ILLINOIS TOOL WORKS INC
Form 10-Q
August 03, 2018

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

FORM 10-Q
(Mark One)
x QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2018

OR

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

For the transition period from _______________ to _______________

Commission File Number: 1-4797

ILLINOIS TOOL WORKS INC.
(Exact name of registrant as specified in its charter)

Delaware	36-1258310
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
155 Harlem Avenue, Glenview, IL	60025
(Address of principal executive offices)	(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 x No o

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 x No o

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	x	Accelerated filer	o

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

Emerging growth company o

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

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

The number of shares of registrant's common stock, $0.01 par value, outstanding at June 30, 2018: 335,352,977.

Table of Contents

PART I – FINANCIAL INFORMATION

ITEM 1. Financial Statements

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

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions except per share amounts	2018	2017	2018	2017
Operating Revenue	$3,831	$3,599	$7,575	$7,070
Cost of revenue	2,231	2,087	4,412	4,090
Selling, administrative, and research and development expenses	620	603	1,232	1,211
Legal settlement (income)	—	(15)	—	(15)
Amortization and impairment of intangible assets	48	52	96	105
Operating Income	932	872	1,835	1,679
Interest expense	(64)	(65)	(130)	(129)
Other income (expense)	26	12	38	18
Income Before Taxes	894	819	1,743	1,568
Income Taxes	228	232	425	445
Net Income	$666	$587	$1,318	$1,123
Net Income Per Share:				
Basic	$1.98	$1.70	$3.90	$3.25
Diluted	$1.97	$1.69	$3.87	$3.23
Cash Dividends Per Share:				
Paid	$0.78	$0.65	$1.56	$1.30
Declared	$0.78	$0.65	$1.56	$1.30
Shares of Common Stock Outstanding During the Period:				
Average	336.7	344.7	338.5	345.4
Average assuming dilution	338.9	347.5	340.8	348.3

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions	2018	2017	2018	2017
Net Income	$666	$587	$1,318	$1,123
Other Comprehensive Income (Loss):				
Foreign currency translation adjustments, net of tax	(299)	117	(216)	271
Pension and other postretirement benefit adjustments, net of tax	9	10	18	20
Comprehensive Income	$376	$714	$1,120	$1,414

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, 2018	December 31, 2017
Assets		
Current Assets:		
Cash and equivalents	$1,628	$3,094
Trade receivables	2,878	2,628
Inventories	1,320	1,220
Prepaid expenses and other current assets	293	336
Total current assets	6,119	7,278
Net plant and equipment	1,783	1,778
Goodwill	4,675	4,752
Intangible assets	1,177	1,272
Deferred income taxes	595	505
Other assets	1,174	1,195
	$15,523	$16,780
Liabilities and Stockholders' Equity		
Current Liabilities:		
Short-term debt	$1,350	$850
Accounts payable	623	590
Accrued expenses	1,224	1,258
Cash dividends payable	262	266
Income taxes payable	88	89
Total current liabilities	3,547	3,053
Noncurrent Liabilities:		
Long-term debt	6,069	7,478
Deferred income taxes	704	164
Noncurrent income taxes payable	561	614
Other liabilities	854	882
Total noncurrent liabilities	8,188	9,138
Stockholders’ Equity:		
Common stock (par value of $0.01 per share): Issued- 550.0 shares in 2018 and 2017 Outstanding- 335.4 shares in 2018 and 341.5 shares in 2017	6	6
Additional paid-in-capital	1,231	1,218
Retained earnings	20,633	20,210
Common stock held in treasury	(16,555)	(15,562)
Accumulated other comprehensive income (loss)	(1,530)	(1,287)
Noncontrolling interest	3	4
Total stockholders’ equity	3,788	4,589
	$15,523	$16,780

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

5

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

In millions	Six Months Ended June 30, 2018	2017
Cash Provided by (Used for) Operating Activities:		
Net income	$1,318	$1,123
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation	135	123
Amortization and impairment of intangible assets	96	105
Change in deferred income taxes	10	23
Provision for uncollectible accounts	3	2
(Income) loss from investments	(5)	(11)
(Gain) loss on sale of plant and equipment	(2)	1
(Gain) loss on sale of operations and affiliates	1	—
Stock-based compensation expense	20	19
Other non-cash items, net	5	4
Change in assets and liabilities, net of acquisitions and divestitures:		
(Increase) decrease in-		
Trade receivables	(288)	(186)
Inventories	(95)	(82)
Prepaid expenses and other assets	(3)	(112)
Increase (decrease) in-		
Accounts payable	47	47
Accrued expenses and other liabilities	(77)	(115)
Income taxes	(7)	(14)
Net cash provided by operating activities	1,158	927
Cash Provided by (Used for) Investing Activities:		
Acquisition of businesses (excluding cash and equivalents) and additional interest in affiliates	—	(3)
Additions to plant and equipment	(181)	(141)
Proceeds from investments	10	18
Proceeds from sale of plant and equipment	8	3
Proceeds from sales of operations and affiliates	—	2
Other, net	(2)	(1)
Net cash provided by (used for) investing activities	(165)	(122)
Cash Provided by (Used for) Financing Activities:		
Cash dividends paid	(530)	(450)
Issuance of common stock	10	45
Repurchases of common stock	(1,000)	(500)
Net proceeds from (repayments of) debt with original maturities of three months or less	(850)	691
Repayments of debt with original maturities of more than three months	—	(652)
Other, net	(12)	(13)
Net cash provided by (used for) financing activities	(2,382)	(879)
Effect of Exchange Rate Changes on Cash and Equivalents	(77)	98
Cash and Equivalents:		
Increase (decrease) during the period	(1,466)	24
Beginning of period	3,094	2,472
End of period	$1,628	$2,496

Supplementary Cash and Non-Cash Information:		
Cash Paid During the Period for Interest	$149	$146
Cash Paid During the Period for Income Taxes, Net of Refunds	$422	$436

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 2017 Annual Report on Form 10-K. Certain reclassifications of prior year data have been made to conform with current year reporting.

Operating Revenue— Prior to 2018, the Company recognized revenue when persuasive evidence of an arrangement existed, product had shipped and the risks and rewards of ownership had transferred or services had been rendered, the price to the customer was fixed or determinable, and collectibility was reasonably assured, which generally occurred at the time of product shipment. Effective January 1, 2018, the Company adopted new revenue recognition guidance. Under this new guidance, operating revenue is recognized at the time a good or service is transferred to a customer and the customer obtains control of that good or receives the service performed. The Company's sales arrangements with customers are predominantly short-term in nature involving a single performance obligation related to the delivery of products and generally provide for transfer of control at the time of shipment. In limited circumstances, arrangements may include service performed over time, or there may be significant obligations to the customer that are unfulfilled at the time of shipment, typically involving installation of equipment and customer acceptance. In these circumstances, operating revenue may be recognized over time as the service is provided to the customer or deferred until all significant obligations have been completed. The amount of operating revenue recorded reflects the consideration to which the Company expects to be entitled in exchange for goods or services and may include adjustments for customer allowances and rebates. Customer allowances and rebates consist primarily of volume discounts and other short-term incentive programs, which are estimated at the time of sale based on historical experience and anticipated trends. Shipping and handling charges billed to customers are included in revenue and are recognized along with the related product revenue as they are considered a fulfillment cost. Sales commissions are expensed when incurred, which is generally at the time of revenue recognition. Contract liabilities associated with sales arrangements primarily relate to deferred revenue on equipment sales and prepaid service contracts. Total deferred revenue was $236 million and $205 million as of June 30, 2018 and December 31, 2017, respectively, and is short-term in nature. For additional information regarding the Company's operating revenue, see New Accounting Pronouncements below and Note 2. Operating Revenue.

