

Section 1: 10-Q (10-Q)

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2017

OR

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

For the transition period from _____ to _____

Commission File Number: 1-4797

ILLINOIS TOOL WORKS INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

155 Harlem Avenue, Glenview, IL

(Address of principal executive offices)

36-1258310

(I.R.S. Employer Identification Number)

60025

(Zip Code)

(Registrant's telephone number, including area code) **847-724-7500**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

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

The number of shares of registrant's common stock, \$0.01 par value, outstanding at June 30, 2017: 344,149,420.

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PART I – FINANCIAL INFORMATION

ITEM 1. Financial Statements

**Illinois Tool Works Inc. and Subsidiaries
Statement of Income (Unaudited)**

In millions except per share amounts	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Operating Revenue	\$ 3,599	\$ 3,431	\$ 7,070	\$ 6,705
Cost of revenue	2,087	1,967	4,091	3,863
Selling, administrative, and research and development expenses	586	617	1,191	1,214
Amortization and impairment of intangible assets	52	55	105	114
Operating Income	874	792	1,683	1,514
Interest expense	(65)	(58)	(129)	(116)
Other income (expense)	10	17	14	21
Income Before Taxes	819	751	1,568	1,419
Income Taxes	232	226	445	426
Net Income	\$ 587	\$ 525	\$ 1,123	\$ 993
Net Income Per Share:				
Basic	\$ 1.70	\$ 1.47	\$ 3.25	\$ 2.76
Diluted	\$ 1.69	\$ 1.46	\$ 3.23	\$ 2.75
Cash Dividends Per Share:				
Paid	\$ 0.65	\$ 0.55	\$ 1.30	\$ 1.10
Declared	\$ 0.65	\$ 0.55	\$ 1.30	\$ 1.10
Shares of Common Stock Outstanding During the Period:				
Average	344.7	356.6	345.4	359.3
Average assuming dilution	347.5	358.5	348.3	361.2

The Notes to Financial Statements are an integral part of this statement.

Illinois Tool Works Inc. and Subsidiaries
Statement of Comprehensive Income (Unaudited)

In millions	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Net Income	\$ 587	\$ 525	\$ 1,123	\$ 993
Other Comprehensive Income (Loss):				
Foreign currency translation adjustments, net of tax	117	(144)	271	20
Pension and other postretirement benefit adjustments, net of tax	10	6	20	14
Comprehensive Income	<u>\$ 714</u>	<u>\$ 387</u>	<u>\$ 1,414</u>	<u>\$ 1,027</u>

The Notes to Financial Statements are an integral part of this statement.

Illinois Tool Works Inc. and Subsidiaries
Statement of Financial Position (Unaudited)

In millions except per share amounts	June 30, 2017	December 31, 2016
Assets		
Current Assets:		
Cash and equivalents	\$ 2,496	\$ 2,472
Trade receivables	2,629	2,357
Inventories	1,199	1,076
Prepaid expenses and other current assets	246	218
Total current assets	6,570	6,123
Net plant and equipment	1,726	1,652
Goodwill	4,675	4,558
Intangible assets	1,366	1,463
Deferred income taxes	488	449
Other assets	1,097	956
	\$ 15,922	\$ 15,201
Liabilities and Stockholders' Equity		
Current Liabilities:		
Short-term debt	\$ 691	\$ 652
Accounts payable	582	511
Accrued expenses	1,172	1,202
Cash dividends payable	224	226
Income taxes payable	157	169
Total current liabilities	2,826	2,760
Noncurrent Liabilities:		
Long-term debt	7,360	7,177
Deferred income taxes	121	134
Other liabilities	841	871
Total noncurrent liabilities	8,322	8,182
Stockholders' Equity:		
Common stock (par value of \$0.01 per share):		
Issued- 550.0 shares in 2017 and 2016		
Outstanding- 344.1 shares in 2017 and 346.9 shares in 2016	6	6
Additional paid-in-capital	1,196	1,188
Retained earnings	20,180	19,505
Common stock held in treasury	(15,095)	(14,638)
Accumulated other comprehensive income (loss)	(1,516)	(1,807)
Noncontrolling interest	3	5
Total stockholders' equity	4,774	4,259
	\$ 15,922	\$ 15,201

The Notes to Financial Statements are an integral part of this statement.

Illinois Tool Works Inc. and Subsidiaries
Statement of Cash Flows (Unaudited)

In millions	Six Months Ended June 30,	
	2017	2016
Cash Provided by (Used for) Operating Activities:		
Net income	\$ 1,123	\$ 993
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation	123	118
Amortization and impairment of intangible assets	105	114
Change in deferred income taxes	23	(203)
Provision for uncollectible accounts	2	6
(Income) loss from investments	(11)	(3)
(Gain) loss on sale of plant and equipment	1	1
(Gain) loss on sale of operations and affiliates	—	6
Stock-based compensation expense	19	20
Other non-cash items, net	4	1
Change in assets and liabilities, net of acquisitions and divestitures:		
(Increase) decrease in-		
Trade receivables	(186)	(210)
Inventories	(82)	(54)
Prepaid expenses and other assets	(112)	(58)
Increase (decrease) in-		
Accounts payable	47	68
Accrued expenses and other liabilities	(115)	—
Income taxes	(14)	216
Other, net	—	(1)
Net cash provided by operating activities	927	1,014
Cash Provided by (Used for) Investing Activities:		
Acquisition of businesses (excluding cash and equivalents) and additional interest in affiliates	(3)	(2)
Additions to plant and equipment	(141)	(121)
Proceeds from investments	18	10
Proceeds from sale of plant and equipment	3	4
Proceeds from sales of operations and affiliates	2	2
Other, net	(1)	(8)
Net cash provided by (used for) investing activities	(122)	(115)
Cash Provided by (Used for) Financing Activities:		
Cash dividends paid	(450)	(398)
Issuance of common stock	45	57
Repurchases of common stock	(500)	(1,000)
Net proceeds from (repayments of) debt with original maturities of three months or less	691	(311)
Proceeds from debt with original maturities of more than three months	—	1
Repayments of debt with original maturities of more than three months	(652)	(1)
Excess tax benefits from stock-based compensation	—	19
Other, net	(13)	(11)
Net cash provided by (used for) financing activities	(879)	(1,644)
Effect of Exchange Rate Changes on Cash and Equivalents	98	10
Cash and Equivalents:		
Increase (decrease) during the period	24	(735)
Beginning of period	2,472	3,090
End of period	\$ 2,496	\$ 2,355
Supplementary Cash and Non-Cash Information:		

Cash Paid During the Period for Interest	\$	146	\$	133
Cash Paid During the Period for Income Taxes, Net of Refunds	\$	436	\$	394

The Notes to Financial Statements are an integral part of this statement.

Illinois Tool Works Inc. and Subsidiaries
Notes to Financial Statements (Unaudited)

(1) Significant Accounting Policies

Financial Statements - The unaudited financial statements included herein have been prepared by Illinois Tool Works Inc. and Subsidiaries (the "Company"). In the opinion of management, the interim financial statements reflect all adjustments of a normal recurring nature necessary for a fair statement of the results for interim periods. It is suggested that these financial statements be read in conjunction with the financial statements and notes to financial statements included in the Company's 2016 Annual Report on Form 10-K. Certain reclassifications of prior year data have been made to conform with current year reporting.

New Accounting Pronouncements - In May 2014, the Financial Accounting Standards Board (the "FASB") issued authoritative guidance to change the criteria for revenue recognition. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, several new revenue recognition disclosures will be required. Under current guidance, the Company generally recognizes operating revenue when ownership and risk of loss are transferred to the customer, which is typically at the time of product shipment or delivery of service. While the Company continues to assess the potential impact of the new guidance, we do not currently expect that the adoption of this guidance will have a material impact on our operating revenue, results of operations or financial position. However, the Company expects to provide additional disclosures in the notes to financial statements required under the new guidance. The new guidance will be effective for the Company beginning January 1, 2018 and allows for either full or modified retrospective adoption methods. The Company expects to adopt the new revenue accounting guidance utilizing the modified retrospective method.

In February 2016, the FASB issued authoritative guidance to change the criteria for recognizing leasing transactions. Under the new guidance, a lessee will be required to recognize a lease liability and lease asset for all leases with a lease term greater than twelve months in the statement of financial position, including operating leases. Subsequent measurement, including presentation of expenses and cash flows, will depend on the classification of the lease as either a financing or operating lease. In addition, several new disclosures will be required. This guidance will be effective for the Company beginning January 1, 2019, with early adoption permitted. While the Company has not yet completed its evaluation of the impact the new lease accounting guidance will have on the consolidated financial statements and related disclosures, the Company expects to recognize right of use assets and liabilities for its operating leases in the statement of financial position upon adoption.

In March 2016, the FASB issued authoritative guidance that included several changes to simplify the accounting for stock-based compensation, including the accounting for income taxes, forfeitures, statutory tax withholding requirements and classification of tax benefits in the statement of cash flows. Among the more significant changes, the new guidance requires the income tax effects associated with the settlement of stock-based awards to be recognized through income tax expense rather than directly in equity. Additionally, the income tax effects related to excess tax benefits should be presented within operating cash flows in the statement of cash flows rather than as a financing activity. Excess tax benefits recognized in equity under the prior guidance were \$19 million for the six months ended June 30, 2016. The Company adopted the new guidance effective January 1, 2017 and applied the newly adopted provisions prospectively. Excess tax benefits of \$13 million and \$26 million were included in Income Taxes in the statement of income for the three and six month periods ended June 30, 2017, respectively. The expected effect on income tax expense or net cash provided from operating activities related to future stock-based award settlements will vary each quarter and will depend on inputs such as the stock price at the time of settlement and the number of awards settled in the period presented.

