

LYDALL INC /DE/
Form 10-Q
April 30, 2019

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

FORM 10-Q

¼QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2019

OR

½TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission File Number: 1-7665

LYDALL, INC.

(Exact name of registrant as specified in its charter)

Delaware

06-0865505

(State or Other Jurisdiction of Incorporation or Organization) (I.R.S. Employer Identification No.)

One Colonial Road, Manchester, Connecticut

06042

(Address of principal executive offices)

(zip code)

(860) 646-1233

(Registrant's telephone number, including area code)

None

(Former name, former address and former fiscal year, if changed since last report)

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 a shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

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

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

Edgar Filing: LYDALL INC /DE/ - Form 10-Q

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

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

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock \$.01 par value per share.

Total Shares outstanding April 15, 2019 17,530,795

LYDALL, INC.
INDEX

| | Page Number |
|--|----------------|
| Cautionary Note Concerning Forward – Looking Statements | 3 |
| Part I. Financial Information | |
| Item 1. <u>Financial Statements</u> | |
| <u>Condensed Consolidated Statements of Operations (Unaudited)</u> | 5 |
| <u>Condensed Consolidated Statements of Comprehensive Income (Unaudited)</u> | 6 |
| <u>Condensed Consolidated Balance Sheets (Unaudited)</u> | 7 |
| <u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u> | 8 |
| <u>Condensed Consolidated Statements of Changes in Stockholders' Equity (Unaudited)</u> | 9 |
| <u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u> | 10 |
| Item 2. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u> | 26 |
| Item 3. <u>Quantitative and Qualitative Disclosures about Market Risk</u> | 34 |
| Item 4. <u>Controls and Procedures</u> | 34 |
| Part II. Other Information | |
| Item 1. <u>Legal Proceedings</u> | 36 |
| Item 1A. <u>Risk Factors</u> | 36 |
| Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u> | 37 |
| Item 5. <u>Other Information</u> | 38 |
| Item 6. <u>Exhibits</u> | 39 |
| Signature | 40 |

Lydall, Inc. and its subsidiaries are hereafter collectively referred to as “Lydall,” the “Company” or the “Registrant.” Lydall and its subsidiaries’ names, abbreviations thereof, logos, and product and service designators are all either the registered or unregistered trademarks or trade names of Lydall and its subsidiaries.

CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Any statements contained in this Quarterly Report on Form 10-Q that are not statements of historical fact may be deemed to be forward-looking statements. All such forward-looking statements are intended to provide management’s current expectations for the future operating and financial performance of the Company based on current assumptions relating to the Company’s business, the economy and future conditions. Forward-looking statements generally can be identified through the use of words such as “believes,” “anticipates,” “may,” “should,” “will,” “plans,” “projects,” “expects,” “expectations,” “estimates,” “forecasts,” “prospects,” “strategy,” “signs” and other words of similar meaning in connection with the discussion of future operating or financial performance. Forward-looking statements may include, among other things, statements relating to future sales, earnings, cash flow, results of operations, uses of cash and other measures of financial performance. Because forward-looking statements relate to the future, they are subject to inherent risks, uncertainties and changes in circumstances that are difficult to predict. Accordingly, the Company’s actual results may differ materially from those contemplated by the forward-looking statements. Investors, therefore, are cautioned against relying on any of these forward-looking statements. They are neither statements of historical fact nor guarantees or assurances of future performance. Forward-looking statements in this Quarterly Report on Form 10-Q include, among others, statements relating to:

- Overall economic and business conditions and the effects on the Company’s markets;
- Outlook for the second quarter and full year 2019;
- Ability to improve operational effectiveness in the Thermal Acoustical Solutions segment;
- Expected vehicle production in the North American, European or Asian markets;
- Growth opportunities in markets served by the Company;
- Ability to integrate the Interface Performance Materials business, which was acquired in the third quarter of 2018;
- Expected future financial and operating performance of Interface Performance Materials;
- Expected costs and future savings associated with restructuring programs;
- Expected gross margin, operating margin and working capital improvements from cost control and other improvement programs;
- Product development and new business opportunities;
- Future strategic transactions, including but not limited to: acquisitions, joint ventures, alliances, licensing agreements and divestitures;
- Pension plan funding and expected impacts of the Lydall Pension Plan termination during 2019;
 - Future cash flow and uses of cash;
 - Future amounts of stock-based compensation expense;
- Future earnings and other measurements of financial performance;
- Ability to meet cash operating requirements;
- Future levels of indebtedness and capital spending;
- Ability to meet financial covenants in the Company’s amended revolving credit facility;
- Future impact of the variability of interest rates and foreign currency exchange rates;
- Expected future impact of recently issued accounting pronouncements upon adoption;
- Future effective income tax rates and realization of deferred tax assets;
-

Edgar Filing: LYDALL INC /DE/ - Form 10-Q

Estimates of fair values of reporting units and long-lived assets used in assessing goodwill and long-lived assets for possible impairment; and

•The expected outcomes of legal proceedings and other contingencies, including environmental matters.

All forward-looking statements are inherently subject to a number of risks and uncertainties that could cause the actual results of the Company to differ materially from those reflected in forward-looking statements made in this Quarterly Report on Form 10-

3

Q, as well as in press releases and other statements made from time to time by the Company's authorized officers. Such risks and uncertainties include, among others, worldwide economic cycles and political changes and uncertainties that affect the markets which the Company's businesses serve, which could have an effect on demand for the Company's products and impact the Company's profitability; challenges encountered by the Company in the execution of restructuring programs; challenges encountered in the integration of the acquired Interface Performance Materials business; disruptions in the global credit and financial markets, including diminished liquidity and credit availability; changes in international trade agreements and policies, including tariff regulation and trade restrictions; swings in consumer confidence and spending; unstable economic growth; volatility in foreign currency exchange rates; raw material pricing and supply issues; fluctuations in unemployment rates; retention of key employees; increases in fuel prices; and outcomes of legal proceedings, claims and investigations, as well as other risks and uncertainties identified in Part II, Item 1A - Risk Factors of this Quarterly Report on Form 10-Q, and Part I, Item 1A - Risk Factors of Lydall's Annual Report on Form 10-K for the year ended December 31, 2018. The Company does not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

LYDALL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In Thousands Except Per Share Data)

| | Quarter Ended | |
|--|---------------|-----------|
| | March 31, | |
| | 2019 | 2018 |
| | (Unaudited) | |
| Net sales | \$218,025 | \$191,660 |
| Cost of sales | 175,969 | 152,153 |
| Gross profit | 42,056 | 39,507 |
| Selling, product development and administrative expenses | 33,006 | 25,471 |
| Operating income | 9,050 | 14,036 |
| Interest expense | 3,628 | 540 |
| Other expense, net | 399 | 315 |
| Income before income taxes | 5,023 | 13,181 |
| Income tax expense | 1,106 | 2,123 |
| Loss from equity method investment | 27 | 4 |
| Net income | \$3,890 | \$11,054 |
| Earnings per share: | | |
| Basic | \$0.23 | \$0.64 |
| Diluted | \$0.22 | \$0.64 |
| Weighted average number of common shares outstanding: | | |
| Basic | 17,254 | 17,164 |
| Diluted | 17,318 | 17,339 |

See accompanying Notes to Condensed Consolidated Financial Statements.

LYDALL, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
 (In Thousands)

| | Quarter Ended | |
|--|---------------|----------|
| | March 31, | |
| | 2019 | 2018 |
| | (Unaudited) | |
| Net income | \$3,890 | \$11,054 |
| Other comprehensive income (loss): | | |
| Foreign currency translation adjustments | (127) | 2,545 |
| Pension liability adjustment, net of tax | 215 | 198 |
| Unrealized (loss) gain on hedging activities, net of tax | (675) | 102 |
| Comprehensive income | \$3,303 | \$13,899 |

See accompanying Notes to Condensed Consolidated Financial Statements.

LYDALL, INC.
 CONDENSED CONSOLIDATED BALANCE SHEETS
 (In Thousands)

| | March 31, 2019 (Unaudited) | December 31, 2018 |
|---|----------------------------------|----------------------|
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 47,874 | \$ 49,237 |
| Accounts receivable, less allowances (2019 - \$1,477; 2018 - \$1,440) | 156,349 | 144,938 |
| Contract assets | 22,322 | 23,040 |
| Inventories | 91,048 | 84,465 |
| Taxes receivable | 3,138 | 2,912 |
| Prepaid expenses | 5,062 | 4,707 |
| Other current assets | 8,669 | 7,779 |
| Total current assets | 334,462 | 317,078 |
| Property, plant and equipment, at cost | 462,765 | 458,075 |
| Accumulated depreciation | (248,845) | (244,706) |
| Net, property, plant and equipment | 213,920 | 213,369 |
| Operating lease right-of-use assets | 27,254 | — |
| Goodwill | 197,022 | 196,963 |
| Other intangible assets, net | 131,325 | 136,604 |
| Other assets, net | 7,929 | 8,672 |
| Total assets | \$ 911,912 | \$ 872,686 |
| LIABILITIES AND STOCKHOLDERS' EQUITY | | |
| Current liabilities: | | |
| Current portion of long-term debt | \$ 10,111 | \$ 10,172 |
| Accounts payable | 86,921 | 73,265 |
| Accrued payroll and other compensation | 18,724 | 16,621 |
| Deferred revenue | 5,471 | 6,990 |
| Other accrued liabilities | 21,571 | 14,298 |
| Total current liabilities | 142,798 | 121,346 |
| Long-term debt | 307,656 | 314,641 |
| Long-term operating lease liabilities | 22,138 | — |
| Deferred tax liabilities | 39,038 | 39,265 |
| Benefit plan liabilities | 22,170 | 22,795 |
| Other long-term liabilities | 4,898 | 5,364 |
| Commitments and Contingencies (Note 16) | | |
| Stockholders' equity: | | |
| Preferred stock | — | — |
| Common stock | 252 | 253 |
| Capital in excess of par value | 91,713 | 90,851 |
| Retained earnings | 415,032 | 411,325 |
| Accumulated other comprehensive loss | (43,272) | (42,685) |
| Treasury stock, at cost | (90,511) | (90,469) |
| Total stockholders' equity | 373,214 | 369,275 |
| Total liabilities and stockholders' equity | \$ 911,912 | \$ 872,686 |

See accompanying Notes to Condensed Consolidated Financial Statements.

7

LYDALL, INC.
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
 (In Thousands)

| | Three Months Ended March 31, 2019 2018 (Unaudited) | |
|--|---|-----------|
| Cash flows from operating activities: | | |
| Net income | \$3,890 | \$11,054 |
| Adjustments to reconcile net income to net cash provided by (used for) operating activities: | | |
| Depreciation and amortization | 11,935 | 7,220 |
| Deferred income taxes | (260) | 601 |
| Stock-based compensation | 982 | 1,201 |
| Loss from equity method investment | 27 | 4 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (11,395) | (18,626) |
| Contract assets | 447 | (5,745) |
| Inventories | (6,617) | (8,796) |
| Accounts payable | 15,498 | 9,471 |
| Accrued payroll and other compensation | 2,443 | (2,432) |
| Accrued taxes | 396 | 877 |
| Other, net | (2,976) | 1,209 |
| Net cash provided by (used for) operating activities | 14,370 | (3,962) |
| Cash flows from investing activities: | | |
| Capital expenditures | (9,239) | (7,676) |
| Proceeds from the sale of property, plant and equipment | 256 | — |
| Net cash used for investing activities | (8,983) | (7,676) |
| Cash flows from financing activities: | | |
| Debt repayments | (7,067) | (57) |
| Common stock issued | — | 666 |
| Common stock repurchased | (43) | (823) |
| Net cash used for financing activities | (7,110) | (214) |
| Effect of exchange rate changes on cash | 360 | 1,080 |
| Decrease in cash and cash equivalents | (1,363) | (10,772) |
| Cash and cash equivalents at beginning of period | 49,237 | 59,875 |
| Cash and cash equivalents at end of period | \$47,874 | \$49,103 |

Non-cash capital expenditures of \$3.1 million and \$4.2 million were included in accounts payable at March 31, 2019 and 2018, respectively.

See accompanying Notes to Condensed Consolidated Financial Statements.

