company recorded an additional charge of $5.7 million to fully reserve for the amount of the exposure related to this customer. This customer filed for a voluntary insolvency proceeding on April 9, 2019. During the second quarter of 2019, the Company reversed $1.0 million of this reserve based on additional information obtained during the quarter. There have not been any changes since the second quarter of 2019.

During 2019, the Company sold to an unaffiliated third party, without recourse, its remaining outstanding receivables owed from a customer which filed for bankruptcy, and for which the Company had initially recorded a charge during the second quarter of 2017. During the first quarter of 2019, the Company recorded a recovery of $0.2 million and during the second quarter of 2019, the Company recorded a recovery $1.7 million, related to a bad debt provision for the receivables due from this customer. This matter is considered fully resolved.

7. Property, Plant and Equipment, net

Property, plant and equipment consisted of the following:

	Useful Life (Years)	March 31, 2020	December 31, 2019
Land		$ 2,656	$ 2,672
Buildings and improvements	30-40	24,211	24,537
Office furniture and equipment	5-8	17,443	17,227
Machinery and equipment	5-7	225,230	225,974
		269,540	270,410
Accumulated depreciation and amortization		(174,569)	(171,803)
Property, plant and equipment, net		$ 94,971	$ 98,607

Depreciation and amortization expense for both the three months ended March 31, 2020 and 2019 was approximately $6.1 million.

8. Goodwill

Changes in the carrying amount of goodwill by segment is shown below:

	Services	International	Products and Systems	Total
Balance at December 31, 2019	$ 247,215	$ 35,195	$ —	$ 282,410
Goodwill acquired during the period	—	—	—	—
Impairment charges	(57,227)	(19,862)	—	(77,089)
Adjustments to preliminary purchase price allocations	—	—	—	—
Foreign currency translation	(8,002)	(1,030)	—	(9,032)
Balance at March 31, 2020	$ 181,986	$ 14,303	$ —	$ 196,289

The Company reviews goodwill for impairment on a reporting unit basis on October 1 of each year and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable.

During the first quarter of 2020, the Company's market capitalization declined significantly compared to the fourth quarter of 2019. The Company's closing stock price was $4.26 on March 31, 2020. Over the same period, the equity value of the Company's peer group, and the overall U.S. stock market also declined significantly amid market volatility. In addition, oil prices have dropped significantly. These declines were driven by the uncertainty surrounding the COVID-19 pandemic and other macroeconomic events such as the geopolitical tensions between OPEC and Russia. Based on these factors, the Company concluded that multiple triggering events occurred and, accordingly, an interim quantitative goodwill impairment test was performed for each reporting unit as of March 31, 2020 ("testing date"). The Company also performed an analysis to determine any impairment of long-lived assets (see Note 9–*Intangible assets*) as well based on the triggering events noted above.

In performing the interim quantitative goodwill impairment test and consistent with prior practice, the Company determined the fair value of each of the reporting units using a combination of the income approach and the market approach by assessing each of these valuation methodologies based upon availability and relevance of comparable company data and determining the appropriate weighting.

Under the income approach, the fair value for each of the reporting units was determined based on the present value of estimated future cash flows, discounted at an appropriate risk-adjusted rate. The Company used internal forecasts, updated for recent events, to estimate future cash flows with cash flows beyond the specific operating plans estimated using a terminal value calculation, which incorporates historical and forecasted trends, including an estimate of long-term future growth rates, based on the Company's most recent views of the long-term outlook for each reporting unit. The internal forecasts include assumptions about future market recovery, including the expected demand for the Company's goods and services. Due to the inherent uncertainties involved in making estimates and assumptions, actual results may differ from those assumed in the forecasts. The Company derived the discount rates using a capital asset pricing model and analyzing published rates for industries relevant to the reporting units to estimate the cost of equity financing. The Company used discount rates that are commensurate with the risks and uncertainties inherent in the respective businesses and in the internally developed forecasts, updated for recent events.

The market approach valuations were derived from metrics of publicly traded companies or historically completed transactions of comparable businesses. The selection of comparable businesses was based on the markets in which the reporting units operate considering risk profiles, size, geography, and diversity of products and services.

Based upon the results of the interim quantitative goodwill impairment test, the Company recorded an aggregate impairment charge of $77.1 million, which included $57.2 million in the services reporting unit within the Services segment, $19.3 million in the European reporting unit and $0.6 million in the Brazilian reporting unit, both within the International segment. The impairment was calculated based on the difference between the estimated fair value and the carrying value of the reporting units and are included in Impairment charges on the condensed consolidated statements of income (loss) for the three months ended March 31, 2020. Any significant adverse changes in future periods to the Company's internal forecasts or the external market conditions, if any, could reasonably be expected to negatively affect its key assumptions and may result in future goodwill impairment charges which could be material.

The Company's cumulative goodwill impairment as of March 31, 2020 was $100.2 million, of which $57.2 million related to the Services segment, $29.8 million related to the International segment and $13.2 million related to the Products and Systems segment. The Company's cumulative goodwill impairment as of December 31, 2019 was $23.1 million, of which $13.2 million related to the Products and Systems segment and $9.9 million related to the International segment.

(tabular dollars and shares in thousands, except per share data)

9. Intangible Assets

The gross amount, accumulated amortization and net carrying amount of intangible assets were as follows:

		March 31, 2020				December 31, 2019		
	Useful Life (Years)	Gross Amount	Accumulated Amortization	Impairment	Net Carrying Amount	Gross Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	5-18	$ 111,825	$ (68,262)	$ (2,206)	$ 41,357	$ 113,861	$ (67,853)	$ 46,008
Software/Technology	3-15	73,493	(20,220)	(25,874)	27,399	77,914	(18,756)	59,158
Covenants not to compete	2-5	12,624	(11,662)	(212)	750	12,795	(11,630)	1,165
Other	2-12	10,768	(7,753)	(502)	2,513	10,813	(7,607)	3,206
Total		$ 208,710	$ (107,897)	$ (28,794)	$ 72,019	$ 215,383	$ (105,846)	$ 109,537

As described in Note 8–*Goodwill*, there were negative market indicators that were determined to be triggering events indicating a potential impairment of certain long-lived assets within asset groups in the Services, International, Products and Corporate segments. The asset groups are groupings of assets and liabilities determined at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Recoverability testing indicated that certain intangible assets and right of use assets (See Note 13–*Leases*) were potentially impaired. For asset groups that required an impairment measurement, similar to the valuations performed to determine the goodwill impairment, the Company used income and market approaches to estimate the fair value of the long-lived assets, which requires significant judgment in evaluation of the useful lives of the assets, economic and industry trends, estimated future cash flows, discount rates, and other factors. The result of the analysis was an aggregate impairment charge of $28.8 million, which included $25.9 million to software/technology, $2.2 million to customer relationships, $0.5 million to other intangibles and $0.2 million to covenants not to compete, all of which are in the Services reporting unit within the Services segment and are included in Impairment charges on the condensed consolidated statements of income for the three months ended March 31, 2020.

Amortization expense for the three months ended March 31, 2020 and March 31, 2019 was approximately $3.4 million and $3.6 million, respectively.

10. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	March 31, 2020	December 31, 2019
Accrued salaries, wages and related employee benefits	$ 25,396	$ 30,072
Contingent consideration, current portion	976	2,614
Accrued workers' compensation and health benefits	5,333	4,467
Deferred revenue	6,153	5,860
Pension accrual	2,519	2,519
Right-of-use liability - operating	9,947	10,133
Other accrued expenses	24,832	25,724
Total	$ 75,156	$ 81,389

(tabular dollars and shares in thousands, except per share data)

11. Long-Term Debt

Long-term debt consisted of the following:

	March 31, 2020	December 31, 2019
Senior credit facility	$ 156,600	$ 151,773
Senior secured term loan, net of debt issuance costs of $0.1 million	93,674	94,919
Other	7,752	8,021
Total debt	258,026	254,713
Less: Current portion	(7,240)	(6,593)
Long-term debt, net of current portion	$ 250,786	$ 248,120

Senior Credit Facility

The Company's revolving credit agreement with its banking group ("Credit Agreement") provides the Company with a $300 million revolving line of credit. In addition, the Credit Agreement provides the Company with a $100 million senior secured term loan A facility. Both the revolving line of credit and the term loan A facility under the Credit Agreement have a maturity date of December 12, 2023. The Company may borrow up to $100 million in non-U.S. Dollar currencies and use up to $20 million of the credit limit for the issuance of letters of credit. As of March 31, 2020, the Company had borrowings of $250.3 million and a total of $3.7 million of letters of credit outstanding under the Credit Agreement. The Company has capitalized costs associated with debt modifications of $1.3 million as of March 31, 2020, which is included in Other assets on the Condensed Consolidated Balance Sheets.