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 guidance is that revenue should be recognized to depict the transfer of control 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, expanded revenue disclosures are required. The Company's sales arrangements with customers are predominantly short-term in nature and generally provide for transfer of control and risks and rewards of ownership at the time of product shipment or delivery of service. As such, the timing of revenue recognition under both the prior and new guidance is the same for the majority of the Company’s transactions. Effective January 1, 2018, the Company adopted the new revenue guidance under the modified retrospective method and recorded a cumulative-effect adjustment reducing retained earnings by $9 million as of January 1, 2018. Under the modified retrospective method of adoption, prior periods are not restated and the new guidance is applied prospectively to revenue transactions completed on or after January 1, 2018. Given the nature of the Company’s revenue transactions, the new guidance had an immaterial impact on the Company's operating revenue, results of operations, and financial position for the three and six months ended June 30, 2018. The Company updated its revenue recognition accounting policy to reflect the requirements of the new guidance and included additional disclosures regarding the Company's revenue transactions. Refer to the Company’s operating revenue accounting policy above and Note 2. Operating Revenue for additional information.

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 prior guidance. The provisions of the new guidance are being applied prospectively to intra-entity asset transfers on or after January 1, 2018 and may result in future tax rate volatility. Upon adoption of the new guidance on January 1, 2018, the Company recorded a cumulative-effect adjustment reducing deferred tax assets and retained earnings by $406 million. For the three and six months ended June 30, 2018, the impact of the new guidance on the Company's effective income tax rate was not material.

In March 2017, the FASB issued authoritative guidance which changes the income statement presentation 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 ("other net periodic benefit cost"), including interest cost, expected return on assets, settlements, curtailments, and amortization of actuarial gains and losses and prior service cost, should be presented below operating income. Effective January 1, 2018, the Company adopted the new presentation of other net periodic benefit cost and restated the prior year statement of income and related disclosures for comparability, as required under the new guidance. For the three months ended June 30, 2018 and 2017, other net periodic benefit cost included in Other income (expense) was income of $5 million and $2 million, respectively. For the six months ended June 30, 2018 and 2017, other net periodic benefit cost included in Other income (expense) was income of $10 million and $4 million, respectively. Refer to Note 5. Pension and Other Postretirement Benefits for additional information.

In February 2018, the FASB issued authoritative guidance which allows for an optional one-time reclassification of the stranded tax effects resulting from the change in the U.S. federal corporate income tax rate under the "Tax Cuts and Jobs Act" (the "Act") from accumulated other comprehensive income ("AOCI") to retained earnings. The guidance is effective January 1, 2019, with early adoption permitted. The Company elected to early adopt this guidance as of January 1, 2018 and to reclassify the stranded tax effects related to the Act, which resulted in an increase of $45 million to both retained earnings and accumulated other comprehensive loss. Refer to Note 8. Accumulated Other Comprehensive Income (Loss) for additional information.

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 right-of-use lease asset for all leases with a lease term greater than twelve months, including operating leases, in the statement of financial position. 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, expanded disclosures will be required. This guidance is effective for the Company beginning January 1, 2019, with early adoption permitted. The Company is currently reviewing its existing lease portfolio to assess the impact that the new lease accounting guidance will have on the consolidated financial statements and related disclosures. While the Company has not yet completed this review, the Company expects to recognize right-of-use assets and lease liabilities for its operating leases in the statement of financial position upon adoption.

(2) Operating Revenue

The Company's 85 diversified operating divisions 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. Operating revenue by product category, which is consistent with the Company's segment presentation, for the three and six months ended June 30, 2018 and 2017 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions	2018	2017	2018	2017
Automotive OEM	$879	$820	$1,780	$1,648
Food Equipment	553	529	1,080	1,026
Test & Measurement and Electronics	554	519	1,097	999
Welding	440	385	863	772
Polymers & Fluids	445	437	887	863

Construction Products	444	425	872	820
Specialty Products	522	490	1,007	953
Intersegment revenue	(6)	(6)	(11)	(11)
Total	$3,831	$3,599	$7,575	$7,070

8

Prior to 2018, the Company recognized revenue when persuasive evidence of an arrangement existed, product had shipped and the risks and rewards of ownership had transferred or services had been rendered, the price to the customer was fixed or determinable, and collectibility was reasonably assured, which generally occurred at the time of product shipment. Effective January 1, 2018, the Company adopted new revenue recognition guidance. Under this new guidance, operating revenue is recognized at the time a good or service is transferred to a customer and the customer obtains control of that good or receives the service performed. Given the nature of the Company’s revenue transactions, the new guidance had an immaterial impact on the Company's operating revenue, results of operations, and financial position for the three and six months ended June 30, 2018. See Note 1. Significant Accounting Policies for additional information. The following is a description of the product offerings, end markets and typical revenue transactions for each of the Company's seven segments:

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.

Products sold in this segment are primarily manufactured to the customer's specifications and are sold under long-term supply agreements with OEM auto manufacturers and other top tier auto parts suppliers. The Company typically recognizes revenue for products in this segment at the time of shipment. Certain products may be produced utilizing tooling that is owned by the customer that the Company developed and is reimbursed by the customer for the associated cost. In these arrangements, the Company typically retains a contractual right to use the customer-owned tooling for the purpose of fulfilling its obligations under the supply agreement. The Company records reimbursements for the cost of customer-owned tooling as a cost offset rather than operating revenue as tooling is not considered a product offering central to the Company's operations.

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 service, food institutional/restaurant 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.

Revenue for equipment sold in this segment is typically recognized at the time of product shipment. In limited circumstances involving installation of equipment and customer acceptance, the Company may recognize revenue upon completion of installation and acceptance by the customer. Annual service contracts are typically sold separate from equipment and the related revenue is recognized on a straight-line basis over the annual service period. Operating revenue for on-demand service repairs and parts is recorded upon completion and customer acceptance of the work performed.

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.

Revenue for products sold in this segment is typically recognized at the time of shipment. In limited circumstances where significant obligations to the customer are unfulfilled at the time of shipment, typically involving installation of equipment and customer acceptance, revenue recognition is deferred until such obligations have been completed.

9

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, construction, MRO, automotive original equipment manufacturers and tiers, 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.

Products in this segment are primarily manufactured to meet anticipated customer demand. The Company typically recognizes revenue for these products at the time of product shipment.

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.

Products in this segment are primarily manufactured to meet anticipated customer demand. The Company typically recognizes revenue for these products at the time of product shipment.

Construction Products— This segment is a branded supplier of innovative engineered fastening systems and solutions. This segment primarily serves the residential construction, renovation/remodel 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.

Products in this segment are primarily manufactured to meet anticipated customer demand. The Company typically recognizes revenue for these products at the time of product shipment.

Specialty Products— This segment is focused on diversified niche market opportunities 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.

Products in this segment are primarily manufactured to meet anticipated customer demand. The Company typically recognizes revenue for these products at the time of product shipment. In limited circumstances where significant obligations to the customer are unfulfilled at the time of shipment, typically involving installation of equipment and customer acceptance, revenue is recognized when such obligations have been completed.

(3) Income Taxes

The Company's effective tax rate for the six months ended June 30, 2018 and 2017 was 24.4% and 28.4%, respectively. The year-to-date 2018 effective tax rate was lower primarily as a result of the lower U.S. corporate federal tax rate and a discrete income tax benefit of $14 million in the first quarter of 2018 related to foreign tax credits. Additionally, the effective tax rate for both respective periods included discrete tax benefits of $6 million and $26 million in 2018 and 2017, respectively, related to excess tax benefits from stock-based compensation.