LYDALL, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(Unaudited)

| In thousands of dollars and shares | Common Stock Shares | Common Stock Amount | Capital in Excess of Par Value | Retained Earnings | Accumulated Other Comprehensive Loss | Treasury Stock | Total Stockholders' Equity |
|--|---------------------------|---------------------------|--|----------------------|---|-------------------|----------------------------------|
| Balance at December 31, 2018 | 25,254 | \$ 253 | \$90,851 | \$411,325 | \$ (42,685) | \$(90,469) | \$ 369,275 |
| Net Income | | | | 3,890 | | | 3,890 |
| Other comprehensive loss, net of tax | | | | | (587) | | (587) |
| Stock repurchased | | | | | | (42) | (42) |
| Stock issued (canceled) under employee plans | (26) | (1) | | | | | (1) |
| Stock-based compensation expense | | | 862 | | | | 862 |
| Adoption of ASC 606 (1) | | | | (183) | | | (183) |
| Balance at March 31, 2019 | 25,228 | 252 | 91,713 | 415,032 | (43,272) | (90,511) | 373,214 |

| In thousands of dollars and shares | Common Stock Shares | Common Stock Amount | Capital in Excess of Par Value | Retained Earnings | Accumulated Other Comprehensive Loss | Treasury Stock | Total Stockholders' Equity |
|--|---------------------------|---------------------------|--|----------------------|---|-------------------|----------------------------------|
| Balance at December 31, 2017 | 25,018 | \$ 250 | \$88,006 | \$374,783 | \$ (20,148) | \$(89,495) | \$ 353,396 |
| Net Income | | | | 11,054 | | | 11,054 |
| Other comprehensive income, net of tax | | | | | 2,845 | | 2,845 |
| Stock repurchased | | | | | | (823) | (823) |
| Stock issued under employee plans | 50 | 1 | 666 | | | | 667 |
| Stock-based compensation expense | | | 1,096 | | | | 1,096 |
| Adoption of ASC 606 | | | | 1,598 | | | 1,598 |
| Balance at March 31, 2018 | 25,068 | 251 | 89,768 | 387,435 | (17,303) | (90,318) | 369,833 |

(1) During the quarter ended March 31, 2019, the Company recorded an adjustment reducing retained earnings and contract assets by \$0.2 million to correct an error in the adoption of ASC 606.

See accompanying Notes to Condensed Consolidated Financial Statements.

LYDALL, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

1. Basis of Financial Statement Presentation

Description of Business

Lydall, Inc. and its subsidiaries (the "Company" or "Lydall") design and manufacture specialty engineered nonwoven filtration media, industrial thermal insulating solutions, and thermal and acoustical barriers for filtration/separation and heat abatement and sound dampening applications.

On August 31, 2018, the Company acquired an engineered sealing materials business operating under Interface Performance Materials ("Interface"), based in Lancaster, Pennsylvania for \$268.4 million, net of cash acquired of \$5.2 million. A globally-recognized leader in the delivery of engineered sealing solutions, the Interface operations manufacture wet-laid gasket and specialty materials primarily serving OEM and Tier I manufacturers in the agriculture, construction, earthmoving, industrial, and automotive segments. The acquired business is included in the Company's Performance Materials operating segment.

Basis of Presentation

The accompanying Condensed Consolidated Financial Statements include the accounts of Lydall, Inc. and its subsidiaries. All financial information is unaudited for the interim periods reported. All significant intercompany transactions have been eliminated in the Condensed Consolidated Financial Statements. The Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The operating results of Interface have been included in the Consolidated Statements of Operations beginning on the date of acquisition. The year-end Condensed Consolidated Balance Sheet was derived from the December 31, 2018 audited financial statements, but does not include all disclosures required by U.S. GAAP. Management believes that all adjustments, which include only normal recurring adjustments necessary for a fair statement of the Company's condensed consolidated financial position, results of operations and cash flows for the periods reported, have been included. For further information, refer to the audited consolidated financial statements and accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Recent Accounting Pronouncements

Effective January 1, 2019, the Company adopted the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, "Leases (Topic 842)", along with several additional clarification ASU's issued during 2018, collectively "New Lease Standard". The New Lease Standard requires entities that lease assets with lease terms of more than 12 months to recognize right-of-use assets and lease liabilities created by those leases on their balance sheets. This New Lease Standard also requires new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. The Company's adoption of the New Lease Standard was on a modified retrospective basis and did not have any impact on the Company's 2018 financial statements and disclosures. As part of the adoption of the New Lease Standard, the Company elected the package of practical expedients which allowed the Company to not re-assess 1) if any existing arrangements contained a lease, 2) the lease classification of any existing leases and 3) initial direct costs for any existing lease. The Company also elected the practical expedient which allows use of hindsight in determining the lease term for leases in existence at the date of adoption. Effective January 1, 2019, the

Company reported lease right-of-use assets and lease liabilities on the Company's Condensed Consolidated Balance Sheets. Adoption of the New Lease Standard did not change the balances reported in the Company's 2019 Condensed Consolidated Statements of Operations, Condensed Consolidated Statements of Cash Flows, or Condensed Statements of Comprehensive Income. Please refer to Footnote 8 "Leases" for additional information required as part of the adoption of the New Lease Standard.

Effective January 1, 2019, the Company adopted the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Account for Hedging Activities". This ASU provides various improvements revolving around the financial reporting of hedging relationships that requires an entity to amend the presentation and disclosure of hedging activities to better portray the economic results of an entity's risk management activities in its financial statements. The adoption of this ASU did not have any impact on the Company's consolidated financial statements and disclosures.

Effective January 1, 2019, the Company adopted FASB issued ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income". This ASU allows for reclassification of stranded tax effects resulting from the 2017 Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings, but does not require the reclassification. The Company has elected not to reclassify the income tax effects of the 2017 Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings.

Effective January 1, 2019, the Company adopted FASB issued ASU No. 2018-07, Compensation - Stock Compensation (Topic 718) (“ASU 2018-07”). ASU 2018-07 expands the guidance for stock-based compensation to include share-based payment transactions for acquiring goods and services from nonemployees. The adoption of this ASU did not have any impact on the Company’s consolidated financial statements and disclosures.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments - Credit Losses (Topic 326)". The new standard amends guidance on reporting credit losses for assets held at amortized cost basis. This ASU is effective for financial statements issued for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The Company is currently evaluating the impact this guidance may have on its consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement (“ASU 2018-13”), which adds, amends and removes certain disclosure requirements related to fair value measurements. Among other changes, this standard requires certain additional disclosure surrounding Level 3 assets, including changes in unrealized gains or losses in other comprehensive income and certain inputs in those measurements. ASU 2018-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Certain amended or eliminated disclosures in this standard may be adopted early, while certain additional disclosure requirements in this standard can be adopted on its effective date. In addition, certain changes in the standard require retrospective adoption, while other changes must be adopted prospectively. The Company is currently evaluating the impact of this update on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-14, "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans." This ASU requires entities to disclose the weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates. This ASU also requires entities to disclose an explanation for significant gains and losses related to changes in the benefit obligation for the period. This ASU is effective for fiscal years beginning after December 15, 2020 with early adoption permitted. The Company is currently evaluating the method and impact the adoption of ASU 2018-14 will have on the Company’s consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40); Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The amendments in this update require implementation costs incurred by customers in cloud computing arrangements (i.e., hosting arrangements) to be capitalized under the same premises of authoritative guidance for internal-use software, and deferred over the noncancellable term of the cloud computing arrangement plus any option renewal periods that are reasonably certain to be exercised by the customer or for which the exercise is controlled by the service provider. The Company is required to adopt this new guidance in the first quarter of 2020. Early adoption is permitted. The Company is currently evaluating the impact of this update on its consolidated financial statements and related disclosures.

Significant Accounting Policies

The Company’s significant accounting policies are detailed in Note 1 “Significant Accounting Policies” within Part IV Item 15 of the Company’s Annual Report on Form 10-K for the year ended December 31, 2018. Significant changes to these accounting policies as a result of adopting the New Lease Standard are discussed within Note 8, “Leases”.

2. Revenue from Contracts with Customers

The Company accounts for revenue in accordance with ASC 606, Revenue from Contracts from Customers. These revenues are generated from the design and manufacture of specialty engineered filtration media, industrial thermal insulating solutions, automotive thermal and acoustical barriers for filtration/separation and thermal/acoustical applications. The Company's revenue recognition policies require the Company to make significant judgments and estimates. In applying the Company's revenue recognition policy, determinations must be made as to when control of products passes to the Company's customers which can be either at a point in time or over time. Revenue is generally recognized at a point in time when control passes to customers upon shipment of the Company's products and revenue is generally recognized over time when control of the Company's products transfers to customers during the manufacturing process. The Company analyzes several factors, including but not limited to, the nature of the products being sold and contractual terms and conditions in contracts with customers to help the Company make such judgments about revenue recognition.

Contract Assets and Liabilities

The Company's contract assets primarily include unbilled amounts typically resulting from sales under contracts when the over time method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer. These unbilled

accounts receivable in contract assets are transferred to accounts receivable upon invoicing, typically when the right to payment becomes unconditional in which case payment is due based only upon the passage of time.

The Company's contract liabilities primarily relate to billings and advance payments received from customers, and deferred revenue. These contract liabilities represent the Company's obligation to transfer its products to its customers for which the Company has received, or is owed consideration from its customers. Contract liabilities are included in deferred revenue on the Company's Condensed Consolidated Balance Sheets.

Contract assets and liabilities consisted of the following:

| In thousands | March 31, December 31, Dollar | | |
|----------------------|-------------------------------|-----------|-----------|
| | 2019 | 2018 | Change |
| Contract assets | \$ 22,322 | \$ 23,040 | \$(718) |
| Contract liabilities | \$ 3,418 | \$ 4,537 | \$(1,119) |

The \$0.7 million decrease in contract assets from December 31, 2018 to March 31, 2019 was primarily due to timing of billings to customers.

The \$1.1 million decrease in contract liabilities from December 31, 2018 to March 31, 2019 was primarily due to revenue recognized of \$2.3 million in the first three months of 2019 related to contract liabilities at December 31, 2018, partially offset by an increase in customer deposits.

Disaggregated Revenue

The Company disaggregates revenue from customers by geographic region, as it believes this disclosure best depicts how the nature, amount, timing and uncertainty of the Company's revenue and cash flows are affected by economic factors. Disaggregated revenue by geographical region for the quarters ended March 31, 2019 and 2018 were as follows:

| In thousands | Quarter Ended March 31, 2019 | | | | |
|-----------------|------------------------------|---------------------|------------------------------|------------------------|------------------------|
| | Performance Materials | Technical Nonwovens | Thermal Acoustical Solutions | Eliminations and Other | Consolidated Net Sales |
| North America | \$46,377 | \$ 37,189 | \$ 63,602 | \$ (6,268) | \$ 140,900 |
| Europe | 16,657 | 19,049 | 26,442 | (206) | 61,942 |
| Asia | 1,546 | 9,368 | 4,269 | — | 15,183 |
| Total Net Sales | \$64,580 | \$ 65,606 | \$ 94,313 | \$ (6,474) | \$ 218,025 |
| In thousands | Quarter Ended March 31, 2018 | | | | |
| | Performance Materials | Technical Nonwovens | Thermal Acoustical Solutions | Eliminations and Other | Consolidated Net Sales |
| North America | \$19,161 | \$ 39,133 | \$ 69,979 | \$ (7,826) | \$ 120,447 |
| Europe | 11,532 | 19,386 | 28,055 | (185) | 58,788 |
| Asia | — | 9,022 | 3,403 | — | 12,425 |
| Total Net Sales | \$30,693 | \$ 67,541 | \$ 101,437 | \$ (8,011) | \$ 191,660 |

3. Acquisitions

On August 31, 2018, the Company completed the acquisition of Interface Performance Materials ("Interface"), based in Lancaster, Pennsylvania. A globally-recognized leader in the delivery of engineered sealing solutions, the Interface operations manufacture wet-laid gasket and specialty materials primarily serving OEM and Tier I manufacturers in the Agriculture, Construction, Earthmoving, Industrial, and Automotive segments. The transaction strengthens the Company's position as an industry-leading

12

global provider of filtration and engineered materials and expands the Company's end markets into attractive adjacencies. The Company acquired one hundred percent of Interface for \$268.4 million, net of cash acquired of \$5.2 million, subject to a post-closing purchase price adjustment which has not yet been finalized. The purchase price was financed with a combination of cash on hand and \$261.4 million of borrowings from the Company's amended \$450 million credit facility. The operating results of the Interface businesses have been included in the Consolidated Statements of Operations since August 31, 2018, the date of acquisition, and are reported within the Performance Materials reporting segment.

For the quarter ended March 31, 2019, Interface reported net sales and operating loss of \$32.9 million and \$0.8 million, respectively. Interface's operating loss for the quarter ended March 31, 2019 included \$4.0 million of intangible assets amortization expense in selling, product development and administrative expenses. There were no sales or operating income for Interface during the quarter ended March 31, 2018 as the acquisition was completed on August 31, 2018.

The following table presents the preliminary determination of the fair value of identifiable assets acquired and liabilities assumed from the Company's acquisition of Interface. The final determination of the fair value of certain assets and liabilities will be completed within the one year measurement period as required by the FASB ASC Topic 805, "Business Combinations." As the Company finalizes the fair value of assets acquired and liabilities assumed, additional purchase price adjustments may be recorded during the measurement period within one year of the acquisition date. Fair value estimates are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact the Company's results of operations. The finalization of the purchase accounting assessment may result in a change in the valuation of assets acquired and liabilities assumed and may have a material impact on the Company's results of operations and financial position.