Loans under the Credit Agreement bear interest at the London Interbank Offered Rate ("LIBOR") plus an applicable LIBOR margin ranging from 1% to 2.25%, or a base rate less a margin of 1.25% to 0.375%, at the option of the Company, based upon the Company’s Funded Debt Leverage Ratio. Funded Debt Leverage Ratio is generally the ratio of (1) all outstanding indebtedness for borrowed money and other interest-bearing indebtedness as of the date of determination to (2) EBITDA (which is (a) net income, less (b) income (or plus loss) from discontinued operations and extraordinary items, plus (c) income tax expenses, plus (d) interest expense, plus (e) depreciation, depletion, and amortization (including non-cash loss on retirement of assets), plus (f) stock compensation expense, less (g) cash expense related to stock compensation, plus (h) certain amounts of EBITDA of acquired business for the prior twelve months, plus (i) certain expenses related to the closing of the Credit Agreement, plus (j) non-cash expenses which do not (in the current or any future period) represent a cash item (excluding non-cash gains which increase net income), plus (k) non-recurring charges (not to exceed $10.0 million in the four consecutive quarters immediately preceding the date of determination) for items such as severance, lease termination charges, asset write-offs and litigation settlements paid, and multi-employer pension plan withdrawal liabilities, all determined for the period of four consecutive fiscal quarters immediately preceding the date of determination of EBITDA. The Company has the benefit of the lowest margin if its Funded Debt Leverage Ratio is equal to or less than 1.0 to 1, and the margin increases as the ratio increases, to the maximum margin if the ratio is greater than 3.75 to 1. The Company will also bear additional costs for market disruption, regulatory changes effecting the lenders’ funding costs, and default pricing of an additional 2% interest rate margin on any amounts not paid when due. Amounts borrowed under the Credit Agreement are secured by liens on substantially all of the assets of the Company and is guaranteed by certain of its subsidiaries.

The Credit Agreement contains financial covenants requiring that the Company maintain a Funded Debt Leverage Ratio of no greater than 4.25 to 1 through December 31, 2018, reducing to a maximum permitted ratio of 4.0 to 1 as of March 31, 2019 through June 30, 2020, a maximum permitted ratio of 3.75 to 1 as of September 30, 2020 and a maximum permitted ratio of 3.50 to 1 as of December 31, 2020 and all quarterly periods thereafter, and a Fixed Charge Coverage Ratio of at least 1.25 to 1. Fixed Charge Coverage Ratio means the ratio, as of any date of determination, of (a) (i) EBITDA for the 12 month period immediately preceding the date of determination, taken together as one accounting period, less (ii) the aggregate amount of all capital expenditures made during the period, less (iii) taxes paid in cash during the period, less (iv) Restricted Payments (as defined in the Credit Agreement) paid in cash during the period, -to- (b) the sum of (i) all interest, premium payments, debt discount, fees, charges and related expenses of the Company and its subsidiaries in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets, in each case, to the extent treated as interest in accordance with U.S. generally accepted accounting principles ("GAAP") and to the extent paid in cash during the period, (ii) the aggregate principal amount of all redemptions or similar acquisitions for value of outstanding debt for borrowed money or regularly scheduled principal payments made during the period, but excluding any such payments to the extent refinanced through the incurrence of additional Indebtedness otherwise expressly permitted under the Credit Agreement, and (iii) payments made during the period under all leases that have been or should be, in accordance with GAAP as in effect for the Company's 2017 audited financial statement, recorded as capitalized leases. The Company can elect to increase the maximum Funded Debt Leverage Ratio to 4.0 to 1 for four fiscal quarters immediately following the fiscal quarter in which the Company acquires another business, with the maximum permitted ratio reducing back to 3.5 to 1 in the fifth fiscal quarter following such acquisition. The Company can make this election twice during the term of the Credit Agreement, but prior to the first time the Company makes an election to increase the Funded Debt Leverage Ratio to 4.0 to 1 in connection with an acquisition, the Company must obtain the consent of lenders (in their sole discretion) holding at least 66-2/3% of the credit exposure under the Credit Agreement.

The Credit Agreement also limits the Company’s ability to, among other things, create liens, make investments, incur more indebtedness, merge or consolidate, make dispositions of property, pay dividends and make distributions to stockholders or repurchase its stock, enter into a new line of business, enter into transactions with affiliates and enter into burdensome agreements. The Credit Agreement does not limit the Company’s ability to acquire other businesses or companies except that for acquisitions completed prior to April 1, 2021, (a) the aggregate consideration for all acquisitions made on or after March 9, 2020 and prior to April 1, 2021 cannot exceed $5.0 million, and (b) prior to the first of any such acquisition, the Company must have demonstrated a Funded Debt Leverage Ratio of not greater than 3.0 to 1.0 for two consecutive fiscal quarters immediately prior to such acquisition. The acquired business or company must be in the Company's line of business and, if the acquired business is a separate subsidiary, in certain circumstances the lenders will receive the benefit of a guaranty of the subsidiary and liens on its assets and a pledge of its stock.

As of March 31, 2020, the Company was in compliance with the terms of the Credit Agreement and will continuously monitor its compliance with the covenants contained in its Credit Agreement.

Subsequent Event

On May 15, 2020, the Company entered into the Third Amendment (the “Amendment”), dated May 15, 2020, to the Credit Agreement, dated December 13, 2018, with its banking group under the Credit Agreement. Due to the uncertain impact of the COVID-19 pandemic and the significant drop in oil prices, the Company determined that it would not meet the financial covenants in the Credit Agreement for upcoming quarters. Accordingly, the Amendment modifies the financial covenants to provide for: i) elimination of the Funded Debt Leverage Ratio (as defined in the Credit Agreement) for the quarters ended June 30 and September 30, 2020 and increases the Funded Debt Leverage ratio to no greater than 5.25 to 1 beginning for the quarter ending December 31, 2020 and decreasing each successive quarter to no greater than 3.50 to 1 for the quarter ended September 30, 2021, and all quarterly periods thereafter; ii) an elimination of the minimum Fixed Charge Coverage Ratio (as defined in the Credit Agreement), a decrease to 1.0 to 1 for the quarter ending March 31, 2021 and returning to 1.25 to 1 for the quarter ending June 30, 2021 and thereafter; iii) the addition of a minimum EBITDA covenant requiring $3.44 million for the three months ending June 30, 2020, $24.25 million for the six months ending September 30, 2020, and $38.55 million for the nine months ending December 31, 2020, with no requirement thereafter; and iv) the addition of a minimum Liquidity (as defined in the Amendment) covenant of not less than $20.0 million at all times through September 30, 2020 and ceasing thereafter. In addition, the Amendment reduced the revolving line of credit to $175.0 million, set a LIBOR floor of 1.0% applicable to all LIBOR loans, and increased the LIBOR margin range to 1.50% to 4.15%, in addition to certain other modifications of the Credit Agreement. The Amendment also requires that the Company promptly prepay the outstanding amount under the revolving credit facility in an amount equal to the difference between (a) the aggregate sum of cash and cash equivalents of the Company and its subsidiaries held in the United States minus (b) $10.0 million if, for a period of two (2) consecutive business days, (i) the outstanding amount under the revolving credit facility exceeds $75.0 million and (ii) the such cash and cash equivalents exceeds $10.0 million.

The Amendment also provides that the Company may not make any acquisitions prior to June 30, 2021, and thereafter only if the Company's Funded Debt Leverage Ratio is less than 2.50 to 1 and after giving effect to such acquisition, its pro forma Funded Debt Leverage Ratio will not be greater than 3.25 to 1.

(tabular dollars and shares in thousands, except per share data)

The Company believes that it is probable, based on the amended covenants, that the Company will be able to comply with the financial covenants in the Credit Agreement as modified by the Amendment and that sufficient credit remains available under the Credit Agreement to meet the Company's liquidity needs. However, due to the uncertainties being caused by the COVID-19 pandemic and the significant drop in oil prices, such matters cannot be predicted with certainty.

Other debt

The Company's other debt includes local bank financing provided at the local subsidiary level used to support working capital requirements and fund capital expenditures. At March 31, 2020, there was an aggregate of approximately $7.8 million outstanding, payable at various times through 2029. Monthly payments range from $1 thousand to $17 thousand and interest rates range from 0.4% to 3.5%.

12. Fair Value Measurements

The Company performs fair value measurements in accordance with the guidance provided by ASC 820, Fair Value Measurements and Disclosures. ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Financial instruments measured at fair value on a recurring basis

The fair value of contingent consideration liabilities was estimated using a discounted cash flow technique with significant inputs that are not observable in the market and thus represents a Level 3 fair value measurement as defined in ASC 820. The significant inputs in the Level 3 measurement not supported by market activity include the probability assessments of expected future cash flows related to the acquisitions, appropriately discounted considering the uncertainties associated with the obligation, and as calculated in accordance with the terms of the applicable acquisition agreements.