On December 22, 2017, the "Tax Cuts and Jobs Act" (the “Act”) was enacted in the United States. The provisions of the Act significantly revised the U.S. corporate income tax rules. At December 31, 2017, the Company had not completed the accounting for the tax effects of enactment of the Act; however, the Company made a reasonable estimate of the effects on the existing deferred tax balances and one-time transition tax. The Company continues to analyze certain aspects of the Act and may refine its calculations, which could potentially affect the measurement of the amounts recorded at December 31, 2017. The provisional amounts recorded for the year ended December 31, 2017, and unchanged at June 30, 2018, reflect the Company’s best estimate based on information currently available and are subject to future changes due to subsequent clarification of the tax law and refinement of estimated amounts. On August 1, 2018, the U.S. Department of Treasury released proposed rules related to the one-time transition tax. The Company is currently assessing the potential impact of these proposed rules on the consolidated financial statements.

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 $18 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 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, 2018 and December 31, 2017 were as follows:

In millions	June 30, 2018	December 31, 2017
Raw material	$499	$ 465
Work-in-process	180	141
Finished goods	730	703
LIFO reserve	(89)	(89)
Total inventories	$1,320	$ 1,220

11

(5) Pension and Other Postretirement Benefits

Pension and other postretirement benefit costs for the three and six months ended June 30, 2018 and 2017 were as follows:

	Three Months Ended June 30,				Six Months Ended June 30,			
	Pension		Other Postretirement Benefits		Pension		Other Postretirement Benefits	
In millions	2018	2017	2018	2017	2018	2017	2018	2017
Components of net periodic benefit cost:								
Service cost	$15	$16	$ 2	$ 2	$30	$32	$ 4	$ 4
Interest cost	18	18	4	5	36	36	9	10
Expected return on plan assets	(32)	(33)	(6)	(5)	(64)	(66)	(12)	(11)
Amortization of actuarial loss (gain)	11	14	—	(1)	22	28	(1)	(1)
Total net periodic benefit cost	$12	$15	$ —	$ 1	$24	$30	$ —	$ 2

The service cost component of net periodic benefit cost is presented within Cost of revenue and Selling, administrative, and research and development expenses in the statement of income while the other components of net periodic benefit cost are presented within Other income (expense).

The Company expects to contribute approximately $26 million to its pension plans and $5 million to its other postretirement benefit plans in 2018. As of June 30, 2018, contributions of $15 million to pension plans and $3 million to other postretirement benefit plans have been made.

(6) Debt

Short-term debt as of June 30, 2018 included $649 million related to the 1.95% notes due March 1, 2019 and $699 million related to the 6.25% notes due April 1, 2019, which were reclassified from Long-term debt to Short-term debt in the first and second quarters of 2018, respectively. There was no commercial paper outstanding as of June 30, 2018. Short-term debt as of December 31, 2017 included commercial paper of $849 million.

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, 2018 and December 31, 2017 were as follows:

In millions	June 30, 2018	December 31, 2017
Fair value	$7,727	$ 8,052
Carrying value	7,419	7,479

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.

12

(7) Legal Settlement

In the second quarter of 2017, the Company entered into a $95 million confidential settlement agreement to resolve a litigation matter. Based on the terms of the agreement, the Company received the settlement within 120 days of the execution of the agreement. The receipt of the settlement resulted in a favorable pre-tax impact of $15 million in the second quarter of 2017 and $80 million in the third quarter of 2017, which was 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, 2018 and 2017:

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
In millions	2018	2017	2018	2017
Beginning balance	$(1,240)	$(1,643)	$(1,287)	$(1,807)
Adoption of new accounting guidance related to reclassification of certain tax effects	—	—	(45)	—
Foreign currency translation adjustments during the period	(270)	60	(201)	204
Income taxes	(29)	57	(15)	67
Total foreign currency translation adjustments, net of tax	(299)	117	(216)	271
Pension and other postretirement benefit adjustments during the period	—	—	1	—
Pension and other postretirement benefit adjustments reclassified to income	11	13	21	27
Income taxes	(2)	(3)	(4)	(7)
Total pension and other postretirement benefit adjustments, net of tax	9	10	18	20
Ending balance	$(1,530)	$(1,516)	$(1,530)	$(1,516)

Effective January 1, 2018, the Company elected to early adopt new accounting guidance related to the stranded tax effects resulting from the change in the U.S. federal corporate income tax rate under the "Tax Cuts and Jobs Act" (the "Act") and reclassified $45 million of stranded income tax effects from Accumulated other comprehensive income (loss) to Retained earnings. Refer to Note 1. Significant Accounting Policies for additional information.

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 $1.2 billion and $1.2 billion, respectively, as of June 30, 2018. 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 $145 million and $81 million as of June 30, 2018 and December 31, 2017, respectively.

The ending balance of Accumulated other comprehensive income (loss) as of June 30, 2018 and 2017 consisted of cumulative translation adjustment losses, net of tax, of $1.2 billion and $1.1 billion, respectively, and unrecognized pension and other postretirement benefits costs, net of tax, of $329 million and $385 million, respectively.

(9) Segment Information

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. Refer to 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 55 countries. As of December 31, 2017, the Company employed approximately 50,000 people.

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 front to back 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 front to back 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 enables 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 first phase of its strategic framework, transitioning the Company on 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 five 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 product line simplification work is returning to more normalized levels.

- 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 established sourcing as 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 2017 and is on track to do the same in 2018.

- With the portfolio realignment and scale-up work largely complete, the Company shifted its focus to preparing for and accelerating organic growth, 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.

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. At the same time, these 80/20 initiatives can also result in restructuring initiatives that reduce costs and improve profitability and returns. With this first phase of the strategy nearing completion, the Company will look ahead to the next five years and delivering differentiated performance on a sustained basis.

SUSTAINED DIFFERENTIATED PERFORMANCE

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. The second phase of the strategic framework is focused on delivering differentiated performance on a sustained basis, with consistent above market organic growth. Moving forward, the Company remains committed to the four strategic principles that have served as the foundation of its progress over the past five years and that the Company believes best positions ITW to deliver continued differentiated performance over the next five years:

- The ITW Business Model is the Company's competitive advantage
- Focus on quality growth

- "Do what we say" execution is a critical differentiator
- Invest only where ITW has a competitive advantage

The ITW Business Model is the Company's Competitive Advantage

The ITW Business Model is the combination of a set of strategic, operational, and cultural approaches and practices that is applied to every ITW business. The Business Model has existed inside the Company for over 30 years and is truly ITW's differentiating competitive advantage. The ITW Business Model is comprised of three elements:

- 80/20 Front to Back Process = How the Company Operates
- Customer-Back Innovation Approach = How the Company Innovates
- Decentralized Entrepreneurial Culture = How the Company Executes

Focus on Quality Growth

ITW prioritizes high-quality revenue growth and, as such, the Company’s primary growth focus is organic.

Leveraging the Business Model and the 80/20 front to back process provides a clear view of where to focus for high-quality growth. The Company targets differentiated end-markets and customers with critical needs and challenging pain points. ITW generates high-quality growth through consistent customer-back innovation and customer service excellence.

The Company only invests and operates in industries and businesses that have the right “raw material” to generate high quality organic growth through the application of the ITW Business Model. ITW’s current portfolio of seven segments offers solid growth potential and a high degree of diversification in terms of geographic and end market exposures, enabling the Company to deliver consistent high-quality growth in an increasingly volatile and competitive global market environment.