In thousands

| | |
|---|------------|
| Accounts receivable | \$25,182 |
| Inventories | 17,313 |
| Prepaid expenses and other current assets | 2,382 |
| Property, plant and equipment | 40,902 |
| Goodwill (Note 5) | 130,991 |
| Other intangible assets (Note 5) | 106,900 |
| Other assets | 308 |
| Total assets acquired, net of cash acquired | \$323,978 |
| Current liabilities | \$(11,319) |
| Deferred tax liabilities | (24,904) |
| Benefit plan liabilities (Note 12) | (18,352) |
| Other long-term liabilities | (1,031) |
| Total liabilities assumed | (55,606) |
| Total purchase price, net of cash acquired | \$268,372 |

The following table reflects the unaudited actual results of the Company for the quarter ended March 31, 2019 and the pro forma operating results of the Company for the quarter ended March 31, 2018, which gives effect to the acquisition of Interface as if it had occurred on January 1, 2017. The pro forma information includes the historical financial results of the Company and Interface. The pro forma results are not necessarily indicative of the operating results that would have occurred had the acquisition been effective January 1, 2017, nor are they intended to be

indicative of results that may occur in the future. The pro forma information does not include the effects of any synergies related to the acquisition.

| | Quarter Ended March 31, | |
|---------------------|----------------------------|------------------------|
| | (Actual) 2019 | (Pro Forma) 2018 |
| In thousands | | |
| Net sales | \$218,025 | \$231,077 |
| Net income | \$3,890 | \$10,946 |
| Earnings per share: | | |
| Basic | \$0.23 | \$0.64 |
| Diluted | \$0.22 | \$0.63 |
| Basic | 17,254 | 17,164 |
| Diluted | 17,318 | 17,339 |

Included in net income during the quarter ended March 31, 2019 was \$3.1 million of intangible assets amortization expense related to acquired Interface intangible assets and \$2.6 million of interest expense primarily to finance the Interface acquisition.

Pro forma adjustments during the quarter ended March 31, 2018 reduced net income by \$1.5 million. Included in net income for the quarter ended March 31, 2018 was \$3.1 million of intangible assets amortization expense and \$2.5 million of interest expense associated with borrowings under the Company's Amended Credit Facility. Net income was adjusted to exclude items such as Interface management fee expenses and tax valuation allowance expenses.

On July 12, 2018, the Company acquired certain assets and assumed certain liabilities of the Precision Filtration division of Precision Custom Coatings ("PCC") based in Totowa, NJ. Precision Filtration is a producer of high-quality, air filtration media principally serving the commercial and residential HVAC markets with a range of low efficiency through high-performing air filtration media. The Company acquired the assets and liabilities of PCC for \$1.6 million in cash with additional cash payments of up to \$2.0 million to be made based on the achievement of certain future financial targets through 2022. PCC had a minimal impact on the Company's sales and operating income for the quarter ended March 31, 2019.

4. Inventories

Inventories as of March 31, 2019 and December 31, 2018 were as follows:

| In thousands | March 31, December 31, | |
|-------------------|------------------------|-----------|
| | 2019 | 2018 |
| Raw materials | \$ 43,447 | \$ 37,731 |
| Work in process | 16,450 | 18,296 |
| Finished goods | 31,151 | 28,438 |
| Total inventories | \$ 91,048 | \$ 84,465 |

Included in work in process is gross tooling inventory of \$2.4 million and \$4.3 million at March 31, 2019 and December 31, 2018, respectively.

5. Goodwill and Other Intangible Assets

Goodwill:

The Company tests its goodwill for impairment annually in the fourth quarter, and whenever events or changes in circumstances indicate that the carrying value may exceed its fair value.

The changes in the carrying amount of goodwill by segment as of and for the three months ended March 31, 2019 were as follows:

| In thousands | December 31, 2018 | Currency translation adjustments | Additions | March 31, 2019 |
|-----------------------|----------------------|--|-----------|-------------------|
| Performance Materials | \$ 144,626 | \$ (209) | \$ | —\$144,417 |
| Technical Nonwovens | 52,337 | 268 | — | 52,605 |
| Total goodwill | \$ 196,963 | \$ 59 | \$ | —\$197,022 |

Other Intangible Assets:

The table below presents the gross carrying amount and, as applicable, the accumulated amortization of the Company's acquired intangible assets other than goodwill included in "Other intangible assets, net" in the Condensed Consolidated Balance Sheets as of March 31, 2019 and December 31, 2018:

| In thousands | March 31, 2019 | | December 31, 2018 | |
|-----------------------------------|-----------------------|--------------------------|-----------------------|--------------------------|
| | Gross Carrying Amount | Accumulated Amortization | Gross Carrying Amount | Accumulated Amortization |
| Amortized intangible assets | | | | |
| Customer Relationships | \$ 141,631 | \$ (16,259) | \$ 141,455 | \$ (11,453) |
| Patents | 4,252 | (3,771) | 4,333 | (3,816) |
| Technology | 2,500 | (853) | 2,500 | (810) |
| Trade Names | 7,238 | (3,413) | 7,235 | (2,840) |
| License Agreements | 610 | (610) | 619 | (619) |
| Other | 560 | (560) | 561 | (561) |
| Total amortized intangible assets | \$ 156,791 | \$ (25,466) | \$ 156,703 | \$ (20,099) |

6. Long-term Debt and Financing Arrangements

On August 31, 2018, the Company amended and restated its \$175 million senior secured revolving credit agreement ("Amended Credit Agreement") that increased the available borrowing from \$175 million to \$450 million, added three additional lenders and extended the maturity date from July 7, 2021 to August 31, 2023.

Under the terms of the Amended Credit Agreement, the lenders are providing up to a \$450 million credit facility (the "Facility") to the Company, under which the lenders provided a term loan commitment of \$200 million and revolving loans to or for the benefit of the Company and its subsidiaries of up to \$250 million. The Facility may be increased by an aggregate amount not to exceed \$150 million through an accordion feature, subject to specified conditions. The Facility is secured by substantially all of the assets of the Company.

Interest is charged on borrowings at the Company's option of either: (i) Base Rate plus the Applicable Rate, or (ii) the Eurodollar Rate plus the Applicable Rate. The Base Rate is a fluctuating rate equal to the highest of (a) the federal funds rate plus 0.50%, (b) the prime rate as set by Bank of America, and (c) the Eurocurrency Rate plus 1.00%. The Eurocurrency Rate means (i) if denominated in LIBOR quoted currency, a fluctuating LIBOR per annum rate equal to the London Interbank Offered Rate; (ii) if denominated in Canadian Dollars, the rate per annum equal to the Canadian Dollar Offered Rate; or (iii) the rate per annum as designated with respect to such alternative currency at the time such alternative currency is approved by the Lenders. The Applicable Rate is determined based on the Company's Consolidated Leverage Ratio (as defined in the Amended Credit Agreement). The Applicable Rate added to the Base Rate Committed Loans ranges from 0.00% to 1.25%, and the Applicable Rate added to Eurocurrency Rate Committed Loans and Letters of Credit ranges from 0.75% to 2.00%. The Company pays a quarterly fee ranging from 0.15% to 0.275% on the unused portion of the revolving commitment. The Company has entered into multiple interest rate swaps to convert a portion of the Company's one-month LIBOR-based borrowings from a variable rate to a fixed rate. See Note 7.

The Company is permitted to prepay term and revolving borrowings in whole or in part at any time without premium or penalty, subject to certain minimum payment requirements, and the Company is generally permitted to irrevocably cancel unutilized portions of the revolving commitments under the Amended Credit Agreement. The Company is

required to repay the term commitment in an amount of \$2.5 million per quarter beginning with the quarter ending December 31, 2018 through the quarter ending June 30, 2023.

The Amended Credit Agreement contains covenants required of the Company and its subsidiaries, including various affirmative and negative financial and operational covenants. The Company is required to meet certain quarterly financial covenants calculated from the four fiscal quarters most recently ended, including: (i) a minimum consolidated fixed charge coverage ratio, which requires that at the end of each fiscal quarter the ratio of (a) consolidated EBITDA to (b) the sum of consolidated interest charges, redemptions, non-financed maintenance capital expenditures, restricted payments and taxes paid, each as defined in the Amended Credit Agreement, may not be lower than 1.25 to 1.0; and (ii) a consolidated net leverage ratio, which requires that at the end of each fiscal quarter the ratio of consolidated funded indebtedness minus consolidated domestic cash to consolidated EBITDA, as defined in the Amended Credit Agreement, may not be greater than 3.5 to 1.0. The Company was in compliance with all covenants at March 31, 2019.

At March 31, 2019, the Company had borrowing availability of \$108.1 million under the Facility, net of \$318.0 million of borrowings outstanding and standby letters of credit outstanding of \$3.9 million. The borrowings outstanding included a \$180.0 million term loan, net of \$0.5 million in debt issuance costs being amortized to interest expense over the debt maturity period.

In addition to the amounts outstanding under the Facility, the Company has various acquired foreign credit facilities totaling approximately \$8.1 million. At March 31, 2019, the Company's foreign subsidiaries had \$2.6 million in standby letters of credit outstanding.

The Company also has finance lease agreements for machinery and equipment at multiple operations requiring monthly principal and interest payments through 2020.

Total outstanding debt consists of:

| In thousands | Effective Rate | Maturity | March 31, 2019 | December 31, 2018 |
|--|----------------|-------------|-------------------|-------------------------|
| Revolver loan | 4.12 | % 8/31/2023 | \$ 138,000 | \$ 138,000 |
| Term loan, net of debt issuance costs | 4.12 | % 8/31/2023 | 179,524 | 186,498 |
| Finance leases | 0.00% - 2.09% | 2019 - 2020 | 243 | 315 |
| | | | 317,767 | 324,813 |
| Less portion due within one year | | | (10,111) | (10,172) |
| Total long-term debt, net of debt issuance costs | | | \$307,656 | \$314,641 |

The carrying value of the Company's debt outstanding on its Facility approximates fair value given the variable rate nature of the debt. The fair values of the Company's long-term debt are determined using discounted cash flows based upon the Company's estimated current interest cost for similar type borrowings or current market value, which falls under Level 2 of the fair value hierarchy.

The weighted average interest rate on long-term debt was 4.2% for the three months ended March 31, 2019 and 3.4% for the year ended December 31, 2018.

7. Derivatives

The Company selectively uses financial instruments to manage market risk associated with exposure to fluctuations in interest rates. These financial exposures are monitored and managed by the Company as an integral part of its risk management program. The Company's interest rate exposure is most sensitive to fluctuations in interest rates in the United States and Europe, which impact interest paid on its debt. The Company has debt with variable rates of interest based generally on LIBOR. From time to time, the Company enters into interest rate swap agreements to manage interest rate risk. These instruments are designated as cash flow hedges and are recorded at fair value using Level 2 observable market inputs.

Derivative instruments are recognized as either assets or liabilities on the balance sheet in either current or non-current other assets or other accrued liabilities or other long-term liabilities depending upon maturity and commitment. For derivative instruments that are designated and qualify as a cash flow hedge, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods in which the hedge transaction affects earnings. Any ineffective portion, or amounts related to contracts that are not designated as hedges, are recorded directly to earnings. The Company's policy for classifying cash flows from derivatives is to report the cash flows consistent with the underlying hedged item. The Company does

not use derivatives for speculative or trading purposes.

In November 2018, the Company entered into a five-year interest rate swap agreement with a bank which converts the interest on a notional \$139.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 3.09% plus the borrowing spread. The notional amount reduces quarterly by fluctuating amounts through August 2023. In April 2017, the Company entered into a three-year interest rate swap agreement with a bank which converts the interest on a notional \$60.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 1.58% plus the borrowing spread. The notional amount reduces quarterly by \$5.0 million through March 31, 2020. These interest rate swap agreements were accounted for as cash flow hedges. Effectiveness of these derivative agreements are assessed quarterly by ensuring that the critical terms of the swaps continue to match the critical terms of the hedged debt.

The following table sets forth the fair value amounts of derivative instruments held by the Company:

| In thousands | March 31, 2019 | | December 31, 2018 | |
|--|-------------------|-----------------------|-------------------|-----------------------|
| | Asset Derivatives | Liability Derivatives | Asset Derivatives | Liability Derivatives |
| Derivatives designated as hedging instruments: | | | | |
| Interest rate contracts | \$107 | \$ 3,541 | \$179 | \$ 2,738 |
| Total derivatives | \$107 | \$ 3,541 | \$179 | \$ 2,738 |

The following table sets forth the income recorded in accumulated other comprehensive income (loss), net of tax, for the quarters ended March 31, 2019 and 2018 for derivatives held by the Company and designated as hedging instruments:

| In thousands | Quarters Ended March 31, | |
|-------------------------|--------------------------|-------|
| | 2019 | 2018 |
| Cash flow hedges: | | |
| Interest rate contracts | \$(675) | \$102 |
| | \$(675) | 102 |

8. Leases

From time to time, the Company enters into arrangements with vendors to provide certain tangible assets used in the Company's operations which qualify as a lease pursuant to ASC Topic 842, Leases. The tangible assets leased include Buildings, Office Equipment, Machinery and Vehicles. The Company's leases have remaining terms of a few months to 14 years, some of which have options to extend for a period of up to 7 years and some of which have options to terminate within 1 year.