The following table represents the changes in the fair value of Level 3 contingent consideration:

	Three months ended March 31,	
	2020	2019
Beginning balance	$ 3,216	$ 2,365
Payments	(1,303)	—
Accretion of liability	11	44
Revaluation	(553)	261
Foreign currency translation	(62)	29
Ending balance	$ 1,309	$ 2,699

Financial instruments not measured at fair value on a recurring basis

The Company has evaluated current market conditions and borrower credit quality and has determined that the carrying value of its long-term debt approximates fair value. The fair value of the Company’s notes payable and capital lease obligations approximates their carrying amounts based on anticipated interest rates which management believes would currently be available to the Company for similar issuances of debt.

(tabular dollars and shares in thousands, except per share data)

13. Leases

The Company leases certain office and operating facilities, machinery, equipment, and vehicles. Concurrent with the adoption of ASC 842, the Company recognized a right-of-use (ROU) asset and lease liability based on the present value of the future lease payments over the lease term for each lease agreement. The Company has elected not to recognize a ROU asset and lease liability for leases with terms of 12 months or less and will continue to recognize lease expense for these leases on a straight-line basis over the lease term. The Company has leases with both lease components and non-lease components, such as common area maintenance, utilities, or other repairs and maintenance. For all asset classes, the Company decided to utilize the practical expedient to include both fixed lease components and fixed non-lease components in calculating the ROU asset and lease liability. The Company identified variable lease payments, such as maintenance payments based on actual activities performed or costs incurred, at lease commencement by assessing the nature of the payment provisions, including whether the payments are subject to a minimum charge. Many of the Company's leases include one or more options to renew. When it is reasonably certain that the Company will exercise the option, the Company will include the impact of the option in the lease term for purposes of determining future lease payments. As the Company is unable to determine the discount rate implicit in its lease agreements, the Company uses its incremental borrowing rate on the commencement date to calculate the present value of future payments.

The Company’s Condensed Consolidated Balance Sheets includes the following related to operating leases:

Leases	Classification	March 31, 2020	December 31, 2019
Assets			
ROU assets	Other Assets	$ 44,669	$ 45,817
Liabilities			
ROU - current	Accrued and other current liabilities	$ 9,947	$ 10,133
ROU liability - long-term	Other liabilities	35,927	36,750
Total ROU liabilities		$ 45,874	$ 46,883

Included within the balance of operating leases is a lease for the Company’s headquarters which is with a related party. The ROU liability for this facility was approximately $4.3 million and $4.5 million as of March 31, 2020 and December 31, 2019, respectively. Total rent payments for this facility were approximately $0.3 million and $0.2 million for the three months ended March 31, 2020 and March 31, 2019, respectively.

The total ROU assets attributable to finance leases were approximately $17.9 million and $19.2 million as of March 31, 2020 and December 31, 2019, respectively, which is included in Property, plant, and equipment, net on the Condensed Consolidated Balance Sheets.

As described in Note 9–*Intangible Assets*, the Company performed an analysis to determine whether there was any impairment of long-lived assets, which included the ROU assets, within the Services, International, and Products and Systems operating segments as well as Corporate. The result of the analysis was a $0.2 million impairment of a ROU asset in an asset group within the Services segment which is included in Impairment charges on the condensed consolidated statements of income (loss) for the three months ended March 31, 2020.

(tabular dollars and shares in thousands, except per share data)

The components of lease costs were as follows:

	Classification	Three months ended March 31, 2020	Three months ended March 31, 2019
Finance lease expense			
Amortization of ROU assets	Depreciation and amortization	$ 1,228	$ 1,292
Interest on lease liabilities	Interest expense	218	197
Operating lease expense	Cost of revenue; Selling, general & administrative expenses	3,528	3,023
Short-term lease expense	Cost of revenue; Selling, general & administrative expenses	1	133
Variable lease expense	Cost of revenue; Selling, general & administrative expenses	349	272
Total		$ 5,324	$ 4,917

Additional information related to leases was as follows:

	Three months ended March 31, 2020	Three months ended March 31, 2019
Cash paid for amounts included in the measurement of lease liabilities for finance leases		
Finance - financing cash flows	$ 1,167	$ 1,249
Finance - operating cash flows	$ 217	$ 197
Operating - operating cash flows	$ 3,291	$ 3,079
ROU assets obtained in the exchange for lease liabilities		
Finance leases	$ 667	$ 1,086
Operating leases	$ 1,625	$ 1,348
Weighted-average remaining lease term (in years)		
Finance leases	5.9	5.8
Operating leases	6.1	6.0
Weighted-average discount rate		
Finance leases	5.6 %	6.5 %
Operating leases	5.8 %	6.0 %

Maturities of lease liabilities as of March 31, 2020 were as follows:

	Finance	Operating
Remainder of 2020	$ 4,762	$ 9,348
2021	4,345	10,558
2022	3,489	8,472
2023	2,618	7,038
2024	1,708	5,478
Thereafter	917	13,729
Total	17,839	54,623
Less: Present value discount	(1,591)	(8,749)
Lease liability	$ 16,248	$ 45,874

14. Commitments and Contingencies

Legal Proceedings and Government Investigations

The Company is subject to periodic lawsuits, investigations and claims that arise in the ordinary course of business. The Company cannot predict with certainty the ultimate resolution of lawsuits, investigations and claims asserted against it. Except possibly for certain of the matters described below, the Company does not believe that any currently pending legal proceeding to which the Company is a party will have a material adverse effect on its business, results of operations, cash flows or financial condition. The costs of defense and amounts that may be recovered against the Company may be covered by insurance for certain matters.

Litigation and Commercial Claims

The Company was contracted to perform inspections of welds on various pipeline projects in Texas for a customer. As of March 31, 2020, approximately $1.4 million of past due receivables were outstanding from this customer. The customer provided the Company with notice in December 2019, alleging that the Company’s inspection of 66 welds (out of approximately 16,000 welds inspected) were not in compliance with the contract, claimed approximately $7.6 million in damages, and requested that the Company pay these damages and any other damages incurred. The Company has filed a lawsuit in the District Court of Bexar County, Texas, 37th Judicial District, in an action captioned Mistras Group, Inc. v. Epic Y-Grade Pipeline LP, to recover the $1.4 million and other amounts due to the Company. The customer filed a counterclaim, alleging breach of contract and seeking recovery of its alleged damages. The Company believes that any successful claim by the customer regarding the Company’s workmanship will be covered by insurance, subject to payment of a deductible. At this time, the Company is unable to determine whether it has any liability in connection with this matter and if so, the amount or range of any such liability, and accordingly, has not established any accruals for this matter.

Pension Related Contingencies

The workforce of certain of the Company’s subsidiaries are unionized and the terms of employment for these workers are governed by collective bargaining agreements, or CBAs. Under these CBAs, the Company’s subsidiaries are required to contribute to the national pension funds for the unions representing these employees, which are multi-employer pension plans. The Company was notified that a significant project was awarded to another contractor in January 2018, and as a result, one of the Company’s subsidiaries experienced a significant reduction in the number of its employees covered by one of the CBAs. Under certain circumstances, such a reduction in the number of employees participating in multi-employer pension plans pursuant to this CBA could result in a complete or partial withdrawal liability to these multi-employer pension plans under the Employee Retirement Income Security Act of 1974 ("ERISA"). Management explored options to retain a level of union work that would avoid withdrawal liability to the pension plans, but concluded during the third quarter of 2018 that the Company's subsidiaries probably would not obtain sufficient union work to avoid withdrawal liability. Therefore, the Company determined that it is probable that its subsidiary would incur a withdrawal liability related to these multi-employer pension plans. Accordingly, the Company recorded a charge of $5.9 million during 2018 and $0.8 million during 2019 for this potential withdrawal liability. The Company’s subsidiary reached an agreement with one of the pension funds in September 2019 and made a final payment of $0.9 million in complete satisfaction of the withdrawal liability of the subsidiary. Excluding the settlement payment, the Company made monthly payments totaling $3.3 million through the time of the final settlement payment, for total payments of $4.2 million. The balance of the estimated total amount of this potential liability as of March 31, 2020 is approximately $2.5 million.