In October 2016, the FASB issued authoritative guidance requiring the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs rather than when transferred to a third party as required under the current guidance. The new guidance is effective for the Company beginning January 1, 2018. The Company is currently assessing the potential impact the new guidance will have upon adoption.

In March 2017, the FASB issued authoritative guidance which changes the income statement presentation of the components of net periodic benefit cost related to defined benefit pension and other postretirement plans. The primary change under the new guidance is that only the service cost component of net periodic benefit cost should be included in operating income and is eligible for capitalization as an asset. The other components of net periodic benefit cost, such as interest cost, the expected return on assets, and amortization of actuarial gains and losses and prior service cost, should be presented below operating income. The guidance is effective for the Company starting January 1, 2018 and will be applied retrospectively to the

presentation of net periodic benefit cost and prospectively to the capitalization of service cost. The Company does not expect the adoption of this guidance to have a material impact on the results of operations or financial position.

(2) Acquisition

On July 1, 2016, the Company completed the acquisition of the Engineered Fasteners and Components business ("EF&C") from ZF TRW for a purchase price of approximately \$450 million. The acquisition of EF&C did not materially affect the Company's results of operations or financial position for the periods presented.

EF&C had operating revenue of \$256 million for the six months ended June 30, 2017 which was reported within the Company's Automotive OEM segment. As a result of the EF&C transaction, the Company recorded \$185 million of goodwill and \$134 million of amortizable intangible assets primarily related to customer relationships and technology. The intangible assets are expected to be amortized on a straight-line basis over their estimated useful lives ranging from 4 to 17 years, with a weighted average amortization period of 16 years. Subsequent purchase accounting adjustments may change the initial amounts recorded. The allocation of the purchase price will be completed no later than one year from the acquisition date.

(3) Income Taxes

The Company and its subsidiaries file tax returns in the U.S. and various state, local and foreign jurisdictions. These tax returns are routinely audited by the tax authorities in these jurisdictions, including the Internal Revenue Service ("IRS"), Her Majesty's Revenue and Customs, German Fiscal Authority, French Fiscal Authority, and Australian Tax Office, and a number of these audits are currently ongoing, which may increase the amount of the unrecognized tax benefits in future periods. Due to the ongoing audits, the Company believes it is reasonably possible that within the next twelve months the amount of the Company's unrecognized tax benefits may be decreased by approximately \$58 million related predominantly to various intercompany transactions. The Company has recorded its best estimate of the potential exposure for these issues.

On February 18, 2014, the Company received a Notice of Deficiency ("NOD") from the IRS asserting that a non-taxable return of capital received from a subsidiary was a taxable dividend distribution. The NOD assesses additional taxes of \$70 million for the 2006 tax year, plus interest and penalties. In May 2014, the Company petitioned the United States Tax Court to challenge the NOD. The Company's petition was subsequently denied and the case proceeded to court with the trial taking place in the third quarter of 2016. Final decision by the tax court is expected in 2017 or 2018. Although the court's final decision cannot be predicted with certainty, the Company believes its position continues to be supportable. Accordingly, no reserve has been recorded related to this matter.

(4) Inventories

Inventories as of June 30, 2017 and December 31, 2016 were as follows:

In millions	June 30, 2017	December 31, 2016
Raw material	\$ 452	\$ 407
Work-in-process	139	126
Finished goods	692	629
LIFO reserve	(84)	(86)
Total inventories	<u>\$ 1,199</u>	<u>\$ 1,076</u>

(5) Pension and Other Postretirement Benefits

Beginning in 2017, the Company changed the method used to estimate the service and interest cost components of net periodic benefit cost related to pension and other postretirement benefit plans. The new method provides a more precise measure of the service and interest cost components of net periodic benefit cost by applying specific spot rates along the yield curve to the projected cash flows rather than a single weighted-average rate. The Company accounted for this change as a change in estimate prospectively. The change did not have a material impact on the 2017 net periodic pension and other postretirement benefit costs.

Pension and other postretirement benefit costs for the three and six months ended June 30, 2017 and 2016 were as follows:

In millions	Three Months Ended June 30,				Six Months Ended June 30,			
	Pension		Other Postretirement Benefits		Pension		Other Postretirement Benefits	
	2017	2016	2017	2016	2017	2016	2017	2016
Components of net periodic benefit cost:								
Service cost	\$ 16	\$ 16	\$ 2	\$ 3	\$ 32	\$ 32	\$ 4	\$ 5
Interest cost	18	24	5	6	36	47	10	12
Expected return on plan assets	(33)	(36)	(5)	(5)	(66)	(73)	(11)	(11)
Amortization of actuarial loss	14	10	(1)	—	28	21	(1)	—
Amortization of prior service income	—	—	—	(1)	—	—	—	(1)
Total net periodic benefit cost	\$ 15	\$ 14	\$ 1	\$ 3	\$ 30	\$ 27	\$ 2	\$ 5

The Company expects to contribute approximately \$179 million to its pension plans and \$5 million to its other postretirement plans in 2017. During the six months ended June 30, 2017, the Company made contributions of \$170 million to its pension plans, which include an additional \$115 million discretionary contribution made in the second quarter of 2017. Contributions of \$3 million have been made to other postretirement plans during the six months ended June 30, 2017.

(6) Debt

Short-term debt as of June 30, 2017 included commercial paper of \$688 million. Short-term debt as of December 31, 2016 included \$650 million related to the 0.90% notes paid on the February 25, 2017 due date.

The approximate fair value and related carrying value of the Company's total long-term debt, including current maturities of long-term debt presented as short-term debt, as of June 30, 2017 and December 31, 2016 were as follows:

In millions	June 30, 2017	December 31, 2016
Fair value	\$ 7,898	\$ 8,281
Carrying value	7,360	7,827

The approximate fair values of the Company's long-term debt, including current maturities, were based on a valuation model using Level 2 observable inputs which included market rates for comparable instruments for the respective periods.

(7) Legal Settlement

In the second quarter of 2017, the Company entered into a confidential settlement agreement to resolve a litigation matter. Based on the terms of the agreement, the Company expects to receive a total of \$95 million within 120 days of the execution of the agreement. The receipt of the settlement is primarily expected to have a favorable impact on the third quarter 2017 results. In the second quarter of 2017, the Company recorded a \$15 million gain related to this matter which is included in operating income.

(8) Accumulated Other Comprehensive Income (Loss)

The following table summarizes changes in Accumulated other comprehensive income (loss) for the three and six months ended June 30, 2017 and 2016:

In millions	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Beginning balance	\$ (1,643)	\$ (1,332)	\$ (1,807)	\$ (1,504)
Foreign currency translation adjustments during the period	60	(124)	204	—
Foreign currency translation adjustments reclassified to income	—	—	—	1
Income taxes	57	(20)	67	19
Total foreign currency translation adjustments, net of tax	117	(144)	271	20
Pension and other postretirement benefit adjustments during the period	—	—	—	1
Pension and other postretirement benefit adjustments reclassified to income	13	9	27	20
Income taxes	(3)	(3)	(7)	(7)
Total pension and other postretirement benefit adjustments, net of tax	10	6	20	14
Ending balance	\$ (1,516)	\$ (1,470)	\$ (1,516)	\$ (1,470)

Pension and other postretirement benefit adjustments reclassified to income relate primarily to the amortization of actuarial losses. Refer to Note 5. Pension and Other Postretirement Benefits for additional information.

The Company designated the €1.0 billion of Euro notes issued in May 2015 and the €1.0 billion of Euro notes issued in May 2014 as hedges of a portion of its net investment in Euro-denominated foreign operations to reduce foreign currency risk associated with the investment in these operations. The carrying values of the 2015 and 2014 Euro notes were \$1.1 billion and \$1.1 billion, respectively, as of June 30, 2017. Changes in the value of this debt resulting from fluctuations in the Euro to U.S. dollar exchange rate have been recorded as foreign currency translation adjustments within Accumulated other comprehensive income (loss). The unrealized pre-tax gain recorded in Accumulated other comprehensive income (loss) related to the net investment hedge was \$195 million and \$375 million as of June 30, 2017 and December 31, 2016, respectively.

The ending balance of Accumulated other comprehensive income (loss) as of June 30, 2017 and 2016 consisted of cumulative translation adjustment losses, net of tax, of \$1.1 billion and \$1.1 billion, respectively, and unrecognized pension and other postretirement benefits costs, net of tax, of \$385 million and \$365 million, respectively.

(9) Segment Information

The Company has seven reportable segments: Automotive OEM; Food Equipment; Test & Measurement and Electronics; Welding; Polymers & Fluids; Construction Products; and Specialty Products. See Item 2 - Management's Discussion and Analysis of Financial Condition and Results of Operations for information regarding operating revenue and operating income for the Company's segments.

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

INTRODUCTION

Illinois Tool Works Inc. (the "Company" or "ITW") is a global manufacturer of a diversified range of industrial products and equipment with 85 divisions in 57 countries. As of December 31, 2016, the Company employed approximately 50,000 persons.

The Company's operations are organized and managed based on similar product offerings and end markets, and are reported to senior management as the following seven segments: Automotive OEM; Food Equipment; Test & Measurement and Electronics; Welding; Polymers & Fluids; Construction Products; and Specialty Products.

Due to the large number of diverse businesses and the Company's decentralized operating structure, the Company does not require its businesses to provide detailed information on operating results. Instead, the Company's corporate management collects data on several key measurements: operating revenue, operating income, operating margin, overhead costs, number of months on hand in inventory, days sales outstanding in accounts receivable, past due receivables and return on invested capital. These key measures are monitored by management and significant changes in operating results versus current trends in end markets and variances from forecasts are discussed with operating unit management.

