## Third Quarter 2018 Earnings Call

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## Important Information

## Forward-Looking Statements

This presentation contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "guidance," "intends," "may," "outlook," "plans," "projects," "seeks," "sees," "should," "targets," "will," "would," or other words of similar meaning. All statements that reflect Arconic's expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, forecasts and expectations relating to the growth of the aerospace, automotive, commercial transportation and other end markets; statements and guidance regarding future financial results or operating performance; statements about Arconic's strategies, outlook, business and financial prospects; and statements regarding the completion of the Texarkana sale and the expected financial impact of the sale. These statements reflect beliefs and assumptions that are based on Arconic's perception of historical trends, current conditions and expected future developments, as well as other factors Arconic believes are appropriate in the circumstances. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and changes in circumstances that are difficult to predict, which could cause actual results to differ materially from those indicated by these statements. Such risks and uncertainties include, but are not limited to: (a) deterioration in global economic and financial market conditions generally; (b) unfavorable changes in the markets served by Arconic; (c) the inability to achieve the level of revenue growth, cash generation, cost savings, improvement in profitability and margins, fiscal discipline, or strengthening of competitiveness and operations anticipated or targeted; (d) competition from new product offerings, disruptive technologies or other developments; (e) political, economic, and regulatory risks relating to Arconic's global operations, including compliance with US and foreign trade and tax laws, sanctions, embargoes and other regulations; (f) manufacturing difficulties or other issues that impact product performance, quality or safety; ( g ) Arconic's inability to realize expected benefits, in each case as planned and by targeted completion dates, from acquisitions, divestitures, facility closures, curtailments, expansions, or joint ventures; (h) failure or delays in the receipt or satisfaction of, or unacceptable or burdensome conditions imposed in connection with, all required regulatory approvals and the other closing conditions to the Texarkana transaction; (i) the impact of cyber attacks and potential information technology or data security breaches; (j) changes in discount rates or investment returns on pension assets; (k) the impact of changes in aluminum prices and foreign currency exchange rates on costs and results; (I) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation, which can expose Arconic to substantial costs and liabilities; and ( m ) the other risk factors summarized in Arconic's Form 10-K for the year ended December 31, 2017 and other reports filed with the U.S. Securities and Exchange Commission (SEC). Market projections are subject to the risks discussed above and other risks in the market. The statements in this presentation are made as of the date of this presentation, even if subsequently made available by Arconic on its website or otherwise. Arconic disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events, or otherwise, except as required by applicable law.

## Important Information (continued)

## Non-GAAP Financial Measures

Some of the information included in this presentation is derived from Arconic's consolidated financial information but is not presented in Arconic's financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). Certain of these data are considered "nonGAAP financial measures" under SEC rules. These non-GAAP financial measures supplement our GAAP disclosures and should not be considered an alternative to the GAAP measure. Reconciliations to the most directly comparable GAAP financial measures and management's rationale for the use of the non-GAAP financial measures can be found in the Appendix to this presentation. Arconic has not provided reconciliations of any forward-looking non-GAAP financial measures, such as earnings per share excluding special items and adjusted free cash flow, to the most directly comparable GAAP financial measures because Arconic is unable to quantify certain amounts that would be required to be included in the GAAP measure without unreasonable efforts, and Arconic believes such reconciliations would imply a degree of precision that would be confusing or misleading to investors. In particular, such reconciliations are not available without unreasonable efforts due to the variability and complexity with respect to the charges and other components excluded from the non-GAAP measures, such as the effects of foreign currency movements, equity income, gains or losses on sales of assets, taxes, and any future restructuring or impairment charges. These reconciling items are in addition to the inherent variability already included in the GAAP measures, which includes, but is not limited to, price/mix and volume.

Any reference to historical EBITDA means adjusted EBITDA, for which we have provided calculations and reconciliations in the Appendix. "Organic revenue" is U.S. GAAP revenue adjusted for Tennessee packaging (due to its planned phase-down), divestitures, and changes in aluminum prices and foreign currency exchange rates relative to prior year period. "Adjusted free cash flow" is cash provided from (used for) operations, less capital expenditures, plus cash receipts from sold receivables.

## Other Information

Tennessee Packaging - Arconic expects to fully exit the North America packaging business at its Tennessee operations following the expiration of the Toll Processing and Services Agreement (the "Processing Agreement") with Alcoa Corporation on December 31, 2018, unless sooner terminated by the parties. Pursuant to the Processing Agreement, dated as of October 31, 2016, Arconic provides can body stock to Alcoa Corporation, using aluminum supplied by Alcoa Corporation.

## Third Quarter 2018 Highlights

## Revenue (YoY) ${ }^{1}$

- Revenue growth $9 \%$ and organic revenue growth of $7 \%$


## Profitability (YoY)

- Operating Income excluding Special Items $+4 \%^{2}$. Major underlying elements include:
- Volume growth across all segments
- Segment Operating Profit growth in EP\&S' Engines/Fastening Systems, GRP, and TCS
- Manufacturing inefficiencies in EP\&S' Engineered Structures
- Earnings Per Share excluding Special Items $+28 \%^{3}$


## Adjusted Free Cash Flow (YoY) ${ }^{4}$

- \$115M 3Q 2018 vs. \$41M 3Q 2017
- Working capital improvement of 8 days to 54 Days Working Capital


## Capital Structure

- Cash balance of \$1.5B, Liquidity (cash and available credit facilities) of \$5.3B
- Net Debt-to-LTM EBITDA of $2.43 x^{5}$
- Announced sale of Texarkana facility for $\$ 300 \mathrm{M}$ with additional contingent consideration of $\$ 50 \mathrm{M}$

1) $\mathrm{YoY}=$ Year over Year. 3Q 2018 Revenue (GAAP) $=\$ 3,524 \mathrm{M}$ (up 9\%), 3Q 2017 Revenue (GAAP) $=\$ 3,236 \mathrm{M}$
2) 3 Q 2018 Operating income (GAAP) $=\$ 345 \mathrm{M}$ (up 11\%), 3Q 2017 Operating income (GAAP) $=\$ 310 \mathrm{M}$
3) $3 \mathrm{Q} 2018 \mathrm{EPS}(\mathrm{GAAP})=\$ 0.32$, 3Q $2017 \mathrm{EPS}(\mathrm{GAAP})=\$ 0.22$
4) 3Q18 (GAAP): Cash provided from operations $=\$ 51 \mathrm{M}$, Cash used for financing activities $=(\$ 32 \mathrm{M})$, Cash provided from investing activities $=\$ 65 \mathrm{M}$;