"Do What We Say" Execution is a Critical Differentiator

ITW’s commitment to execution is a key differentiator for ITW. Living up to the Company’s commitments - “do what we say” execution - is a deeply embedded core element of the culture. The culture is the engine that translates ITW's strategy into action, and action into results.

All divisions function within a “framework” that defines how the culture operates and defines the Company’s values, business model and strategy to ensure all divisions are working toward our common set of goals. Business leaders have the flexibility to define the actions and customize their approach to meet those goals. This “flexibility within the framework” establishes an entrepreneurial environment where decisions are made “bottom up” by those with the greatest knowledge, capability and proximity to the customer, which enables our businesses to be nimble and react quickly to market conditions and customer requirements.

ITW is simple, straightforward and transparent in everything it does. The Company sets clear performance expectations and financial targets, executes against these at the appropriate pace, and establishes the freedom to define how to achieve results within the construct of the Business Model.

Invest Only Where ITW Has a Competitive Advantage

The Company is highly focused and disciplined in its approach to invest only where it can leverage the ITW Business Model into compelling and sustainable competitive advantage.

Investments to support organic growth and sustain its highly differentiated core businesses, such as new product innovation, marketing programs, simplification projects, and capital investments, are ITW’s number one investment priority.

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 2017 Annual Report on Form 10-K.

CONSOLIDATED RESULTS OF OPERATIONS

The Company delivered strong second quarter and year-to-date financial results primarily attributable to the successful execution of enterprise initiatives and continued focus on the highly differentiated Business Model despite a challenging external environment. All segments achieved worldwide organic revenue growth and had operating margin above 21% in the second quarter and year-to-date periods of 2018.

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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$3,831	$3,599	6.5 %	3.7 %	—%	— %	2.8 %	6.5 %
Operating income	$932	$872	6.9 %	4.0 %	—%	(0.1)%	3.0 %	6.9 %
Operating margin %	24.3 %	24.2 %	10 bps	10 bps	—	—	—	10 bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$7,575	$7,070	7.1 %	3.2 %	—%	— %	3.9 %	7.1 %
Operating income	$1,835	$1,679	9.3 %	4.6 %	—%	0.4 %	4.3 %	9.3 %
Operating margin %	24.2 %	23.7 %	50 bps	40 bps	—	10 bps	—	50 bps

- Operating revenue grew in the second quarter and year-to-date periods due to an increase in organic revenue and the favorable effect of foreign currency translation.
- Organic revenue grew 3.7% and 3.2% in the second quarter and year-to-date periods, respectively, as all segments had organic revenue growth in each respective period primarily due to penetration gains, higher end market demand and product innovation. Product line simplification activities reduced organic revenue growth by 70 basis points in both the second quarter and year-to-date periods.

North American organic revenue increased 5.4% and 4.3% in the second quarter and year-to-date periods, respectively, primarily driven by growth in the Welding, Specialty Products and Test & Measurement and Electronics segments.

Asia Pacific organic revenue increased 2.8% in the second quarter as growth in six segments was partially offset by a decline in the Construction Products segment. In the year-to-date period, organic revenue grew 3.1% as all segments had organic revenue growth.

Europe, Middle East and Africa organic revenue increased 1.4% and 1.2% in the second quarter and year-to-date periods, respectively, as growth in the Automotive OEM, Food Equipment, Test & Measurement and Electronics and Construction Products segments was partially offset by a decline in the Specialty Products, Polymers & Fluids and Welding segments.

- In the second quarter of 2017, the Company entered into a $95 million confidential settlement agreement to resolve a litigation matter. Based on the terms of the agreement, the Company received the settlement within 120 days of the execution of the agreement. The receipt of the settlement resulted in a favorable pre-tax impact of $15 million in the second quarter of 2017 and $80 million in the third quarter of 2017, which was included in operating income.
- Operating income of $932 million and $1.8 billion in the second quarter and year-to-date periods, respectively, increased 6.9% and 9.3% in the respective periods. Excluding the favorable impact of the 2017 confidential legal

settlement, operating income would have increased 8.8% and 10.3% in the second quarter and year-to-date periods, respectively.

- Operating margin of 24.3% in the second quarter increased 10 basis points. Excluding the 40 basis points of favorability from the 2017 second quarter confidential legal settlement, operating margin increased 50 basis points primarily due to the benefits of the Company's enterprise initiatives that contributed 110 basis points and positive operating leverage of 70 basis points, partially offset by unfavorable price/cost of 70 basis points and additional growth investments in the business.

- In the year-to-date period, operating margin of 24.2% increased 50 basis points. Excluding the 20 basis points of favorability from the 2017 confidential legal settlement, operating margin increased 70 basis points primarily driven by the benefits of the Company's enterprise initiatives of 110 basis points and positive operating leverage of 70 basis points, partially offset by unfavorable price/cost of 60 basis points and additional growth investments in the business.
- The effective tax rate for the second quarter of 2018 was 25.5% compared to 28.4% in 2017. The second quarter 2018 effective tax rate was lower primarily as a result of the lower U.S. corporate federal tax rate. Additionally, the effective tax rate for the second quarter of 2017 included discrete income tax benefits of $13 million related to excess tax benefits from stock-based compensation. In the year-to-date period, the effective tax rate was 24.4% and 28.4% for 2018 and 2017, respectively. The year-to-date effective tax rate for 2018 was lower primarily as a result of the lower U.S. corporate federal tax rate and a discrete income tax benefit of $14 million in the first quarter of 2018 related to foreign tax credits. Additionally, the effective tax rate for both respective periods included discrete tax benefits of $6 million and $26 million in 2018 and 2017, respectively, related to excess tax benefits from stock-based compensation.
The estimated effective tax rate for the full year of 2018 is approximately 25%. Refer to Note 3. Income Taxes in Item 1 - Financial Statements for further information.
- Diluted earnings per share (EPS) of $1.97 for the second quarter and $3.87 for the year-to-date period increased 16.6% and 19.8%, respectively. Excluding the favorable effect of the 2017 second quarter confidential legal settlement of $0.03 in the second quarter and year-to-date periods, respectively, EPS increased 18.7% and 20.9% in the respective periods.
- Free cash flow was $533 million and $977 million for the second quarter and year-to-date periods, respectively. Refer to the Cash Flow section of Liquidity and Capital Resources for a reconciliation of this non-GAAP measure.
- The Company repurchased approximately 3.4 million and 6.5 million shares of its common stock in the second quarter and year-to-date periods of 2018, respectively, for approximately $500 million and $1.0 billion, respectively.
- Adjusted after-tax return on average invested capital was 28.7% for the second quarter and 28.3% for the year-to-date period, an increase of 440 basis points and 430 basis points in the second quarter and year-to-date periods, respectively, primarily due to the new U.S. tax rules and regulations. 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	
	2018	2017	2018	2017	2018	2017	2018	2017
Automotive OEM	$879	$820	$198	$182	$1,780	$1,648	$415	$384
Food Equipment	553	529	140	139	1,080	1,026	270	264
Test & Measurement and Electronics	554	519	131	114	1,097	999	258	210
Welding	440	385	129	105	863	772	246	212
Polymers & Fluids	445	437	95	94	887	863	187	182
Construction Products	444	425	109	102	872	820	204	191
Specialty Products	522	490	146	139	1,007	953	276	263
Intersegment revenue	(6)	(6)	—	—	(11)	(11)	—	—
Unallocated	—	—	(16)	(3)	—	—	(21)	(27)
Total	$3,831	$3,599	$932	$872	$7,575	$7,070	$1,835	$1,679