THE ITW BUSINESS MODEL

The powerful and highly differentiated ITW Business Model is the Company's core source of value creation. This business model is the Company's competitive advantage and defines how ITW creates value for its shareholders and comprises three unique elements:

- ITW's **80/20 management process** is the operating system that is applied in every ITW business. Initially introduced as a manufacturing efficiency tool in the 1980s, ITW has continually refined, improved and expanded 80/20 into a proprietary, holistic business management process that generates significant value for the Company and its customers. Through the application of data-driven insights generated by 80/20 practice, ITW focuses on its largest and best opportunities (the "80") and eliminates cost, complexity and distractions associated with the less profitable opportunities (the "20"). 80/20 enables ITW businesses to consistently achieve world-class operational excellence in product availability, quality, and innovation, while generating superior financial performance;
- **Customer-back innovation** has fueled decades of profitable growth at ITW. The Company's unique innovation approach is built on insight gathered from the 80/20 management process. Working from the customer back, ITW businesses position themselves as the go-to problem solver for their "80" customers. ITW's innovation efforts are focused on understanding customer needs, particularly those in "80" markets with solid long-term growth fundamentals, and subsequently creating unique solutions to address those needs. These customer insights and learnings drive innovation at ITW and have contributed to a portfolio of more than 17,000 granted and pending patents;
- ITW's **decentralized, entrepreneurial culture** allows ITW businesses to be fast, focused, and responsive. ITW businesses have significant flexibility within the framework of the ITW Business Model to customize their approach in order to best serve their specific customers' needs. ITW colleagues recognize their unique responsibilities to execute the Company's strategy and values. As a result, the Company maintains a focused and simple organizational structure that, combined with outstanding execution, delivers best-in-class services adapted to each business' customers and end markets.

ENTERPRISE STRATEGY

In late 2012, ITW began the process of transitioning the Company onto its current strategic path to fully leverage the compelling performance potential of the ITW Business Model. Since then, ITW has made considerable progress, as evidenced by the Company's strong financial performance over the past four years.

The roots of ITW's Enterprise Strategy began in late 2011 / early 2012, when the Company undertook a complete review of its performance. Focusing on its businesses delivering consistent above-market growth with best-in-class margins and returns, ITW developed a strategy to replicate that performance across its operations.

Based on this rigorous evaluation, ITW determined that solid and consistent above-market organic growth must be the core growth engine to deliver world-class financial performance and compelling long-term returns for its shareholders. To shift its primary growth engine to organic, the Company began executing a multi-step approach.

- The first step was to narrow the focus and improve the quality of ITW's business portfolio. As part of the **Portfolio Management** initiative, ITW exited businesses that were operating in commoditized market spaces and prioritized sustainable differentiation as a must-have requirement for all ITW businesses. This process included both divesting entire businesses and exiting commoditized product lines and customers inside otherwise highly differentiated ITW divisions.

As a result of this work, ITW's business portfolio now has significantly higher organic growth potential. ITW segments and divisions now possess attractive and differentiated product lines and end markets as they continue to improve operating margins and generate price/cost increases. The Company achieved this through product line simplification, or eliminating the complexity and overhead costs associated with smaller product lines and customers, while supporting and growing the businesses' largest / most profitable customers and product lines. With the initiative nearly complete and ITW businesses demonstrating notably improved financial performance, the Company believes that the significant product line simplification work is essentially finalized and will return to more normalized levels in 2017 and beyond.

- Step two, **Business Structure Simplification**, was implemented to simplify and scale-up ITW's operating structure to support increased engineering, marketing, and sales resources, and, at the same time, improve global reach and competitiveness, all of which were critical to driving accelerated organic growth. ITW now has 85 scaled-up divisions with significantly enhanced focus on growth investments, core customers and products, and customer-back innovation.
- The **Strategic Sourcing** initiative was established as a core capability to better leverage ITW's scale and improve global competitiveness. Sourcing is now a core strategic and operational capability at ITW. The Company's 80/20-enabled sourcing organization has delivered an average of one percent reduction in spend each year from 2013 through 2016 and is on track to do the same in 2017 and 2018.
- With the portfolio realignment and scale-up work largely complete, the Company was able to **shift its focus to preparing for and accelerating, organic growth**. As a preparatory step, ITW is in the process of reapplying 80/20 to optimize its newly scaled-up divisions for growth, first, to build a foundation of operational excellence, and second, to identify the best opportunities to drive organic growth.

Once the business has achieved operational excellence and identified the right growth opportunities, the final step is to accelerate organic growth. The process of preparing for accelerated organic growth generally takes 18 to 24 months.

Based on the financial performance of the divisions that are further along in this process, the Company believes that its organic growth framework is capable of delivering above-market organic growth across all segments. Divisions are at various phases in preparation for growth and many are either ready to grow or already growing above their respective markets. ITW management is fully aligned with this plan and very focused on executing it. As of December 31, 2016, approximately 85 percent of the divisions were ready to grow.

PATH TO FULL POTENTIAL

While the Company has made considerable progress and ITW's performance is nearing best-in-class levels, the Company has significant opportunity for further improvement before it achieves full operating potential. In order to do so, ITW is focused on two key areas of opportunity, including: additional structural margin improvement and sustained above-market organic growth with strong incremental profitability.

Additional Structural Margin Improvement

To deliver on the additional structural margin improvement, the Company is implementing the following two levers: (1) further leveraging the 80/20 management process and (2) strategic sourcing.

- The first lever, better leveraging the full power of the ITW Business Model, will be accomplished through a much more consistent and focused approach to 80/20 best practice implementation across the Company. The 80/20 management system has continuously been refined, improved and expanded into a unique holistic business management process of interconnected tools, which improves all aspects of the business and, when applied

consistently and executed more effectively, will lead to additional margin improvement. ITW has clearly demonstrated superior 80/20 management, resulting in meaningful incremental improvement in margins and returns as evidenced by the Company's operating margin and after-tax return on invested capital. These 80/20 initiatives can also result in restructuring initiatives that reduce costs and improve profitability and returns.

- The second lever, strategic sourcing, is a core element of ITW's ongoing operational strategy and a sustainable enterprise-wide capability. Through the continued execution of this initiative, the Company expects to deliver additional margin improvement with the goal of a one percent reduction in spend in 2017 and 2018.

Sustained Above-Market Organic Growth with Strong Incremental Profitability

ITW has done extensive work on its portfolio and operating structure to position the Company to deliver sustainable above-market organic growth. The Company has narrowed the focus and significantly improved the growth potential of ITW's business portfolio. With approximately 85% of its divisions ready to grow as of the end of 2016, ITW is well positioned for accelerated growth in 2017 and beyond. To deliver on this accelerated growth, the divisions have been implementing the organic growth framework, which includes continued investment in customer-back innovation and a strengthened focus on market penetration. ITW continues to focus on growing its share of "80" products with existing customers with whom the Company has a resonant value proposition as well as target potential new customers with similar pain points to existing customers. ITW has made strong progress on the Company's pivot to organic growth and is well positioned to deliver on sustained above-market organic growth over the long-term.

TERMS USED BY ITW

Management uses the following terms to describe the financial results of operations of the Company:

- **Organic business** - acquired businesses that have been included in the Company's results of operations for more than 12 months on a constant currency basis.
- **Operating leverage** - the estimated effect of the organic revenue volume changes on organic operating income, assuming variable margins remain the same as the prior period.
- **Price/cost** - represents the estimated net impact of increases or decreases in the cost of materials used in the Company's products versus changes in the selling price to the Company's customers.
- **Product line simplification (PLS)** - focuses businesses on eliminating the complexity and overhead costs associated with smaller product lines and customers, and focuses businesses on supporting and growing their largest customers and product lines; in the short-term, PLS may result in a decrease in revenue and overhead costs while improving operating margin. In the long-term, PLS is expected to result in growth in revenue, profitability, and returns.

Unless otherwise stated, the changes in financial results in the consolidated results of operations and the results of operations by segment represent the current year period versus the comparable period in the prior year. The following discussion of operating results should be read in conjunction with Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's 2016 Annual Report on Form 10-K.

CONSOLIDATED RESULTS OF OPERATIONS

The Company's strong second quarter and year-to-date financial performance reflected continued progress leveraging the powerful and highly differentiated ITW Business Model and executing enterprise initiatives. Six of seven segments achieved worldwide organic revenue growth in the second quarter and all seven segments had organic revenue growth in the year-to-date period. All seven segments had operating margin at or above 21% in both respective periods.

On July 1, 2016, the Company completed the acquisition of the Engineered Fasteners and Components business ("EF&C") from ZF TRW for a purchase price of approximately \$450 million. In 2017, EF&C had operating revenue of \$128 million in the second quarter and \$256 million in the year-to-date period. EF&C diluted the Company's operating margin by 60 basis points in both the second quarter and year-to-date periods due to lower operating margin and acquisition related expenses. The Company expects EF&C's operating margin to improve in later years through the application of the Company's 80/20 business management process. The operating results of EF&C are reported within the Company's Automotive OEM segment. The acquisition of EF&C did not materially affect the Company's results of operations or financial position for any period presented. Refer to Note 2. Acquisition in Item 1 - Financial Statements for further information.