ARCONIC 3Q17 (GAAP): Cash used for operations $=(\$ 57 \mathrm{M})$, Cash used for financing activities $=(\$ 15 \mathrm{M})$, Cash provided from investing activities $=\$ 100 \mathrm{M}$
5) Adjusted for special items; Last twelve month (LTM) Arconic adjusted EBITDA

## Key Financial Results - 3Q 2018



- Revenue growth across all segments
- Organic revenue increased $\$ 233 \mathrm{M}$ or $7 \%$ YoY

Operating
Income
Excluding
Special Items²


- Volume \$56M: Aero \$28M and Automotive \$16M
- Price/Mix (\$25M): Aero Engine mix and Aero pricing
- Net Cost Savings (\$19M) driven by Transportation
Adjusted
Free Cash
Flow ${ }^{3}$
- Days Working Capital 54 days, favorable 8 days YoY
- Capex of $\$ 209 \mathrm{M}$, up $\$ 78 \mathrm{M}$ YoY

EPS Excluding Special Items ${ }^{4}$


- Pension / OPEB $+\$ 0.03$
- Interest expense $+\$ 0.02$
- Tax rate $+\$ 0.02$

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## Overview of Segment Results - 3Q 2018

|  | Revenue ${ }^{1}$ | Segment Operating Profit ${ }^{1}$ | Segment Operating Profit Comments |
| :---: | :---: | :---: | :---: |
| EP\&S | \$1,566M <br> Up 6\% <br> Up 6\% Organic | $\begin{gathered} \$ 238 \mathrm{M} \\ \text { Approximately Flat } \\ \text { Aluminum price impact }+\$ 4 \mathrm{M} \end{gathered}$ | + Aero Engine growth <br> + Aero Defense growth <br> - Aero Engine mix and Aero pricing <br> - Manufacturing inefficiencies in Engineered Structures |
| GRP | \$1,426M <br> Up 16\% <br> Up 9\% Organic | $\begin{gathered} \$ 74 \mathrm{M} \\ \text { Up } 76 \% \text {, or } \$ 10 \mathrm{M} \\ \text { Aluminum price impact }+\$ 9 \mathrm{M} \end{gathered}$ | + Automotive growth <br> + Industrial growth <br> - Scrap spreads and volume <br> - Transportation costs |
| TCS | \$530M Up 1\% Up 8\% Organic | $\$ 77 \mathrm{M}$ Up $4 \%$, or $\$ 3 \mathrm{M}$ Aluminum price impact (\$14M) | + Commercial Transportation growth <br> + Building and Construction growth <br> - Majority of aluminum price impact non-cash |

## Third Quarter 2018 Key Achievements

EP\&S

- Aero Engines revenue up $15 \%$ YoY
- Aero Defense revenue up 38\% YoY

GRP

- Auto organic revenue up $20 \% \mathrm{YoY}^{1}$
- Industrial organic revenue up $6 \% \mathrm{YoY}^{2}$
- Commercial Transportation organic revenue up $7 \% \mathrm{YoY}^{3}$

TCS

- Commercial Transportation organic revenue up $8 \% \mathrm{YoY}^{4}$
- Building and Construction organic revenue up 7\% YoY5
- Segment Operating Profit Margin of $15 \%$, up +40 bps YoY incl. -280 bps Al price impact


## Cash flows / Other

- Pension/OPEB Contributions of \$347M 3Q 2018 YTD vs. \$327M 3Q 2017 YTD
- 3Q 2018 YTD Pension / OPEB Net Liability reduction of \$519M


## 2018 Earnings Per Share ${ }^{1}$ Guidance Updated ${ }^{2}$

+ Next Gen Engine ramp
- Transportation and raw material costs
+ Auto Aluminization
+ Commercial Transportation
+ Net Cost Savings
+ Building and Construction
+ Aerospace and Military Aircraft deliveries

| EPS Excluding Special Items |  |
| :--- | :---: |
| Prior Guidance | $\$ 1.17-\$ 1.27$ |
|  | Updated |
| Current Guidance | $\$ 1.28-\$ 1.34$ |

## Adjusted Free Cash Flow

| Prior Guidance | $\sim \$ 250 \mathrm{M}$ |
| :--- | :---: |
|  | Unchanged |
| Current Guidance | $\sim \$ 250 \mathrm{M}$ |

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## Appendix

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## 3Q 2018 Special Items

| (\$M) | Income before income taxes | Net Income |  |
| :---: | :---: | :---: | :---: |
| As reported | \$249 | \$161 | \$0.32 |
| Restructuring-related | (\$2) | (\$3) |  |
| Spain tax indemnification receivable | (\$29) | (\$28) |  |
| Legal and other advisory costs related to Grenfell Tower | \$5 | \$4 |  |
| Discrete tax items | N/A | \$26 |  |
| Special items | (\$26) | (\$1) |  |
| Excluding special items | \$223 | \$160 | \$0.32 |

## Capital Structure: \$4.8B of Net Debt

| Capitalization at September 30, 2018 |  |
| :--- | :--- |
| (\$M) | Amount |
| Cash | $\$ 1,535$ |
| Gross Debt | $\$ 6,357$ |
| Net Debt | $\mathbf{\$ 4 , 8 2 2}$ |
| Net Debt-to-LTM EBITDA ${ }^{1}$ | 2.43 |



## Key 2018 Guidance Assumptions



## Aluminum price impacts 3Q 2018 vs. 3Q 2017

Year-over-Year Impact from Aluminum Price Changes

|  | 3Q 2018 |  |  |
| :---: | :---: | :---: | :---: |
|  | Revenue (\$M) | Operating Income (\$M) | Operating Income \% |
| EP\&S | (\$1) | \$4 | +30 bps |
| GRP | \$106 | \$9 | +30 bps |
| TCS | \$3 | (\$14) | -280 bps |
| Arconic | \$108 | (\$1) | -30 bps |
|  | 3Q 2018 Year-to-Date |  |  |
|  | Revenue (\$M) | Operating Income (\$M) | Operating Income \% |
| EP\&S | \$2 | (\$12) | -20 bps |
| GRP | \$343 | (\$8) | -80 bps |
| TCS | \$21 | (\$38) | -260 bps |
| Arconic | \$366 | (\$58) | -90 bps |

