Third Quarter 2020 Earnings Call

John Plant: Executive Chairman and Co-Chief Executive Officer
Tolga Oal: Co-Chief Executive Officer
Ken Giacobbe: EVP and Chief Financial Officer

November 9, 2020

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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 Howmet Aerospace’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 end markets; statements and guidance regarding future financial results or operating performance; statements regarding future strategic actions; and statements about Howmet Aerospace's strategies, outlook, business and financial prospects, including share repurchases, which may be subject to market conditions, legal requirements and other considerations. These statements reflect beliefs and assumptions that are based on Howmet Aerospace’s perception of historical trends, current conditions and expected future developments, as well as other factors Howmet Aerospace 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) the impact of the separation on the businesses of Howmet Aerospace; (b) deterioration in global economic and financial market conditions generally, including as a result of pandemic health issues (including COVID-19 and its effects, among other things, on global supply, demand, and distribution disruptions as the COVID-19 outbreak continues and results in an increasingly prolonged period of travel, commercial and/or other similar restrictions and limitations); (c) unfavorable changes in the markets served by Howmet Aerospace; (d) 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; (e) competition from new product offerings, disruptive technologies or other developments; (f) political, economic, and regulatory risks relating to Howmet Aerospace’s global operations, including compliance with U.S. and foreign trade and tax laws, sanctions, embargoes and other regulations; (g) manufacturing difficulties or other issues that impact product performance, quality or safety; (h) Howmet Aerospace’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; (i) the impact of potential cyber attacks and information technology or data security breaches; (j) the loss of significant customers or adverse changes in customers’ business or financial conditions; (k) adverse changes in discount rates or investment returns on pension assets; (l) the impact of changes in raw material prices (including but not limited to aluminum and nickel prices) and foreign currency exchange rates on costs and results; (m) the outcome of contingencies, including legal proceedings, government or regulatory investigations, and environmental remediation, which can expose Howmet Aerospace to substantial costs and liabilities; (n) the possible impacts and our preparedness to respond to implications of COVID-19; and (o) the other risk factors summarized in Howmet Aerospace’s Form 10-K for the year ended December 31, 2019, Form 10-Q for the quarter ended March 31, 2020, Form 10-Q for the quarter ended June 30, 2020, 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 release are made as of the date of this release, even if subsequently made available by Howmet Aerospace on its website or otherwise. Howmet Aerospace 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)

On April 1, 2020, Arconic Inc. completed the separation of its businesses into two independent, publicly-traded companies: Howmet Aerospace Inc. (the new name for Arconic Inc.) and Arconic Corporation. The historical results of the businesses that comprise Arconic Corporation are presented as discontinued operations in Howmet Aerospace's consolidated financial statements (other than cash flows, equity and comprehensive income related to Arconic Corporation, which have not been segregated and are included in the Statement of Consolidated Cash Flows and Statement of Consolidated Comprehensive Loss, respectively). Income statement values shown in this presentation are on the basis of continuing operations only, and exclude the effects of discontinued operations. The calculation of adjusted free cash flow is on the basis of continuing and discontinued operations.

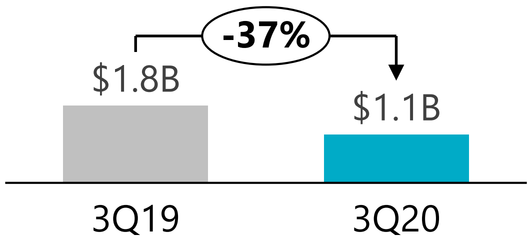
Non-GAAP Financial Measures

Some of the information included in this presentation is derived from Howmet Aerospace's consolidated financial information but is not presented in Howmet Aerospace's financial statements prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). Certain of these data are considered "non-GAAP 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. Howmet Aerospace has not provided reconciliations of any forward-looking non-GAAP financial measures, such as adjusted EBITDA, adjusted EBITDA margin, adjusted free cash flow and adjusted earnings per share (or earnings per share excluding special items), to the most directly comparable GAAP financial measures because 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. Howmet Aerospace believes such reconciliations would imply a degree of precision that would be confusing or misleading to investors.

"Adjusted free cash flow" is cash provided from (used for) operations, less capital expenditures, plus cash receipts from sold receivables. Any reference to historical EBITDA means adjusted EBITDA for which we have provided calculations and reconciliations in the Appendix.

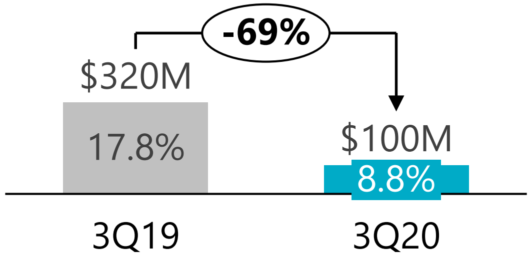
3Q 2020 In Line with Expectations; Strong Cash Generation

Revenue



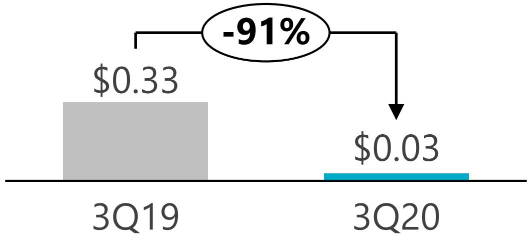
- – Declines in Commercial Aerospace (56%). Inventory corrections
- – Commercial Transportation down. Sequential improvement of 42%
- + Growth in Defense Aerospace
- + Growth in Industrial Gas Turbine (IGT)

Operating Income Excluding Special Items[1]



- – Declines in Commercial Aerospace, Commercial Transportation
- – COVID-19 productivity and cost impacts
- – Unfavorable product mix, 3Q 2020 Commercial Aero ~40% of total revenue
- + Cost reductions of $56M and $137M year-to-date
- + Price increase of $14M in 3Q, $9M in 2Q and $28M year-to-date