The Company's consolidated results of operations for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)						
	June 30,									
	2017	2016	Inc (Dec)	Organic	Acq/Div	Restructuring	Impairment	Foreign Currency	Total	
Operating revenue	\$ 3,599	\$ 3,431	4.9%	2.6%	3.5%	—%	—%	(1.2)%	4.9%	
Operating income	\$ 874	\$ 792	10.4%	10.0%	1.1%	0.8%	—%	(1.5)%	10.4%	
Operating margin %	24.3%	23.1%	120 bps	160 bps	(60) bps	20 bps	—	—	120 bps	

Dollars in millions	Six Months Ended			Components of Increase (Decrease)						
	June 30,									
	2017	2016	Inc (Dec)	Organic	Acq/Div	Restructuring	Impairment	Foreign Currency	Total	
Operating revenue	\$ 7,070	\$ 6,705	5.4%	3.0%	3.6%	—%	—%	(1.2)%	5.4%	
Operating income	\$ 1,683	\$ 1,514	11.2%	10.9%	1.4%	0.2%	0.2%	(1.5)%	11.2%	
Operating margin %	23.8%	22.6%	120 bps	170 bps	(60) bps	—	10 bps	—	120 bps	

- Operating revenue grew in the second quarter and year-to-date periods due to an increase in organic and acquisition revenues, partially offset by the unfavorable effect of foreign currency translation.
- Organic revenue grew 2.6% and 3.0% in the second quarter and year-to-date periods, respectively. Six of seven segments achieved worldwide organic revenue growth in the second quarter and all seven segments had organic revenue growth in the year-to-date period. In the second quarter, Polymers & Fluids declined 1.0% primarily due to lower demand in North America.
 - North American organic revenue increased 1.4% in both the second quarter and year-to-date periods. Growth in five segments was partially offset by a decline in the Polymers & Fluids and Food Equipment segments in the second quarter, and a decline in the Polymers & Fluids and Specialty Products segments in the year-to-date period.
 - Europe, Middle East and Africa organic revenue increased 3.4% in the second quarter as growth in five segments was partially offset by a decline in the Welding and Polymers & Fluids segments. Organic revenue increased 4.4% in the year-to-date period as growth in six segments was partially offset by a decline in the Welding segment.
 - Asia Pacific organic revenue increased 6.2% in the second quarter as growth in five segments was partially offset by a decline in the Polymers & Fluids and Welding segments. In the year-to-date period, organic revenue grew 7.3% due to growth in the Automotive OEM, Test & Measurement and Electronics, Specialty Products and Construction Products segments, partially offset by a decline in the Polymers & Fluids, Welding and Food Equipment segments.
- In the second quarter of 2017, the Company entered into a confidential settlement agreement to resolve a litigation matter. Based on the terms of the agreement, the Company expects to receive a total of \$95 million within 120 days of the execution of the agreement. The receipt of the settlement is primarily expected to have a favorable impact on the third quarter 2017 results. In the second quarter of 2017, the Company recorded a \$15 million gain related to this matter which is included in operating income.
- Operating margin was 24.3% in the second quarter. The increase of 120 basis points was primarily driven by the benefits of the Company's enterprise initiatives of 100 basis points. In addition, positive operating leverage of 50 basis points, favorability from the confidential legal settlement of 40 basis points, lower restructuring expenses and improved overhead efficiencies were partially offset by the dilutive impact of 60 basis points from the EF&C acquisition and unfavorable price/cost of 50 basis points.
- In the year-to-date period, operating margin of 23.8% increased 120 basis points primarily driven by the benefits of the Company's enterprise initiatives of 110 basis points. In addition, positive operating leverage of 60 basis points, improved overhead efficiencies and favorability from the confidential legal settlement were partially offset by the dilutive impact of 60 basis points from the EF&C acquisition and unfavorable price/cost of 40 basis points.
- Diluted earnings per share (EPS) of \$1.69 for the second quarter and \$3.23 for the year-to-date period increased 15.8% and 17.5%, respectively. The favorable effect of the confidential legal settlement increased second quarter and year-to-date EPS by \$0.03 in each respective period.

- Free cash flow was \$387 million and \$786 million for the second quarter and year-to-date periods, respectively. Free cash flow was lower in the second quarter primarily due to an additional discretionary pension contribution of \$115 million. Free cash flow was lower in the year-to-date period primarily due to \$160 million of discretionary pension contributions as compared to the prior year period. Refer to the Cash Flow section of Liquidity and Capital Resources for a reconciliation of this non-GAAP measure.
- The Company repurchased approximately 1.8 million and 3.8 million shares of its common stock in the second quarter and year-to-date periods, respectively, for approximately \$250 million and \$500 million, respectively.
- Total cash dividends of \$224 million and \$450 million were paid in the second quarter and year-to-date periods of 2017, respectively.
- Adjusted after-tax return on average invested capital was 24.8% for the second quarter and 24.3% for the year-to-date period, an increase of 190 basis points and 220 basis points, respectively. Refer to the Adjusted After-Tax Return on Average Invested Capital section of Liquidity and Capital Resources for a reconciliation of this non-GAAP measure.

RESULTS OF OPERATIONS BY SEGMENT

Total operating revenue and operating income for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended June 30,				Six Months Ended June 30,			
	Operating Revenue		Operating Income		Operating Revenue		Operating Income	
	2017	2016	2017	2016	2017	2016	2017	2016
Automotive OEM	\$ 820	\$ 670	\$ 182	\$ 173	\$ 1,648	\$ 1,326	\$ 384	\$ 346
Food Equipment	529	535	139	134	1,026	1,034	264	256
Test & Measurement and Electronics	519	507	114	94	999	971	210	166
Welding	385	375	105	94	772	764	212	187
Polymers & Fluids	437	443	94	93	863	861	182	177
Construction Products	425	424	102	103	820	808	191	184
Specialty Products	490	484	139	126	953	952	263	248
Intersegment revenues	(6)	(7)	—	—	(11)	(11)	—	—
Unallocated	—	—	(1)	(25)	—	—	(23)	(50)
Total	\$ 3,599	\$ 3,431	\$ 874	\$ 792	\$ 7,070	\$ 6,705	\$ 1,683	\$ 1,514

Segments are allocated a fixed overhead charge based on the segment's revenue. Expenses not charged to the segments are reported separately as Unallocated. Because the Unallocated category includes a variety of items, it is subject to fluctuations on a quarterly and annual basis. Unallocated expenses are lower in 2017 as compared to 2016 primarily due to the previously discussed confidential legal settlement.

AUTOMOTIVE OEM

This segment is a global, niche supplier to top tier OEMs, providing unique innovation to address pain points for sophisticated customers with complex problems. Businesses in this segment produce components and fasteners for automotive-related applications. This segment primarily serves the automotive original equipment manufacturers and tiers market. Products in this segment include:

- plastic and metal components, fasteners and assemblies for automobiles, light trucks and other industrial uses.

The results of operations for the Automotive OEM segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 820	\$ 670	22.2%	4.4%	19.0%	— %	(1.2)%	22.2%
Operating income	\$ 182	\$ 173	5.4%	4.4%	5.5%	(3.0)%	(1.5)%	5.4%
Operating margin %	22.3%	25.8%	(350) bps	—	(270) bps	(80) bps	—	(350) bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 1,648	\$ 1,326	24.2%	6.7%	19.2%	— %	(1.7)%	24.2%
Operating income	\$ 384	\$ 346	11.1%	8.6%	6.3%	(1.9)%	(1.9)%	11.1%
Operating margin %	23.3%	26.1%	(280) bps	40 bps	(270) bps	(50) bps	—	(280) bps

- Operating revenue increased in the second quarter and year-to-date periods due to higher organic and acquisition revenues, partially offset by the unfavorable effect of foreign currency translation.
- Organic revenue grew 4.4% and 6.7% in the second quarter and year-to-date periods, respectively, as a result of penetration gains exceeding auto builds. Worldwide auto builds were flat for the second quarter and grew 3% in the year-to-date period.
 - European organic revenue grew 7.0% and 9.4% in the second quarter and year-to-date periods, respectively. European auto builds declined 3% in the second quarter and grew 1% in the year-to-date period.
 - Asia Pacific organic revenue increased 11.6% and 14.6% in the second quarter and year-to-date periods, respectively. China organic revenue grew 17.1% and 23.0% in the second quarter and year-to-date periods, respectively, versus Chinese auto builds that declined 1% in the second quarter and grew 3% in the year-to-date period.
 - North American organic revenue grew 0.3% and 2.3% in the second quarter and year-to-date periods, respectively, as a result of penetration gains. North American auto builds declined 3% in the second quarter and 1% in the year-to-date period. Auto build growth for the Detroit 3, where the Company has higher content, declined 6% in the second quarter and 4% in the year-to-date period.
- Operating margin was 22.3% in the second quarter. The decrease of 350 basis points was primarily driven by the dilutive impact of 270 basis points from the EF&C acquisition, unfavorable price/cost of 150 basis points and higher restructuring expenses, partially offset by the net benefits from the Company's enterprise initiatives and cost management of 80 basis points and positive operating leverage of 70 basis points.
- In the year-to-date period, operating margin of 23.3% decreased 280 basis points primarily driven by the dilutive impact of 270 basis points from the EF&C acquisition, unfavorable price/cost of 110 basis points and higher restructuring expenses, partially offset by positive operating leverage of 90 basis points and the net benefits from the Company's enterprise initiatives and cost management of 60 basis points.

FOOD EQUIPMENT

This segment is a highly focused and branded industry-leader in commercial food equipment differentiated by innovation and integrated service offerings. This segment primarily serves the food institutional/restaurant, food service and food retail markets. Products in this segment include:

- warewashing equipment;
- cooking equipment, including ovens, ranges and broilers;
- refrigeration equipment, including refrigerators, freezers and prep tables;
- food processing equipment, including slicers, mixers and scales;
- kitchen exhaust, ventilation and pollution control systems; and
- food equipment service, maintenance and repair.