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 in 2017 includes the favorable impact from the previously disclosed 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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$879	$820	7.2 %	2.8 %	— %	— %	4.4 %	7.2 %
Operating income	$198	$182	8.4 %	3.2 %	— %	0.7 %	4.5 %	8.4 %
Operating margin %	22.5 %	22.3 %	20 bps	—	—	20 bps	—	20 bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$1,780	$1,648	8.0 %	1.9 %	— %	— %	6.1 %	8.0 %
Operating income	$415	$384	8.0 %	0.7 %	— %	1.1 %	6.2 %	8.0 %
Operating margin %	23.3 %	23.3 %	—	(30) bps	—	30 bps	—	—

- Operating revenue increased in the second quarter and year-to-date periods due to the favorable effect of foreign currency translation and higher organic revenue.
- Organic revenue grew 2.8% and 1.9% in the second quarter and year-to-date periods, respectively.
  - North American organic revenue increased 1.7% and 1.4% in the second quarter and year-to-date periods, respectively, compared to North American auto builds which declined 3% in the second quarter and year-to-date periods, respectively. Auto builds for the Detroit 3, where the Company has higher content, declined 1% in the second quarter and were flat year-to-date.
  - European organic revenue grew 3.1% and 2.1% in the second quarter and year-to-date periods, respectively, compared to European auto builds which increased 4% and 2% in the second quarter and year-to-date periods, respectively.
  - Asia Pacific organic revenue increased 5.9% and 3.2% in the second quarter and year-to-date periods, respectively. China organic revenue grew 17.0% and 12.2% in the second quarter and year-to-date periods, respectively, versus Chinese auto builds which increased 9% in the second quarter and 3% in the year-to-date period.
- Operating margin was 22.5% in the second quarter. The increase of 20 basis points was primarily driven by the net benefits from the Company's enterprise initiatives and cost management of 90 basis points, positive operating leverage of 40 basis points and lower restructuring expenses of 20 basis points, partially offset by unfavorable price/cost of 130 basis points.
- In the year-to-date period, operating margin of 23.3% was flat to the prior year as the net benefits from the Company's enterprise initiatives and cost management of 70 basis points, positive operating leverage of 30 basis points and lower restructuring expenses of 30 basis points were offset by unfavorable price/cost of 130 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 service, food institutional/restaurant 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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$553	$529	4.8 %	1.6 %	—%	— %	3.2 %	4.8 %
Operating income	$140	$139	0.8 %	(0.7)%	—%	(1.6)%	3.1 %	0.8 %
Operating margin %	25.4 %	26.4 %	(100) bps	(60) bps	—	(40) bps	—	(100) bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$1,080	$1,026	5.4 %	1.1 %	—%	— %	4.3 %	5.4 %
Operating income	$270	$264	2.3 %	(1.6)%	—%	(0.3)%	4.2 %	2.3 %
Operating margin %	25.0 %	25.8 %	(80) bps	(70) bps	—	(10) bps	—	(80) bps

- Operating revenue increased in the second quarter and year-to-date periods due to the favorable effect of foreign currency translation and higher organic revenue.
- Organic revenue increased 1.6% in the second quarter as equipment and service organic revenue increased 1.8% and 1.6%, respectively. In the year-to-date period, organic revenue increased 1.1% as equipment and service organic revenue each increased 1.1%.

North American organic revenue increased 2.1% and 1.2% in the second quarter and year-to-date periods, respectively. Equipment organic revenue grew 3.0% and 1.6% in the second quarter and year-to-date periods, respectively, as higher end market demand in food service, refrigeration and cooking was offset by lower end market demand in food retail. Service organic revenue grew 0.8% and 0.7% in the second quarter and year-to-date periods, respectively.

International organic revenue increased 1.0% and 0.9% in the second quarter and year-to-date periods, respectively. Equipment organic revenue grew 0.5% and 0.7% in the second quarter and year-to-date periods, respectively, primarily due to higher demand in the European warewash end markets, partially offset by lower end market demand in refrigeration and cooking. Service organic revenue increased 2.8% and 1.7% in the second quarter and year-to-date periods, respectively.

- Operating margin of 25.4% in the second quarter declined 100 basis points primarily due to the unfavorable impact of product mix, higher restructuring and employee-related expenses, and unfavorable price/cost of 30 basis points, partially offset by benefits from the Company's enterprise initiatives.
- In the year-to-date period, operating margin of 25.0% decreased 80 basis points primarily due to the unfavorable impact of product mix and higher employee-related expenses, partially offset by benefits from the Company's enterprise initiatives.

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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$554	$519	6.7 %	3.9 %	—%	— %	2.8 %	6.7 %
Operating income	$131	$114	14.5 %	14.3 %	—%	(2.8)%	3.0 %	14.5 %
Operating margin %	23.5 %	21.9 %	160 bps	220 bps	—	(60) bps	—	160 bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$1,097	$999	9.8 %	5.7 %	—%	— %	4.1 %	9.8 %
Operating income	$258	$210	22.6 %	18.6 %	—%	(0.6)%	4.6 %	22.6 %
Operating margin %	23.5 %	21.0 %	250 bps	260 bps	—	(10) bps	—	250 bps

- Operating revenue increased in the second quarter and year-to-date periods due to higher organic revenue and the favorable effect of foreign currency translation.
- Organic revenue increased 3.9% and 5.7% in the second quarter and year-to-date periods, respectively.
Organic revenue for the test and measurement businesses increased 7.4% and 8.4% in the second quarter and year-to-date periods, respectively, primarily due to higher semi-conductor end market demand in North America. Instron, where demand is more closely tied to the capital spending environment, had organic revenue growth of 4.9% and 9.6% in the second quarter and year-to-date periods, respectively.
Electronics organic revenue was flat in the second quarter and increased 2.5% in the year-to-date period. The electronics assembly businesses declined 8.9% and 3.7% in the second quarter and year-to-date periods, respectively, primarily due to lower demand in North American end markets. The other electronics businesses grew 6.5% and 6.9% in the second quarter and year-to-date periods, respectively, due to higher semi-conductor end market demand.
- Operating margin was 23.5% in the second quarter. The increase of 160 basis points was primarily due to the net benefits of the Company's enterprise initiatives and cost management and positive operating leverage of 100 basis points, partially offset by higher restructuring expenses of 60 basis points.
- In the year-to-date period, operating margin of 23.5% increased 250 basis points primarily driven by positive operating leverage of 150 basis points and the net benefits resulting from the Company's enterprise initiatives and cost management.