EPS Excluding Special Items[2]



- – Market declines due to COVID-19 and 737 MAX

Balance Sheet and Cash Flow

- Adj Free Cash Flow $143M[3] includes ($45M) reduction in A/R Securitization and ($14M) of severance
- Cash Balance increased to $1.4B and includes $51M of common stock repurchases at $17.36
- Net Debt-to-LTM EBITDA of 3.17x[4]. Revolving Credit Facility of $1B undrawn

3Q 2020 YoY Total Segment Decremental Margin of 37% higher than 2Q 2020 YoY Total Segment Decremental Margin of 28%[1,5]
As guided, 3Q 2020 costs not temporarily adjusted due to expected 4Q 2020 volume increase

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1) 3Q 2020 Operating income (GAAP) = $73M, 3Q 2019 Operating income (GAAP) = $256M 2) 3Q 2020 EPS from Continuing Ops (GAAP) = $0.08, 3Q 2019 EPS from Continuing Ops (GAAP) = $0.13 3) 3Q 2020 (GAAP): Cash provided from operations = $35M, Cash used for financing activities = ($62M); Cash provided from investing activities = $108M 4) Adjusted for special items; Last twelve month (LTM) Howmet adjusted EBITDA 5) Howmet Consolidated: 2Q 2019 Revenue (GAAP) = $1,818M, 2Q 2020 Revenue (GAAP) = $1,253M, Howmet Consolidated: 2Q 2019 Operating loss (GAAP) = ($176M), 2Q 2020 Operating income (GAAP) = $74M *See appendix for reconciliations*

Operations Adapting to COVID-19 and 737 Max Impacts

Markets / Operations

- All plants running with Employee and Partner safety being a top priority
- Managing daily adjustments for customer inventory corrections and shutdowns

Cost Reduction / Cash Preservation

- Most North America permanent personnel reductions completed, ahead of the target
- Flexing variable spend and labor effectively with revenue
- Strict and disciplined capital expenditure
- Working capital is a use of cash driven by a reduction in A/R Securitization of ~$95M 3Q YTD and stranded inventory

Segments Drive Cost Reduction & Cash Preservation

Engine Products

- Strong Defense Aerospace & Industrial Gas Turbine growth mitigate Commercial Aerospace declines
- 3Q 2020 is expected to be lowest revenue quarter of 2020, permanent cost reduction ahead of plan
- Long Term Agreement (LTA) pricing negotiations complete for 2020
- Stranded inventory management continues

Fastening Systems

- Revenue reduction continues with Commercial Aerospace distribution business timing
- Industrial recovery mitigates Aerospace declines
- High number of plants in Europe, permanent cost reduction lagging, balancing with furloughs

Engineered Structures

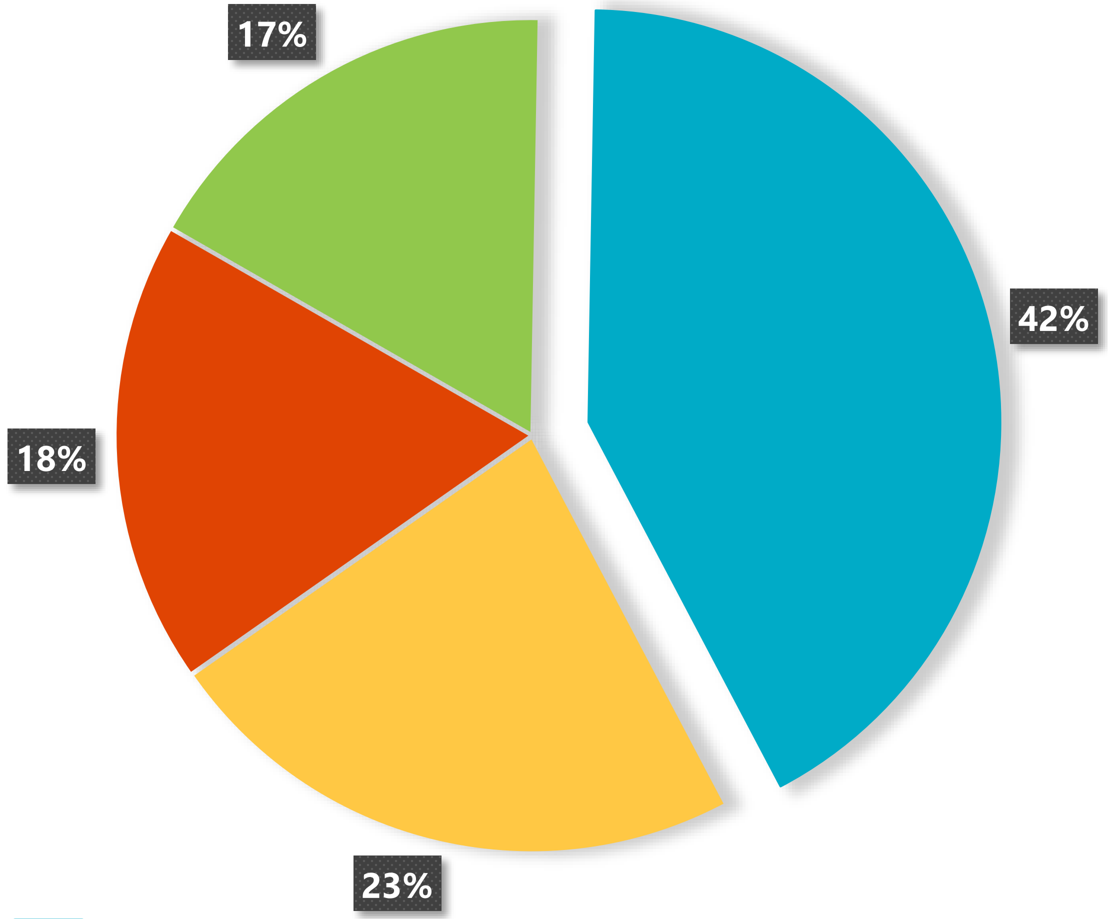
- Long lead time products, level loading customer demand for balanced operations
- Permanent cost reduction actions ahead of plan
- Long Term Agreement (LTA) pricing negotiations complete for 2020