Severance and labor disputes

The Company’s German subsidiary provides employees to customers under temporary staff leasing arrangements. In April 2017, the German Labor Lease Act was passed in Germany limiting the duration of temporary workers to eighteen months, or longer as subsequently agreed with by a customer appropriate authority. Since the passing of the German Labor Lease Act, the Company explored selling its staff leasing services and concluded during the third quarter of 2018 that a sale would not be probable. As a result, the Company decided that it would not renew several of these leasing services contracts when they expired beginning in 2019. Due to the limit on the length of service allowed under the German Labor Lease Act, employees are being transitioned off the customer contracts. The German subsidiary has terminated, or will terminate, some these employees, creating a severance obligation to the terminated employees, and has transitioned, or will transition other employees to the

Company's other customers. During December 2019, the Company executed an agreement to sell the rights of certain customer contracts for total consideration of approximately $0.1 million, effective January 1, 2020. No other assets or liabilities other than those employee benefits related to employees working on the customer contracts were included in the sale. As of March 31, 2020, the Company has approximately $0.6 million of accrued estimated severance payment obligations, which takes into account the Company's estimate with respect to the employees that have been or will be transitioned to the German subsidiaries' other customers. The $0.6 million of estimated obligations is net of $0.3 million in payments and $0.6 million in reversals due to employees being transitioned to customer contracts.

Acquisition and disposition related contingencies

The Company is liable for contingent consideration in connection with certain of its acquisitions. As of March 31, 2020, total potential acquisition-related contingent consideration ranged from zero to approximately $5.7 million and would be payable upon the achievement of specific performance metrics by certain of the acquired companies over the next 2.42 years.

During 2018, the Company sold a subsidiary in the Products and Systems segment. As part of the sale, the Company entered into a three-year agreement to purchase products from the buyer, with a cumulative commitment of $2.3 million, of which $1.4 million is remaining as of March 31, 2020. The agreement is based on third-party pricing and the Company's planned purchase requirements over the three year purchase period to meet the minimum contractual purchases.

15. Segment Disclosure

The Company’s three operating segments are:

- *Services.* This segment provides asset protection solutions predominantly in North America, with the largest concentration in the United States, followed by Canada, consisting primarily of NDT, inspection, mechanical and engineering services that are used to evaluate the safety, structural integrity and reliability of critical energy, industrial and public infrastructure and commercial aerospace components. PCMS software and pipeline related software and data analysis solutions are included in this segment.

- *International.* This segment offers services, products and systems similar to those of the other segments to select markets within Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by the Products and Systems segment.

- *Products and Systems.* This segment designs, manufactures, sells, installs and services the Company’s asset protection products and systems, including equipment and instrumentation, predominantly in the United States.

Costs incurred for general corporate services, including finance, legal, and certain other costs that are provided to the segments are reported within Corporate and eliminations. Sales to the International segment from the Products and Systems segment and subsequent sales by the International segment of the same items are recorded and reflected in the operating performance of both segments. Additionally, engineering charges and royalty fees charged to the Services and International segments by the Products and Systems segment are reflected in the operating performance of each segment. All such intersegment transactions are eliminated in the Company’s consolidated financial reporting.

Mistras Group, Inc. and Subsidiaries
Notes to Unaudited Condensed Consolidated Financial Statements
(tabular dollars and shares in thousands, except per share data)

Selected consolidated financial information by segment for the periods shown was as follows: (with intercompany transactions eliminated in Corporate and eliminations)

	Three months ended	
	March 31, 2020	March 31, 2019
Revenues		
Services	$ 128,873	$ 140,298
International	29,067	35,162
Products and Systems	2,812	3,432
Corporate and eliminations	(1,287)	(2,105)
	$ 159,465	$ 176,787

	Three months ended	
	March 31, 2020	March 31, 2019
Gross profit		
Services	$ 32,237	$ 37,365
International	8,023	10,360
Products and Systems	368	1,239
Corporate and eliminations	16	(90)
	$ 40,644	$ 48,874

	Three months ended	
	March 31, 2020	March 31, 2019
Income (loss) from operations		
Services	$ (81,494)	$ 4,053
International	(20,419)	(215)
Products and Systems	(1,680)	(1,328)
Corporate and eliminations	(7,635)	(6,906)
	$ (111,228)	$ (4,396)

Income (loss) from operations by operating segment includes intercompany transactions, which are eliminated in Corporate and eliminations.

	Three months ended	
	March 31, 2020	March 31, 2019
Depreciation and amortization		
Services	$ 7,075	$ 7,268
International	2,140	2,089
Products and Systems	253	290
Corporate and eliminations	(1)	21
	$ 9,467	$ 9,668

(tabular dollars and shares in thousands, except per share data)

	March 31, 2020	December 31, 2019
Intangible assets, net		
Services	$ 61,536	$ 98,284
International	9,157	9,814
Products and Systems	1,104	1,181
Corporate and eliminations	222	258
	$ 72,019	$ 109,537

	March 31, 2020	December 31, 2019
Total assets		
Services	$ 427,165	$ 537,518
International	125,684	153,380
Products and Systems	16,003	16,028
Corporate and eliminations	14,693	12,952
	$ 583,545	$ 719,878

Refer to Note 2–*Revenue*, for revenues by geographic area for the three months ended March 31, 2020 and March 31, 2019.

ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following Management’s Discussion and Analysis (“MD&A”) provides a discussion of our results of operations and financial position for the three months ended March 31, 2020 and March 31, 2019. The MD&A should be read together with our condensed consolidated financial statements and related notes included in Item 1 in this Quarterly Report on Form 10-Q and our audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission on March 27, 2020 (“2019 Annual Report”). Unless otherwise specified or the context otherwise requires, “Mistras,” “the Company,” “we,” “us” and “our” refer to Mistras Group, Inc. and its consolidated subsidiaries. The MD&A includes the following sections:

- Forward-Looking Statements
- Overview
- Results of Operations
- Liquidity and Capital Resources
- Critical Accounting Policies and Estimates

Forward-Looking Statements

This report on Form 10-Q contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934 (“Exchange Act”). Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact. These forward-looking statements are based on our current expectations and projections about future events and they are subject to risks and uncertainties known and unknown that could cause actual results and developments to differ materially from those expressed or implied in such statements.

In some cases, you can identify forward-looking statements by terminology, such as “goals,” or “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “may,” “could,” “should,” “would,” “predicts,” “appears,” “projects,” or the negative of such terms or other similar expressions. You are urged not to place undue reliance on any such forward-looking statements, any of which may turn out to be wrong due to inaccurate assumptions, various risks, uncertainties or other factors known and unknown. Factors that could cause or contribute to differences in results and outcomes from those in our forward-looking statements include, without limitation, those discussed in the “Business—Forward-Looking Statements,” and “Risk Factors” sections of our 2019 Annual Report as well as those discussed in this Quarterly Report on Form 10-Q and in our other filings with the SEC.

At the time of this report, the COVID-19 pandemic is continuing to have a negative impact on us and our key markets and is causing significant economic disruption worldwide. Our discussion above is qualified by the unknown impact that the COVID-19 pandemic will continue to have on our business and the economy in general, including the duration of the health risk the COVID-19 pandemic will cause and the resulting economic disruption.

Overview

We offer our customers “OneSource for Asset Protection Solutions®" and are a leading global provider of technology-enabled asset protection solutions used to evaluate the structural integrity and reliability of critical energy, commercial aerospace and defense, industrial and public infrastructure. We combine industry-leading products and technologies, expertise in mechanical integrity (MI), Non-Destructive Testing (NDT), Destructive Testing (DT), mechanical and predictive maintenance (PdM) services, process and fixed asset engineering and consulting services, proprietary data analysis and our world class enterprise inspection database management and analysis software, PCMS, to deliver a comprehensive portfolio of customized solutions, ranging from routine inspections to complex, plant-wide asset integrity management and assessments. These mission critical solutions enhance our customers’ ability to comply with governmental safety and environmental regulations, extend the useful life of their assets, increase productivity, minimize repair costs, manage risk and avoid catastrophic disasters. Our comprehensive “OneSource” portfolio of customized solutions, utilizing a proven systematic method that creates a closed-loop lifecycle for addressing continuous asset protection and improvement, helps us to deliver value to our customers.

Our operations consist of three reportable segments: Services, International, and Products and Systems.

- *Services* provides asset protection solutions predominantly in North America, with the largest concentration in the United States, followed by Canada, consisting primarily of NDT, inspection, mechanical and engineering services that are used to evaluate the structural integrity and reliability of critical energy, industrial and public infrastructure and commercial aerospace components. PCMS software and pipeline related software and data analysis solutions are included in this segment.
- *International* offers services, products and systems similar to those of the other segments to select markets within Europe, the Middle East, Africa, Asia and South America, but not to customers in China and South Korea, which are served by the Products and Systems segment.
- *Products and Systems* designs, manufactures, sells, installs and services the Company's asset protection products and systems, including equipment and instrumentation, predominantly in the United States.