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, construction, MRO, automotive original equipment manufacturers and tiers, 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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$440	$385	14.3 %	13.3 %	—%	— %	1.0 %	14.3 %
Operating income	$129	$105	23.2 %	21.7 %	—%	0.8 %	0.7 %	23.2 %
Operating margin %	29.3 %	27.2 %	210 bps	200 bps	—	20 bps	(10) bps	210 bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$863	$772	11.8 %	10.4 %	—%	— %	1.4 %	11.8 %
Operating income	$246	$212	16.3 %	14.9 %	—%	0.7 %	0.7 %	16.3 %
Operating margin %	28.5 %	27.4 %	110 bps	110 bps	—	20 bps	(20) bps	110 bps

- Operating revenue increased in the second quarter and year-to-date periods due to higher organic revenue and the favorable effect of foreign currency translation.
- Organic revenue grew 13.3% in the second quarter driven by growth in equipment of 14.7% and consumables of 11.3%. In the year-to-date period, organic revenue increased 10.4% as equipment grew 12.6% and consumables increased 7.4%. In both periods, organic revenue grew due to increased demand in the industrial end markets related to 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 16.5% in the second quarter primarily due to 23.8% and 7.8% growth in the industrial and commercial end markets, respectively. In the year-to-date period, organic revenue grew 12.9% primarily driven by 19.4% and 4.6% growth in the industrial and commercial end markets, respectively.
- International organic revenue increased 0.6% and 0.1% in the second quarter and year-to-date periods, respectively, primarily due to higher end market demand in the Asian commercial and oil and gas end markets.
- Operating margin was 29.3% in the second quarter. The increase of 210 basis points was primarily due to positive operating leverage of 200 basis points, the benefits from the Company's enterprise initiatives and lower restructuring expenses, partially offset by unfavorable price/cost of 70 basis points.
- In the year-to-date period, operating margin of 28.5% increased 110 basis points primarily due to positive operating leverage of 160 basis points and the benefits of the Company's enterprise initiatives, partially offset by higher operating expenses, including employee-related expenses, and unfavorable price/cost 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 June 30, 2018	2017	Inc (Dec)	Components of Increase (Decrease) Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$445	$437	1.7 %	0.9 %	—%	— %	0.8 %	1.7 %
Operating income	$95	$94	1.0 %	(1.6)%	—%	1.0 %	1.6 %	1.0 %
Operating margin %	21.2 %	21.4 %	(20) bps	(50) bps	—	20 bps	10 bps	(20) bps

Dollars in millions	Six Months Ended June 30, 2018	2017	Inc (Dec)	Components of Increase (Decrease) Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$887	$863	2.7 %	0.6 %	—%	— %	2.1 %	2.7 %
Operating income	$187	$182	3.0 %	(1.1)%	—%	1.4 %	2.7 %	3.0 %
Operating margin %	21.1 %	21.0 %	10 bps	(30) bps	—	30 bps	10 bps	10 bps

- Operating revenue increased in the second quarter and year-to-date periods due to higher organic revenue and the favorable effect of foreign currency translation.
- Organic revenue increased 0.9% and 0.6% in the second quarter and year-to-date periods, respectively, as higher demand in Asia Pacific, North America and South America was partially offset by lower demand in Europe.
Organic revenue for the automotive aftermarket businesses increased 1.0% in the second quarter primarily driven by growth in the car care businesses in North America and the additives businesses in Europe. In the year-to-date period, organic revenue grew 0.3% as stronger demand in the car care and tire repair businesses in North America and additives businesses in Europe were offset by a decline in the body and engine repair businesses in North America.
Organic revenue for the fluids businesses grew 0.6% and 0.9% 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 North America, partially offset by a decline in Europe.
Organic revenue for the polymers businesses increased 1.2% and 1.0% in the second quarter and year-to-date periods, respectively, primarily driven by an increase in North America and Asia Pacific, partially offset by a decline in Europe.
- Operating margin of 21.2% in the second quarter decreased 20 basis points primarily driven by unfavorable price/cost of 120 basis points and higher freight and employee-related expenses, partially offset by benefits from the Company's enterprise initiatives and lower restructuring expenses.
- In the year-to-date period, operating margin of 21.1% increased 10 basis points primarily driven by benefits from the Company's enterprise initiatives and lower restructuring expenses, partially offset by unfavorable price/cost of 110 basis points and higher freight and employee-related expenses.

CONSTRUCTION PRODUCTS

This segment is a branded supplier of innovative engineered fastening systems and solutions. This segment primarily serves the residential construction, renovation/remodel 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.

24

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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$444	$425	4.4 %	1.7 %	—%	— %	2.7 %	4.4 %
Operating income	$109	$102	6.4 %	4.1 %	—%	(0.2)%	2.5 %	6.4 %
Operating margin %	24.5 %	24.0 %	50 bps	60 bps	—	(10) bps	—	50 bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$872	$820	6.3 %	2.3 %	—%	— %	4.0 %	6.3%
Operating income	$204	$191	6.5 %	3.1 %	—%	(0.4)%	3.8 %	6.5%
Operating margin %	23.3 %	23.3 %	—	20 bps	—	(20) bps	—	—

- Operating revenue increased in the second quarter and year-to-date periods due to the favorable effect of foreign currency translation and higher organic revenue.
- Organic revenue increased 1.7% and 2.3% in the second quarter and year-to-date periods, respectively.

North American organic revenue grew 1.9% and 4.1% in the second quarter and year-to-date periods, respectively. Growth in the residential end markets of 5.5% and 7.0% in the second quarter and year-to-date periods, respectively, was partially offset by a decline in the commercial end markets.

International organic revenue increased 1.6% and 1.0% in the second quarter and year-to-date periods, respectively. European organic revenue increased 3.5% and 0.7% in the second quarter and year-to-date periods, respectively, primarily due to growth in continental Europe and the Nordic countries. Asia Pacific organic revenue decreased 0.4% in the second quarter as a decline in China, India, and Singapore was partially offset by growth in Australia and New Zealand. Asia Pacific organic revenue increased 1.3% in the year-to-date period primarily due to growth in the Australia and New Zealand retail end markets.

- Operating margin was 24.5% 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 and positive operating leverage of 40 basis points, partially offset by unfavorable price/cost of 80 basis points.
- In the year-to-date period, operating margin of 23.3% was flat compared to the prior year as positive operating leverage of 60 basis points and the net benefits of the Company's enterprise initiatives and cost management were offset by unfavorable price/cost of 70 basis points and higher restructuring and employee-related expenses.

SPECIALTY PRODUCTS

This segment is focused on diversified niche market opportunities 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 June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$522	$490	6.5 %	4.0 %	(0.1)%	— %	2.6 %	6.5 %
Operating income	$146	$139	5.9 %	2.1 %	— %	1.1 %	2.7 %	5.9 %
Operating margin %	28.1 %	28.3 %	(20) bps	(60) bps	—	40 bps	—	(20) bps

Dollars in millions	Six Months Ended June 30,			Components of Increase (Decrease)				
	2018	2017	Inc (Dec)	Organic	Acquisition/Divestiture	Restructuring	Foreign Currency	Total
Operating revenue	$1,007	$953	5.7 %	2.3 %	(0.2)%	— %	3.6 %	5.7 %
Operating income	$276	$263	5.1 %	0.8 %	(0.1)%	0.8 %	3.6 %	5.1 %
Operating margin %	27.4 %	27.6 %	(20) bps	(40) bps	—	20 bps	—	(20) bps

- Operating revenue increased in the second quarter and year-to-date periods primarily due to higher organic revenue and the favorable effect of foreign currency translation.
- Organic revenue increased 4.0% in the second quarter as equipment sales grew 22.5%, partially offset by a decline in consumables of 0.4%. In the year-to-date period, organic revenue increased 2.3% as equipment sales increased 15.5%, partially offset by a decline in consumable sales of 0.7%.
- North American organic revenue increased 7.7% and 3.6% in the second quarter and year-to-date periods, respectively, primarily due to an increase in the consumer packaging, ground support and medical businesses.
- International organic revenue decreased 1.7% in the second quarter primarily due to the graphics businesses in Europe and Asia Pacific. Organic revenue was flat in the year-to-date period as growth in the consumer packaging equipment business was offset by a decline in the appliance business in Europe and the graphics business in Asia Pacific.
- Operating margin of 28.1% in the second quarter decreased 20 basis points primarily driven by product mix, higher operating expenses, including employee-related expenses, and unfavorable price/cost of 30 basis points, partially offset by benefits from the Company's enterprise initiatives, positive operating leverage of 70 basis points and lower restructuring expenses.
- In the year-to-date period, operating margin was 27.4%. The decrease of 20 basis points was primarily driven by higher operating expenses, including employee-related expenses, and unfavorable price/cost of 20 basis points, partially offset by benefits from the Company's enterprise initiatives, positive operating leverage of 50 basis points and lower restructuring expenses.