Forged Wheels

- 3Q 2020 revenue started recovering from 2Q 2020 quarter low
- Called employees back from furloughs and restarted operations
- Compressed permanent costs and flexing production to meet customer demand
- Renewed one of largest customer LTA, increasing share with our innovative, lightweight 39 lb. wheel

3Q20 Revenue Down (37%) YoY, Commercial Aero now ~40% of Revenue

Revenue by Market (% of total)



Revenue by Market YoY (% change)

Aerospace - Commercial	(56%)
Aerospace - Defense	15%
Sub-Total Aerospace	**(43%)**
Commercial Transportation	(31%)
Industrial & Other[1]	(4%)
Total Revenue	**(37%)**

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1) *IGT represents ~40%, general Industrial represents ~40%, and Oil & Gas represents ~20% of total Industrial & Other*

Combined Segment Results[1]

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Combined Segment 3rd Party Revenue[3]	$1,756M	$1,822M	$1,794M	$1,734M	$7,106M	$1,632M	$1,253M	$1,134M
Combined Segment Operating Profit[4]	$313M	$360M	$363M	$355M	$1,391M	$339M	$200M	$117M
Combined Segment Operating Profit Margin	17.8%	19.8%	20.2%	20.5%	19.6%	20.8%	16.0%	10.3%

Estimated Annual Corporate Costs excluding Special Items: ~$100M in 2019, expected ~$75M in 2020[2]

3Q 2020 YoY

Operating Income

- Price increase YoY:
  - 3Q of $14M
  - 3Q YTD of $28M
- Cost reductions YoY:
  - 3Q of $56M
  - 3Q YTD of $137M

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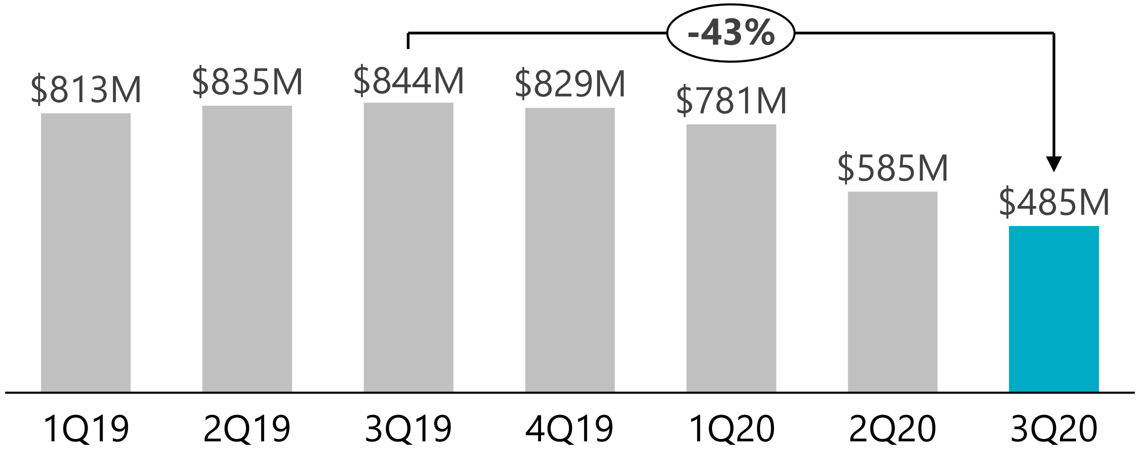
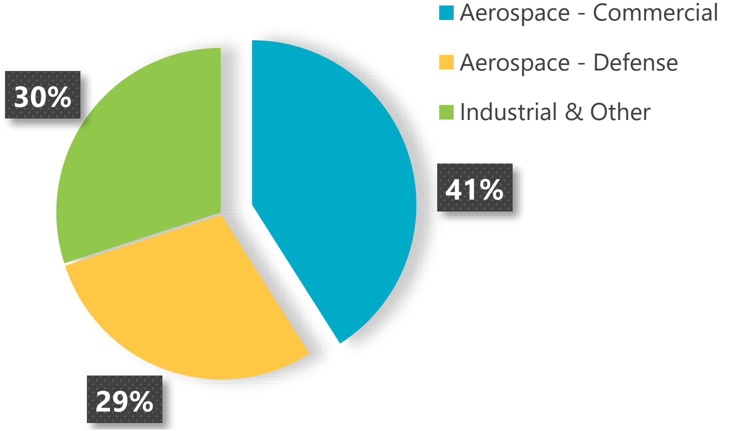
1) All metrics exclude Corporate 2) Includes estimated D&A 3) Howmet Consolidated: 1Q 2019 Revenue (GAAP) = $1,752M, 2Q 2019 Revenue (GAAP) = $1,818M, 3Q 2019 Revenue (GAAP) = $1,794M, 4Q 2019 Revenue (GAAP) = $1,734M, 1Q 2020 Revenue (GAAP) = $1,634M, 2Q 2020 Revenue (GAAP) = $1,253M, 3Q 2020 Revenue (GAAP) = $1,134M 4) Howmet Consolidated: 1Q 2019 Operating income (GAAP) = $214M, 2Q 2019 Operating loss (GAAP) = ($176M), 3Q 2019 Operating income (GAAP) = $256M, 4Q 2019 Operating income (GAAP) = $285M, 1Q 2020 Operating income (GAAP) = $258M, 2Q 2020 Operating income (GAAP) = $74M, 3Q 2020 Operating income (GAAP) = $73M *See appendix for reconciliations*