The results of operations for the Food Equipment segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 529	\$ 535	(1.4)%	0.6%	—%	—%	(2.0)%	(1.4)%
Operating income	\$ 139	\$ 134	4.3 %	4.7%	—%	1.6%	(2.0)%	4.3 %
Operating margin %	26.4%	25.0%	140 bps	100 bps	—	40 bps	—	140 bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 1,026	\$ 1,034	(0.9)%	1.3%	—%	—%	(2.2)%	(0.9)%
Operating income	\$ 264	\$ 256	3.2 %	3.8%	—%	1.6%	(2.2)%	3.2 %
Operating margin %	25.8%	24.8%	100 bps	60 bps	—	40 bps	—	100 bps

- Operating revenue decreased in the second quarter and year-to-date periods due to the unfavorable effect of foreign currency translation, partially offset by organic revenue growth.
- Organic revenue increased 0.6% in the second quarter as equipment and service organic revenue grew 0.4% and 0.9%, respectively. In the year-to-date period, organic revenue increased 1.3% as equipment and service organic revenue increased 1.4% and 0.8%, respectively.
 - North American organic revenue declined 0.7% in the second quarter. Equipment organic revenue, which had a challenging comparable in the prior year second quarter of 9.0% growth, decreased 1.7% primarily due to lower demand in the cooking and warewash end markets. Service organic revenue grew 0.7%. In the year-to-date period, North American organic revenue grew 0.2%. Equipment organic revenue, which had a challenging comparable in the prior year period of 7.2% growth, increased 0.2% primarily due to higher demand in the institutional end market, partially offset by lower demand in the restaurant end market. Service organic revenue was flat.
 - International organic revenue increased 2.5% and 2.8% in the second quarter and year-to-date periods, respectively. Equipment organic revenue grew 3.1% and 3.0% in the second quarter and year-to-date periods, respectively, primarily due to higher demand in the European refrigeration and warewash end markets. Service organic revenue increased 1.3% and 2.2% in the second quarter and year-to-date periods, respectively.
- Operating margin of 26.4% in the second quarter increased 140 basis points primarily due to the benefits of the Company's enterprise initiatives of 100 basis points, lower restructuring expenses, favorable price/cost of 30 basis points and positive operating leverage of 10 basis points, partially offset by product mix of 40 basis points.
- In the year-to-date period, operating margin of 25.8% increased 100 basis points primarily due to the benefits of the Company's enterprise initiatives of 100 basis points, lower restructuring expenses, favorable price/cost of 30 basis points and positive operating leverage of 20 basis points, partially offset by product mix of 90 basis points.

TEST & MEASUREMENT AND ELECTRONICS

This segment is a branded and innovative producer of test and measurement and electronic manufacturing and maintenance, repair, and operations, or "MRO" solutions that improve efficiency and quality for customers in diverse end markets. Businesses in this segment produce equipment, consumables, and related software for testing and measuring of materials and structures, as well as equipment and consumables used in the production of electronic subassemblies and microelectronics. This segment primarily serves the electronics, general industrial, industrial capital goods, automotive original equipment manufacturers and tiers, and consumer durables markets. Products in this segment include:

- equipment, consumables, and related software for testing and measuring of materials, structures, gases and fluids;
- electronic assembly equipment and related consumable solder materials;
- electronic components and component packaging;
- static control equipment and consumables used for contamination control in clean room environments; and

- pressure sensitive adhesives and components for telecommunications, electronics, medical and transportation applications.

The results of operations for the Test & Measurement and Electronics segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 519	\$ 507	2.5%	4.3%	—%	—%	(1.8)%	2.5%
Operating income	\$ 114	\$ 94	20.9%	22.3%	—%	0.8%	(2.2)%	20.9%
Operating margin %	21.9%	18.6%	330 bps	320 bps	—	10 bps	—	330 bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 999	\$ 971	2.9%	4.9%	—%	—%	(2.0)%	2.9%
Operating income	\$ 210	\$ 166	26.6%	28.5%	—%	0.3%	(2.2)%	26.6%
Operating margin %	21.0%	17.1%	390 bps	390 bps	—	—	—	390 bps

- Operating revenue increased in the second quarter and year-to-date periods due to organic revenue growth, partially offset by the unfavorable effect of foreign currency translation.
- Organic revenue increased 4.3% and 4.9% in the second quarter and year-to-date periods, respectively.
 - Organic revenue for the test and measurement businesses increased 5.7% and 5.6% in the second quarter and year-to-date periods, respectively, primarily due to higher semi-conductor end market demand across all major regions. Instron, where demand is more closely tied to the capital spending environment, had organic revenue growth of 4.0% and 4.5% in the second quarter and year-to-date periods, respectively.
 - Electronics organic revenue increased 3.0% and 4.2% in the second quarter and year-to-date periods, respectively, primarily due to higher demand in the semi-conductor end market. The electronics assembly businesses grew 4.4% and 5.0% in the second quarter and year-to-date periods, respectively. The other electronics businesses grew 2.1% and 3.7% in the second quarter and year-to-date periods, respectively.
- Operating margin was 21.9% in the second quarter. The increase of 330 basis points was primarily due to the net benefits resulting from the Company's enterprise initiatives and cost management of 140 basis points, positive operating leverage of 120 basis points and favorable price/cost of 20 basis points.
- In the year-to-date period, operating margin of 21.0% increased 390 basis points primarily driven by the net benefits resulting from the Company's enterprise initiatives and cost management of 170 basis points, positive operating leverage of 140 basis points and favorable price/cost of 20 basis points.

WELDING

This segment is a branded value-added equipment and specialty consumable manufacturer with innovative and leading technology. Businesses in this segment produce arc welding equipment, consumables and accessories for a wide array of industrial and commercial applications. This segment primarily serves the general industrial market, which includes fabrication, shipbuilding and other general industrial markets, and energy, MRO, construction, and industrial capital goods markets. Products in this segment include:

- arc welding equipment;
- metal arc welding consumables and related accessories; and
- metal jacketing and other insulation products.

The results of operations for the Welding segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Restructuring	Impairment	Foreign Currency	Total
Operating revenue	\$ 385	\$ 375	2.9%	3.3%	—%	—%	(0.4)%	2.9%
Operating income	\$ 105	\$ 94	12.4%	6.4%	6.2%	—%	(0.2)%	12.4%
Operating margin %	27.2%	24.9%	230 bps	70 bps	150 bps	—	10 bps	230 bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Restructuring	Impairment	Foreign Currency	Total
Operating revenue	\$ 772	\$ 764	1.1%	1.5%	—%	—%	(0.4)%	1.1%
Operating income	\$ 212	\$ 187	13.6%	7.5%	4.6%	1.6%	(0.1)%	13.6%
Operating margin %	27.4%	24.4%	300 bps	150 bps	110 bps	40 bps	—	300 bps

- Operating revenue increased in the second quarter and year-to-date periods due to higher organic revenue, partially offset by the unfavorable effect of foreign currency translation.
- Organic revenue grew 3.3% in the second quarter driven by growth in equipment of 7.0%, partially offset by a decline in consumables of 1.5%. In the year-to-date period, organic revenue increased 1.5% as equipment grew 3.7%, partially offset by a decrease of 1.4% in consumables. In both respective periods, organic revenue grew in the industrial end markets related to transportation and heavy equipment for agriculture, infrastructure and mining and in the commercial end markets related to construction, light fabrication and farm and ranch customers.
 - North American organic revenue increased 4.9% in the second quarter primarily driven by approximately 5% growth in both the industrial and commercial end markets. North American organic revenue grew 3.3% in the year-to-date period primarily due to 2.2% and 4.5% growth in the industrial and commercial end markets, respectively.
 - International organic revenue decreased 2.6% and 5.4% in the second quarter and year-to-date periods, respectively, primarily due to weaker end market demand in Europe and Asia Pacific.
- Operating margin was 27.2% in the second quarter. The increase of 230 basis points was primarily due to lower restructuring expenses of 150 basis points, the net benefits of the Company's enterprise initiatives and cost management of 60 basis points and positive operating leverage of 60 basis points, partially offset by unfavorable price/cost of 50 basis points.
- In the year-to-date period, operating margin of 27.4% increased 300 basis points primarily due to the net benefits of the Company's enterprise initiatives and cost management of 170 basis points, lower restructuring expenses of 110 basis points and positive operating leverage of 40 basis points, partially offset by unfavorable price/cost of 60 basis points. In addition, the prior year period was negatively impacted by an intangible asset impairment charge of 40 basis points.

POLYMERS & FLUIDS

This segment is a highly branded supplier to niche markets that require value-added, differentiated products. Businesses in this segment produce engineered adhesives, sealants, lubrication and cutting fluids, and fluids and polymers for auto aftermarket maintenance and appearance. This segment primarily serves the automotive aftermarket, general industrial, MRO, and construction markets. Products in this segment include:

- adhesives for industrial, construction and consumer purposes;
- chemical fluids which clean or add lubrication to machines;
- epoxy and resin-based coating products for industrial applications;
- hand wipes and cleaners for industrial applications;
- fluids, polymers and other supplies for auto aftermarket maintenance and appearance;
- fillers and putties for auto body repair; and
- polyester coatings and patch and repair products for the marine industry.