## Organic Revenue ${ }^{1}$ Growth for 3Q 2018

|  | 3Q 2017 <br> $\mathbf{( \$ M )}$ | 3Q 2018 <br> $\mathbf{( \$ M )}$ | \% Change |
| :--- | :---: | :---: | :---: |
| Arconic Revenue | $\$ 3,236$ | $\$ 3,524$ | $\mathbf{9 \%}$ |
| less Tennessee Packaging | 45 | 37 |  |
| less Latin America Extrusions | 30 | - |  |
| less Aluminum Price Impact ${ }^{2}$ | - | 108 |  |
| less Foreign Currency Impact $^{2}$ | - | $(15)$ |  |
| Arconic Revenue, Organic | $\$ 3,161$ | $\$ 3,394$ | $\mathbf{7 \%}$ |


|  | 3Q 2017 <br> $\mathbf{( \$ M )}$ | 3Q 2018 <br> $\mathbf{( \$ M )}$ | \% Change |
| :---: | :---: | :---: | :---: |
| GRP Revenue | $\$ 1,234$ | $\$ 1,426$ | $\mathbf{1 6 \%}$ |
| less Tennessee Packaging | 45 | 37 |  |
| less Aluminum Price Impact ${ }^{2}$ | - | 106 |  |
| less Foreign Currency Impact $^{2}$ | - | $(10)$ |  |
| GRP Revenue, Organic | $\$ 1,189$ | $\$ 1,293$ | $\mathbf{9 \%}$ |


|  | 3Q 2017 <br> $\mathbf{( \$ M )}$ | 3Q 2018 <br> $\mathbf{( \$ M )}$ | \% Change |
| :---: | :---: | :---: | :---: |
| EP\&S Revenue | $\$ 1,477$ | $\$ 1,566$ | $\mathbf{6 \%}$ |
| less Aluminum Price Impact ${ }^{2}$ | - | $(1)$ |  |
| less Foreign Currency Impact $^{2}$ | - | $(1)$ |  |
| EP\&S Revenue, Organic | $\$ 1,477$ | $\$ 1,568$ | $\mathbf{6 \%}$ |


|  | 3Q 2017 <br> $\mathbf{( \$ M )}$ | 3Q 2018 <br> $\mathbf{( \$ M )}$ | \% Change |
| :---: | :---: | :---: | :---: |
| TCS Revenue | $\$ 523$ | $\$ 530$ | $\mathbf{1 \%}$ |
| less Latin America Extrusions | 30 | - |  |
| less Aluminum Price Impact ${ }^{2}$ | - | 3 |  |
| less Foreign Currency Impact $^{2}$ | - | $(4)$ |  |
| TCS Revenue, Organic | $\$ 493$ | $\$ 531$ | $\mathbf{8 \%}$ |

## LIFO (Non Cash) Charges Illustrated

| 2017 |  | Annual LIFO2 <br> Estimate (\$M) | Annual Estimate To Book YTD | $\frac{10}{(\$ \mathrm{M})}$ | $\begin{gathered} 20 \\ (\$ M) \end{gathered}$ | $\begin{gathered} 30 \\ (\$ M) \end{gathered}$ | $\begin{gathered} 40 \\ (\$ M) \end{gathered}$ | 2018 |  | Annual LIFO² <br> Estimate (\$M) | Annual Estimate To Book YTD | $\frac{10}{(\$ M)}$ | $\begin{gathered} 20 \\ (\$ M) \end{gathered}$ | $\begin{gathered} 30 \\ (\$ \mathrm{M}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 Q$ | \$2,174 | (\$76M) | 25\% | (\$19M) | (\$19M) | (\$19M) | (\$19M) | 10 | \$2,433 | (\$56M) | 25\% | (\$14M) | (\$14M) | (\$14M) |
| 2Q | \$2,097 | (\$60M) | 50\% |  | (\$11M) | (\$11M) | (\$11M) | 2Q | \$2,590 | (\$92M) | 50\% |  | (\$32M) | (\$32M) |
| 3Q | \$2,267 | (\$104M) | 75\% |  |  | (\$48M) | (\$48M) | 3Q | \$2,482 | (\$71M) | 75\% |  |  | (\$7M) |
| 4Q | \$2,309 | (\$110M) | 100\% |  |  |  | (\$32M) |  |  |  |  |  |  |  |
| YTD Entry |  |  |  | (\$19M) | (\$30M) | (\$78M) | (\$110M) | YTD <br> Entry |  |  |  | (\$14M) | (\$46M) | (\$53M) |

## Lower Annual YoY Aluminum Price Headwind; Favorable \$30M

| Year-over-Year Operating Income Impact from Aluminum Price Changes |  |  |  |
| :---: | :---: | :---: | :---: |
| USD Millions | Year'18 vs Year'17 <br> (\$M) <br> Prior Guidance | Year'18 vs Year'17 <br> (\$M) <br> Current Guidance | Full Year <br> 2018 Current Guidance: \$2,561 <br> 2018 Prior Guidance: \$2,664 2017 Actual: \$2,167 |
| LIFO ${ }^{1} /$ Metal Lag Trading Desk | $\sim(\$ 50)$ $\sim(\$ 20)$ | $\sim(\$ 15)$ $\sim(\$ 20)$ |  |
| Scrap Spreads | ~(\$10) | $\sim(\$ 30)$ | Year-over-year impact based on |
| Operational | ~(\$50) | $\sim(\$ 35)$ | ~\$2,520/MT for the remainder of the year |
| Arconic Total | ~(\$130) | ~(\$100) |  |

## Revenue by Market - 3Q 2018


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## Reconciliation of Net income excluding Special items

| (\$ in millions, except per-share amounts) | Net income excluding Special items |  | Diluted EPS excluding Special itemsQuarter ended |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quarter ended |  |  |  |
|  | $\begin{gathered} \text { September 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2017 \end{gathered}$ |
| Net income | \$161 | \$119 | \$0.32 | \$0.22 |
| Special items: |  |  |  |  |
| Restructuring and other charges | (2) | 19 |  |  |
| Discrete tax items ${ }^{(1)}$ | 26 | 2 |  |  |
| Other special items ${ }^{(2)}$ | (24) | - |  |  |
| Tax impact ${ }^{(3)}$ | (1) | (8) |  |  |
| Net income excluding Special items | \$160 | \$132 | \$0.32 | \$0.25 |



 Special items.
(1)

Discrete tax items included the following.