Engines: Commercial Aero Inventory Correction; Defense Aero and IGT Growth

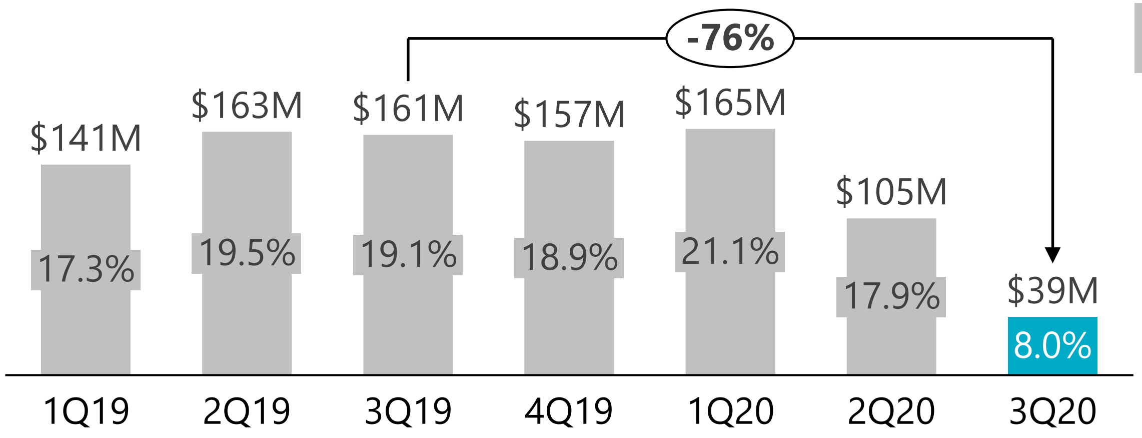
3rd Party Revenue



Revenue by Market (% of total)



Segment Operating Profit and Margin



3Q 2020 YoY

– Commercial Aerospace Inventory Corrections
– Boeing 737 MAX Production Declines
– COVID-19 Productivity and Cost Impacts
– Intentional Product Exits
+ Defense Aero & Industrial Gas Turbine Growth
+ Cost Reductions
+ Price Increases

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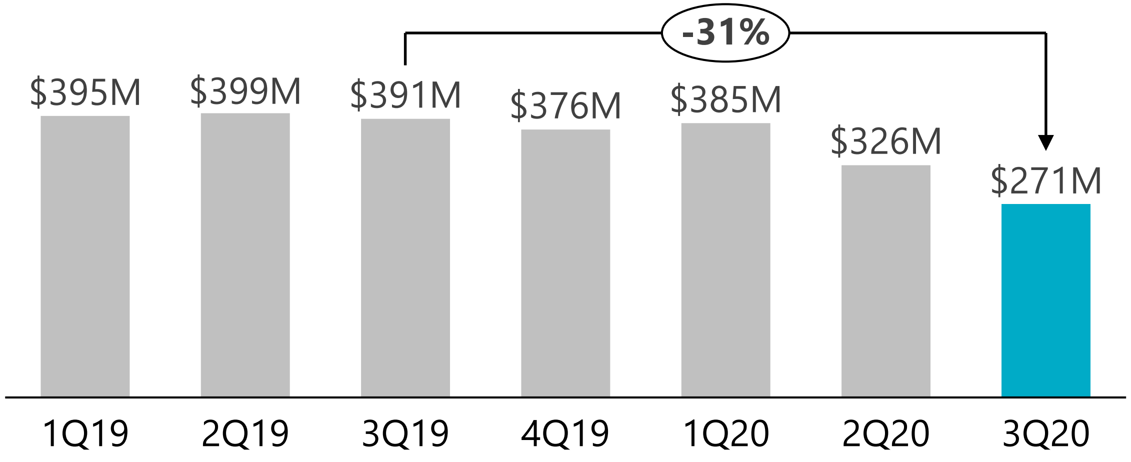
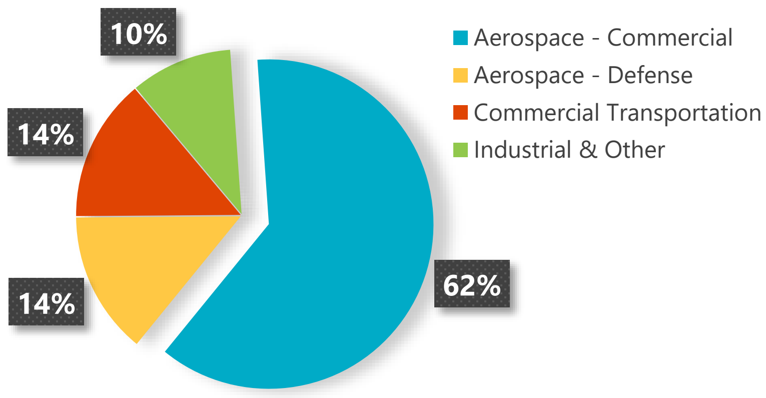
See appendix for reconciliations