The results of operations for the Polymers & Fluids segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 437	\$ 443	(1.3)%	(1.0)%	—%	—%	(0.3)%	(1.3)%
Operating income	\$ 94	\$ 93	0.8%	2.7%	—%	(0.8)%	(1.1)%	0.8%
Operating margin %	21.4%	20.9%	50 bps	80 bps	—	(20) bps	(10) bps	50 bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 863	\$ 861	0.3%	0.2%	—%	—%	0.1%	0.3%
Operating income	\$ 182	\$ 177	2.5%	5.5%	—%	(2.0)%	(1.0)%	2.5%
Operating margin %	21.0%	20.6%	40 bps	110 bps	—	(50) bps	(20) bps	40 bps

- Operating revenue decreased in the second quarter due to lower organic revenue and the unfavorable effect of foreign currency translation. In the year-to-date period, operating revenue increased 0.3% due to organic revenue growth and the favorable effect of foreign currency translation.
- Organic revenue declined 1.0% in the second quarter primarily due to lower demand in North American end markets. In the year-to-date period, organic revenue increased 0.2% primarily due to stronger demand in Europe, partially offset by softness in Asia Pacific.
 - Organic revenue for the automotive aftermarket businesses decreased 1.8% in the second quarter primarily driven by a decrease in the car care and repair businesses in North America. In the year-to-date period, organic revenue was essentially flat as stronger demand in the car care and engine businesses in North America was offset by a decline in the body repair businesses in Asia Pacific.
 - Organic revenue for the fluids businesses grew 0.9% and 1.2% in the second quarter and year-to-date periods, respectively, primarily due to an increase in the industrial maintenance, repair, and operations end markets in Europe and North America.
 - Organic revenue for the polymers businesses decreased 1.3% and 0.6% in the second quarter and year-to-date periods, respectively, primarily driven by a decline in North America, partially offset by an increase in Europe.
- Operating margin was 21.4% in the second quarter. The increase of 50 basis points was primarily driven by the net benefits of the Company's enterprise initiatives and cost management of 120 basis points, partially offset by 20 basis points each of unfavorable operating leverage, higher restructuring expenses and unfavorable price/cost.
- In the year-to-date period, operating margin of 21.0% increased 40 basis points primarily driven by the net benefits of the Company's enterprise initiatives and cost management of 130 basis points, partially offset by higher restructuring expenses and unfavorable price/cost of 20 basis points.

CONSTRUCTION PRODUCTS

This segment is a branded supplier of innovative engineered fastening systems and solutions. This segment primarily serves the residential construction, renovation/remodel construction and commercial construction markets. Products in this segment include:

- fasteners and related fastening tools for wood and metal applications;
- anchors, fasteners and related tools for concrete applications;
- metal plate truss components and related equipment and software; and
- packaged hardware, fasteners, anchors and other products for retail.

The results of operations for the Construction Products segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 425	\$ 424	0.4 %	1.6 %	—%	—%	(1.2)%	0.4 %
Operating income	\$ 102	\$ 103	(0.9)%	(2.8)%	—%	2.8%	(0.9)%	(0.9)%
Operating margin %	24.0%	24.3%	(30) bps	(100) bps	—	70 bps	—	(30) bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 820	\$ 808	1.5%	2.2%	—%	—%	(0.7)%	1.5%
Operating income	\$ 191	\$ 184	3.9%	3.8%	—%	0.4%	(0.3)%	3.9%
Operating margin %	23.3%	22.8%	50 bps	30 bps	—	10 bps	10 bps	50 bps

- Operating revenue increased in the second quarter and year-to-date periods due to organic revenue growth, partially offset by the unfavorable effect of foreign currency translation.
- Organic revenue increased 1.6% and 2.2% in the second quarter and year-to-date periods, respectively.
 - North American organic revenue grew 3.0% in the second quarter primarily due to approximately 3% growth in both the residential and commercial end markets. North American organic revenue increased 0.6% in the year-to-date period primarily due to 0.3% and 1.2% growth in the residential and the commercial end markets, respectively.
 - International organic revenue increased 0.7% and 3.4% in the second quarter and year-to-date periods, respectively. Asia Pacific organic revenue increased 1.2% and 2.7% in the second quarter and year-to-date periods, respectively, primarily due to growth in the Australia and New Zealand retail end markets. European organic revenue, which had a challenging comparable in the prior year second quarter of 6.1% growth, increased 0.2% in the second quarter primarily due to growth in the United Kingdom. In the year-to-date period, European organic revenue grew 4.1% primarily due to growth in the United Kingdom and the Nordic countries.
- Operating margin was 24.0% in the second quarter. The decrease of 30 basis points was primarily driven by unfavorable price/cost of 120 basis points, partially offset by lower restructuring expenses and positive operating leverage of 40 basis points.
- In the year-to-date period, operating margin of 23.3% increased 50 basis points primarily driven by the net benefits of the Company's enterprise initiatives and cost management and positive operating leverage of 50 basis points, partially offset by unfavorable price/cost of 80 basis points.

SPECIALTY PRODUCTS

This segment is focused on diversified niche market opportunities that deliver strong operating results with substantial patent protection producing beverage packaging equipment and consumables, product coding and marking equipment and consumables, and appliance components and fasteners. This segment primarily serves the food and beverage, consumer durables, general industrial, printing and publishing and industrial capital goods markets. Products in this segment include:

- line integration, conveyor systems and line automation for the food and beverage industries;
- plastic consumables that multi-pack cans and bottles and related equipment;
- foil, film and related equipment used to decorate consumer products;
- product coding and marking equipment and related consumables;
- plastic and metal fasteners and components for appliances;
- airport ground support equipment; and
- components for medical devices.

The results of operations for the Specialty Products segment for the second quarter and year-to-date periods were as follows:

Dollars in millions	Three Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 490	\$ 484	1.1%	3.9%	(1.4)%	—%	(1.4)%	1.1%
Operating income	\$ 139	\$ 126	9.8%	11.2%	(0.5)%	0.4%	(1.3)%	9.8%
Operating margin %	28.3%	26.0%	230 bps	180 bps	30 bps	20 bps	—	230 bps

Dollars in millions	Six Months Ended			Components of Increase (Decrease)				
	June 30,							
	2017	2016	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	\$ 953	\$ 952	—%	2.4%	(1.1)%	—%	(1.3)%	—%
Operating income	\$ 263	\$ 248	5.9%	8.0%	0.1%	(0.8)%	(1.4)%	5.9%
Operating margin %	27.6%	26.0%	160 bps	150 bps	30 bps	(20) bps	—	160 bps

- Operating revenue increased in the second quarter due to organic revenue growth, partially offset by a divestiture and the unfavorable effect of foreign currency translation. For the year-to-date period, operating revenue was flat as organic revenue growth was offset by a divestiture and the unfavorable effect of foreign currency translation.
- Organic revenue increased 3.9% and 2.4% for the second quarter and year-to-date periods, respectively, primarily driven by strong growth in the consumer packaging businesses of 5.0% and 3.0% in each respective period. Consumable sales increased 5.1% and 4.6% in the second quarter and year-to-date periods, respectively. Equipment sales declined 0.5% and 5.9% in the second quarter and year-to-date periods, respectively.
 - North American organic revenue increased 1.0% in the second quarter primarily due to an increase in the consumer packaging, medical devices and appliance businesses, partially offset by lower demand for capital equipment. In the year-to-date period, organic revenue declined 0.7% primarily due to a decrease in the equipment businesses, partially offset by growth in the consumer packaging, medical devices and appliance businesses.
 - International organic revenue increased 8.9% and 8.1% in the second quarter and year-to-date periods, respectively, primarily driven by growth in the consumable businesses in Europe and Asia Pacific.
- Operating margin was 28.3% for the second quarter. The increase of 230 basis points was primarily driven by the net benefits of the Company's enterprise initiatives and cost management of 100 basis points, positive operating leverage of 80 basis points, the impact of a divestiture and lower restructuring expenses, partially offset by unfavorable price/cost of 20 basis points.
- In the year-to-date period, operating margin of 27.6% increased 160 basis points primarily driven by the net benefits of the Company's enterprise initiatives and cost management of 120 basis points, positive operating leverage of 60 basis points and the impact of a divestiture, partially offset by unfavorable price/cost of 40 basis points and higher restructuring expenses.

OTHER FINANCIAL HIGHLIGHTS

- Interest expense of \$65 million and \$129 million in the second quarter and year-to-date periods, respectively, increased from \$58 million and \$116 million in 2016, primarily due to the debt issuance in the fourth quarter of 2016.
- Other income (expense) was income of \$10 million in the second quarter of 2017 and \$14 million in the year-to-date period, a decrease of \$7 million in each respective period primarily driven by foreign currency translation losses.
- The effective tax rate for the second quarter and year-to-date periods of 2017 was 28.4% compared to 30.0% in both respective periods of 2016. Included in the effective tax rate for 2017 was a discrete income tax benefit of \$13 million in the second quarter and \$26 million in the year-to-date period related to the adoption of the new stock-based compensation guidance. Excluding this discrete tax benefit, the Company's effective tax rate for the second quarter and year-to-date periods of 2017 would have been 30.0%. Refer to Note 1. Significant Accounting Policies in Item 1 - Financial Statements for further information.

NEW ACCOUNTING PRONOUNCEMENTS

In May 2014, the Financial Accounting Standards Board (the "FASB") issued authoritative guidance to change the criteria for revenue recognition. The core principle of the new standard is that revenue should be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, several new revenue recognition disclosures will be required. Under current guidance, the Company generally recognizes operating revenue when ownership and risk of loss are transferred to the customer, which is typically at the time of product shipment or delivery of service. While the Company continues to assess the potential impact of the new guidance, we do not currently expect that the adoption of this guidance will have a material impact on our operating revenue, results of operations or financial position. However, the Company expects to provide additional disclosures in the notes to financial statements required under the new guidance. The new guidance will be effective for the Company beginning January 1, 2018 and allows for either full or modified retrospective adoption methods. The Company expects to adopt the new revenue accounting guidance utilizing the modified retrospective method.