At inception of the arrangement, the Company determines if an arrangement is a lease based on assessment of the terms and conditions of the contract. Operating leases are included in Operating lease right-of-use ("ROU") assets, other accrued liabilities, and Long-term operating lease liabilities in the Company's condensed consolidated balance sheets. Finance leases are included in property, plant and equipment, Current portion of long-term debt, and long-term debt in the Company's condensed consolidated balance sheets. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term.

While the overwhelming majority of leases have fixed payments schedules, some leases have variable lease schedules based on market indices such as LIBOR or include additional payments based on excess consumption of services. For leases on a variable schedule based on a market index, the current lease payment amount is used in the calculation of the lease liability and corresponding asset included on the balance sheet. For leases with additional payments based on excess consumption of services, no amount is included in the calculation of the lease liability or corresponding asset as it is not probable excess consumption will continue in the future.

As most leases do not provide an implicit rate, the Company uses its incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. At March 31, 2019, the weighted average discount rate used for operating and finance leases is 4.39% and 1.89%, respectively. The implicit rate is used when readily determinable from a lease.

The operating lease ROU asset also includes any lease payments made in advance of the assets use and excludes lease incentives received. The Company's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. The Company has lease agreements with lease and non-lease components, which are generally accounted for as one component as permitted by ASC 842.

After consideration of any options to terminate early which are reasonably certain to be executed or any options to extend which are not reasonably certain to be executed, any lease with a term of 12 months or less is considered short-term. As permitted by ASC 842, short-term leases are excluded from the ROU Asset and Lease Liability accounts on the condensed consolidated balance sheets. Consistent with all other operating leases, short-term lease expense is recorded on a straight-line basis over the lease term.

The components of lease expense are as follows:

| In thousands | Three Months Ended March 31, 2019 |
|-------------------------------------|--|
| Finance lease expense: | |
| Amortization of right-of-use assets | \$ 33 |
| Interest on lease liabilities | 1 |
| Operating lease expense | 1,644 |
| Short-term lease expense | 224 |
| Variable lease expense | 36 |
| Total lease expense | \$ 1,938 |

Supplemental balance sheet information related to leases are as follows:

In thousands, except March 31,
lease term 2019

Operating leases:

Operating lease right-of-use assets \$ 27,254

Short-term lease liabilities, included in "Other accrued liabilities" \$ 5,039

Long-term lease liabilities 22,138

Total operating lease liabilities \$ 27,177

Finance leases:

Property, plant and equipment \$ 1,455

Accumulated depreciation (443)

Property, plant and equipment, net \$ 1,012

Short-term lease liabilities, included in debt \$ 219

Long-term lease liabilities, included in debt 24

Total finance lease liabilities \$ 243

Weighted average
remaining lease

term:

| | |
|------------------|-----------|
| Operating leases | 7.6 years |
| Finance leases | 0.7 years |

Supplemental cash flow information related to leases are as follows:

| | |
|--------------|--------|
| | Three |
| | Months |
| In thousands | Ended |
| | March |
| | 31, |
| | 2019 |

Cash paid for
amounts included in
the measurement of
lease liabilities:

| | |
|--|----------|
| Operating cash flows from operating leases | \$ 1,673 |
|--|----------|

| | |
|--|---|
| Operating cash flows from finance leases | 1 |
|--|---|

| | |
|--|----|
| Financing cash flows from finance leases | 67 |
|--|----|

Right-of-use assets
obtained in
exchange for lease
obligations:

| | |
|------------------|-------|
| Operating leases | 1,131 |
| Finance leases | — |

As of March 31, 2019, future lease payments maturities were as follows:

In thousands

| Years Ending December 31, | Operating Finance | |
|--|-------------------|--------|
| | Leases | Leases |
| 2019 (excluding the 3 months ended March 31, 2019) | \$4,584 | \$ 209 |
| 2020 | 5,522 | 36 |
| 2021 | 4,222 | — |
| 2022 | 3,483 | — |
| 2023 | 2,598 | — |
| Thereafter | 12,160 | — |
| Total lease payments | 32,569 | 245 |
| Less imputed interest | (5,392) | (2) |
| Total discounted future lease payments | \$27,177 | \$ 243 |

As of December 31, 2018, future lease payment maturities were as follows:

In thousands

| Years Ending December 31, | Operating Finance | |
|---------------------------|-------------------|--------|
| | Leases | Leases |
| 2019 | \$ 6,004 | \$ 279 |
| 2020 | 4,871 | 35 |
| 2021 | 3,877 | — |
| 2022 | 3,226 | — |
| 2023 | 2,617 | — |
| Thereafter | 11,111 | — |
| Total lease payments | \$ 31,706 | \$ 314 |

9. Equity Compensation Plans

As of March 31, 2019, the Company's equity compensation plans consisted of the 2003 Stock Incentive Compensation Plan (the "2003 Plan") and the 2012 Stock Incentive Plan (the "2012 Plan" and together with the 2003 Plan, the "Plans") under which incentive and non-qualified stock options and time and performance based restricted shares have been granted to employees and directors from authorized but unissued shares of common stock or treasury shares. The 2003 Plan is not active, but continues to govern all outstanding awards granted under the plan until the awards themselves are exercised or terminate in accordance with their terms. The 2012 Plan, approved by shareholders on April 27, 2012, authorizes 1.75 million shares of common stock for awards. The 2012 Plan also authorizes an additional 1.2 million shares of common stock to the extent awards granted under prior stock plans that were outstanding as of April 27, 2012 are forfeited. The 2012 Plan provides for the following types of awards: options, restricted stock, restricted stock units and other stock-based awards.

The Company accounts for the expense of all share-based compensation by measuring the awards at fair value on the date of grant. The Company recognizes expense on a straight-line basis over the vesting period of the entire award. Options issued by the Company under its stock option plans have a term of ten years and generally vest ratably over a period of three to four years. Time-based restricted stock grants are expensed over the vesting period of the award, which is typically two to four years. The number of performance based restricted shares that vest or forfeit depend upon achievement of certain targets during the performance period. The Company accounts for forfeitures as they occur. Compensation expense for performance based awards granted prior to December 2018, is recorded based upon the service period and management's assessment of the probability of achieving the performance goals and will be

adjusted based upon actual achievement. In December 2018, the performance metric changed to a 3-year relative Total Shareholder Return (TSR) compared to S&P 600 industrial index instead of a pre-established earnings-per-share target to better align compensation to the long-term interests of shareholders. Stock options issued under the current plan must have an exercise price that may not be less than the fair market value of the Company's Common Stock on the date of grant. The Plans provide for automatic acceleration of vesting in the event of a change in control of the Company. Upon the exercise of a stock option under the Plans, shares are issued from authorized shares or treasury shares held by the Company.

The Company incurred equity compensation expense of \$1.0 million and \$1.2 million for the quarters ended March 31, 2019 and March 31, 2018, respectively, for the Plans, including restricted stock awards. No equity compensation costs were capitalized as part of inventory.

Stock Options

The following table is a summary of outstanding and exercisable options as of March 31, 2019:

| In thousands except per share amounts | Shares | Weighted-Average Exercise Price | Aggregate Intrinsic Value |
|---------------------------------------|--------|---------------------------------|---------------------------|
| Outstanding at March 31, 2019 | 599 | \$ 30.19 | \$ 1,693 |
| Exercisable at March 31, 2019 | 256 | \$ 29.59 | \$ 959 |
| Unvested at March 31, 2019 | 343 | \$ 30.64 | \$ 734 |

There were no stock options granted and no stock options exercised during the quarter ended March 31, 2019.

There were 11,180 stock options granted and 27,041 stock options exercised during the quarter ended March 31, 2018. The amount of cash received from the exercise of stock options was \$0.7 million during the quarter ended March 31, 2018. The intrinsic value of stock options exercised was \$0.6 million with a tax benefit of \$0.1 million during the quarter ended March 31, 2018.

At March 31, 2019, the total unrecognized compensation cost related to non-vested stock option awards was approximately \$3.4 million, with a weighted average expected amortization period of 2.9 years.

Restricted Stock

Restricted stock includes both performance-based and time-based awards. There were 33,932 time-based restricted stock shares granted during the quarter ended March 31, 2019. There were no performance-based restricted shares granted during the quarter ended March 31, 2019. There were no performance-based restricted shares that vested during the quarter ended March 31, 2019. There were 5,468 time-based restricted shares that vested during the quarter ended March 31, 2019.

There were 8,106 time-based restricted stock shares granted during the quarter ended March 31, 2018. There were 15,190 performance-based restricted shares granted during the quarter ended March 31, 2018. There were 48,035 performance-based restricted shares that vested during the quarter ended March 31, 2018. There were 5,164 time-based restricted shares that vested during the quarter ended March 31, 2018.

At March 31, 2019, there were 272,816 unvested restricted stock awards with total unrecognized compensation cost related to these awards of \$5.2 million with a weighted average expected amortization period of 2.1 years.

Compensation expense for performance based awards is recorded based on the service period and management's assessment of the probability of achieving the performance goals.

10. Stock Repurchases

During the three months ended March 31, 2019, the Company purchased 1,636 shares of common stock valued at less than \$0.1 million, through withholding, pursuant to provisions in agreements with recipients of restricted stock granted under the Company's equity compensation plans, in which the Company withholds that number of shares having fair value equal to each recipient's minimum tax withholding due.

11. Restructuring

In April 2017, the Company commenced a restructuring plan in the Technical Nonwovens segment which includes plant consolidations and transfer of equipment to other facilities within the segment's Europe and China operations. The consolidation of certain plants, which is expected to conclude in 2019, is expected to reduce operating costs, increase efficiency and enhance the Company's flexibility by better aligning its manufacturing footprint with the segment's customer base. Accordingly, the Company expects to record pre-tax expenses of approximately \$4.2 million, in connection with this restructuring plan, of which approximately \$3.7 million is expected to result in cash expenditures over the period of consolidation. The Company also expects to incur cash expenditures of approximately \$3.8 million for capital expenditures associated with this plan.

During the quarter ended March 31, 2019, the Company recorded pre-tax restructuring expenses of \$0.4 million, primarily related to equipment move costs, in cost of sales. The Company expects to record approximately \$0.9 million of restructuring expenses for the remainder of 2019.

Actual pre-tax expenses incurred and total estimated pre-tax expenses for the restructuring program by type are as follows:

| In thousands | Severance and Related Expenses | Contract Termination Expenses | Facility Exit, Move and Set-up Expenses | Total |
|--|--------------------------------|-------------------------------|---|---------|
| Total estimated expenses | \$ 1,250 | \$ 450 | \$ 2,500 | \$4,200 |
| Expenses incurred through December 31, 2018 | 787 | 290 | 1,882 | 2,959 |
| Estimated remaining expense at December 31, 2018 | \$ 463 | \$ 160 | \$ 618 | \$1,241 |
| Expense incurred during quarter ended: | | | | |
| March 31, 2019 | \$ 16 | \$ — | \$ 360 | \$376 |
| Total pre-tax expense incurred | \$ 803 | \$ 290 | \$ 2,242 | \$3,335 |
| Estimated remaining expense at March 31, 2019 | \$ 447 | \$ 160 | \$ 258 | \$865 |

There were cash outflows of \$0.4 million for the restructuring program for the quarter ended March 31, 2019.

Accrued restructuring costs were as follows at March 31, 2019:

| In thousands | Total |
|--|--------|
| Balance as of December 31, 2018 | \$147 |
| Pre-tax restructuring expenses, excluding depreciation | 376 |
| Cash paid | (379) |
| Balance as of March 31, 2019 | \$144 |

12. Employer Sponsored Benefit Plans

As of March 31, 2019, the Company maintains a defined benefit pension plan ("U.S. Lydall Pension Plan") and acquired two domestic pension plans in the Interface acquisition ("Interface Pension Plans"), (collectively, "domestic defined benefit pension plans").

The U.S. Lydall Pension Plan covers certain domestic Lydall employees, is noncontributory and benefits are based on either years of service or eligible compensation paid while a participant is in a plan. The plan has been closed to new employees for several years and benefits under the pension plan are no longer accruing. During the fourth quarter of 2018, the Company authorized the termination of the U.S. Lydall Pension Plan under which approximately 900 participants, including 200 active employees, have accrued benefits. The Company anticipates completing the termination of this plan in 2019. At December 31, 2018, the benefit obligations were valued at the amount expected to be required to settle the obligations, using assumptions regarding the portion of obligations expected to be settled through participant acceptance of lump sum payments or annuities and the cost to purchase those annuities. Overall, the Company estimates it will incur pension expense of approximately \$29.0 million to \$33.0 million in 2019 when the plan settlement is completed. Of that settlement amount, the Company is expected to make a one-time cash contribution of approximately \$2.0 million to \$4.0 million to purchase annuities for participants and make lump sum payments. The estimated expense is subject to change based on valuations at the actual date of settlement. No contributions were made during the quarter ended March 31, 2019 and contributions of \$1.2 million were made during the quarter ended March 31, 2018.