Fastening Systems: Commercial Aero Inventory Correction

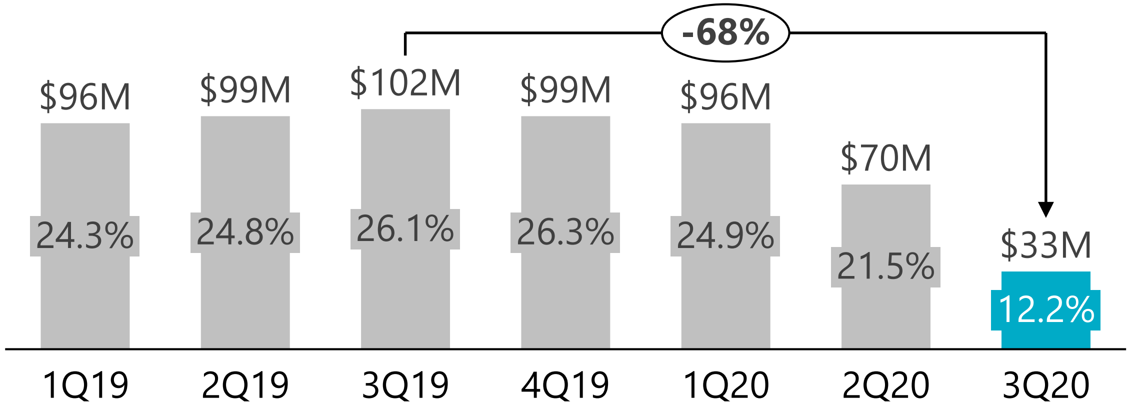
3rd Party Revenue



Revenue by Market (% of total)



Segment Operating Profit and Margin



3Q 2020 YoY

- – Commercial Aerospace Inventory Corrections
- – Boeing 737 MAX Production Declines
- – Product Mix
- – Decline in Commercial Transportation
- – COVID-19 Productivity and Cost Impacts
- – European Delay on Cost Reductions
- + Cost Reductions
- + Price Increases

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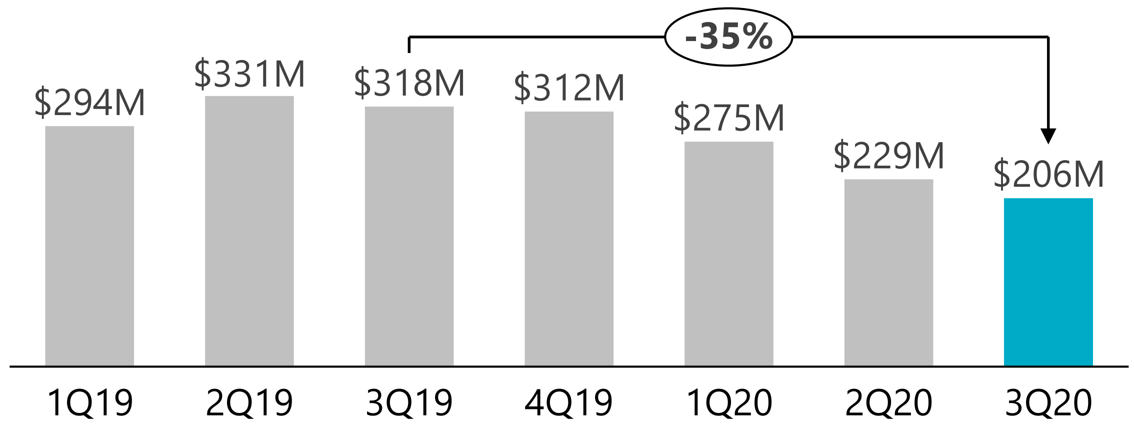
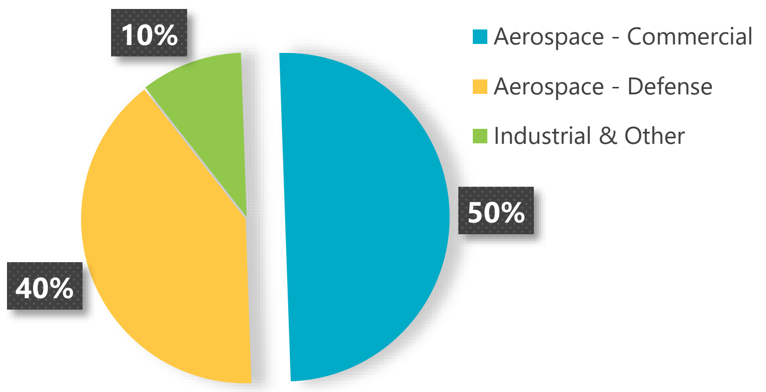
See appendix for reconciliations

Engineered Structures: Commercial Aero Inventory Correction; Price Increases

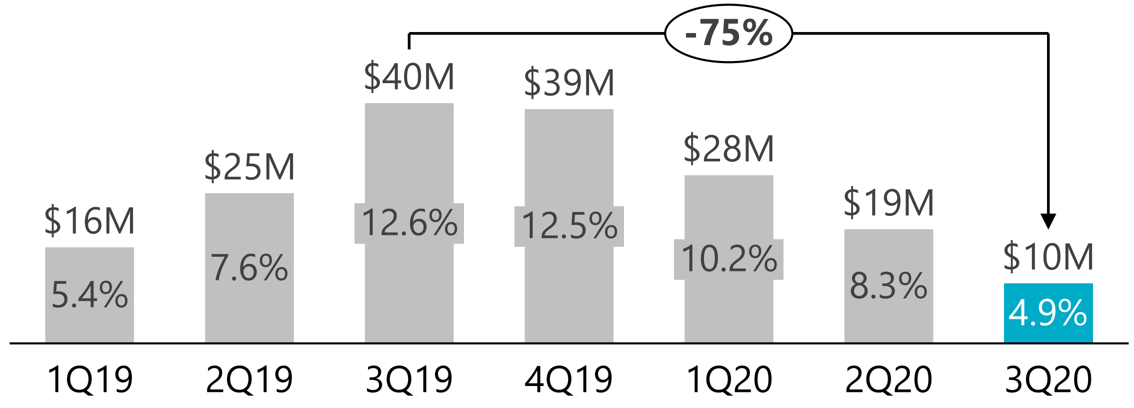
3rd Party Revenue



Revenue by Market (% of total)



Segment Operating Profit and Margin



3Q 2020 YoY

- – Commercial Aerospace Inventory Corrections
- – Boeing 787 and 737 Max Production Declines
- – COVID-19 Productivity and Cost Impacts
- – Product Mix
- + Defense Aero Growth
- + Cost Reductions
- + Price Increases