Given the role our solutions play in enhancing the safe and efficient operation of infrastructure, we have historically provided a majority of our solutions to our customers on a regular, recurring basis. We perform these services largely at our customers' facilities, while primarily servicing our aerospace customers at our growing network of state-of-the-art, in-house laboratories. These solutions typically include NDT and inspection services, and can also include a wide range of mechanical services, including heat tracing, pre-inspection insulation stripping, coating applications, re-insulation, and re-insulation, engineering assessments and long-term condition-monitoring. Under this business model, many customers outsource their inspection to us on a "run and maintain" basis. We have established long-term relationships as a critical solutions provider to many of the leading companies with asset-intensive infrastructure in our target markets. These markets include oil and gas (downstream, midstream, upstream and petrochemical), commercial aerospace and defense, power generation (natural gas, fossil, nuclear, alternative, renewable, and transmission and distribution), public infrastructure, chemicals, transportation, primary metals and metalworking and research and engineering institutions.

We have focused on providing our advanced asset protection solutions to our customers using proprietary, technology-enabled software and testing instruments, including those developed by our Products and Systems segment. We have made numerous acquisitions in an effort to grow our base of experienced, certified personnel, expand our service lines and technical capabilities, increase our geographical reach, complement our existing offerings, and leverage our fixed costs. We have increased our capabilities and the size of our customer base through the development of applied technologies and managed support services, organic growth and the integration of acquired companies. These acquisitions have provided us with additional service lines, technologies, resources and customers that we believe will enhance our advantages over our competition.

We believe long-term growth can be realized in all of our target markets. We expect the timing of our oil and gas customers inspection spend to be impacted by oil price fluctuations. In addition, we have increased our capabilities and the size of our customer base through the development of applied technologies and managed support services, organic growth and the integration of acquired companies. Recent acquisitions have provided us with additional products, technologies, resources and customers that we believe will enhance our advantages over our competition.

Recent Developments

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus (COVID-19) as a pandemic, which continues to spread throughout the United States. The COVID-19 pandemic has caused significant volatility in domestic and international markets. There is on-going uncertainty around the breadth and duration of business disruptions related to COVID-19, as well as its impact on the U.S. and international economies. In addition, oil prices have dropped significantly and airline traffic has also dropped significantly. These declines were driven by the uncertainty surrounding the COVID-19 pandemic and, in the case of the oil and gas market, other macroeconomic events such as the geopolitical tensions between OPEC and Russia, which also resulted in a significant drop in oil prices.

The COVID-19 pandemic and significant drop in oil prices has adversely affected our workforce and operations, as well as the operations of our customers, suppliers and contractors. These negative factors have also resulted in significant volatility and uncertainty in the markets in which we operate. To successfully navigate through this unprecedented period, we continue to focus on the following key priorities:

- Ensuring the health and safety of our employees and those of our customers and suppliers;

- Maintaining business continuity and financial strength and stability; and
- Serving our customers as they provide essential products and services to the world.

While we cannot fully assess the impact that the COVID-19 pandemic or the significant drop in oil prices will have on all of our operations at this time, there are certain impacts that we have identified:

- The financial market volatility that resulted from COVID-19 and the drop in oil prices required that we reassess the goodwill we had recorded related to various prior acquisitions under the guidance of ASC 350. We determined that the fair values of various reporting units were less than their carrying values (including goodwill). As a result, we recorded an impairment charge related to goodwill of approximately $77.1 million in the three months ended March 31, 2020. See Note 8–*Goodwill* in the condensed consolidated financial statements.
- This same financial market volatility required the we reassess the tangible and intangible assets recorded under the guidance of ASC 360. We determined that the fair values of certain asset groups were less than their carrying values (excluding goodwill). As a result, we recorded impairment charges related to intangible assets of approximately $28.8 million and a right-of-use asset of approximately $0.2 million in the three months ended March 31, 2020. See Note 9–*Intangible Assets* and Note 13–*Leases* in the condensed consolidated financial statements.
- As of March 31, 2020, we were in compliance with the terms of our $300 million revolving line of credit and $100 million senior secured term loan A facility provided by our banking group. Given the uncertainty of our projected cash flows as a result of the impact of the COVID-19 pandemic and the drop in oil prices, we entered into an amendment on May 15, 2020 with our banking group that, among other provisions, modifies the current financial covenants. It is probable, based on the amended covenants, that we will comply with the amended covenants and fulfil our obligations under the credit agreement; however, such matters cannot be predicted with certainty. See Note11–*Long-Term Debt* in the condensed consolidated financial statements.

To respond to the economic downturn resulting from the COVID-19 pandemic and the drop in oil prices, we have initiated a cost reduction and efficiency program. All of our named executive officers have voluntarily taken temporary salary reductions ranging from 25% to 45% of their base salary. In addition, we instituted a reduction for our other salaried employees, at lower percentages, and suspended our voluntary match under our sponsored savings plans for our U.S. and Canadian employees. These reductions are for the second quarter of 2020. If the economic downturn continues beyond the second quarter and there is no sign of economic recovery for us or our industry, we will assess whether to continue these cost saving measures. In addition, our non-employee directors voluntarily agreed to a $3,750 reduction in their second quarter 2020 payment.

We are currently unable to predict with certainty the overall impact that the COVID-19 pandemic and drop in oil prices may have on our business, results of operations, or liquidity. We will likely be impacted by the pandemic and drop in oil prices in other ways which we cannot yet determine. We will continue to monitor market conditions and respond accordingly. Refer to Item 1A. Risk Factors in Part I of our 2019 Annual Report on Form 10-K ("2019 Annual Report") for the year ended December 31, 2019, filed with the Securities and Exchange Commission ("SEC") on March 27, 2020.

Note About Non-GAAP Measures

In this MD&A under the heading "Income (loss) from Operations", the non-GAAP financial performance measure "Income (loss) before special items” is used for each of our three segments, the Corporate segment and the "Total Company", with tables reconciling the measure to a financial measure under GAAP. This non-GAAP measure excludes from the GAAP measure "Income (loss) from Operations" (a) transaction expenses related to acquisitions, such as professional fees and due diligence costs, (b) the net changes in the fair value of acquisition-related contingent consideration liabilities, (c) impairment charges, (d) reorganization and other costs, which includes items such as severance, labor relations matters and asset and lease termination costs and (e) other special items. These adjustments have been excluded from the GAAP measure because these expenses and credits are not related to the Company’s or Segment’s core business operations. The acquisition related costs and special items can be a net expense or credit in any given period.

We believe investors and other users of our financial statements benefit from the presentation of "Income (loss) before special items" for each of our three segments, the Corporate segment and the Total Company in evaluating our performance. Income (loss) before special items excludes the identified adjustments, which provides additional tools to compare our core business operating performance on a consistent basis and measure underlying trends and results in our business. Income (loss) before special items is not used to determine incentive compensation for executives or employees, nor is it a replacement for GAAP and/or necessarily comparable to the non-GAAP financial measures of other companies.

(tabular dollars are in thousands)

Results of Operations

Condensed consolidated results of operations for the three months ended March 31, 2020 and March 31, 2019 were as follows:

	Three months ended	
	March 31, 2020	March 31, 2019
Revenues	$ 159,465	$ 176,787
Gross profit	40,644	48,874
Gross profit as a % of Revenue	*25.5 %*	*27.6 %*
Total operating expenses	151,872	53,270
Operating expenses as a % of Revenue	*95.2 %*	*30.1 %*
Loss from operations	(111,228)	(4,396)
Loss from Operations as a % of Revenue	*(69.8)%*	*(2.5)%*
Interest expense	2,789	3,527
Loss before provision for income taxes	(114,017)	(7,923)
Benefit for income taxes	(15,495)	(2,637)
Net loss	(98,522)	(5,286)
Less: Net income (loss) attributable to non-controlling interests, net of taxes	(13)	7
Net loss attributable to Mistras Group, Inc.	$ (98,509)	$ (5,293)

Revenue

Revenue was $159.5 million for the three months ended March 31, 2020 , a decrease of $17.3 million, or 9.8%, compared with the three months ended March 31, 2019.

Revenues by segment for the three months ended March 31, 2020 and March 31, 2019 were as follows:

	Three months ended	
	March 31, 2020	March 31, 2019
Revenues		
Services	$ 128,873	$ 140,298
International	29,067	35,162
Products and Systems	2,812	3,432
Corporate and eliminations	(1,287)	(2,105)
	$ 159,465	$ 176,787

Three Months

In the three months ended March 31, 2020, total revenue decreased 9.8% due to a combination of low double-digit organic decline and the low single-digit unfavorable impact of foreign exchange rates, partially offset by low single-digit acquisition growth. The decrease in revenue was primarily the result of the impact of COVID-19, as many of our customers cut back operations. Services segment revenues decreased 8.1%, driven by high single-digit organic decline, partially offset by the low-single digit acquisition growth. International segment revenues decreased 17.3%, driven by double-digit organic decline and the mid-single-digit unfavorable impact of foreign exchange rates. Products and Systems segment revenues decreased by 18.1%, due predominantly to the organic decline.