The Interface Pension Plans cover Interface's union and non-union employees, the plans are closed to new employees and benefits are no longer accruing for the majority of participants. The Company expects to make a required contribution of approximately \$1.0 million to \$2.0 million to the Interface Pension Plans during 2019. Contributions of \$0.6 million were made during the quarter ended March 31, 2019.

The following is a summary of the components of net periodic benefit cost for the domestic defined benefit pension plans:

| In thousands | Quarters Ended March 31, | |
|---|--------------------------------|-------|
| | 2019 | 2018 |
| Components of net periodic benefit cost | | |
| Service cost | 30 | — |
| Interest cost | 982 | 470 |
| Expected return on assets | (872) | (650) |
| Amortization of actuarial loss | 278 | 256 |
| Net periodic benefit cost | \$418 | \$76 |

13. Income Taxes

The Company's effective tax rate for the first quarter of 2019 was 22.0% compared to an effective tax rate of 16.1% for the first quarter of 2018. The effective rate in the first quarter of 2019 was negatively impacted by valuation allowance activity of \$0.3 million, partially offset by an uncertain tax position released due to statutory expiration of \$0.2 million and geographical mix of earnings. The effective rate in the first quarter of 2018 was positively impacted by tax benefits of \$0.3 million related to stock vesting and geographical mix of earnings.

The Company and its subsidiaries file a consolidated federal income tax return, as well as returns required by various state and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities, including such major jurisdictions as the United States, France, Germany, China, the United Kingdom, Canada and the Netherlands. With few exceptions, the Company is no longer subject to U.S. federal examinations for years before 2015, state and local examinations for years before 2013, and non-U.S. income tax examinations for years before 2003.

The Company's effective tax rates in future periods could be affected by an increase or decrease in earnings in countries where tax rates differ from the United States federal tax rate, the relative impact of permanent tax adjustments on earnings from domestic operations, changes in net deferred tax asset valuation allowances, stock vesting, pension plan terminations, the completion of acquisitions or divestitures, changes in tax rates or tax laws and the completion of ongoing tax planning strategies and audits.

14. Earnings Per Share

For the quarters ended March 31, 2019 and 2018, basic earnings per share were computed by dividing net income by the weighted average number of shares of common stock outstanding during the period. Unexercised stock options and unvested restricted shares are excluded from this calculation but are included in the diluted earnings per share calculation using the treasury stock method as long as their effect is not antidilutive.

The following table provides a reconciliation of weighted-average shares used to determine basic and diluted earnings per share:

| In thousands | Quarter Ended March 31, | |
|--|-------------------------------|--------|
| | 2019 | 2018 |
| Basic average common shares outstanding | 17,254 | 17,164 |
| Effect of dilutive options and restricted stock awards | 64 | 175 |
| Diluted average common shares outstanding | 17,318 | 17,339 |

For each of the quarters ended March 31, 2019 and 2018, stock options for 519,342 shares and 137,709 shares of Common Stock were not considered in computing diluted earnings per common share because they were antidilutive.

15. Segment Information

As of March 31, 2019, the Company's reportable segments were Performance Materials, Technical Nonwovens, and Thermal Acoustical Solutions.

Effective September 30, 2018, as a result of the Interface acquisition, the Performance Materials segment changed the disaggregation of revenue at the product level to be categorized as "Filtration" and "Sealing and Advanced Solutions". Prior period product level

amounts throughout the Notes to the Condensed Consolidated Financial Statements have been recast to reflect the results of the new product level structure. The recast of historical product level information had no impact on the consolidated financial results.

Performance Materials Segment

The Performance Materials segment includes filtration media solutions primarily for air, fluid power, life science and industrial applications (“Filtration”), and sealing and gasket solutions, thermal insulation, energy storage, and other engineered products (“Sealing and Advanced Solutions”).

Filtration products include LydAir® MG (Micro-Glass) Air Filtration Media, LydAir® MB (Melt Blown) Air Filtration Media, LydAir® SC (Synthetic Composite) Air Filtration Media, and Arioso® Membrane Composite Media. These products constitute the critical media component of clean-air systems for applications in clean-space, commercial, industrial and residential HVAC, power generation, respiratory protection, and industrial processes. Lydall has leveraged its extensive technical expertise and applications knowledge into a suite of media products covering the vast liquid filtration landscape across the transportation and industrial fields. The LyPore® Liquid Filtration Media series address a variety of application needs in fluid power including hydraulic filters, air-water and air-oil coalescing, industrial fluid processes and diesel fuel filtration. LyPore® media and Solupor® ultra-high molecular weight polyethylene membranes also serve critical liquid filtration/separation applications such as biopharmaceutical pre-filtration and clarification, lateral flow diagnostic and analytical testing, potable water filtration and high purity process filtration such as those found in food and beverage and medical applications.

Sealing and Advanced Solutions products include nonwoven specialty engineered materials for a multitude of applications. Interface fiber-reinforced gasket materials serve the heavy-duty diesel, automobile, small engine, transmission and compressor markets. These products handle demanding sealing challenges with a diverse range of metallic, non-metallic, rubber-coated and laminate materials that comprise the extensive Sealing materials portfolio. Interface Engineered Components are ready to use soft and hard gasket parts sold directly to OEMs and aftermarket applications. An example is Select-a-Seal® rubber-edged composite (REC) technology that provides robust sealing, compression, adhesion, and shear strength for driveline applications. Advanced Solutions’ nonwoven veils, papers and specialty composites for the building products, appliance, energy and industrial markets include Manniglas® Thermal Insulation Papers, and Lytherm® Insulation Media for high temperature technology applications. Lydall’s Cryotherm® Super-Insulating Media, CRS-Wrap® Super-Insulating Media and Cryo-Lite® Cryogenic Insulation products are industry standards for state-of-the-art cryogenic insulation designs used by manufacturers of cryogenic equipment for liquid gas storage, piping, and transportation. Additional specialty composite materials include specialty fiber calendar bowl products to service the printing and textile industries and press pad materials for industrial lamination processes.

Technical Nonwovens Segment

The Technical Nonwovens segment primarily produces needle punch nonwoven solutions for a multitude of industries and applications. Products are manufactured and sold globally under the leading brands of Lydall Industrial Filtration, Southern Felt, Gutsche, and Texel. Industrial Filtration products include nonwoven rolled-good felt media and filter bags used primarily in industrial air and liquid filtration applications. Nonwoven filter media is an effective solution to satisfy increasing emission control regulations in a wide range of industries, including power, cement, steel, asphalt, incineration, mining, food, and pharmaceutical. Advanced Materials products include nonwoven rolled-good media used in commercial applications and predominantly serves the geosynthetics, automotive, industrial, medical, and safety apparel markets. Automotive media is provided to Tier I/II suppliers as well as the Company's Thermal Acoustical Solutions segment.

Technical Nonwovens segment products include air and liquid filtration media sold under the brand names Fiberlox® high performance filtration felts, Checkstatic™ conductive filtration felts, Microfelt® high efficiency filtration felts, Pleatlox® pleatable filtration felts, Ultratech™ PTFE filtration felts, Powertech® and Powerlox® power generation filtration felts, Microcap® high efficiency liquid filtration felts, Duotech membrane composite filtration felts, along with our porotex® family of high temperature filtration felts including microvel® and optivel® products. Technical Nonwovens Advanced Materials products are sold under the brand names Thermofit® thermo-formable products, Ecoduo® recycled content materials, Duotex® floor protection products, and Versaflex® composite molding materials. Technical Nonwovens also offers extensive finishing and coating capabilities which provide custom engineered properties tailored to meet the most demanding applications. The business leverages a wide range of fiber types and extensive technical capabilities to provide products that meet our customers' needs across a variety of applications providing both high performance and durability.

Thermal Acoustical Solutions Segment

The Thermal Acoustical Solutions segment offers a full range of innovative engineered products tailored for the transportation and industrial sectors to thermally shield sensitive components from high heat, improve exhaust gas treatment and lower harmful emissions as well as assist in the reduction of noise, vibration and harshness (NVH). Within the transportation sector, Lydall's products are found in the interior (dash insulators, cabin flooring), underbody (wheel well, aerodynamic belly pan, fuel tank,

exhaust, tunnel, spare tire) and under hood (engine compartment, outer dash, powertrain, catalytic converter, turbo charger, manifolds) of cars, trucks, SUVs, heavy duty trucks and recreational vehicles.

Thermal Acoustical Solutions segment products offer thermal and acoustical insulating solutions comprised of organic and inorganic fiber composites that provide weight reduction, superior noise suppression and increased durability over conventional designs, as well as products that efficiently combine multiple layers of metal and thermal - acoustical insulation media to provide an engineered shielding solution for an array of application areas. Lydall's dBCore® is a lightweight acoustical composite that emphasizes absorption principles over heavy-mass type systems. Lydall's dBLyte® is a high-performance acoustical barrier with sound absorption and blocking properties and can be used throughout a vehicle's interior to minimize intrusive noise from an engine compartment and road. Lydall's ZeroClearance® is an innovative thermal solution that utilizes an adhesive backing for attachment and is used to protect vehicle components from excessive heat. Lydall's flux® product family includes several patented or IP-rich products that address applications which include: Direct Exhaust Mount heat shields, which are assembled to high temperature components like catalytic converters, turbochargers or exhaust manifolds using aluminized and stainless steel and high performance and high temperature heat insulating materials; Powertrain heat shields that absorb noise at the source and do not contribute to the engine's noise budget; and durable, thermally robust solutions for temperature sensitive plastic components such as fuel tanks that are in proximity to high temperature heat sources.

The tables below present net sales and operating income by segment for the quarters ended March 31, 2019 and 2018, and also a reconciliation of total segment net sales and operating income to total consolidated net sales and operating income.

Consolidated net sales by segment:

| In thousands | Quarter Ended March | |
|--|---------------------|-----------|
| | 2019 | 2018 |
| Performance Materials Segment (1): | | |
| Filtration | \$23,934 | \$23,142 |
| Sealing and Advanced Solutions | 40,646 | 7,551 |
| Performance Materials Segment net sales | 64,580 | 30,693 |
| Technical Nonwovens Segment: | | |
| Industrial Filtration | 42,364 | 40,231 |
| Advanced Materials (2) | 23,242 | 27,310 |
| Technical Nonwovens net sales | 65,606 | 67,541 |
| Thermal Acoustical Solutions Segment: | | |
| Parts | 84,576 | 88,122 |
| Tooling | 9,737 | 13,315 |
| Thermal Acoustical Solutions Segment net sales | 94,313 | 101,437 |
| Eliminations and Other (2) | (6,474) | (8,011) |
| Consolidated Net Sales | \$218,025 | \$191,660 |

Operating income by segment:

| In thousands | Quarter | |
|---------------------------|---------|---------|
| | 2019 | 2018 |
| Performance Materials (1) | \$1,459 | \$2,641 |

| | | |
|-------------------------------|----------|----------|
| Technical Nonwovens | 4,734 | 5,006 |
| Thermal Acoustical Solutions | 9,491 | 12,614 |
| Corporate Office Expenses | (6,634) | (6,225) |
| Consolidated Operating Income | \$9,050 | \$14,036 |

(1) The Performance Materials segment reports the results of Interface and PCC for the period following the date of acquisitions of August 31, 2018 and July 12, 2018, respectively, and included \$4.0 million of incremental intangible assets amortization for the quarter ended March 31, 2019.

(2) Included in the Technical Nonwovens segment and Eliminations and Other is \$4.7 million and \$7.1 million in intercompany sales to the Thermal Acoustical Solutions segment for the quarters ended March 31, 2019 and 2018, respectively.

16. Commitments and Contingencies

Environmental Remediation

In the fourth quarter of 2016, as part of a groundwater discharging permitting process, water samples collected from wells and process water basins at the Company's Rochester New Hampshire manufacturing facility, within the Performance Materials segment, showed concentrations of Per and Polyfluorinated Substances ("PFAS") in excess of state ambient groundwater quality standards. In January 2017, the Company received a notification from the State of New Hampshire Department of Environmental Services ("NHDES") naming Lydall Performance Materials, Inc. a responsible party with respect to the discharge of regulated contaminants and, as such, is required to take action to investigate and remediate the impacts in accordance with standards established by the NHDES. The Company conducted a site investigation, the scope of which was reviewed by the NHDES, in order to assess the extent of potential soil and groundwater contamination and develop a remedial action. Based on input received from NHDES in March 2017 with regard to the scope of the site investigation, the Company recorded \$0.2 million of expense. In 2018, the Company received a response from the NHDES to the site investigation report outlining proposed remedial actions. The Company recorded an additional \$0.1 million of expense in 2018 associated with the expected costs to remediate the impacts of the discharge of regulated contaminants in accordance with standards established by the NHDES. During 2018 the environmental liability was fully reduced reflecting payments made to vendors, resulting in no balance at December 31, 2018. Additionally, the Company incurred \$0.2 million of capital expenditures in 2018, in relation to the lining of the Company's fresh water waste lagoons. The site investigation is ongoing. The Company cannot be sure that costs will not exceed the current estimates until this matter is closed with the NHDES, nor that any future corrective action at this location would not have a material effect on the Company's financial condition, results of operations or liquidity.