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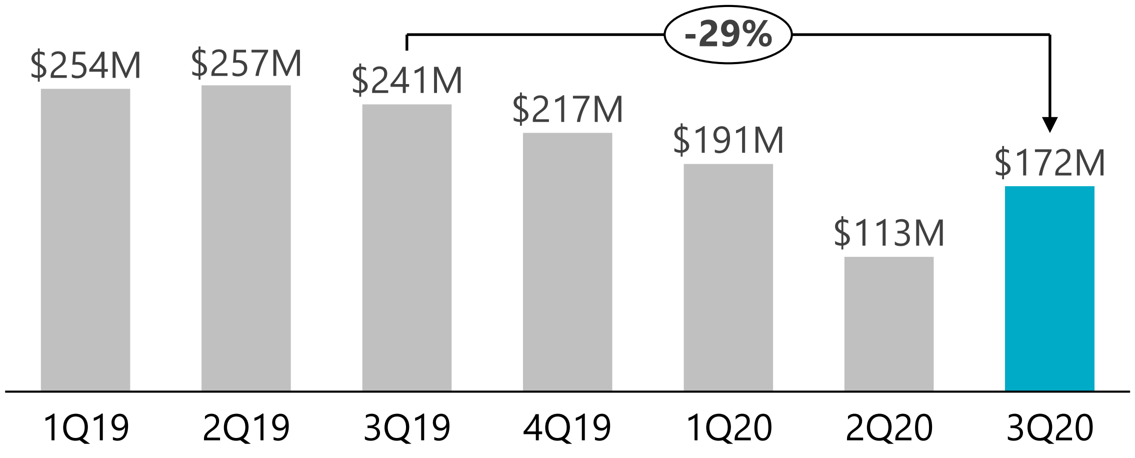
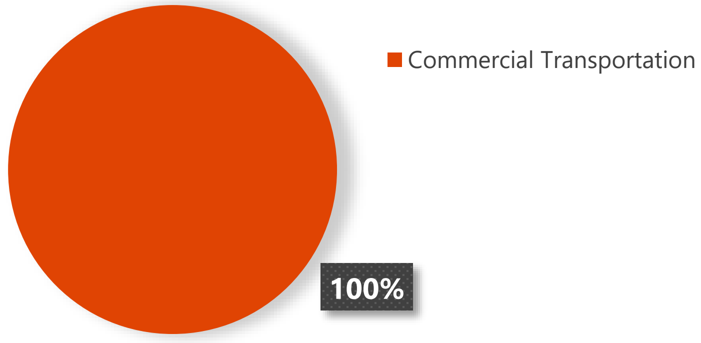
See appendix for reconciliations

Forged Wheels: Market Recovery Underway; Sequential Improvement

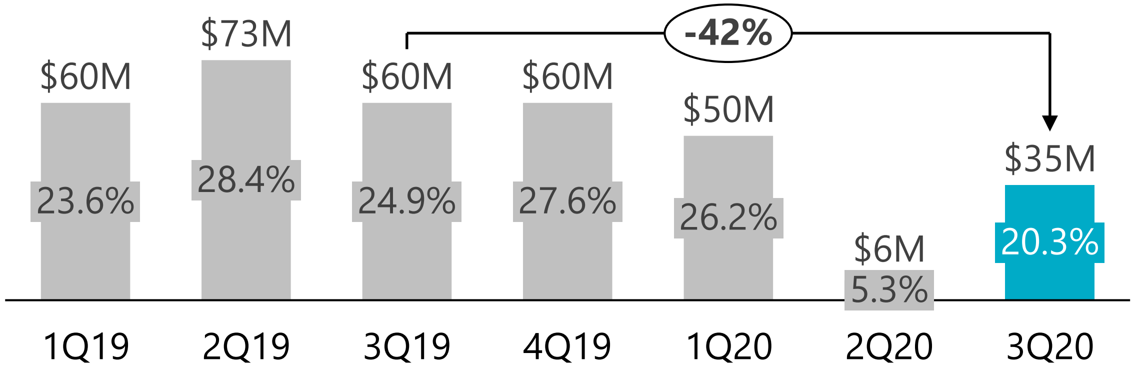
3rd Party Revenue



Revenue by Market (% of total)



Segment Operating Profit and Margin



3Q 2020 YoY

– Decline in Commercial Transportation
– COVID-19 Productivity and Cost Impacts
+ Cost Reductions
+ Employees Returning from Furlough
+ Sequential Improvement

See appendix for reconciliations

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$23M of Favorable Special Items Driven By Tax

3Q 2020 Special Items ($M, except per share amounts)	Income (loss) before income taxes	Income (Loss) from Continuing Ops	Earnings per diluted share
AS REPORTED	**($12)**	**$36**	**$0.08**
Severance costs	$17	$12	
St. Cosme fasteners / Barberton wheels plant fire costs	$7	$5	
Pension plan settlement charges and other	$3	$2	
Discrete and other special tax benefit	N/A	($42)	
Subtotal: Special items	**$27**	**($23)**	
EXCLUDING SPECIAL ITEMS	**$15**	**$13**	**$0.03**