- for the quarter ended September 30, 2018, a charge to establish a tax reserve in Spain (\$59), a net charge related to prior year adjustments in various jurisdictions (\$13), a benefit to reverse a foreign tax reserve that is effectively settled (\$38), and benefits resulting from the Company's ongoing analysis of the U.S. Tax Cuts and Jobs Act of 2017 related to the one-time transition tax ( $\$ 2$ ) and U.S. rate change impacts (\$6); and
- for the quarter ended September 30, 2017, a net charge for a number of small items (\$2)
(2)

Other special items included the following:

- for the quarter ended September 30, 2018, a benefit from establishing a tax indemnification receivable (\$29) reflecting Alcoa Corporation's $49 \%$ share of the Spanish tax reserve and legal and other advisory costs related to Grenfell Tower (\$5); and
- for the quarter ended September 30, 2017, legal and other advisory costs related to Grenfell Tower (\$7) and a favorable tax impact resulting from the difference between Arconic's consolidated estimated annual effective tax rate and the statutory rate applicable to special items (\$7).

The tax impact on special items is based on the applicable statutory rates whereby the difference between such rates and Arconic's consolidated estimated annual effective tax rate is itself a Special
item.
The average number of shares applicable to diluted EPS excluding Special items, includes certain share equivalents as their effect was dilutive. For all periods presented, share equivalents associated with outstanding employee stock options and awards and shares underlying outstanding convertible debt (acquired through the acquisition of RTI) were dilutive based on Net income excluding Special items.

For the quarter ended September 30, 2017, share equivalents associated with mandatory convertible preferred stock were anti-dilutive based on Net income excluding Special items.

## Reconciliation of Net income excluding Special items

| (\$ in millions, except per-share amounts) | Net income excluding Special items |  | Diluted EPS excluding Special items <br> Nine months ended |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Nine months ended |  |  |  |
|  | $\begin{gathered} \text { September 30, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { September } 30, \\ 2018 \end{gathered}$ | $\begin{gathered} \hline \text { September 30, } \\ 2017 \end{gathered}$ |
| Net income | \$424 | \$653 | \$0.86 | \$1.31 |
| Special items: |  |  |  |  |
| Restructuring and other charges | 20 | 118 |  |  |
| Discrete tax items ${ }^{(1)}$ | 49 | 3 |  |  |
| Other special items ${ }^{(2)}$ | 43 | (348) |  |  |
| Tax impact ${ }^{(3)}$ | (22) | 40 |  |  |
| Net income excluding Special items | \$514 | \$466 | \$1.04 | \$0.91 |


 periods. To compensate for this limitation, management believes that it is appropriate to consider both Net income determined under GAAP as well as Net income excluding Special items.

Discrete tax items included the following:

- for the nine months ended September 30, 2018, a charge to establish a tax reserve in Spain (\$59); a net charge related to prior year adjustments in various jurisdictions (\$13); a net charge resulting from the Company's ongoing analysis of the U.S. Tax Cuts and Jobs Acts of 2017 related to an increase in the one-time transition tax ( $\$ 16$ ) and a charge for AMT credits expected to be refunded upon filing the 2018 tax return that will result in no benefit under government sequestration ( $\$ 3$ ), partially offset by beneficial U.S. rate change impacts ( $\$ 6$ ); a benefit to reverse a foreign tax reserve that is effectively settled ( $\$ 38$ ), and a charge for a number of small items (\$2); and
- for the nine months ended September 30, 2017, a net charge for a number of small items (\$3).
(2)

Other special items included the following:
 ( $\$ 29$ ) reflecting Alcoa Corporation's $49 \%$ share of the Spanish tax reserve, costs related to the early redemption of the Company's outstanding $5.720 \%$ Senior Notes due 2019 ( $\$ 19$ ), legal and other advisory costs related to Grenfell Tower (\$14), and a charge for a number of small tax items (\$1); and

- for the nine months ended September 30, 2017, a gain on the sale of a portion of Arconic's investment in Alcoa Corporation common stock (\$351), and a gain on the exchange of the remaining portion of Arconic's investment in Alcoa Corporation common stock (\$167), costs associated with the Company's early redemption of $\$ 1,250$ of outstanding senior notes ( $\$ 76$ ), proxy, advisory, and governance-related costs (\$58), costs associated with the separation of Alcoa Inc. (\$18), legal and other advisory costs related to Grenfell Tower (\$7), an unfavorable tax impact resulting from the difference between Arconic's consolidated estimated annual effective tax rate and the statutory rate applicable to special items (\$6) and an unfavorable tax impact related to the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit was recognized (\$5).


## Reconciliation of Operational Tax Rate

| (\$ in millions) | Quarter ended September 30, 2018 |  |  | Nine months ended September 30, 2018 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | As reported | Special items ${ }^{(1)}$ | As adjusted | As reported | Special items ${ }^{(1)}$ | As adjusted |
| Income before income taxes | \$249 | \$(26) | \$223 | \$642 | \$62 | \$704 |
| Provision for income taxes | 88 | (25) | 63 | 218 | (28) | 190 |
| Operational tax rate | 35.3\% |  | 28.3\% | 34.0\% |  | 27.0\% |

Operational tax rate is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of Arconic excluding the impacts of Special items. There can be no assurances that additional Special items will not occur in future periods. To compensate for this limitation, management believes that it is appropriate to consider both the Effective tax rate determined under GAAP as well as the Operational tax rate.
${ }^{(1)}$ See Net income excluding Special items reconciliation for a description of Special items.