Provisions for such matters are charged to expense when it is probable that a liability has been incurred and reasonable estimates of the liability can be made. Estimates of environmental liabilities are based on a variety of matters, including, but not limited to, the stage of investigation, the stage of the remedial design, evaluation of existing remediation technologies, and presently enacted laws and regulations. In future periods, a number of factors could significantly impact any estimates of environmental remediation costs.

17. Changes in Accumulated Other Comprehensive Income (Loss)

The following table discloses the changes by classification within accumulated other comprehensive income (loss) for the three months ended March 31, 2019 and 2018:

| In thousands | Foreign Currency Translation Adjustment | Defined Benefit Pension Adjustment | Gains and Losses on Cash Flow Hedges | Total Accumulated Other Comprehensive (Loss) Income |
|--|--|---|--|---|
| Balance at December 31, 2017 | \$ (2,221) | \$ (18,049) | \$ 122 | \$ (20,148) |
| Other comprehensive income | 2,545 | — | 102 | (b) 2,647 |
| Amounts reclassified from accumulated other comprehensive loss | — | 198 | (a) — | 198 |
| Balance at March 31, 2018 | 324 | (17,851) | 224 | (17,303) |
| Balance at December 31, 2018 | (18,458) | (22,253) | (1,974) | (42,685) |
| Other comprehensive loss | (127) | — | (675) | (b) (802) |
| Amounts reclassified from accumulated other comprehensive loss | — | 215 | (a) — | 215 |

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW AND OUTLOOK

Business

Lydall, Inc. and its subsidiaries (collectively, the "Company" or "Lydall") design and manufacture specialty engineered nonwoven filtration media, industrial thermal insulating solutions, and thermal and acoustical barriers for filtration/separation and heat abatement and sound dampening applications. Lydall principally conducts its business through three reportable segments: Performance Materials, Technical Nonwovens and Thermal Acoustical Solutions, with sales globally. The Performance Materials segment includes filtration media solutions primarily for air, fluid power, life science and industrial applications ("Filtration"), and gasket and sealing solutions, thermal insulation, energy storage, and other engineered products ("Sealing and Advanced Solutions"). The Technical Nonwovens ("TNW") segment consists of Industrial Filtration products that include nonwoven rolled-goods felt media and filter bags used primarily in industrial air and liquid filtration applications as well as Advanced Materials products that include nonwoven rolled-good media that is used in other commercial applications and predominantly serves the geosynthetics, automotive, industrial and medical markets. Advanced Materials products also include automotive rolled-good material for use in the Thermal Acoustical Solutions segment manufacturing process. Nonwoven filter media is used to satisfy increasing emission control regulations in a wide range of industries, including power, cement, steel, asphalt, incineration, food, and pharmaceutical. The Thermal Acoustical Solutions ("TAS") segment offers innovative engineered products to assist in noise and heat abatement within the transportation and industrial sectors.

First Quarter 2019 Highlights

Below are financial highlights comparing Lydall's quarter ended March 31, 2019 ("Q1 2019") results to its quarter ended March 31, 2018 ("Q1 2018") results:

Net sales were \$218.0 million in Q1 2019, compared to \$191.7 million in Q1 2018, an increase of \$26.4 million, or 13.8%. The change in consolidated net sales is summarized in the following table:

| Components (in thousands) | Change in Net Sales | Percent Change |
|---------------------------------|---------------------------|-------------------|
| Acquisitions | \$33,729 | 17.6 % |
| Parts volume and pricing change | 2,187 | 1.1 % |
| Change in tooling sales | (3,131) | (1.6)% |
| Foreign currency translation | (6,420) | (3.3)% |
| Total | \$26,365 | 13.8 % |

Gross margin decreased 130 basis points to 19.3% in Q1 2019, as the positive impact of higher margin Interface sealing and advance solutions sales in the Performance Materials segment were offset by lower gross margin from the Thermal Acoustical Solutions segment, and to a lesser extent the Technical Nonwovens segment. The Thermal Acoustical Solutions segment negatively impacted consolidated gross margin by approximately 300 basis points, primarily due to increased labor costs, higher material costs and unfavorable product mix. The Technical Nonwovens segment negatively impacted consolidated gross margin by approximately 130 basis points, primarily due to unfavorable product mix and commodity inflation, partially offset by improved customer pricing.

Operating income was \$9.1 million, or 4.2% of net sales, in Q1 2019, compared to \$14.0 million, or 7.3% of net sales, in Q1 2018. Operating margin declined due to the negative impact of lower gross margin of 130 basis points and incremental intangible assets amortization from acquisitions of 180 basis points in Q1 2019 compared to Q1 2018. The following components are included in operating income for Q1 2019 and Q1 2018 and impact the comparability of each quarter:

| Components (in thousands except per share amounts) | Q1 2019 | | Q1 2018 | |
|--|-------------------------------|---------------|-------------------------------|---------------|
| | Operating income effect | EPS impact | Operating income effect | EPS impact |
| TNW restructuring expenses | (376) | \$(0.02) | (534) | \$(0.03) |
| Strategic initiatives expenses | (841) | \$(0.04) | (122) | \$(0.01) |
| Intangible assets amortization expenses | (5,377) | \$(0.25) | (1,517) | \$(0.07) |

Net income was \$3.9 million, or \$0.22 per diluted share, in Q1 2019 and \$11.1 million, or \$0.64 per diluted share, in Q1 2018.

Liquidity

Cash was \$47.9 million at March 31, 2019, compared to \$49.2 million at December 31, 2018. Net cash provided by operations was \$14.4 million in Q1 2019 compared to cash used in operations of \$4.0 million in Q1 2018 as improved tooling collections and accounts payable timing led to improvement. As of March 31, 2019, there was approximately \$108 million of availability under the Company's credit facility.

Outlook

As the Company enters the second quarter, demand remains generally steady in the Thermal Acoustical Solutions and Technical Nonwovens segments. In the Performance Materials segment, the Company is continuing to experience stable conditions in filtration markets, but expects weakness to persist in the sealing solutions end markets during the quarter. EBITDA will be favorably impacted by the Interface acquisition, and the Company anticipates continued operational improvements in the Thermal Acoustical Solutions segment and seasonally higher sales in the Technical Nonwovens segment to drive incremental profit compared to Q1 2019. The Company remains focused on cost control and margin improvement plans across the businesses as well as working capital initiatives to enhance cash flow generation.

Results of Operations

All of the following tabular comparisons, unless otherwise indicated, are for the quarters ended March 31, 2019 (Q1-19) and March 31, 2018 (Q1-18).

Net Sales

| | Quarter Ended | | |
|--------------|---------------|-----------|----------------|
| In thousands | Q1-19 | Q1-18 | Percent Change |
| Net sales | \$218,025 | \$191,660 | 13.8 % |

Net sales for the first quarter of 2019 increased by \$26.4 million, or 13.8%, compared to the first quarter of 2018. This increase was due to greater net sales in the Performance Materials segment of \$33.9 million, or 17.7% of consolidated net sales, including \$32.9 million from the Interface acquisition, which occurred on August 31, 2018. Net sales decreased in the Thermal Acoustical Solutions segment by \$7.1 million, including decreased tooling net sales of \$3.6 million, and in the Technical Nonwovens segment by \$1.9 million, but increased \$0.5 million when eliminating automotive rolled-good material sold to the Thermal Acoustical Solutions segment. Foreign currency translation had a negative impact on net sales of \$6.4 million, or 3.3% of consolidated net sales, primarily impacting the Technical Nonwovens segment by \$3.0 million, or 1.6% of consolidated net sales, and the Thermal Acoustical Solutions segment by \$2.5 million, or 1.3% of consolidated net sales.

Cost of Sales

| | Quarter Ended | | |
|-------------------------|---------------|-----------|----------------|
| In thousands of dollars | Q1-19 | Q1-18 | Percent Change |
| Cost of sales | \$175,969 | \$152,153 | 15.7 % |

Cost of sales for the first quarter of 2019 increased by \$23.8 million, or 15.7%, compared to the first quarter of 2018. The increase was related to increased sales volumes in the Performance Materials segment, primarily sealing and advance solutions products from the Interface acquisition. Additionally, increased commodity costs and unfavorable product mix across all segments drove increased cost of sales in the first quarter of 2019 compared to the first quarter of 2018. The Thermal Acoustical Solutions segment also experienced increased labor costs of approximately \$1.3 million, primarily due to excess overtime and outsourcing costs primarily associated with program launches. Partially offsetting the increase was foreign currency translation which decreased cost of sales by \$5.5 million, or 3.6%, in the first quarter of 2019 compared to the first quarter of 2018.

Gross Profit

| In thousands | Quarter Ended | | Percent Change |
|--------------|---------------|----------|-------------------|
| | Q1-19 | Q1-18 | |
| Gross profit | \$42,056 | \$39,507 | 6.5 % |
| Gross margin | 19.3 % | 20.6 % | |

Gross margin for the first quarter of 2019 was 130 basis points lower than first quarter of 2018. The Thermal Acoustical Solutions segment negatively impacted consolidated gross margin by approximately 300 basis points, including increased labor costs primarily associated with new product launch activity and higher material costs. Increased material costs were driven by higher aluminum conversion costs and tariffs as well as less scrap recovery from reduced aluminum index pricing. The Technical Nonwovens segment negatively impacted consolidated gross margin by approximately 130 basis points, primarily related to unfavorable product mix, as increased material costs were partially offset by customer pricing actions. The Performance Materials segment favorably impacted consolidated gross margin by approximately 300 basis points, driven by favorable segment mix from the inclusion of higher margin Interface sealing and advanced solutions products sales, partially offset by lower legacy product gross margin from unfavorable product mix and increased material costs.

Selling, Product Development and Administrative Expenses

| In thousands | Quarter Ended | | Percent Change |
|--|---------------|----------|-------------------|
| | Q1-19 | Q1-18 | |
| Selling, product development and administrative expenses | \$33,006 | \$25,471 | 29.6 % |
| Percentage of sales | 15.1 % | 13.3 % | |

Selling, product development and administrative expenses for the first quarter of 2019 increased by \$7.5 million, or 180 basis points as a percentage of net sales, compared to the first quarter of 2018. This increase in expense was primarily related to the acquisition of Interface on August 31, 2018, including approximately 190 basis points of increased intangible asset amortization as a percentage of consolidated net sales. This increase was partially offset by decreased legacy selling, product development and administrative expenses in the first quarter of 2019 compared to the first quarter of 2018. Included in this decrease was lower salaries and benefits of \$0.8 million and decreased product development costs of \$0.5 million, partially offset by an increase in corporate strategic initiatives expenses of \$0.8 million. Legacy selling, product development and administrative expenses decreased 50 basis points as a percentage of net sales compared to the first quarter of 2018.

Interest Expense

| In thousands | Quarter Ended | | Percent Change |
|--------------------------------|---------------|-------|-------------------|
| | Q1-19 | Q1-18 | |
| Interest expense | \$3,628 | \$540 | 571.9 % |
| Weighted average interest rate | 4.2 % | 2.6 % | |

The increase in interest expense for the quarter ended March 31, 2019 compared to the quarter ended March 31, 2018 was due to higher borrowings incurred to finance the Interface acquisition on August 31, 2018 and increased interest rates.

Other Income/Expense, net

| In thousands | Quarter Ended | |
|--------------|---------------|-------|
| | Q1-19 | Q1-18 |
| | | |

Dollar
Change

Other expense, net \$399 \$315 \$ 84

Other expense, net, for the quarter ended March 31, 2019 compared to the quarter ended March 31, 2018 was relatively flat, as net foreign currency losses recognized on the revaluation of cash, trade payables and receivables and intercompany loans denominated in currencies other than the functional currencies of the Company's subsidiaries was consistent with prior year.

Income Taxes

The Company's effective tax rate for the first quarter of 2019 was 22.0% compared to an effective tax rate of 16.1% for the first quarter of 2018. The effective rate in the first quarter of 2019 was negatively impacted by valuation allowance activity of \$0.3 million, partially offset by a uncertain tax position released due to statutory expiration of \$0.2 million and geographical mix of earnings. The effective rate in the first quarter of 2018 was positively impacted by tax benefits of \$0.3 million related to stock vesting and geographical mix of earnings.

The Company and its subsidiaries file a consolidated federal income tax return, as well as returns required by various state and foreign jurisdictions. In the normal course of business, the Company is subject to examination by taxing authorities, including such major jurisdictions as the United States, France, Germany, China, the United Kingdom, Canada and the Netherlands. With few exceptions, the Company is no longer subject to U.S. federal examinations for years before 2015, state and local examinations for years before 2013, and non-U.S. income tax examinations for years before 2003.