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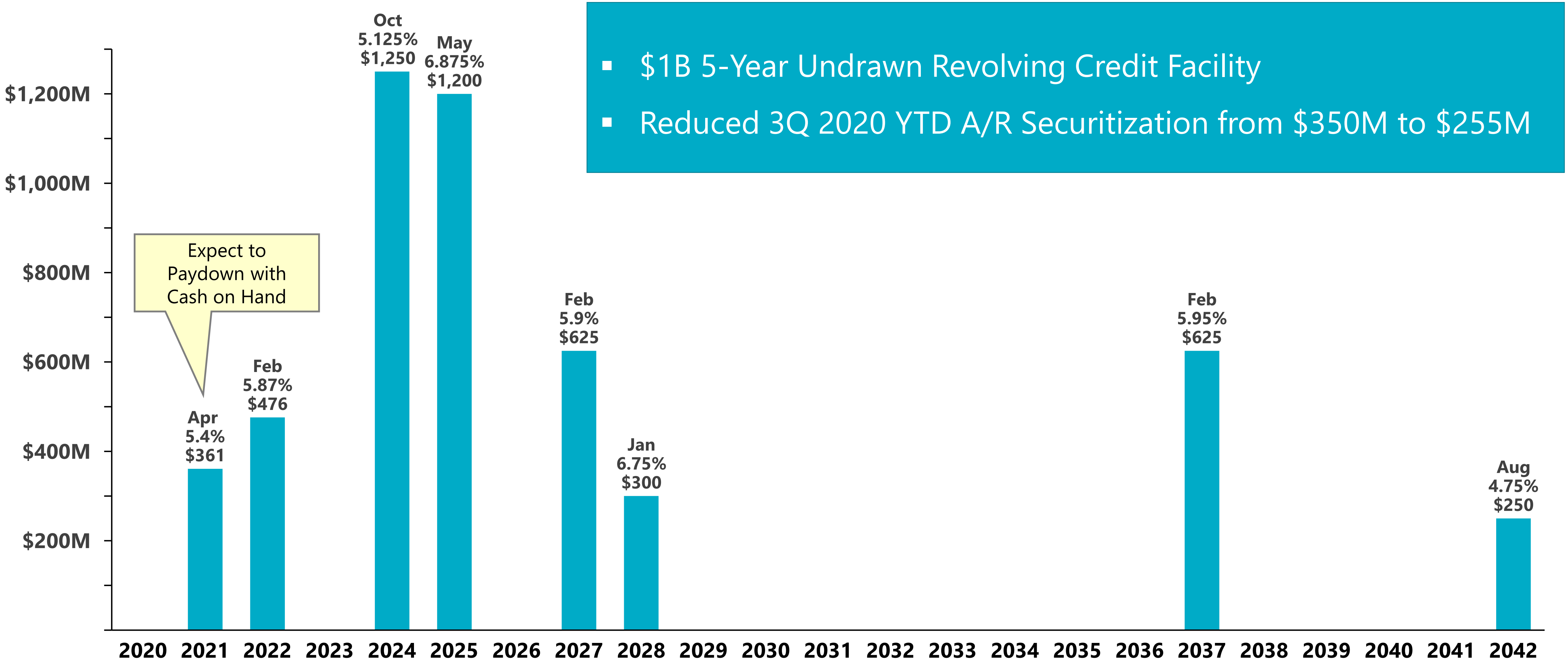
( ) = income to be deducted from As Reported number; + = expense to be added to As Reported number

See appendix for additional details

All Debt Unsecured; Next Significant Maturity in 2024



- $1B 5-Year Undrawn Revolving Credit Facility
- Reduced 3Q 2020 YTD A/R Securitization from $350M to $255M

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2020 Assumptions

	1Q 2020[1]	2Q 2020	3Q 2020	4Q 2020	Full Year 2020	Sensitivities and Comments
Corporate Overhead	~$20M	$20M	$17M	~$18M	~$75M	• Adj Operating Income excluding special items • 1Q 2020 reflects estimate of Howmet Corporate costs
Depreciation & Amortization	~$67M	$67M	$68M	~$68M	**~$270M**	• Excludes special items. **Reduction from prior view of $275M**
Interest Expense	~$85M	$79M	$77M	~$75M	~$315M	• Excludes debt issuance, breakage and tender fees
Operational Tax Rate for Continuing Ops	~26%	35%	13%	~28%	**27% - 29%**	• **Reduction from prior view of 28% - 30%** • May experience volatility in the current environment • Cash tax % = ~10%
Pension / OPEB-related Expense	~$10M Total per Quarter ~$7M Non-Service per Quarter				~$40M Total ~$30M Non-Service	• 25 bps Discount Rate sensitivity = ~<$1M on after-tax earnings • 25 bps Expected Return on Assets sensitivity = ~$3M on after-tax earnings
Post-Tax Unfunded Pension / OPEB-related Liability	~$800M Pension Liability; ~$165M OPEB Liability					• Applied U.S. federal corporate tax rate of 21% • 25 bps Discount Rate sensitivity = ~$70M on pre-tax liability
Pension / OPEB Contributions	~$25M	$50M	$10M	~$125M	~$210M	• Includes discretionary ~$45M related to UK pension plan to reduce gross liability by ~$320M
Capex	~$40M	$32M	$36M	~$52M	**~$160M**	• Excludes separation related Capex. **Reduction from prior view of $175M**
Diluted Share Count Average	~440M	439M	439M	**~437M**	**~439M**	• **Includes $51M common stock repurchases in 3Q, ~2.9M shares**

1) Excludes Arconic Corp.