OTHER FINANCIAL HIGHLIGHTS

- Interest expense in the second quarter of 2018 decreased to $64 million versus $65 million in the second quarter of 2017 primarily due to lower outstanding commercial paper. Interest expense was $130 million and $129 million in the year-to-date periods of 2018 and 2017, respectively.
- Other income (expense) was income of $26 million in the second quarter of 2018 versus $12 million in the prior year period and $38 million in the year-to-date period of 2018 versus $18 million in the prior year period. The increase in both respective periods was primarily driven by translation gains and other net periodic benefit income related to defined benefit pension and other postretirement plans.

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 guidance is that revenue should be recognized to depict the transfer of control 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, expanded revenue disclosures are required. The Company's sales arrangements with customers are predominantly short-term in nature and generally provide for transfer of control and risks and rewards of ownership at the time of product shipment or delivery of service. As such, the timing of revenue recognition under both the prior and new guidance is the same for the majority of the Company's transactions. Effective January 1, 2018, the Company adopted the new revenue guidance under the modified retrospective method and recorded a cumulative-effect adjustment reducing retained earnings by $9 million as of January 1, 2018. Under the modified retrospective method of adoption, prior periods are not restated and the new guidance is applied prospectively to revenue transactions completed on or after January 1, 2018. Given the nature of the Company's revenue transactions, the new guidance had an immaterial impact on the Company's operating revenue, results of operations, and financial position for the three and six months ended June 30, 2018. The Company updated its revenue recognition accounting policy to reflect the requirements of the new guidance and included additional disclosures regarding the Company's revenue transactions. Refer to Note 1. Significant Accounting Policies and Note 2. Operating Revenue in Item 1. Financial Statements for additional information.

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 prior guidance. The provisions of the new guidance are being applied prospectively to intra-entity asset transfers on or after January 1, 2018 and may result in future tax rate volatility. Upon adoption of the new guidance on January 1, 2018, the Company recorded a cumulative-effect adjustment reducing deferred tax assets and retained earnings by $406 million. For the three and six months ended June 30, 2018, the impact of the new guidance on the Company's effective income tax rate was not material.

In March 2017, the FASB issued authoritative guidance which changes the income statement presentation 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 ("other net periodic benefit cost"), including interest cost, expected return on assets, settlements, curtailments, and amortization of actuarial gains and losses and prior service cost, should be presented below operating income. Effective January 1, 2018, the Company adopted the new presentation of other net periodic benefit cost and restated the prior year statement of income and related disclosures for comparability, as required under the new guidance. For the three months ended June 30, 2018 and 2017, other net periodic benefit cost included in Other income (expense) was income of $5 million and $2 million, respectively. For the six months ended June 30, 2018 and 2017, other net periodic benefit cost included in Other income (expense) was income of $10 million and $4 million, respectively. Refer to Note 5. Pension and Other Postretirement Benefits in Item 1. Financial Statements for additional information.

In February 2018, the FASB issued authoritative guidance which allows for an optional one-time reclassification of the stranded tax effects resulting from the change in the U.S. federal corporate income tax rate under the "Tax Cuts and Jobs Act" (the "Act") from accumulated other comprehensive income ("AOCI") to retained earnings. The guidance is effective January 1, 2019, with early adoption permitted. The Company elected to early adopt this guidance as of January 1, 2018 and to reclassify the stranded tax effects related to the Act, which resulted in an increase of $45 million to both retained earnings and accumulated other comprehensive loss. Refer to Note 8. Accumulated Other Comprehensive Income (Loss) in Item 1. Financial Statements for additional information.

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 right-of-use lease asset for all leases with a lease term greater than twelve months, including operating leases, in the statement of financial position. 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, expanded disclosures will be required. This guidance is effective for the Company beginning January 1, 2019, with early adoption permitted. The Company is currently reviewing its existing lease portfolio to assess the impact that the new lease accounting guidance will have on the consolidated financial statements and related disclosures. While the Company has not yet completed this review, the

Company expects to recognize right-of-use assets and lease liabilities for its operating leases in the statement of financial position upon adoption.

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 $1.6 billion of cash and equivalents on hand at June 30, 2018 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 2018 and 2017 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
In millions	2018	2017	2018	2017
Net cash provided by operating activities	$620	$464	$1,158	$927
Additions to plant and equipment	(87)	(77)	(181)	(141)
Free cash flow	$533	$387	$977	$786
Cash dividends paid	$(264)	$(224)	$(530)	$(450)
Repurchases of common stock	(500)	(250)	(1,000)	(500)
Acquisition of businesses (excluding cash and equivalents) and additional interest in affiliates	—	—	—	(3)
Net proceeds from (repayments of) debt with original maturities of three months or less	(10)	20	(850)	691
Repayments of debt with original maturities of more than three months	—	—	—	(652)
Other	11	37	14	54
Effect of exchange rate changes on cash and equivalents	(82)	33	(77)	98
Net increase (decrease) in cash and equivalents	$(312)	$3	$(1,466)	$24

Free cash flow for the three and six months ended June 30, 2017 included an additional $115 million discretionary pension contribution made in the second quarter of 2017.

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 1.9 million shares of its common stock at an average price of $128.47 in the first quarter of 2017, approximately 1.8 million shares of its common stock at an average price of $136.81 in the second quarter of 2017, approximately 1.8 million shares of its common stock at an average price of $142.54 in the third quarter of 2017, approximately 1.6 million shares of its common stock at an average price of $157.51 in the fourth quarter of 2017, approximately 3.0 million shares of its common stock at an average price of $164.04 in the first quarter of 2018, and approximately 3.4 million shares of its common stock at an average price of $146.24 in the second quarter 2018. As of June 30, 2018, there were approximately $1.4 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. For comparability, the Company excluded the 2017 confidential legal settlement from the calculation of ROIC for the three and six months ended June 30, 2017. 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. 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 2018 and 2017 was as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
Dollars in millions	2018	2017	2018	2017
Operating income	$932	$872	$1,835	$1,679
Less: Legal settlement income	—	(15)	—	(15)
Adjusted operating income	932	857	1,835	1,664
Tax rate[(1)]	25.5 %	28.4 %	25.0 %	28.4 %
Income taxes	(238)	(243)	(459)	(472)
Operating income after taxes	$694	$614	$1,376	$1,192
Invested capital:				
Trade receivables	$2,878	$2,629	$2,878	$2,629
Inventories	1,320	1,199	1,320	1,199
Net plant and equipment	1,783	1,726	1,783	1,726
Goodwill and intangible assets	5,852	6,041	5,852	6,041
Accounts payable and accrued expenses	(1,847)	(1,754)	(1,847)	(1,754)
Other, net	(407)	488	(407)	488
Total invested capital	$9,579	$10,329	$9,579	$10,329
Average invested capital	$9,675	$10,105	$9,724	$9,942
Annualized return on average invested capital	28.7 %	24.3 %	28.3 %	24.0 %

(1) The tax rate for the six months ended June 30, 2018 represents the estimated effective tax rate for the full year of 2018.