The Company's effective tax rates in future periods could be affected by an increase or decrease in earnings in countries where tax rates differ from the United States federal tax rate, the relative impact of permanent tax adjustments on earnings from domestic operations, changes in net deferred tax asset valuation allowances, stock vesting, pension plan terminations, the completion of acquisitions or divestitures, changes in tax rates or tax laws and the completion of ongoing tax planning strategies and audits.

Segment Results

The following tables present net sales information for the key product and service groups included within each operating segment as well as other products and services and operating income by segment, for the quarter ended March 31, 2019 compared with the quarter ended March 31, 2018:

Net sales by segment:

| In thousands | Quarter Ended | | Dollar Change |
|--|---------------|-----------|---------------|
| | Q1-19 | Q1-18 | |
| Performance Materials Segment (1): | | | |
| Filtration | \$23,934 | \$23,142 | \$792 |
| Sealing and Advanced Solutions | 40,646 | 7,551 | 33,095 |
| Performance Materials Segment net sales | 64,580 | 30,693 | 33,887 |
| Technical Nonwovens Segment: | | | |
| Industrial Filtration | 42,364 | 40,231 | 2,133 |
| Advanced Materials (2) | 23,242 | 27,310 | (4,068) |
| Technical Nonwovens net sales | 65,606 | 67,541 | (1,935) |
| Thermal Acoustical Solutions Segment: | | | |
| Parts | 84,576 | 88,122 | (3,546) |
| Tooling | 9,737 | 13,315 | (3,578) |
| Thermal Acoustical Solutions Segment net sales | 94,313 | 101,437 | (7,124) |
| Eliminations and Other (2) | (6,474) | (8,011) | 1,537 |
| Consolidated Net Sales | \$218,025 | \$191,660 | \$26,365 |

Operating income by segment:

| In thousands | Quarter Ended | | Quarter Ended | | Dollar Change |
|-------------------------------|------------------|--------------------|------------------|--------------------|---------------|
| | Q1-19 | Q1-18 | Q1-19 | Q1-18 | |
| | Operating Income | Operating Margin % | Operating Income | Operating Margin % | |
| Performance Materials (1) | \$1,459 | 2.3% | \$2,641 | 8.6% | \$(1,182) |
| Technical Nonwovens | 4,734 | 7.2% | 5,006 | 7.4% | (272) |
| Thermal Acoustical Solutions | 9,491 | 10.1% | 12,614 | 12.4% | (3,123) |
| Corporate Office Expenses | (6,634) | | (6,225) | | (409) |
| Consolidated Operating Income | \$9,050 | 4.2% | \$14,036 | 7.3% | \$(4,986) |

The Performance Materials segment reports results of Interface and PCC for the period following the date of (1) acquisitions of August 31, 2018 and July 12, 2018, respectively, and included \$4.0 million of incremental intangible assets amortization for the quarter ended March 31, 2019.

Included in the Technical Nonwovens segment and Eliminations and Other is \$4.7 million and \$7.1 million in (2) intercompany sales to the Thermal Acoustical Solutions segment for the quarters ended March 31, 2019 and 2018, respectively.

Performance Materials

Segment net sales increased \$33.9 million, or 110.4%, in the first quarter of 2019 compared to the first quarter of 2018. The increase was primarily due to acquisitions in the third quarter of 2018 which contributed \$33.7 million of net sales in the first quarter of 2019. Remaining Performance Materials net sales increased \$0.2 million, including unfavorable foreign currency translation of \$1.0 million, or 3.1%, due to increased net sales of air filtration products.

The Performance Materials segment reported operating income of \$1.5 million, or 2.3% of net sales, in the first quarter of 2019, compared to operating income of \$2.6 million, or 8.6% of net sales, in the first quarter of 2018. Increased intangible asset

amortization of \$4.0 million from the Interface acquisition resulted in a reduction of 620 basis points of operating margin in the first quarter of 2019. Legacy Performance Materials businesses reported a reduction in operating margin of 160 basis points. Lower gross margin primarily related to increased overhead costs, unfavorable product mix and higher raw material costs was partially offset by a decrease in selling, product development and administrative expenses as a percentage of net sales, primarily related to decreased product development costs and salaries and benefits.

Technical Nonwovens

Segment net sales decreased \$1.9 million, or 2.9%, in the first quarter of 2019 compared to the first quarter of 2018. Foreign currency translation had a negative impact on segment net sales of \$3.0 million, or 4.4%, in the first quarter of 2019 compared to the first quarter of 2018. Advanced materials sales decreased \$4.1 million, or 14.9%, primarily driven by \$2.4 million less sales of automotive rolled-good material for use in the Thermal Acoustical Solutions segment manufacturing process. Also, decreased demand, primarily in North America, and the negative impact of foreign currency lowered advanced materials sales. Offsetting this decrease were increased sales in industrial filtration of \$2.1 million, or 5.3%, particularly from increased demand in North America and China.

The Technical Nonwovens segment reported operating income of \$4.7 million, or 7.2% of net sales, in the first quarter of 2019, compared to \$5.0 million, or 7.4% of net sales, in the first quarter of 2018. The decrease in operating income of \$0.3 million and operating margin of 20 basis points was primarily attributable to lower gross margin. Gross margin was negatively impacted by unfavorable product mix on decreased higher margin automotive rolled-good sales and lower margin air filtration sales. Additionally, higher raw material costs were mostly offset by price increases in the first quarter of 2019 compared to the first quarter of 2018. Partially offsetting lower gross margin was a reduction in selling, product development and administrative expenses of \$0.7 million, or 80 basis points as a percentage of net sales, in the first quarter of 2019 compared to the first quarter of 2018. The decrease was primarily related to decreased salaries and benefits of \$0.4 million in the first quarter of 2019 compared to the first quarter of 2018.

Thermal Acoustical Solutions

Segment net sales decreased \$7.1 million, or 7.0%, in the first quarter of 2019 compared to the first quarter of 2018. The decrease was primarily related to decreased tooling net sales of \$3.6 million due to the timing of new platform launches, primarily in North America and Europe. Parts net sales decreased \$3.5 million, or 4.0%, or \$1.5 million, or 1.7% when excluding foreign currency translation, compared to the first quarter of 2018, due to decreased demand on fibers parts, primarily in North America. Foreign currency translation had a negative impact on total segment net sales of \$2.5 million, or 2.5%, in the first quarter of 2019 compared to the first quarter of 2018.

The Thermal Acoustical Solutions segment reported operating income of \$9.5 million, or 10.1% of net sales, in the first quarter of 2019, compared to operating income of \$12.6 million, or 12.4% of net sales, in the first quarter of 2018. The decrease in operating income of \$3.1 million and operating margin of 230 basis points was due to lower gross margin of 280 basis points. Labor costs increased by approximately 140 basis points, including outsourcing costs and overtime associated primarily with new product launch activity. Increased raw material commodity costs driven by higher aluminum conversion costs and tariffs as well as less scrap recovery from reduced aluminum index pricing negatively impacted gross margin by approximately 100 basis points. This decrease to gross margin was partially offset by a \$0.8 million decrease in selling product development and administrative expenses, or a 40 basis point decrease as a percentage of net sales, primarily from continued savings realized on the segment combination coupled with managed spending across all administrative functions in the first quarter of 2019 compared to the first quarter of 2018.

Corporate Office Expenses

Corporate office expenses for the first quarter of 2019 were \$6.6 million, compared to \$6.2 million in the first quarter of 2018. The increase of \$0.4 million was primarily due to increased strategic initiatives expenses of \$0.8 million, partially offset by decreased salaries and benefits expenses.

Liquidity and Capital Resources

The Company assesses its liquidity in terms of its ability to generate cash to fund operating, investing and financing activities. The principal source of liquidity is operating cash flows. In addition to operating cash flows, other significant factors that affect the overall management of liquidity include capital expenditures, investments in businesses, strategic transactions, income tax payments, debt service payments, outcomes of contingencies, foreign currency exchange rates and employee benefit plan funding. The Company manages worldwide cash requirements by considering available funds among domestic and foreign subsidiaries.

The Company expects to finance its 2019 operating cash and capital spending requirements from existing cash balances, cash provided by operating activities and through borrowings under the Amended Credit Facility, as needed.

At March 31, 2019, the Company held \$47.9 million in cash and cash equivalents, including \$11.2 million in the U.S. with the remaining held by foreign subsidiaries.

Financing Arrangements

On August 31, 2018, the Company amended and restated its \$175 million senior secured credit agreement ("Amended Credit Agreement") that increased the available borrowing from \$175 million to \$450 million, added three additional lenders and extended the maturity date from July 7, 2021 to August 31, 2023.

Under the terms of the Amended Credit Agreement, the lenders are providing up to a \$450 million credit facility (the "Facility") to the Company, under which the lenders provided a term loan commitment of \$200 million and revolving loans to or for the benefit of the Company and its subsidiaries of up to \$250 million. The Facility may be increased by an aggregate amount not to exceed \$150 million through an accordion feature, subject to specified conditions. The Facility is secured by substantially all of the assets of the Company.

Interest is charged on borrowings at the Company's option of either: (i) Base Rate plus the Applicable Rate, or (ii) the Eurodollar Rate plus the Applicable Rate. The Base Rate is a fluctuating rate equal to the highest of (a) the federal funds rate plus 0.50%, (b) the prime rate as set by Bank of America, and (c) the Eurocurrency Rate plus 1.00%. The Eurocurrency Rate means (i) if denominated in LIBOR quoted currency, a fluctuating LIBOR per annum rate equal to the London Interbank Offered Rate; (ii) if denominated in Canadian Dollars, the rate per annum equal to the Canadian Dollar Offered Rate; or (iii) the rate per annum as designated with respect to such alternative currency at the time such alternative currency is approved by the Lenders. The Applicable Rate is determined based on the Company's Consolidated Leverage Ratio (as defined in the Amended Credit Agreement). The Applicable Rate added to the Base Rate Committed Loans ranges from 0.00% to 1.25%, and the Applicable Rate added to Eurocurrency Rate Committed Loans and Letters of Credit ranges from 0.75% to 2.00%. The Company pays a quarterly fee ranging from 0.15% to 0.275% on the unused portion of the revolving commitment.

The Company is permitted to prepay term and revolving borrowings in whole or in part at any time without premium or penalty, subject to certain minimum payment requirements, and the Company is generally permitted to irrevocably cancel unutilized portions of the revolving commitments under the Amended Credit Agreement. The Company is required to repay the term commitment in an amount of \$2.5 million per quarter beginning with the quarter ending December 31, 2018 through the quarter ending June 30, 2023.

The Amended Credit Agreement contains covenants required of the Company and its subsidiaries, including various affirmative and negative financial and operational covenants. The Company is required to meet certain quarterly financial covenants calculated from the four fiscal quarters most recently ended, including: (i) a minimum consolidated fixed charge coverage ratio, which requires that at the end of each fiscal quarter the ratio of (a) consolidated EBITDA to (b) the sum of consolidated interest charges, redemptions, non-financed maintenance capital expenditures, restricted payments and taxes paid, each as defined in the Amended Credit Agreement, may not be lower than 1.25 to 1.0; and (ii) a consolidated net leverage ratio, which requires that at the end of each fiscal quarter the ratio of consolidated funded indebtedness minus consolidated domestic cash to consolidated EBITDA, as defined in the Amended Credit Agreement, may not be greater than 3.5 to 1.0. The Company was in compliance with all covenants at March 31, 2019.

At March 31, 2019, the Company had borrowing availability of \$108.1 million under the Facility, net of \$318.0 million of borrowings outstanding and standby letters of credit outstanding of \$3.9 million. The borrowings outstanding included a \$180.0 million term loan, net of \$0.5 million in debt issuance costs being amortized to expense over the debt maturity period.

In addition to the amounts outstanding under the Facility, the Company has various acquired foreign credit facilities totaling approximately \$8.1 million. At March 31, 2019, the Company's foreign subsidiaries had \$2.6 million in standby letters of credit outstanding.

In November 2018, the Company entered into a five year interest rate swap agreement with a bank which converts the interest on a notional \$139.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 3.09% plus the borrowing spread. The notional amount reduces quarterly by fluctuating amounts through August 2023. In April 2017, the Company entered into a three-year interest rate swap agreement with a bank which converts the interest on a notional \$60.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 1.58% plus the borrowing spread. The notional amount reduces quarterly by \$5.0 million through March 31, 2020. These interest rate swap agreements were accounted

for as cash flow hedges. Effectiveness of these derivative agreements are assessed quarterly by ensuring that the critical terms of the swaps continue to match the critical terms of the hedged debt.