## Calculation of Engineered Products and Solutions Segment Operating Profit Margin

| (\$ in millions) | $\mathbf{1 Q 1 7}$ | $\mathbf{2 Q 1 7}$ | $\mathbf{3 Q 1 7}$ | $\mathbf{4 Q 1 7}$ | $\mathbf{2 0 1 7}$ | $\mathbf{1 Q 1 8}$ | 2Q18 | 3Q18 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Segment operating profit ${ }^{(1)}$ | $\$ 247$ | $\$ 250$ | $\$ 239$ | $\$ 228$ | $\$ 964$ | $\$ 221$ | $\$ 212$ |
| Third-party sales | $\$ 1,487$ | $\$ 1,485$ | $\$ 1,477$ | $\$ 1,494$ | $\$ 5,943$ | $\$ 1,541$ | $\$ 1,596$ | $\$ 1,566$ |
| Segment operating profit margin | $16.6 \%$ | $16.8 \%$ | $16.2 \%$ | $15.3 \%$ | $16.2 \%$ | $14.3 \%$ | $13.3 \%$ | $15.2 \%$ |

In the first quarter of 2018, the Company changed its primary measure of segment performance from Adjusted EBITDA to Segment operating profit. Arconic's definition of Segment operating profit is Operating income (loss) excluding Special items. Special items include Restructuring and other charges, and Impairment of goodwill. Segment operating profit may not be comparable to similarly titled measures of other companies. Prior period amounts have been recast to conform to current period presentation.
Segment operating profit also includes certain items which under the previous segment performance measure were recorded in Corporate, such as the impact of LIFO inventory accounting, metal price lag, intersegment profit eliminations, and derivative activities.
(1)

[^0]
## Calculation of Global Rolled Products Segment Operating Profit Margin

| (\$ in millions) | $1 \mathrm{Q17}$ | 2Q17 | 3 Q17 | $4 \mathrm{Q17}$ | 2017 | 1 Q18 | $2 \mathrm{Q18}$ | 3 Q 18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Segment operating profit | \$136 | \$133 | \$64 | \$91 | \$424 | \$112 | \$123 | \$74 |
| Third-party sales | \$1,248 | \$1,271 | \$1,234 | \$1,247 | \$5,000 | \$1,366 | \$1,451 | \$1,426 |
| Segment operating profit margin | 10.9\% | 10.5\% | 5.2\% | 7.3\% | 8.5\% | 8.2\% | 8.5\% | 5.2\% |
| Third-party aluminum shipments (kmt) | 310 | 307 | 297 | 283 | 1,197 | 308 | 315 | 318 |


 companies. Prior period amounts have been recast to conform to current period presentation.
 intersegment profit eliminations, and derivative activities.

Calculation of Transportation and Construction Solutions Segment Operating Profit Margin

| (\$ in millions) | $\mathbf{1 Q 1 7}$ | $\mathbf{2 Q 1 7}$ | $\mathbf{3 Q 1 7}$ | $\mathbf{4 Q 1 7}$ | $\mathbf{2 0 1 7}$ | $\mathbf{1 Q 1 8}$ | $\mathbf{2 Q 1 8}$ | $\mathbf{3 Q 1 8}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Segment operating profit | $\$ 68$ | $\$ 71$ | $\$ 74$ | $\$ 77$ | $\$ 290$ | $\$ 67$ | $\$ 97$ |
|  | $\$ 456$ | $\$ 504$ | $\$ 523$ | $\$ 528$ | $\$ 2,011$ | $\$ 537$ | $\$ 562$ | $\$ 530$ |
| Segment operating profit margin | $14.9 \%$ | $14.1 \%$ | $14.1 \%$ | $14.6 \%$ | $14.4 \%$ | $12.5 \%$ | $17.3 \%$ | $14.5 \%$ |


 companies. Prior period amounts have been recast to conform to current period presentation.
 intersegment profit eliminations, and derivative activities.

## Calculation of Total Segment Operating Profit Margin

| (\$ in millions) | 1Q17 | 2 Q 17 | 3Q17 | $4 \mathrm{Q17}$ | 2017 | $1 \mathrm{Q18}$ | 2 Q18 | 3 Q 18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales - Engineered Products and Solutions | \$1,487 | \$1,485 | \$1,477 | \$1,494 | \$5,943 | \$1,541 | \$1,596 | \$1,566 |
| Sales - Global Rolled Products | 1,248 | 1,271 | 1,234 | 1,247 | 5,000 | 1,366 | 1,451 | 1,426 |
| Sales - Transportation and Construction Solutions | 456 | 504 | 523 | 528 | 2,011 | 537 | 562 | 530 |
| Total segment sales | \$3,191 | \$3,260 | \$3,234 | \$3,269 | \$12,954 | \$3,444 | \$3,609 | \$3,522 |
| Total segment operating profit ${ }^{(1)}$ | \$451 | \$454 | \$377 | \$396 | \$1,678 | \$400 | \$432 | \$389 |
| Total segment operating profit margin | 14.1\% | 13.9\% | 11.7\% | 12.1\% | 13.0\% | 11.6\% | 12.0\% | 11.0\% |


 companies. Prior period amounts have been recast to conform to current period presentation.
 intersegment profit eliminations, and derivative activities.
${ }^{(1)}$ See Reconciliation of Total segment operating profit to Consolidated income (loss) before income taxes.

## Reconciliation of Total segment operating profit to Consolidated income (loss) before income taxes

| (\$ in millions) | $1 \mathrm{Q17}$ | 2Q17 | 3Q17 | 4Q17 | 2017 | 1Q18 | 2 Q18 | $3 \mathrm{Q18}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total segment operating profit ${ }^{(1)}$ | \$451 | \$454 | \$377 | \$396 | \$1,678 | \$400 | \$432 | \$389 |
| Unallocated amounts: |  |  |  |  |  |  |  |  |
| Restructuring and other charges | (73) | (26) | (19) | (47) | (165) | (7) | (15) | 2 |
| Impairment of goodwill | - | - | - | (719) | (719) | - | - | - |
| Corporate expense ${ }^{(2)}$ | (95) | (108) | (48) | (63) | (314) | (60) | (93) | (46) |
| Consolidated operating income (loss) | 283 | 320 | 310 | (433) | 480 | 333 | 324 | 345 |
| Interest expense ${ }^{(3)}$ | (115) | (183) | (100) | (98) | (496) | (114) | (89) | (88) |
| Other income (expense), net ${ }^{(4)}$ | 316 | 132 | (38) | 76 | 486 | (20) | (41) | (8) |
| Consolidated income (loss) before income taxes | \$484 | \$269 | \$172 | \$(455) | \$470 | \$199 | \$194 | \$249 |


 companies. Prior period amounts have been recast to conform to current period presentation.
 intersegment profit eliminations, and derivative activities.
The difference between certain segment totals and consolidated amounts is Corporate.