ROIC for the three months ended June 30, 2018 was 28.7%, an improvement of 440 basis points, of which 400 basis points related to the new U.S. tax rules and regulations. ROIC for the six months ended June 30, 2018 was 28.3%, an improvement of 430 basis points, of which 380 basis points related to the new U.S. tax rules and regulations.

Working Capital

Management uses working capital as a measurement of the short-term liquidity of the Company. Net working capital as of June 30, 2018 and December 31, 2017 is summarized as follows:

In millions	June 30, 2018	December 31, 2017	Increase/ (Decrease)
Current assets:			
Cash and equivalents	$1,628	$ 3,094	$ (1,466)
Trade receivables	2,878	2,628	250
Inventories	1,320	1,220	100
Other	293	336	(43)
Total current assets	6,119	7,278	(1,159)
Current liabilities:			
Short-term debt	1,350	850	500
Accounts payable and accrued expenses	1,847	1,848	(1)
Other	350	355	(5)
Total current liabilities	3,547	3,053	494
Net working capital	$2,572	$ 4,225	$ (1,653)

As of June 30, 2018, a majority of the Company's cash and equivalents were held by international subsidiaries. Cash and equivalents held internationally may be subject to foreign withholding taxes if repatriated to the U.S. A portion of the cash and equivalents balances held internationally is 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.

On December 22, 2017, the "Tax Cuts and Jobs Act" (the "Act") was enacted in the United States. The provisions of the Act significantly revised the U.S. corporate income tax rules, including a one-time repatriation tax on the deemed repatriation of post-1986 undistributed earnings of foreign subsidiaries. As a result of the one-time repatriation provisions of the Act, the Company provided for substantially all U.S. taxes on the undistributed earnings of its foreign subsidiaries as of December 31, 2017. During the six months ended June 30, 2018, the Company repatriated approximately $2.4 billion of cash and equivalents held by its international subsidiaries, a portion of which was used to repay outstanding commercial paper and to fund additional share repurchases.

Debt

Total debt as of June 30, 2018 and December 31, 2017 was as follows:

In millions	June 30, 2018	December 31, 2017
Short-term debt	$1,350	$ 850
Long-term debt	6,069	7,478
Total debt	$7,419	$ 8,328

Short-term debt as of June 30, 2018 included $649 million related to the 1.95% notes due March 1, 2019 and $699 million related to the 6.25% notes due April 1, 2019, which were reclassified from Long-term debt to Short-term debt in the first and second quarters of 2018, respectively. There was no commercial paper outstanding as of June 30, 2018. Short-term debt as of December 31, 2017 included commercial paper of $849 million.

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, 2018 and December 31, 2017 was as follows:

Dollars in millions	June 30, 2018	December 31, 2017
Total debt	$7,419	$ 8,328
Net income	$1,882	$ 1,687
Add:		
Interest expense	261	260
Other income	(65)	(45)
Income taxes	1,563	1,583
Depreciation	268	256
Amortization and impairment of intangible assets	197	206
EBITDA	$4,106	$ 3,947
Total debt to EBITDA ratio	1.8	2.1

Stockholders’ Equity

The changes to stockholders’ equity during 2018 were as follows:

In millions	
Total stockholders’ equity, December 31, 2017	$4,589
Net income	1,318
Adoption of new accounting guidance	(415)
Repurchases of common stock	(1,000)
Cash dividends declared	(525)
Foreign currency translation adjustments, net of tax	(216)
Other	37
Total stockholders’ equity, June 30, 2018	$3,788

The adoption of new accounting guidance included cumulative-effect adjustments of $406 million related to the tax consequences of intra-entity asset transfers and $9 million related to revenue recognition. Refer to Note 1. Significant Accounting Policies in Item 1. Financial Statements for additional information.

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 initiatives, 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 impact of the recently enacted U.S. tax legislation, the cost and availability of additional financing, the Company's portion of future benefit payments related to pension and postretirement benefits, 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, (16) uncertainties related to climate change regulation, and (17) negative effects of service interruptions, data corruption, cyber-based attacks, network security breaches, or violations of data privacy laws. 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, 2017. 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 ITW speak only as of the date on which they are made. ITW 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.

ITW practices fair disclosure for all interested parties. Investors should be aware that while ITW regularly communicates with securities analysts and other investment professionals, it is against ITW's policy to disclose to them any material non-public information or other confidential commercial information. Shareholders should not assume that ITW 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, 2018. 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, 2018, 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, 2018 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. The following is an update to the Company’s risk factors and should be read in conjunction with the risk factors previously disclosed in Part I - Item 1A - Risk Factors in the Company's 2017 Annual Report on Form 10-K.

If the Company is unable to protect its information technology infrastructure against service interruptions, data corruption, cyber-based attacks or network security breaches, or if there is a violation of data privacy laws, there could be a negative impact on operating results or the Company may suffer financial or reputational damage.

The Company relies on information technology networks and systems, including the Internet, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities, including procurement, manufacturing, distribution, invoicing and collection. These technology networks and systems may be susceptible to damage, disruptions or shutdowns due to failures during the process of upgrading or replacing software, databases or components; power outages; hardware failures; attacks by computer hackers; computer viruses; employee error or malfeasance. In addition, security breaches could result in unauthorized disclosure of confidential information or personal data belonging to our employees, partners, customers or suppliers. We are also subject to data privacy laws in the various countries in which we operate. If our information technology systems suffer severe damage, disruption, or shutdown, and business continuity plans do not effectively resolve the issues in a timely manner, or if we violate data privacy laws, there could be a negative impact on operating results or the Company may suffer financial or reputational damage.

The global nature of the Company's operations subjects it to political and economic risks that could adversely affect its business, results of operations or financial condition.

The Company currently operates in 55 countries. The risks inherent in the Company's global operations include:

- fluctuation in currency exchange rates;
- limitations on ownership or participation in local enterprises;
- price controls, exchange controls and limitations on repatriation of earnings;
- transportation delays and interruptions;
- political, social and economic instability and disruptions;
- acts of terrorism;
- government embargoes or foreign trade restrictions;
- the imposition of duties and tariffs and other trade barriers and retaliatory countermeasures;
- government actions impacting international trade agreements;
- import and export controls;
- labor unrest and current and changing regulatory environments;
- the potential for expropriation or nationalization of enterprises;
- difficulties in staffing and managing multi-national operations;
- limitations on its ability to enforce legal rights and remedies; and
- potentially adverse tax consequences.

If the Company is unable to successfully manage these and other risks associated with managing and expanding its international businesses, the risks could have a material adverse effect on the Company's business, results of operations or financial condition.

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, 2018, there were approximately $1.4 billion of authorized repurchases remaining under the 2015 Program. Share repurchase activity under the Company's share repurchase program for the second quarter of 2018 was as follows:

In millions except per share amounts

Period	Total Number of Shares	Average Price Paid Per	Total Number of Shares	Maximum Value of Shares

	Purchased	Share	Purchased as Part of Publicly Announced Program	That May Yet Be Purchased Under Program
April 2018	1.3	$148.92	1.3	$ 1,750
May 2018	1.8	$144.34	1.8	$ 1,487
June 2018	0.3	$146.00	0.3	$ 1,445
Total	3.4		3.4	

33

ITEM 6.
Exhibits
Exhibit
Index

Exhibit Number	Exhibit Description
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, 2018 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 2, 2018	By:	/s/ Randall J. Scheuneman
			Randall J. Scheuneman
			Vice President & Chief Accounting Officer
			(Principal Accounting Officer and Duly Authorized Officer)