Oil and gas customer revenues comprised approximately 58% and 57% of total revenues for the three months ended March 31, 2020 and 2019, respectively. Aerospace and defense customer revenues comprised approximately 14% of total revenues for both the three months ended March 31, 2020 and 2019. The Company's top ten customers comprised approximately 34% of total revenues for the three months ended March 31, 2020, as compared to 38% for the three months ended March 31, 2019, with no customer accounting for 10% or more of total revenues in either three-month period.

(tabular dollars are in thousands)

Gross Profit

Gross profit decreased by $8.2 million, or 16.8%, in the three months ended March 31, 2020, on a decrease in sales of 9.8%.

Gross profit by segment for the three months ended March 31, 2020 and March 31, 2019 was as follows:

	Three months ended	
	March 31, 2020	March 31, 2019
Gross profit		
Services	$ 32,237	$ 37,365
% of segment revenue	*25.0 %*	*26.6 %*
International	8,023	10,360
% of segment revenue	*27.6 %*	*29.5 %*
Products and Systems	368	1,239
% of segment revenue	*13.1 %*	*36.1 %*
Corporate and eliminations	16	(90)
	$ 40,644	$ 48,874
% of total revenue	*25.5 %*	*27.6 %*

Three months

Gross profit margin was 25.5% and 27.6% for the three month periods ended March 31, 2020 and 2019, respectively. COVID-19 and the significant drop in oil prices have had a significant impact on the decline as sales volumes and sales mix were both unfavorably impacted. Services segment gross profit margins had a year-on-year decline of 160 basis points to 25.0% during the three months ended March 31, 2020, due primarily to unfavorable mix of sales and lower sales volume. International segment gross margins had a year-on-year decline of 190 basis points to 27.6% during the three months ended March 31, 2020, due primarily to unfavorable sales mix and reduced volumes. Products and Systems segment gross margin had a year-on-year decrease in gross profit margin to 13.1% during the three months ended March 31, 2020 due to decreased sales volume and unfavorable sales mix.

Operating Expenses

Operating expenses for the three months ended March 31, 2020 and 2019 was as follows:

	Three months ended	
	March 31, 2020	March 31, 2019
Operating Expenses		
Selling, general and administrative expenses	$ 41,558	$ 41,763
Bad debt provision for troubled customers, net of recoveries	—	5,491
Impairment charges	106,062	—
Pension withdrawal expense	—	534
Research and engineering	824	857
Depreciation and amortization	3,970	4,172
Acquisition-related expense (benefit), net	(542)	453
	$ 151,872	$ 53,270
% of total revenue	*95.2 %*	*30.1 %*

(tabular dollars are in thousands)

Operating expenses increased $98.6 million, or 185%, for the three months ended March 31, 2020 compared to the three months ended March 31, 2019, due predominantly to impairment charges of $106.1 million in 2020 as more fully described in Note 8–*Goodwill* and Note 9–*Intangible Assets* to these condensed consolidated financial statements. Excluding the 2020 impairment charges, operating expenses decreased due to lower bad debt, pension withdrawal and acquisition-related expenses for the three months ended March 31, 2020 compared to the three months ended March 31, 2019. During the first quarter of 2019, we recorded a charge of $5.7 million to fully reserve for the amount of exposure related to a renewable energy industry customer of our Services Division, which customer subsequently filed for a voluntary insolvency proceeding on April 9, 2019.

Income (loss) from Operations

The following table shows a reconciliation of the income (loss) from operations to income (loss) before special items for each of our three segments and for the Company in total:

	Three months ended	
	March 31, 2020	March 31, 2019
Services:		
Income (loss) from operations (GAAP)	$ (81,494)	$ 4,053
Bad debt provision for troubled customers, net of recoveries	—	4,755
Impairment charges	86,200	—
Pension withdrawal expense	—	534
Reorganization and other costs	22	—
Acquisition-related expense (benefit), net	(542)	305
Income before special items (non-GAAP)	$ 4,186	$ 9,647
International:		
Loss from operations (GAAP)	$ (20,419)	$ (215)
Bad debt provision for troubled customers, net of recoveries	—	736
Impairment charges	19,862	—
Reorganization and other costs (benefit)	(75)	156
Income (loss) before special items (non-GAAP)	$ (632)	$ 677
Products and Systems:		
Loss from operations (GAAP)	$ (1,680)	$ (1,328)
Loss before special items (non-GAAP)	$ (1,680)	$ (1,328)
Corporate and Eliminations:		
Loss from operations (GAAP)	$ (7,635)	$ (6,906)
Reorganization and other costs	38	60
Acquisition-related expense, net	—	148
Loss before special items (non-GAAP)	$ (7,597)	$ (6,698)
Total Company:		
Loss from operations (GAAP)	$ (111,228)	$ (4,396)
Bad debt provision for troubled customers, net of recoveries	—	5,491
Impairment charges	106,062	—
Pension withdrawal expense	—	534
Reorganization and other costs (benefit)	(15)	216
Acquisition-related expense (benefit), net	(542)	453
Income (loss) before special items (non-GAAP)	$ (5,723)	$ 2,298

(tabular dollars are in thousands)

Three months

For the three months ended March 31, 2020, loss from operations (GAAP) increased $106.8 million, compared with the three months ended March 31, 2019, while income (loss) before special items (non-GAAP) decreased $8.0 million, or 349%. As a percentage of revenues, income (loss) before special items decreased by 490 basis points to (3.6)% in the three months ended March 31, 2020 from 1.3% in the three months ended March 31, 2019. During the three months ended March 31, 2020, the COVID-19 outbreak and significant drop in oil prices has adversely affected our workforce and operations, as well as the operations of our customers, suppliers and contractors and was the primary reason for the impairment charges. These negative factors have resulted in significant volatility and uncertainty in the markets in which we operate. We are currently unable to predict or determine the overall impact that the COVID-19 pandemic and drop in oil prices may have on our business, results of operations, or liquidity. Refer to Item 1A. Risk Factors in Part I of our 2019 Form 10-K, and the additional risk factors included in Part II, Item 1.A. of this Form 10-Q for further discussion.

Interest Expense

Interest expense was approximately $2.8 million and $3.5 million for the three months ended March 31, 2020 and 2019, respectively. The decrease was due to lower average level of borrowings on our Credit Agreement attributable primarily to payments on borrowings for the acquisition completed during the fourth quarter of 2018, and to a lesser extent, from a decrease in the base borrowing rate.

Income Taxes

The Company’s effective income tax rate was approximately 14% and 33% for the three months ended March 31, 2020 and 2019, respectively. The effective income tax rate for the three months ended March 31, 2020 was lower than the statutory rate primarily due to impairments recorded during the interim period for which no income tax benefits will be realized by us. However, this unfavorable impact on our effective income tax rate was partially offset by income tax benefits of the CARES Act enacted on March 27, 2020. The CARES Act provides a five-year carryback of net operating losses generated in years 2018-2020. As the statutory federal income tax rate applicable to certain years within the carryback period is 35%, carryback to those years of our estimated 2020 annual tax loss provides a tax benefit in excess of the current federal statutory rate of 21%, resulting in an increased income tax benefit. We project that the income tax effects of the CARES Act will result in additional income tax benefit recognized throughout the 2020 tax year as part of the estimated annual effective tax rate, and a cash refund in 2021 of taxes paid in prior years. The effective income tax rate for the three months ended March 31, 2019 was higher than the statutory rate due to the impact of discrete items, the global intangible low-taxes income, and executive compensation, and other provisions resulting from the December 22, 2017 passage of the Tax Cuts and Jobs Act and foreign tax rates different than statutory rates in the U.S.

Liquidity and Capital Resources

Cash flows are summarized in the table below:

	Three months ended	
	March 31, 2020	March 31, 2019
Net cash provided by (used in):		
Operating activities	$ 6,107	$ 8,177
Investing activities	(4,204)	(5,001)
Financing activities	492	(3,949)
Effect of exchange rate changes on cash	(384)	(171)
Net change in cash and cash equivalents	$ 2,011	$ (944)

Cash Flows from Operating Activities

During the three months ended March 31, 2020, cash provided by operating activities was $6.1 million, representing a year-on-year decrease of $2.1 million, or 25%. The decrease was primarily attributable to movements in working capital.

Cash Flows from Investing Activities

During the three months ended March 31, 2020, cash used in investing activities was $4.2 million, compared with $5.0 million in 2019. The decrease is primarily attributable to a reduction in capital expenditures to $4.4 million for the three months ended March 31, 2020 compared with $5.7 million in the comparable 2019 period.