 June 30, 2017, Corporate expense included $\$ 42$ of proxy, advisory and governance-related costs. For the quarter ended June 30, 2018, Corporate expense included $\$ 38$ of costs related to settlements of certain customer claims primarily related to product introductions.
 2019. For quarter ended March 31, 2018, Interest expense included $\$ 19$ related to the early redemption of the Company’s outstanding $5.720 \%$ Senior Notes due 2019 .
 2017, Other income (expense), net included a $\$ 167$ gain on the exchange of Arconic's remaining investment in Alcoa Corporation common stock for a portion of the Company's outstanding 2018 Senior Notes. For the quarter ended December 31, 2017, Other income (expense), net included favorable adjustments of $\$ 81$ to the Firth Rixson earn-out and $\$ 25$ to a separation-related guarantee liability.

## Reconciliation of Operating Income Excluding Special Items

| (\$ in millions) | 1 Q17 | $2 \mathrm{Q17}$ | $3 \mathrm{Q17}$ | 4Q17 | 2017 | 1 Q18 | $2 \mathrm{Q18}$ | 3Q18 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating income (loss) | \$283 | \$320 | \$310 | \$(433) | \$480 | \$333 | \$324 | \$345 |
| Special items: |  |  |  |  |  |  |  |  |
| Restructuring and other charges | 73 | 26 | 19 | 47 | 165 | 7 | 15 | (2) |
| Impairment of goodwill | - | - | - | 719 | 719 | - | - | - |
| Separation costs | 18 | - | - | - | 18 | - | - | - |
| Proxy, advisory and governance-related costs | 16 | 42 | - | - | 58 | - | - | - |
| Delaware reincorporation costs | - | - | - | 3 | 3 | - | - | - |
| Legal and other advisory costs related to Grenfell Tower | - | - | 7 | 7 | 14 | 5 | 4 | 5 |
| Settlements of certain customer claims primarily related to product introductions | - | - | - | - | - | - | 38 | - |
| Operating income excluding Special items | \$390 | \$388 | \$336 | \$343 | \$1,457 | \$345 | \$381 | \$348 |


 consider both Operating income determined under GAAP as well as Operating income excluding Special items.

## Reconciliation of Adjusted Free Cash Flow

|  | $\mathbf{1 Q 1 7}$ | $\mathbf{2 Q 1 7}$ | $\mathbf{3 Q 1 7}$ | $\mathbf{4 Q 1 7}$ | $\mathbf{2 0 1 7}$ | $\mathbf{1 Q 1 8}$ | $\mathbf{2 Q 1 8}$ | $\mathbf{3 Q 1 8}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ( in millions) <br> Cash (used for) provided from operations | $\$(395)$ | $\$ 79$ | $\$(57)$ | $\$ 323$ | $\$(50)$ | $\$(436)$ | $\$ 176$ | 51 |
| Capital expenditures | $(103)$ | $(126)$ | $(131)$ | $(236)$ | $(596)$ | $(117)$ | $(171)$ | $(209)$ |
| Cash receipts from sold receivables | 95 | 190 | 229 | 289 | 803 | 136 | 284 |  |
| Adjusted free cash flow | $\$(403)$ | $\$ 143$ | $\$ 41$ | $\$ 376$ | $\$ 157$ | $\$(417)$ | $\$ 289$ | $\$ 115$ |

There has been no change in the net cash funding in the sale of accounts receivable program in the third quarter of 2018. It remains at $\$ 350$






 service requirements, are not deducted from the measure.

## Reconciliation of Organic Revenue

| (\$ in millions) | Quarter ended September 30, |  | Quarter ended June 30, |  | Nine months ended September 30, |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 | 2018 | 2017 |
| Arconic |  |  |  |  |  |  |
| Sales - Arconic | \$3,524 | \$3,236 | \$3,573 | \$3,261 | \$10,542 | \$9,689 |
| Less: |  |  |  |  |  |  |
| Sales - Tennessee packaging | 37 | 45 | 46 | 51 | 126 | 150 |
| Sales - Fusina rolling mill | - | - | - | 9 | - | 54 |
| Sales - Latin America extrusions | - | 30 | - | 30 | 25 | 86 |
| Aluminum price impact | 108 | n/a | 149 | n/a | 366 | n/a |
| Foreign currency impact | (15) | n/a | 38 | n/a | 89 | n/a |
| Arconic Organic revenue | \$3,394 | \$3,161 | \$3,340 | \$3,171 | \$9,936 | \$9,399 |
| Engineered Products and Solutions (EP\&S) |  |  |  |  |  |  |
| Sales | \$1,566 | \$1,477 | \$1,596 | \$1,485 | \$4,703 | \$4,449 |
| Less: |  |  |  |  |  |  |
| Aluminum price impact | (1) | n/a | 2 | n/a | 2 | n/a |
| Foreign currency impact | (1) | n/a | 15 | n/a | 39 | n/a |
| EP\&S Organic revenue | \$1,568 | \$1,477 | \$1,579 | \$1,485 | \$4,662 | \$4,449 |
| Global Rolled Products (GRP) |  |  |  |  |  |  |
| Sales | \$1,426 | \$1,234 | \$1,451 | \$1,271 | \$4,243 | \$3,753 |
| Less: |  |  |  |  |  |  |
| Sales - Tennessee packaging | 37 | 45 | 46 | 51 | 126 | 150 |
| Sales - Fusina rolling mill | - | - | - | 9 | - | 54 |
| Aluminum price impact | 106 | n/a | 128 | n/a | 343 | $\mathrm{n} / \mathrm{a}$ |
| Foreign currency impact | (10) | n/a | 8 | n/a | 14 | n/a |
| GRP Organic revenue | \$1,293 | \$1,189 | \$1,269 | \$1,211 | \$3,760 | \$3,549 |
| Transportation and Construction Solutions (TCS) - - - - - - - |  |  |  |  |  |  |
| Sales | \$530 | \$523 | \$562 | \$504 | \$1,629 | \$1,483 |
| Less: |  |  |  |  |  |  |
| Sales - Latin America extrusions | - | 30 | - | 30 | 25 | 86 |
| Aluminum price impact | 3 | n/a | 19 | n/a | 21 | n/a |
| Foreign currency impact | (4) | n/a | 15 | n/a | 36 | n/a |
| TCS Organic revenue | \$531 | \$493 | \$528 | \$474 | \$1,547 | \$1,397 |


 the impact of changes in aluminum prices and foreign currency fluctuations relative to the prior year periods.