In February 2016, the FASB issued authoritative guidance to change the criteria for recognizing leasing transactions. Under the new guidance, a lessee will be required to recognize a lease liability and lease asset for all leases with a lease term greater than twelve months in the statement of financial position, including operating leases. Subsequent measurement, including presentation of expenses and cash flows, will depend on the classification of the lease as either a financing or operating lease. In addition, several new disclosures will be required. This guidance will be effective for the Company beginning January 1, 2019, with early adoption permitted. While the Company has not yet completed its evaluation of the impact the new lease accounting guidance will have on the consolidated financial statements and related disclosures, the Company expects to recognize right of use assets and liabilities for its operating leases in the statement of financial position upon adoption.

In March 2016, the FASB issued authoritative guidance that included several changes to simplify the accounting for stock-based compensation, including the accounting for income taxes, forfeitures, statutory tax withholding requirements and classification of tax benefits in the statement of cash flows. Among the more significant changes, the new guidance requires the income tax effects associated with the settlement of stock-based awards to be recognized through income tax expense rather than directly in equity. Additionally, the income tax effects related to excess tax benefits should be presented within operating cash flows in the statement of cash flows rather than as a financing activity. Excess tax benefits recognized in equity under the prior guidance were \$19 million for the six months ended June 30, 2016. The Company adopted the new guidance effective January 1, 2017 and applied the newly adopted provisions prospectively. Excess tax benefits of \$13 million and \$26 million were included in Income Taxes in the statement of income for the three and six month periods ended June 30, 2017, respectively. The expected effect on income tax expense or net cash provided from operating activities related to future stock-based award settlements will vary each quarter and will depend on inputs such as the stock price at the time of settlement and the number of awards settled in the period presented.

In October 2016, the FASB issued authoritative guidance requiring the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs rather than when transferred to a third party as required under the current guidance. The new guidance is effective for the Company beginning January 1, 2018. The Company is currently assessing the potential impact the new guidance will have upon adoption.

In March 2017, the FASB issued authoritative guidance which changes the income statement presentation of the components of net periodic benefit cost related to defined benefit pension and other postretirement plans. The primary change under the new guidance is that only the service cost component of net periodic benefit cost should be included in operating income and is eligible for capitalization as an asset. The other components of net periodic benefit cost, such as interest cost, the expected return on assets, and amortization of actuarial gains and losses and prior service cost, should be presented below operating income. The guidance is effective for the Company starting January 1, 2018 and will be applied retrospectively to the presentation of net periodic benefit cost and prospectively to the capitalization of service cost. The Company does not expect the adoption of this guidance to have a material impact on the results of operations or financial position.

LIQUIDITY AND CAPITAL RESOURCES

The Company's primary sources of liquidity are free cash flow and short-term credit facilities. In addition, the Company had \$2.5 billion of cash on hand at June 30, 2017 and also maintains strong access to public debt markets. Management believes that these sources are sufficient to service debt and to finance the Company's capital allocation priorities, which include:

- internal investments to support organic growth and sustain core businesses;
- payment of an attractive dividend to shareholders; and

- external investments in selective strategic acquisitions that support the Company's organic growth focus, and an active share repurchase program.

The Company believes that, based on its revenue, operating margin, current free cash flow, and credit ratings, it could readily obtain additional financing if necessary.

Cash Flow

The Company uses free cash flow to measure cash flow generated by operations that is available for dividends, share repurchases, acquisitions and debt repayment. The Company believes this non-GAAP financial measure is useful to investors in evaluating the Company's financial performance and measures the Company's ability to generate cash internally to fund Company initiatives. Free cash flow represents net cash provided by operating activities less additions to plant and equipment. Free cash flow is a measurement that is not the same as net cash flow from operating activities per the statement of cash flows and may not be consistent with similarly titled measures used by other companies. Summarized cash flow information for the second quarter and year-to-date periods of 2017 and 2016 was as follows:

In millions	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2017	2016	2017	2016
Net cash provided by operating activities	\$ 464	\$ 535	\$ 927	\$ 1,014
Additions to plant and equipment	(77)	(64)	(141)	(121)
Free cash flow	\$ 387	\$ 471	\$ 786	\$ 893
Cash dividends paid	\$ (224)	\$ (198)	\$ (450)	\$ (398)
Repurchases of common stock	(250)	(520)	(500)	(1,000)
Acquisition of businesses (excluding cash and equivalents) and additional interest in affiliates	—	—	(3)	(2)
Net proceeds from (repayments of) debt with original maturities of three months or less	20	214	691	(311)
Repayments of debt with original maturities of more than three months	—	—	(652)	(1)
Other	37	22	54	74
Effect of exchange rate changes on cash and equivalents	33	(82)	98	10
Net increase (decrease) in cash and equivalents	\$ 3	\$ (93)	\$ 24	\$ (735)

Free cash flow for the three months ended June 30, 2017 was lower primarily due to an additional \$115 million discretionary pension contribution made in the second quarter of 2017. Free cash flow for the six months ended June 30, 2017 was lower primarily due to \$160 million of discretionary pension contributions as compared to the prior year period.

Stock Repurchase Program

On February 13, 2015, the Company's Board of Directors authorized a stock repurchase program which provides for the buyback of up to \$6.0 billion of the Company's common stock over an open-ended period of time (the "2015 Program"). Under the 2015 Program, the Company repurchased approximately 5.3 million shares of its common stock at an average price of \$94.07 in the first quarter of 2016, approximately 4.8 million shares of its common stock at an average price of \$104.54 in the second quarter of 2016, approximately 4.3 million shares of its common stock at an average price of \$116.27 in the third quarter of 2016, approximately 4.3 million shares of its common stock at an average price of \$117.29 in the fourth quarter of 2016, approximately 1.9 million shares of its common stock at an average price of \$128.47 in the first quarter of 2017, and approximately 1.8 million shares of its common stock at an average price of \$136.81 in the second quarter of 2017. As of June 30, 2017, there were approximately \$2.9 billion of authorized repurchases remaining under the 2015 Program.

Adjusted After-Tax Return on Average Invested Capital

The Company uses adjusted after-tax return on average invested capital ("ROIC") to measure the effectiveness of its operations' use of invested capital to generate profits. ROIC is a non-GAAP financial measure that the Company believes is a meaningful metric to investors in evaluating the Company's financial performance and may be different than the method used by other companies to calculate ROIC. Adjusted average invested capital represents the net assets of the Company, excluding cash and equivalents and outstanding debt, which are excluded as they do not represent capital investment in the Company's operations, as well as the Company's equity investment in the Wilsonart business (formerly the Decorative Surfaces segment). Average invested capital is calculated using balances at the start of the period and at the end of each quarter. ROIC for the second quarter and year-to-date periods of 2017 and 2016 was as follows:

Dollars in millions	Three Months Ended June 30,		Six Months Ended June 30,	
	2017	2016	2017	2016
Operating income	\$ 874	\$ 792	\$ 1,683	\$ 1,514
Tax rate	28.4%	30.0%	28.4%	30.0%
Income taxes	(248)	(238)	(477)	(454)
Operating income after taxes	\$ 626	\$ 554	\$ 1,206	\$ 1,060
Invested capital:				
Trade receivables	\$ 2,629	\$ 2,413	\$ 2,629	\$ 2,413
Inventories	1,199	1,145	1,199	1,145
Net plant and equipment	1,726	1,580	1,726	1,580
Goodwill and intangible assets	6,041	5,907	6,041	5,907
Accounts payable and accrued expenses	(1,754)	(1,635)	(1,754)	(1,635)
Other, net	488	349	488	349
Total invested capital	\$ 10,329	\$ 9,759	\$ 10,329	\$ 9,759
Average invested capital	\$ 10,105	\$ 9,768	\$ 9,942	\$ 9,698
Adjustment for Wilsonart (formerly the Decorative Surfaces segment)	—	(112)	—	(112)
Adjusted average invested capital	\$ 10,105	\$ 9,656	\$ 9,942	\$ 9,586
Adjusted return on average invested capital	24.8%	22.9%	24.3%	22.1%

ROIC increased 190 basis points for the three month period ended June 30, 2017 compared to the prior period as a result of a 13.0% improvement in after-tax operating income versus a 4.7% increase in adjusted average invested capital. Additionally, ROIC increased 220 basis points for the six month period ended June 30, 2017 compared to the prior year period as a result of a 13.8% improvement in after-tax operating income versus a 3.7% increase in adjusted average invested capital.

The discrete tax benefits related to share-based compensation of \$13 million and \$26 million for the three and six month periods ended June 30, 2017, respectively, improved after-tax ROIC by approximately 60 basis points in both periods.

Working Capital

Management uses working capital as a measurement of the short-term liquidity of the Company. Net working capital as of June 30, 2017 and December 31, 2016 is summarized as follows:

In millions	June 30, 2017	December 31, 2016	Increase/ (Decrease)
Current assets:			
Cash and equivalents	\$ 2,496	\$ 2,472	\$ 24
Trade receivables	2,629	2,357	272
Inventories	1,199	1,076	123
Other	246	218	28
Total current assets	6,570	6,123	447
Current liabilities:			
Short-term debt	691	652	39
Accounts payable and accrued expenses	1,754	1,713	41
Other	381	395	(14)
Total current liabilities	2,826	2,760	66
Net working capital	\$ 3,744	\$ 3,363	\$ 381

Cash and equivalents totaled approximately \$2.5 billion as of June 30, 2017 and December 31, 2016, primarily all of which was held by international subsidiaries. Cash and equivalents held internationally may be subject to U.S. income taxes and foreign withholding taxes if repatriated to the U.S. Cash and equivalents balances held internationally are typically used for international operating needs, reinvested to fund expansion of existing international businesses, used to fund new international acquisitions, or used to repay debt held internationally. In the U.S., the Company utilizes cash flows from domestic operations to fund domestic cash needs, which primarily consist of dividend payments, share repurchases, acquisitions, servicing of domestic debt obligations and general corporate needs. The Company also uses its commercial paper program, which is backed by long-term credit facilities, for short-term liquidity needs. The Company believes cash generated domestically and liquidity provided by the Company's commercial paper program will continue to be sufficient to fund cash requirements in the U.S.