Cash Flows from Financing Activities

Net cash provided by financing activities was $0.5 million for the three months ended March 31, 2020, compared to net cash used of $3.9 million for the three months ended March 31, 2019. During the three months ended March 31, 2020, we borrowed an additional $6.0 million, net of payments, on our revolving credit facility as compared to 2019 and, in addition, made payments of $1.3 million and $0.5 million for acquisition-related contingent consideration and financing costs, respectively.

Effect of Exchange Rate Changes on Cash and Cash Equivalents

The effect of exchange rate changes on our cash and cash equivalents was a net reduction of $0.4 million in the three months ended March 31, 2020, compared to a net reduction of $0.2 million for the three months ended March 31, 2019.

Cash Balance and Credit Facility Borrowings

The terms of our Credit Agreement have not changed from those set forth in Part II, Item 7 of our 2019 Annual Report under the Section “Liquidity and Capital Resources”, under the heading “Cash Balance and Credit Facility Borrowings,” and in Note 11–*Long-Term Debt* to these condensed consolidated financial statements in this Quarterly Report, under the heading “Senior Credit Facility.”

As of March 31, 2020, we had cash and cash equivalents totaling $17.0 million and available borrowing capacity of $139.7 million under our Credit Agreement with borrowings of $250.3 million and $3.7 million of letters of credit outstanding. We finance operations primarily through our existing cash balances, cash collected from operations, bank borrowings and capital lease financing. We believe these sources are sufficient to fund our operations for the foreseeable future.

As of March 31, 2020, the Company was in compliance with the terms of the Credit Agreement and will continuously monitor its compliance with the covenants contained in its Credit Agreement.

In response to the uncertain impact of the COVID-19 pandemic and the significant drop in oil prices on our projected cash flows and ability to continue compliance with the terms of the Credit Agreement, on May 15, 2020, we amended the Credit Agreement as more fully described in Note 11–*Long-Term Debt* to these condensed consolidated financial statements in this Quarterly Report.

Contractual Obligations

There have been no significant changes in our contractual obligations and outstanding indebtedness as disclosed in the 2019 Annual Report.

Off-balance Sheet Arrangements

During the three months ended March 31, 2020, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies and Estimates

There have been no significant changes to our critical accounting policies and estimates from the information provided in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," included in the 2019 Annual Report.

ITEM 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no significant changes to our quantitative and qualitative disclosures about market risk as discussed in Part II, Item 7A "Quantitative and Qualitative Disclosures About Market Risk," included in the 2019 Annual Report.

ITEM 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Pursuant to Rule 13a-15(b) under the Exchange Act, our management carried out an evaluation, under the supervision and with the participation of our President and Chief Executive Officer and our Executive Vice President, Chief Financial Officer and Treasurer, of the effectiveness of the design and operation of our disclosure controls (as defined in Rule 13a-15(e) of the Exchange Act) and procedures. Based upon that evaluation, our President and Chief Executive Officer and our Executive Vice President, Chief Financial Officer and Treasurer concluded that, as of March 31, 2020, our disclosure controls and procedures were not effective, due to material weaknesses in our internal control over financial reporting as discussed below.

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

Management previously disclosed material weaknesses in internal control over financial reporting in our 2019 Annual Report pertaining to financial reporting processes and internal control related to accounting for income taxes. The Company remains committed to an effective internal control environment and management believes that these actions, and the improvements management expects to achieve as a result, will remediate the material weakness. However, the material weaknesses will not be considered remediated until the controls operate for a sufficient period of time and management has concluded through testing that these controls operate effectively. The Company continues to execute on the remediation plans as outlined below.

Remediation Plans

Our management, with oversight from the Audit Committee of the Board of Directors, is actively engaged in remediation efforts to address the identified material weaknesses over income taxes. These efforts include:

- Accelerate the risk assessment process related to changes in the business;
- Enhance the design of controls surrounding the preparation and review of the income tax provision, and enhance the automation of the income tax processes and controls to allow for a timelier completion and review of internal controls; and
- Accelerate all key activities within the income tax accounting and reporting process and controls by further increasing and expanding the capabilities of the income tax accounting resources in order to devote additional time and resources to the consolidated income tax accounting and reporting processes and controls.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during the quarter ended March 31, 2020 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, other than as set forth in the remediation plan described above.

PART II—OTHER INFORMATION

ITEM 1. Legal Proceedings

See Note 14–*Commitments and Contingencies* to the condensed consolidated financial statements included in this Quarterly Report for a description of our legal proceedings. There have been no material developments with regard to any matters disclosed under Part I, Item 3 "Legal Proceedings" in our 2019 Annual Report, except as disclosed in such Note 14–*Commitments and Contingencies*.

ITEM 1.A. Risk Factors

In addition to the other information set forth in this Quarterly Report, you should carefully consider the risk factors discussed under the "Risk Factors" section included in our 2019 Annual Report. There have been no material changes to the risk factors previously disclosed in the 2019 Annual Report, except for the addition of the following risk factors.

The COVID-19 pandemic has adversely affected and in the future periods is expected to continue to adversely affect our business and operations.

The COVID-19 pandemic is adversely affecting, and is expected to continue to adversely affect, our business and operations and the business and operations of our customers. We have experienced and expect to continue to experience, unpredictable reductions in demand for our services and products. In response to the COVID-19 pandemic, companies within the oil and gas and aerospace industries (including our customers) have announced spending cuts and/or slowdowns (or temporary cessation) in production which, in turn, may result in decreases in awards of new contracts or adjustments, reductions, suspensions or cancellations of existing contracts. In addition, as a result of the COVID-19 pandemic, some of our customers have been and could continue to be negatively impacted as a result of disruption in demand, which has led to delays and could lead to defaults on collections of receivables from them. Such continued delays could negatively impact our business, results of operations and financial condition.

The continued spread of COVID-19 may result in a decrease in business and/or cause our customers to be unable to meet existing payment or other obligations to us, particularly in the event of a spread of COVID-19 in our market areas. The continued spread of COVID-19 could also negatively impact the availability of our key personnel necessary to conduct our business. In addition, any significant disruption of global financial markets, reducing our ability to access capital, could negatively affect our liquidity. Because the severity, magnitude and duration of the COVID-19 pandemic and its economic consequences are uncertain, rapidly changing and difficult to predict, the impact on our business, financial condition and results of operations remains uncertain and difficult to predict. While we expect the COVID-19 pandemic to have an adverse effect on our business, financial condition, liquidity, cash flow and results of operations, we are unable to predict the extent, nature or duration of these impacts at this time, although we expect such negative impacts for the remainder of the fiscal year and perhaps longer.

If the economic disruption caused by the COVID-19 pandemic increases in magnitude or continues longer than expected, we may have difficulty meeting the financial covenants in our credit agreement with our banks.

The Company expected that the economic disruption being caused by the COVID-19 pandemic would likely cause our results in upcoming quarters to be less than are required to meet the financial covenants in our credit agreement with our banks. We obtained an amendment to our credit agreement which included, among other terms, modifications to the financial covenants in the credit agreement. We believe we will be able to meet the amended financial covenants. However, due to the uncertainties and risks created by the COVID-19 pandemic, no assurance can be given that we will comply with these covenants, particularly if the pandemic increases in intensity or its duration is longer than expected. If we are not able to meet the financial covenants in our credit agreement in future quarters, we will be in default, which would give the lenders the right to terminate the agreement, not allow us to borrow on our line of credit, call all of our loans to be due and payable, and exercise any other remedies available to the lenders. If we do default on our credit agreement and the lenders elect to not grant us a waiver or amendment and/or to commence exercising their remedies and we are unable to obtain other funding sources, our operations will be materially impacted and we may not be able to continue operating as a going concern. If we do obtain alternate funding sources, this alternate financing could be on substantially different and adverse terms than our existing credit agreement, materially impacting our operations and profitability, and otherwise could significantly dilute our existing shareholders and have other materially adverse effects on us and our shareholders.

ITEM 2. Unregistered Sale of Equity Securities and Use of Proceeds

(a) Sales of Unregistered Securities

None.

(b) Use of Proceeds from Public Offering of Common Stock

None.

(c) *Repurchases of Our Equity Securities*

The following table sets forth the shares of our common stock we acquired during the quarter as a result of the surrender of shares by employees to satisfy tax withholding obligations in connection with the vesting of restricted stock units.

Month Ending	Total Number of Shares (or Units) Purchased	Average Price Paid per Share (or Unit)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
January 31, 2020	—	$ —	—	$ —
February 29, 2020	—	$ —	—	$ —
March 31, 2020	41,446	$ 3.78	—	$ —

ITEM 3. Defaults Upon Senior Securities

None.

ITEM 4. Mine Safety Disclosures

Not applicable.

ITEM 5. Other Information

None.