## Reconciliation of Net Debt

| (\$ in millions $)$ | September 30, <br> $\mathbf{2 0 1 8}$ | June 30, <br> $\mathbf{2 0 1 8}$, | March 31, <br> $\mathbf{2 0 1 8}$, | December 31, <br> $\mathbf{2 0 1 7}$ | September 30, <br> $\mathbf{2 0 1 7}$ | June 30, <br> $\mathbf{2 0 1 7}$ | March 31, <br> $\mathbf{2 0 1 7}$ | December 31, <br> $\mathbf{2 0 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Short-term debt | $\$ 42$ | $\$ 45$ | $\$ 45$ | $\$ 38$ | $\$ 55$ | $\$ 48$ | $\$ 47$ | $\$ 40$ |
| Long-term debt, less amount due within one year | 6,315 | 6,312 | 6,309 | 6,806 | 6,802 | 6,796 | 8,046 | 8,044 |
| Total debt | 6,357 | 6,357 | 6,354 | 6,844 | 6,857 | 6,844 | 8,093 | 8,084 |
| Less: Cash and cash equivalents | 1,535 | 1,455 | 1,205 | 2,150 | 1,815 | 1,785 | 2,553 | 1,863 |
| Net debt | $\$ 4,822$ | $\$ 4,902$ | $\$ 5,149$ | $\$ 4,694$ | $\$ 5,042$ | $\$ 5,059$ | $\$ 5,540$ | $\$ 6,221$ |

 used to repay outstanding debt.

## Reconciliation of Net debt to Adjusted EBITDA Excluding Special Items

| (\$ in millions) | $\begin{gathered} \text { September 30, } \\ 2018 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { June 30, } \\ 2018 \end{gathered}$ |  | $\begin{gathered} \text { March 31, } \\ 2018 \end{gathered}$ |  | Trailing-12 months ended |  |  |  | June 30, 2017 |  | $\begin{gathered} \text { March 31, } \\ 2017 \end{gathered}$ |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { September 30, } \\ 2017 \end{gathered}$ |  |  |  |  |  |  |  |
| Net loss attributable to Arconic | \$ | (303) |  |  | \$ | (345) | \$ | (253) |  | (74) | \$ | (605) | \$ | (558) |  | (635) |  | (941) |
| Discontinued operations |  | - |  | - |  |  |  | - |  | - |  | (33) |  | (133) |  | (215) |  | (121) |
| Loss from continuing operations after income taxes and non-controlling interests | \$ | (303) | \$ | (345) | \$ | (253) | \$ | (74) | \$ | (638) |  | (691) | \$ | (850) |  | $(1,062)$ |
| Add: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Provision for income taxes |  | 490 |  | 455 |  | 438 |  | 544 |  | 1,518 |  | 1,521 |  | 1,587 |  | 1,477 |
| Other (income) expense, net |  | (7) |  | 23 |  | (150) |  | (486) |  | (435) |  | (453) |  | (298) |  | 42 |
| Interest expense |  | 389 |  | 401 |  | 495 |  | 496 |  | 526 |  | 552 |  | 493 |  | 499 |
| Restructuring and other charges |  | 67 |  | 88 |  | 99 |  | 165 |  | 240 |  | 224 |  | 212 |  | 155 |
| Impairment of goodwill |  | 719 |  | 719 |  | 719 |  | 719 |  | - |  | - |  | - |  | - |
| Provision for depreciation and amortization |  | 568 |  | 567 |  | 560 |  | 551 |  | 543 |  | 539 |  | 535 |  | 535 |
| Adjusted EBITDA | \$ | 1,923 | \$ | 1,908 | \$ | 1,908 | \$ | 1,915 | \$ | 1,754 | \$ | 1,692 | \$ | 1,679 | \$ | 1,646 |
| Add: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separation costs | \$ | - | \$ | - | \$ | - | \$ | 18 | \$ | 94 | , | 148 | \$ | 193 | \$ | 193 |
| Proxy, advisory and governance-related costs |  | - |  | - |  | 42 |  | 58 |  | 58 |  | 58 |  | 16 |  | - |
| Legal and other advisory costs related to Grenfell Tower |  | 21 |  | 23 |  | 19 |  | 14 |  | 7 |  | - |  | - |  | - |
| Settlements of certain customer claims primarily related to product introductions |  | 38 |  | 38 |  | - |  | - |  | - |  | - |  | - |  | - |
| Delaware reincorporation costs |  | 3 |  | 3 |  | 3 |  | 3 |  | - |  | - |  | - |  | - |
| Adjusted EBITDA excluding Special items | \$ | 1,985 | \$ | 1,972 | \$ | 1,972 | \$ | 2,008 | \$ | 1,913 | \$ | 1,898 | \$ | 1,888 | \$ | 1,839 |
| Net debt | \$ | 4,822 | \$ | 4,902 | \$ | 5,149 | \$ | 4,694 | \$ | 5,042 | \$ | 5,059 | \$ | 5,540 | \$ | 6,221 |
| Net debt to Adjusted EBITDA excluding Special items |  | 2.43 |  | 2.49 |  | 2.61 |  | 2.34 |  | 2.64 |  | 2.67 |  | 2.93 |  | 3.38 |

[^1]
## Reconciliation of Return on Net Assets (RONA)

| (\$ in millions) | Nine months ended September 30, |  |
| :---: | :---: | :---: |
|  | 2018 | 2017 |
| Net income | \$424 | \$653 |
| Special items ${ }^{(1)}$ | 90 | (187) |
| Net income excluding Special items | \$514 | \$466 |
| Annualized net income excluding Special items | \$685 | \$621 |
| Net Assets: |  |  |
| Add: Receivables from customers, less allowances | \$1,147 | \$1,150 |
| Add: Deferred purchase program ${ }^{(2)}$ | 362 | 238 |
| Add: Inventories | 2,622 | 2,453 |
| Less: Accounts payable, trade | 2,061 | 1,656 |
| Working capital | 2,070 | 2,185 |
| Properties, plants, and equipment, net (PP\&E) | 5,645 | 5,526 |
| Net assets - total | \$7,715 | \$7,711 |
| RONA | 8.9\% | 8.1\% |


 earnings.
(1) See Reconciliation of Net income excluding Special items for a description of Special items
 the Working capital calculation.