Debt

Total debt as of June 30, 2017 and December 31, 2016 was as follows:

In millions	June 30, 2017	December 31, 2016
Short-term debt	\$ 691	\$ 652
Long-term debt	7,360	7,177
Total debt	\$ 8,051	\$ 7,829

Short-term debt as of June 30, 2017 included commercial paper of \$688 million. Short-term debt as of December 31, 2016 included \$650 million related to the 0.90% notes paid on the February 25, 2017 due date.

Total Debt to EBITDA

The Company uses the ratio of total debt to EBITDA as a measure of its ability to repay its outstanding debt obligations. The Company believes that total debt to EBITDA is a meaningful metric to investors in evaluating the Company's long term financial liquidity and may be different than the method used by other companies to calculate total debt to EBITDA. EBITDA and the ratio of total debt to EBITDA are non-GAAP financial measures. The ratio of total debt to EBITDA represents total debt divided by net income before interest expense, other income (expense), income taxes, depreciation and amortization and impairment of intangible assets on a trailing twelve month basis. Total debt to EBITDA for the trailing twelve month periods ended June 30, 2017 and December 31, 2016 was as follows:

Dollars in millions	June 30, 2017	December 31, 2016
Total debt	\$ 8,051	\$ 7,829
Net income	\$ 2,165	\$ 2,035
Add:		
Interest expense	250	237
Other income	(74)	(81)
Income taxes	892	873
Depreciation	251	246
Amortization and impairment of intangible assets	215	224
EBITDA	\$ 3,699	\$ 3,534
Total debt to EBITDA ratio	2.2	2.2

Stockholders' Equity

The changes to stockholders' equity during 2017 were as follows:

In millions	
Total stockholders' equity, December 31, 2016	\$ 4,259
Net income	1,123
Repurchases of common stock	(500)
Cash dividends declared	(448)
Foreign currency translation adjustments, net of tax	271
Stock option and restricted stock activity	53
Other	16
Total stockholders' equity, June 30, 2017	\$ 4,774

FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as "believe," "expect," "plans," "intends," "may," "strategy," "prospects," "estimate," "project," "target," "anticipate," "guidance," "forecast," and other similar words, including, without limitation, statements regarding the expected performance of acquired businesses and impact of divested businesses, economic conditions in various geographic regions, the timing and amount of share repurchases, the timing and amount of benefits from the Company's Enterprise Strategy, the adequacy of internally generated funds and credit facilities to service debt and finance the Company's capital allocation priorities, the sufficiency of U.S. generated cash to fund cash requirements in the U.S., the cost and availability of additional financing, the Company's portion of future benefit payments related to pension and postretirement benefits, the expected impact of a change in the method of calculating the service and interest cost components of net periodic pension and other postretirement benefit costs to a specific spot rate approach, the availability of raw materials and energy, the expiration of any one of the Company's patents, the cost of compliance with environmental regulations, the likelihood of future goodwill or intangible asset impairment charges, the impact of failure of the Company's employees to comply with applicable laws and regulations, the impact of foreign currency fluctuations, the outcome of outstanding legal proceedings, the impact of adopting new accounting pronouncements, and the estimated timing and amount related to the

resolution of tax matters. These statements are subject to certain risks, uncertainties, and other factors, which could cause actual results to differ materially from those anticipated. Important risks that may influence future results include (1) weaknesses or downturns in the markets served by the Company, (2) changes or deterioration in international and domestic political and economic conditions, (3) the timing and amount of benefits from the Company's enterprise initiatives and their impact on organic revenue growth, (4) market conditions and availability of financing to fund the Company's share repurchases, (5) the risk of intentional acts of the Company's employees, agents or business partners that violate anti-corruption and other laws, (6) the unfavorable impact of foreign currency fluctuations, (7) a delay or decrease in the introduction of new products into the Company's product lines or failure to protect the Company's intellectual property, (8) the potential negative impact of acquisitions on the Company's profitability and returns, (9) negative effects of divestitures, including retained liabilities and unknown contingent liabilities, (10) potential negative impact of impairments to goodwill and other intangible assets on the Company's profitability and return on invested capital, (11) increases in funding costs or decreases in credit availability due to market conditions or changes to the Company's credit ratings, (12) raw material price increases and supply shortages, (13) unfavorable tax law changes and tax authority rulings, (14) financial market risks to the Company's obligations under its defined benefit pension plans, (15) potential adverse outcomes in legal proceedings, and (16) negative effects of service interruptions, data corruption, cyber-based attacks or network security breaches. A more detailed description of these risks is contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2016. These risks are not all inclusive and given these and other possible risks and uncertainties, investors should not place undue reliance on forward-looking statements as a prediction of actual results.

Any forward-looking statements made by the Company speak only as of the date on which they are made. The Company is under no obligation to, and expressly disclaims any obligation to, update or alter its forward-looking statements, whether as a result of new information, subsequent events or otherwise.

The Company practices fair disclosure for all interested parties. Investors should be aware that while the Company regularly communicates with securities analysts and other investment professionals, it is against the Company's policy to disclose to them any material non-public information or other confidential commercial information. Shareholders should not assume that the Company agrees with any statement or report issued by any analyst irrespective of the content of the statement or report.

ITEM 4. Controls and Procedures

The Company carried out an evaluation, under the supervision and with the participation of the Company's Chairman & Chief Executive Officer and Senior Vice President & Chief Financial Officer of the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of June 30, 2017. Based on such evaluation, the Company's Chairman & Chief Executive Officer and Senior Vice President & Chief Financial Officer have concluded that, as of June 30, 2017, the Company's disclosure controls and procedures were effective.

In connection with the evaluation by management, including the Company's Chairman & Chief Executive Officer and Senior Vice President & Chief Financial Officer, no changes in the Company's internal control over financial reporting (as defined in Exchange Act Rule 13a-15(f)) during the quarter ended June 30, 2017 were identified that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1A. Risk Factors

The Company's business, financial condition, results of operations and cash flows are subject to various risks which could cause actual results to vary materially from recent results or from anticipated future results. Refer to the description of the Company's risk factors previously disclosed in Part I - Item 1A - Risk Factors in the Company's 2016 Annual Report on Form 10-K.

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

On February 13, 2015, the Company's Board of Directors authorized a stock repurchase program which provides for the repurchase of up to \$6.0 billion of the Company's common stock over an open-ended period of time (the "2015 Program"). As of June 30, 2017, there were approximately \$2.9 billion of authorized repurchases remaining under the 2015 Program. Share repurchase activity under the Company's share repurchase program for the second quarter of 2017 was as follows:

In millions except per share amounts

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Value of Shares That May Yet Be Purchased Under Program
April 2017	0.7	\$ 132.89	0.7	\$ 3,105
May 2017	0.9	\$ 137.16	0.9	\$ 2,979
June 2017	0.2	\$ 147.12	0.2	\$ 2,945
Total	<u>1.8</u>		<u>1.8</u>	

ITEM 6. Exhibits

Exhibit Index

<u>Exhibit Number</u>	<u>Exhibit Description</u>
31	Rule 13a-14(a) Certification.
32	Section 1350 Certification.
101	The following financial and related information from the Illinois Tool Works Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2017 is formatted in Extensible Business Reporting Language (XBRL) and submitted electronically herewith: (i) Statement of Income, (ii) Statement of Comprehensive Income, (iii) Statement of Financial Position, (iv) Statement of Cash Flows and (v) related Notes to Financial Statements.

SIGNATURES

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

ILLINOIS TOOL WORKS INC.

Dated: August 3, 2017

By: /s/ Randall J. Scheuneman
Randall J. Scheuneman
Vice President & Chief Accounting Officer
(Principal Accounting Officer and Duly Authorized Officer)

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Section 2: EX-31 (EXHIBIT 31)

Exhibit 31

Rule 13a-14(a) Certification

I, E. Scott Santi, certify that:

1. I have reviewed this report on Form 10-Q of Illinois Tool Works Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which

are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information;
and

- b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2017

/s/ E. Scott Santi

E. Scott Santi

Chairman & Chief Executive Officer

Rule 13a-14(a) Certification

I, Michael M. Larsen, certify that:

1. I have reviewed this report on Form 10-Q of Illinois Tool Works Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: August 3, 2017

/s/ Michael M. Larsen

Michael M. Larsen

Senior Vice President & Chief Financial Officer

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Section 3: EX-32 (EXHIBIT 32)

Section 1350 Certification

The following statement is being made to the Securities and Exchange Commission solely for purposes of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350), which carries with it certain criminal penalties in the event of a knowing or willful misrepresentation.

Each of the undersigned hereby certifies that the Quarterly Report on Form 10-Q for the period ended June 30, 2017 fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and results of operations of the registrant.

Dated: August 3, 2017 /s/ E. Scott Santi
E. Scott Santi
Chairman & Chief Executive Officer

Dated: August 3, 2017 /s/ Michael M. Larsen
Michael M. Larsen
Senior Vice President & Chief Financial Officer

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