Operating Cash Flows

Net cash provided by operating activities in the first three months of 2019 was \$14.4 million compared with net cash used for operating activities of \$4.0 million in the first three months of 2018. In the first three months of 2019, net income and non-cash adjustments were \$16.6 million compared to \$20.1 million in the first three months of 2018. Since December 31, 2018, net operating assets and liabilities increased by \$2.2 million, primarily due to increases of \$11.4 million in accounts receivable and \$6.6 million in inventories, partially offset by an increase of \$15.5 million in accounts payable. The increase in accounts receivable was primarily due to higher net sales in the first quarter of 2019 compared to the fourth quarter of 2018, primarily from the Thermal Acoustical Solutions segment, partially offset by improved collection of tooling receivables. The increase in inventory was principally due to strategic purchases within the Technical Nonwovens segment to ensure sufficient levels of inventory to meet seasonal demands. The increase in accounts payable was primarily driven by the timing of vendor payments, including capital expenditures within the Thermal Acoustical Solutions and Technical Nonwovens segments during the first three months of 2019.

Investing Cash Flows

In the first three months of 2019 and 2018, net cash used for investing activities consisted of capital expenditures of \$9.2 million and \$7.7 million, respectively. Capital spending for 2019 is expected to be approximately \$40 million to \$45 million.

Financing Cash Flows

In the first three months of 2019, net cash used for financing activities was \$7.1 million compared to \$0.2 million in the first three months of 2018. The Company made debt repayments of \$7.1 million and \$0.1 million in the first three months of 2019 and 2018, respectively. During the first three months of 2018, the Company acquired \$0.8 million in company stock through its equity compensation plans and received \$0.7 million from the exercise of stock options.

Critical Accounting Estimates

The preparation of the Company's consolidated financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Note 1 of the "Notes to Consolidated Financial Statements" and Critical Accounting Estimates in Item 7 of the Company's Annual Report on Form 10-K for the year ended December 31, 2018, and the "Notes to Condensed Consolidated Financial Statements" of this report describe the significant accounting policies and critical accounting estimates used in the preparation of the consolidated financial statements. The Company's management is required to make judgments and estimates about the effect of matters that are inherently uncertain. Actual results could differ from management's estimates. There have been no significant changes in the Company's critical accounting estimates during the quarter ended March 31, 2019, except for those described in Note 8 of this report in relation to the Company's adoption of ASC 842.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Lydall's limited market risk exposures relate to changes in foreign currency exchange rates and interest rates.

Foreign Currency Risk

The Company has operations in France, Germany, China, the United Kingdom, Canada, India and the Netherlands, in addition to the United States. As a result of this, the Company's financial results are affected by factors such as changes in foreign currency exchange rates or economic conditions in the foreign markets where the Company manufactures and distributes its products. The Company's currency exposure is to the US Dollar, the Euro, the Chinese Yuan, the British Pound Sterling, the Canadian Dollar, the Japanese Yen, the Indian Rupee and the Hong Kong Dollar. The Company's foreign and domestic operations attempt to limit foreign currency exchange transaction risk by completing transactions in local functional currencies, whenever practicable. The Company may periodically enter into foreign currency forward exchange contracts to mitigate exposure to foreign currency volatility. In addition, the Company utilizes bank loans and other debt instruments throughout its operations. To mitigate foreign currency risk, such debt is denominated primarily in the functional currency of the operation maintaining the debt.

The Company also has exposure to fluctuations in currency risk on intercompany loans that the Company makes to certain of its subsidiaries. The Company may periodically enter into foreign currency forward contracts which are intended to offset the impact of foreign currency movements on the underlying intercompany loan obligations.

Interest Rate Risk

The Company's interest rate exposure is most sensitive to fluctuations in interest rates in the United States and Europe, which impact interest paid on its debt. The Company has borrowings outstanding of \$318.0 million from its Amended Credit Facility at March 31, 2019, with variable rates of interest based generally on LIBOR. Increases in interest rates could therefore significantly increase the associated interest payments that the Company is required to make on this debt. From time to time, the Company may enter into interest rate swap agreements to manage interest rate risk.

In November 2018, the Company entered into a five year interest rate swap agreement with a bank which converts the interest on a notional \$139.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 3.09% plus the borrowing spread. The notional amount reduces quarterly by fluctuating amounts through August 2023. In April 2017, the Company entered into a three-year interest rate swap agreement with a bank which converts the interest on a notional \$60.0 million of the Company's one-month LIBOR-based borrowings under its Amended Credit Agreement from a variable rate, plus the borrowing spread, to a fixed rate of 1.58% plus the borrowing spread. The notional amount reduces quarterly by \$5.0 million through March 31, 2020. These interest rate swap agreements were accounted for as cash flow hedges. Effectiveness of these derivative agreements are assessed quarterly by ensuring that the critical terms of the swaps continue to match the critical terms of the hedged debt.

The Company has assessed its exposure to changes in interest rates by analyzing the sensitivity to Lydall's earnings assuming various changes in market interest rates. Assuming a hypothetical increase of one percentage point in interest rates on the variable portion of the \$318.0 million outstanding borrowings as of March 31, 2019, the Company's net income would decrease by an estimated \$1.3 million over a twelve-month period.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's management, including the Company's President and Chief Executive Officer (the "CEO") and the Executive Vice President and Chief Financial Officer (the "CFO"), conducted an evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")). There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission (the "SEC"), and that such information is accumulated and communicated to management of the Company, with the participation of its CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Based on that evaluation, the CEO and CFO

have concluded that the Company's disclosure controls and procedures were effective as of March 31, 2019 at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

On August 31, 2018, the Company completed the acquisition of Interface Performance Materials ("Interface"). Management considers this transaction to be material to the Company's consolidated financial statements. The Company is currently in the process of evaluating the existing controls and procedures of Interface and integrating the business into our Section 404 compliance program under the Sarbanes-Oxley Act of 2002 (the "Act") and the applicable rules and regulations under such Act. The Company will report on its assessment of the effectiveness of internal control over financial reporting of its consolidated operations (including the Interface business) within the time period provided by the Act and the applicable SEC rules and regulations concerning business combinations.

Subject to the foregoing, there have not been any changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act) during the quarter ended March 31, 2019 that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The Company is subject to legal proceedings, claims, investigations and inquiries that arise in the ordinary course of business such as, but not limited to, actions with respect to commercial, intellectual property, employment, personal injury, and environmental matters. The Company believes that it has meritorious defenses against the claims currently asserted against it and intends to defend them vigorously. While the outcome of litigation is inherently uncertain and the Company cannot be sure that it will prevail in any of the cases, subject to the matter referenced below, the Company is not aware of any matters pending that are expected to have a material adverse effect on the Company's business, financial position, results of operations or cash flows.

In the fourth quarter of 2016, as part of a groundwater discharging permitting process, water samples collected from wells and process water basins at the Company's Rochester New Hampshire manufacturing facility, within the Performance Materials segment, showed concentrations of Per and Polyfluorinated Substances ("PFAS") in excess of state ambient groundwater quality standards. In January 2017, the Company received a notification from the State of New Hampshire Department of Environmental Services ("NHDES") naming Lydall Performance Materials, Inc. a responsible party with respect to the discharge of regulated contaminants and, as such, is required to take action to investigate and remediate the impacts in accordance with standards established by the NHDES. The Company conducted a site investigation, the scope of which was reviewed by the NHDES, in order to assess the extent of potential soil and groundwater contamination and develop a remedial action. Based on input received from NHDES in March 2017 with regard to the scope of the site investigation, the Company recorded \$0.2 million of expense. In 2018, the Company received a response from the NHDES to the site investigation report outlining proposed remedial actions. The Company recorded an additional \$0.1 million of expense in 2018 associated with the expected costs to remediate the impacts of the discharge of regulated contaminants in accordance with standards established by the NHDES. During 2018 the environmental liability was fully reduced reflecting payments made to vendors, resulting in \$0.0 million balance at December 31, 2018. Additionally, the Company incurred \$0.2 million of capital expenditures in 2018, in relation to the lining of the Company's fresh water waste lagoons. The site investigation is ongoing. The Company cannot be sure that costs will not exceed the current estimates until this matter is closed with the NHDES, nor that any future corrective action at this location would not have a material effect on the Company's financial condition, results of operations or liquidity.

In December 2018, the New York State Department of Environmental Conservation ("NYDEC") informed the Company that the newly acquired Interface site located at Hoosick Falls, NY will be the subject of an investigation in to the possibility of it being an inactive hazardous disposable waste site. The letter specifically references perfluorinated compounds or per- and polyfluoroalkyl substances ("PFAS") that have been detected in a nearby water supply, soil and/or surface water. The PFAS contamination has been identified in the Hoosick Falls area for some time and other large manufacturers in the area have previously been identified as a source. The Company will conduct a site investigation, the scope of which is in the planning stage with the NYDEC, in order to assess the extent of the potential contamination and develop a remedial action, if necessary. The Company does not know the scope or extent of its future obligations, if any, that may arise from the site investigation and therefore is unable to estimate the cost of any corrective action. Accordingly, the Company cannot assure that the costs of any future corrective at this location would not have a material effect on the Company's financial condition, results of operations or liquidity.

Provisions for such matters are charged to expense when it is probable that a liability has been incurred and reasonable estimates of the liability can be made. Estimates of environmental liabilities are based on a variety of matters, including, but not limited to, the stage of investigation, the stage of the remedial design, evaluation of existing remediation technologies, and presently enacted laws and regulations. In future periods, a number of factors could significantly impact any estimates of environmental remediation costs.

Item 1A. Risk Factors

See Part I, Item 1A of the Company's Annual Report on Form 10-K for the year ended December 31, 2018, as updated by Part II, Item 1, Legal Proceedings, of this Report. The risks described in the Annual Report on Form 10-K, and the "Cautionary Note Concerning Forward-Looking Statements" in this report, are not the only risks faced by the Company. Additional risks and uncertainties not currently known or that are currently judged to be immaterial may also materially affect the Company's business, financial position, results of operations or cash flows.

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

During the three months ended March 31, 2019, the Company acquired 1,636 shares of common stock through withholding, pursuant to provisions in agreements with recipients of restricted stock granted under the Company's equity compensation plans, which allow the Company to withhold the number of shares having fair value equal to each recipient's tax withholding due.

| Period | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Program | Maximum Number of Shares That May Yet Be Purchased Under the Program |
|--------------------------------------|----------------------------------|------------------------------|--|--|
| January 1, 2019 - January 31, 2019 | — | \$ — | — | — |
| February 1, 2019 - February 28, 2019 | 821 | \$ 27.59 | — | — |
| March 1, 2019 - March 31, 2019 | 815 | \$ 24.41 | — | — |
| | 1,636 | \$ 26.01 | — | — |

Item 5. Other Information

Submission of Matters to a Vote of Security Holders

At the annual meeting of stockholders of the Company held on April 26, 2019, stockholders voted on three proposals presented to them for consideration:

1. Election of Nominees to the Board of Directors

The following nominees were elected to the Company's Board of Directors to serve until the next annual meeting to be held in 2020 and until their successors are duly elected and qualified. The results of the voting were as follows:

| Director | For | Withheld | Broker Non-Votes |
|-------------------------|------------|----------|---------------------|
| Dale G. Barnhart | 15,440,924 | 209,149 | 902,597 |
| David G. Bills | 15,422,297 | 227,776 | 902,597 |
| Kathleen Burdett | 15,366,375 | 283,698 | 902,597 |
| James J. Cannon | 15,463,155 | 186,918 | 902,597 |
| Matthew T. Farrell | 15,426,057 | 224,016 | 902,597 |
| Marc T. Giles | 15,364,228 | 285,845 | 902,597 |
| William D. Gurley | 15,310,753 | 339,320 | 902,597 |
| Suzanne Hammett | 15,406,351 | 243,722 | 902,597 |
| S. Carl Soderstorm, Jr. | 15,210,756 | 439,317 | 902,597 |

2. Advisory Vote on Executive Compensation

Stockholders approved, on an advisory basis, the executive compensation of the Company's named executive officers. The results of the voting were as follows:

| | |
|------------------|------------|
| For | 15,508,954 |
| Against | 127,806 |
| Abstain | 13,313 |
| Broker Non-Votes | 902,597 |

3. Ratification of Appointment of Independent Auditors

Stockholders ratified the appointment of PricewaterhouseCoopers LLP as the Company's independent auditors for fiscal year 2019. The results of the voting were as follows:

| | |
|---------|------------|
| For | 16,281,468 |
| Against | 266,511 |
| Abstain | 4,691 |

Item 6. Exhibits

| Exhibit Number | Description |
|----------------|---|
| 31.1 | <u>Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a) under the Securities Exchange Act of 1934, of principal executive officer, filed herewith.</u> |
| 31.2 | <u>Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a) under the Securities Exchange Act of 1934, of principal financial officer, filed herewith.</u> |
| 32.1 | <u>Certifications Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.</u> |
| 101.INS | XBRL Instance Document |
| 101.SCH | XBRL Taxonomy Extension Schema Document |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document |

SIGNATURE

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.

LYDALL, INC.

April 30, 2019 By: /s/ Randall B. Gonzales

Randall B. Gonzales

Executive Vice President and Chief Financial Officer

(On behalf of the Registrant and as

Principal Financial Officer)