## Reconciliation of Days Working Capital

|  | Quarter ended <br> September 30, |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (\$ in millions) | $\mathbf{2 0 1 8}$ |  | $\mathbf{2 0 1 7}$ |  |
|  | Receivables from customers, less allowances | 1,147 | $\$$ | 1,150 |
| Add: Deferred purchase program ${ }^{(1)}$ | 362 | 238 |  |  |
| Add: Inventories | 2,622 |  | 2,453 |  |
| Less: Accounts payable, trade | 2,061 |  | 1,656 |  |
| Working capital | $\$$ | 2,070 | $\$$ | 2,185 |
| Sales | $\$$ | 3,524 | $\$$ | 3,236 |
| Days Working Capital |  | 54 | 62 |  |

Days Working Capital is a non-GAAP financial measure and is calculated as Working Capital / (Sales / number of days in quarter). Management believes that this measure is meaningful to investors because Days Working Capital reflects the capital tied up during a given quarter
 the Working capital calculation.

## Reconciliation of Arconic Auto ${ }^{1}$ and Aero Engines Organic Revenue

## Reconciliation of Arconic Auto ${ }^{10}$ Organic Revenue

(\$ in millions)
Arconic Auto ${ }^{1}$ Revenue
Aluminum price impact
Arconic Auto ${ }^{1}$ Organic Revenue

 the impact of changes in aluminum prices relative to the prior year period

Reconciliation of Arconic Aero Engines Organic Revenue
(\$ in millions)
Arconic Aero Engines Revenue
Aluminum price impact
Arconic Aero Engines Organic Revenue

| 3Q18 |  |
| :---: | :---: | :---: |
| $\$ 568$ <br> $(1)$ | 3Q17 <br> $\$ 569$n/a <br> $\$ 492$ |

 presented due to the impact of changes in aluminum prices relative to the prior year period.

## Reconciliation of Arconic Commercial Transportation and Building and Construction Organic Revenue

## Reconciliation of Arconic Commercial Transportation Organic Revenue

## (\$ in millions)

Arconic Commercial Transportation Revenue
Aluminum price impact
Foreign currency impact
Arconic Commercial Transportation Organic Revenue

| 3 Q 18 | $3 \mathrm{Q17}$ |
| :---: | :---: |
| \$449 | \$402 |
| 21 | n/a |
| (3) | n/a |
| \$431 | \$402 |

 comparable basis for all periods presented due to the impact of changes in aluminum prices and foreign currency exchange rates relative to the prior year period.

Reconciliation of Arconic Building and Construction Organic Revenue
(\$ in millions)
Arconic Building and Construction Revenue
Aluminum price impact
Foreign currency impact
Latin America extrusions
Arconic Building and Construction Organic Revenue

| 3 Q18 | 3Q17 |
| :---: | :---: |
| \$352 | \$342 |
| 8 | n/a |
| (3) | n/a |
| - | 13 |
| \$347 | \$329 |




## Reconciliation of Global Rolled Products Auto ${ }^{1}$, Industrial, and Commercial Transportation Organic Revenue

Reconciliation of Global Rolled Products (GRP) Auto ${ }^{1}$ Organic Revenue
(\$ in millions)
GRP Auto ${ }^{1}$ Revenue
Aluminum price impact
GRP Auto ${ }^{1}$ Organic Revenue

| 3Q18 | 3Q17 |
| :---: | :---: |
| \$481 | \$366 |
| 42 | n/a |
| \$439 | \$366 |

 impact of changes in aluminum prices relative to the prior year period.

## Reconciliation of GRP Industrial Organic Revenue

(\$ in millions)
GRP Industrial Revenue
Aluminum price impact
Foreign currency impact
GRP Industrial Organic Revenue

| 3Q18 |  | 3Q17 |
| :---: | :---: | :---: |
| 258 |  |  |
| 24 |  | $\$ 223$ <br> $(2)$ <br> $\$ 236$ |
|  |  | $\mathrm{n} / \mathrm{a} / \mathrm{a}$ |
| $\$ 223$ |  |  |

 due to the impact of changes in aluminum prices and foreign currency exchange rates relative to the prior year period.

## Reconciliation of GRP Commercial Transportation Organic Revenue

(\$ in millions)
GRP Commercial Transportation Revenue
Aluminum price impact
GRP Commercial Transportation Organic Revenue

| 3Q18 |  | 3Q17 |
| :---: | :---: | :---: |
| $\$ 145$ <br> 14 | $\$ 123$ <br> $\mathrm{n} / \mathrm{a}$ <br> $\$ 131$ | $\$ 123$ |

 basis for all periods presented due to the impact of changes in aluminum prices relative to the prior year period.

## Reconciliation of Transportation and Construction Solutions Commercial Transportation and Building and Construction Organic Revenue

Reconciliation of Transportation and Construction Solutions (TCS) Commercial Transportation Organic Revenue
(\$ in millions)
TCS Commercial Transportation Revenue
Aluminum price impact
Foreign currency impact
TCS Commercial Transportation Organic Revenue

| 3Q18 | 3 Q 17 |
| :---: | :---: |
| \$237 | \$214 |
| 8 | n/a |
| (2) | n/a |
| \$231 | \$214 |

 basis for all periods presented due to the impact of changes in aluminum prices and foreign currency exchange rates relative to the prior year period.

Reconciliation of TCS Building and Construction Organic Revenue
(\$ in millions)
TCS Building and Construction Revenue
Aluminum price impact
Foreign currency impact
Latin America extrusions
TCS Building and Construction Organic Revenue

| 3 Q 18 | 3Q17 |
| :---: | :---: |
| \$293 | \$286 |
| 1 | n/a |
| (1) | $\mathrm{n} / \mathrm{a}$ |
| - | 13 |
| \$293 | \$273 |

 basis for all periods presented due to the divestiture of Latin America extrusions and the impact of changes in aluminum prices and foreign currency exchange rates relative to the prior year period.


[^0]:    Segment operating profit in the second quarter of 2018 included the impact of a $\$ 23$ charge related to a physical inventory adjustment at one plant.

[^1]:    
    
     presented may not be comparable to similarly titled measures of other companies.
     used to repay outstanding debt.