ITEM 6. Exhibits

Exhibit No.	Description
10.1	Certification of Chief Second Amendment, dated March 9, 2020, to Fifth Amended and Restated Credit Agreement, dated December 13, 2018 (filed as Exhibit 10.1 to Current Report on Form 8-K filed March 13, 2020 and incorporated herein by reference). Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
10.2	Form of Restricted Stock Unit Certificate for awards to senior officers under the Mistras Group, Inc. 2016 Long-Term Incentive Plan.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934.
32.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.LAB	XBRL Labels Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Definition Linkbase Document

Exhibit 10.2 is a management contract or compensatory plan, contract, or arrangement.

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.

MISTRAS GROUP, INC.

By: /s/ Edward J. Prajzner

Edward J. Prajzner
Executive Vice President, Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer and duly authorized officer)

Date: May 18, 2020

MISTRAS GROUP, INC.
RESTRICTED STOCK UNIT CERTIFICATE

Granted To:

Total Units: Grant Date:

Vesting Dates:

1. Award. In accordance with the Mistras Group, Inc. 2016 Long-Term Incentive Plan (the "Plan"), Mistras Group, Inc. (the "Company") has made an award to you of restricted stock units (the "RSUs"). Each RSU, upon vesting, will become one share of the Company's common stock. The award and the RSUs are subject to the provisions of the Plan and, to the extent not prohibited by the Plan, the terms and conditions of this certificate. Capitalized terms that are used but not defined in this certificate shall have the meanings ascribed to them by the Plan.

2. Vesting of RSUs. Except as otherwise provided herein or the Plan, the RSUs will vest in equal annual installments on each of the dates set forth above, or 100% on the vesting date if only one vesting date is listed above. All vesting is subject to your continuous employment or other service with the Company or a Subsidiary from the Grant Date until the applicable vesting date, except as otherwise provided in this certificate or in the Plan.

3. Termination of Employment; Forfeiture of Unvested RSUs. Unless the Committee, acting in its sole and absolute discretion, determines otherwise, upon the termination of your employment and other service with the Company and its Subsidiaries ("Termination of Employment"), you will forfeit all right, title and interest in the unvested RSUs, unless your Termination of Employment is as a result of (i) Retirement, in which case the terms of Section 4 shall control, (ii) death or permanent disability, in which case Section 5 shall control, or (iii) as expressly set forth in the Plan, such as in connection with a Change of Control.

4. Eligible Retirement. (a) The following terms shall govern if you retire pursuant to an Eligible Retirement. As used in this Section 4, "Eligible Retirement" means that you have reached the age of 65. If you meet the Eligible Retirement terms, and you retire or resign from providing service to the Company and its subsidiaries, you will be a "Retiree." If you are a Retiree, any outstanding unvested RSUs hereunder shall continue to vest after retirement but only on the condition that you continuously comply with the restrictive covenants set forth below in (b).

(b) In consideration of you having the benefit of post-retirement vesting of RSUs upon becoming a Retiree, you agree that continuously until 6 months after the last of the any unvested RSUs you may have vests (such period being the "Restricted Period"), you shall not, directly or indirectly, on your own behalf or on behalf of any person other than the Company (i) engage in, have an equity or profit interest in, or lend money to, or manage, operate, or work for any person, firm, corporation, partnership, or business (whether as a director, officer, employee, agent, representative, partner, security holder, consultant, or otherwise) that engages in any business which competes in any respect with the Company or any of its Subsidiaries, or (ii) recruit or otherwise solicit or induce any employee, consultant, customer, client, or supplier of the Company or any of its Subsidiaries to (A) terminate its employment or other business arrangement or relationship with the Company or any of its Subsidiaries, (B) otherwise change its relationship with the Company or any of its Subsidiaries or (C) establish any business relationship with you or person controlled by or related to you for any business purpose competitive with the Company or of its Subsidiaries. A passive investment by you in a publicly traded company in which you exercise no operational or strategic control and which constitutes less than 2% of the outstanding shares of such entity shall not constitute a breach of this covenant.

(c) If you fail to meet the restrictive covenants set forth in (b) above continuously during the Restricted Period, then (i) all unvested RSUs shall automatically be cancelled and forfeited, and (ii) you shall repay to the Company the value realized by you of all post retirement vesting of RSUs without any reduction for taxes paid by or withheld on your behalf on account of any such value realized.

5. Vesting Upon Death or Disability. Upon your Disability (as defined in the Plan) or death, all unvested RSUs shall vest and, in the case of your death, the shares represented by such RSUs shall be distributed to your heirs.

6. Transfer Restrictions. You may not sell, assign, transfer, pledge, hedge, hypothecate, encumber or dispose of in any way (whether by operation of law or otherwise) any unvested RSUs, and unvested RSUs shall not be subject to execution, attachment or similar process. Any attempt by you or any other person claiming against, through or under you to cause unvested RSUs to be transferred or assigned in any manner and for any purpose not permitted hereunder or under the Plan shall be null and void and without effect upon the Company, you or any other person.

7. No Ownership of Stock; No Dividends or Voting Rights. The RSUs do not represent shares of the Company's common stock, and no dividends or other distributions will be payable on unvested RSUs, and you will not have any voting rights with respect to the unvested RSUs.

8. Issuance of Shares Upon Vesting. If, as and when any RSU becomes vested, and subject to the satisfaction of applicable withholding and other legal requirements, the vested RSU becomes void and you shall own one share of common stock of the Company for each vested RSU.

9. Withholding. The vesting of RSUs covered by this certificate shall be subject to and conditioned upon the satisfaction by you of applicable tax withholding obligations. The Company and its Subsidiaries may require you to remit an amount sufficient to satisfy applicable withholding taxes or deduct or withhold such amount from any payments otherwise owed to you. By accepting this award, you expressly authorizes the Company to deduct from any compensation or any other payment of any kind due to you, including withholding shares issued in exchange for vested RSUs, for the amount of any federal, state, local or foreign taxes required by law to be withheld in connection with the vesting of RSUs; provided, however, that the value of the RSUs withheld may not exceed the statutory maximum withholding amount allowed by law.

10. Provisions of the Plan and the Committee's Authority Control. This certificate is subject to all the terms, conditions and provisions of the Plan and to the rules, regulations and interpretations as may be established or made by the Committee acting within the scope of its authority and responsibility under the Plan. A copy of the Plan is available to you and may be obtained from the Company's Corporate Secretary at the Company's corporate headquarters. The applicable provisions of the Plan shall govern in any situation where this certificate is silent or where the applicable provisions of this certificate are contrary to or not reconcilable with such Plan provisions. The Committee shall have complete discretion in the exercise of its rights, powers, and duties with respect to the award represented by this certificate. Any interpretation or construction of any provision of, and the determination of any question arising under, this certificate shall be made by the Committee in its discretion and such exercise shall be final, conclusive, and binding.

11. No Employment Rights. Nothing contained herein or in the Plan shall confer upon you any right of continued employment or other service with the Company or a Subsidiary or interfere in any way with the right of the Company and its Subsidiaries at any time to terminate your employment or other service with the Company or its Subsidiaries or to increase, decrease or otherwise adjust your compensation and any other terms and conditions of your employment or other service.

12. Successors. This certificate shall be binding upon, and inure to the benefit of, any successor or successors of the Company, you and any of your beneficiaries.

13. Entire Understanding. This certificate and the terms of Plan constitute the entire terms of the award represented by this certificate and may not be amended, except as provided in the Plan, other than by a written instrument executed by the Company and you.

14. Governing Law. All rights and obligations under this certificate shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to its principles of conflict of laws.

Mistras Group, Inc.

By: Dennis Bertolotti By: Michael C. Keefe
President and Chief Executive VP, General
Executive Officer Counsel

Exhibit 31.1

CERTIFICATION PURSUANT TO RULE 13A-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Dennis Bertolotti, certify that:

1. I have reviewed this report on Form 10-Q of Mistras Group, 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 statements 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 periods 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 control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-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 regarding the reliability of financial reporting and the 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 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: May 18, 2020

/s/ Dennis Bertolotti

Dennis Bertolotti
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO RULE 13A-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934

I, Edward J. Prajzner, certify that:

1. I have reviewed this report on Form 10-Q of Mistras Group, 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 statements 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 periods 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 control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-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 regarding the reliability of financial reporting and the 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 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: May 18, 2020

/s/ Edward J. Prajzner

Edward J. Prajzner
Executive Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Each of the undersigned hereby certifies, for the purposes of section 1350 of chapter 63 of title 18 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, in his capacity as an officer of Mistras Group, Inc. (the “Company”), that, to his knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2020 (the “Report”), fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company. This written statement is being furnished to the Securities and Exchange Commission as an exhibit to the Report.

Dated: May 18, 2020

/s/ Dennis Bertolotti

Dennis Bertolotti
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Edward J. Prajzner

Edward J. Prajzner
Executive Vice President, Chief Financial Officer and Treasurer
(Principal Financial Officer)