2020 Outlook Improves; Year End Cash ~$1.5B

Revenue and Profit Outlook					Comments
	4Q 2020		Full Year[3]		
	Prior	*Updated*	*Prior*	*Updated*	
Revenue	~$1,215M +/- $50M	**~$1,230M +/- $ 30M**	~$5,200M +/- $100M	**~$5,250M +/- $30M**	• Price Increases Continue • Defense Aero and IGT Growth • Commercial Transportation Recovery
Adj EBITDA[1]		**~$255M +/- $15M**	~$1,030M +/- $35M	**~$1,055M +/- $15M**	• Flexing of Variable Costs Continue • Annual Permanent Cost Reductions Increased to $185M from $150M; Savings realized in-year • 4Q volume expected to improve with Adj EBITDA Margins similar to 2Q
Adj EBITDA Margin[1]		**20% - 21%**	~20% +/- 100 bps	**~20% +/- 20 bps**	
Adj Earnings Per Share[1]		**$0.13 - $0.21**	$0.60 - $0.72	**$0.68 - $0.76**	
			2Q – 4Q		
Adj Free Cash Flow[2]		**~$180M +/- $50M**	~$400M +/- $50M	**~$400M +/- $50M**	• Reduced A/R Securitization Program by ~$45M in 3Q and ~$30M in 2Q • Higher EBITDA offset by stranded inventory
			Year End		
Year End Cash Balance			**~$1.5B +/- $50M**		• Net Debt 4Q ~$3.6B vs 2Q $3.8B • 3Q $51M common stock repurchases at $17.36

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1) Excludes special items 2) Adjusted Free Cash Flow outlook excludes separation costs of $11M; Includes A/R Securitization/Customer Supplier Financing unfavorable impact of ($30M) in 2Q20 and ($45M) in 3Q20; Includes Pension/OPEB contributions and interest payments. 3) Outlook assumes 1Q20 revenue of ~$1,632M, 1Q20 Adjusted EBITDA excluding special items of ~$386M, 1Q20 Earnings per Share excluding special items of ~$0.40, and 1Q20 Adjusted Free Cash Flow of ~($100M)

Highlights: 3Q 2020 and Outlook

Revenue/Profit

- Revenue and Profit in line with expectations and implied outlook
- Price Increases continued and accelerated; 2020 Long Term Agreements complete
- Cost Reductions continued and accelerated

Liquidity

- Capex continued to be reduced to ~3% of revenue for the quarter and year
- Adj Free Cash Flow[1] continued to increase; $143M for the quarter
- Cash Balance continued to increase to $1.4B; Includes $51M of Common Stock Repurchases in 3Q

2020 Outlook

- Revenue has increased and range has narrowed
- Adj EBITDA[2] has increased and narrowed; Q4 Adj EBITDA Margin[2] exit rate of 20% - 21%
- Adj EPS[2] has increased and narrowed
- Year end cash Balance of ~$1.5B ; ~$1.2B of excess cash

1) 3Q 2020 (GAAP): Cash provided from operations = $35M, Cash used for financing activities = ($62M); Cash provided from investing activities = $108M
2) Excludes special items

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Appendix

Historical Combined Segment Results [1]

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Engine Products	$813M	$835M	$844M	$829M	$3,321M	$781M	$585M	$485M
Fastening Systems	$395M	$399M	$391M	$376M	$1,561M	$385M	$326M	$271M
Engineered Structures	$294M	$331M	$318M	$312M	$1,255M	$275M	$229M	$206M
Forged Wheels	$254M	$257M	$241M	$217M	$969M	$191M	$113M	$172M
Combined Segment 3rd Party Revenue[2]	**$1,756M**	**$1,822M**	**$1,794M**	**$1,734M**	**$7,106M**	**$1,632M**	**$1,253M**	**$1,134M**
Engine Products	$141M	$163M	$161M	$157M	$622M	$165M	$105M	$39M
Fastening Systems	$96M	$99M	$102M	$99M	$396M	$96M	$70M	$33M
Engineered Structures	$16M	$25M	$40M	$39M	$120M	$28M	$19M	$10M
Forged Wheels	$60M	$73M	$60M	$60M	$253M	$50M	$6M	$35M
Combined Segment Operating Profit[3]	**$313M**	**$360M**	**$363M**	**$355M**	**$1,391M**	**$339M**	**$200M**	**$117M**
Engine Products	17.3%	19.5%	19.1%	18.9%	18.7%	21.1%	17.9%	8.0%
Fastening Systems	24.3%	24.8%	26.1%	26.3%	25.4%	24.9%	21.5%	12.2%
Engineered Structures	5.4%	7.6%	12.6%	12.5%	9.6%	10.2%	8.3%	4.9%
Forged Wheels	23.6%	28.4%	24.9%	27.6%	26.1%	26.2%	5.3%	20.3%
Combined Segment Operating Profit Margin	**17.8%**	**19.8%**	**20.2%**	**20.5%**	**19.6%**	**20.8%**	**16.0%**	**10.3%**

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1) All metrics exclude Corporate 2) Howmet Consolidated: 1Q 2019 Revenue (GAAP) = $1,752M, 2Q 2019 Revenue (GAAP) = $1,818M, 3Q 2019 Revenue (GAAP) = $1,794M, 4Q 2019 Revenue (GAAP) = $1,734M, 1Q 2020 Revenue (GAAP) = $1,634M, 2Q 2020 Revenue (GAAP) = $1,253M, 3Q 2020 Revenue (GAAP) = $1,134M. 3) Howmet Consolidated: 1Q 2019 Operating income (GAAP) = $214M, 2Q 2019 Operating loss (GAAP) = ($176M), 3Q 2019 Operating income (GAAP) = $256M, 4Q 2019 Operating income (GAAP) = $285M, 1Q 2020 Operating income (GAAP) = $258M, 2Q 2020 Operating income (GAAP) = $74M, 3Q 2020 Operating income (GAAP) = $73M.

Historical Combined Segment Results[1] (continued)

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Engine Products	$34M	$35M	$31M	$31M	$131M	$30M	$31M	$31M
Fastening Systems	$12M	$12M	$12M	$12M	$48M	$12M	$12M	$12M
Engineered Structures	$17M	$14M	$15M	$12M	$58M	$13M	$14M	$13M
Forged Wheels	$8M	$8M	$8M	$8M	$32M	$10M	$9M	$10M
Combined Segment Depreciation and Amortization[2]	**$71M**	**$69M**	**$66M**	**$63M**	**$269M**	**$65M**	**$66M**	**$66M**
Engine Products	4.2%	4.2%	3.7%	3.7%	3.9%	3.8%	5.3%	6.4%
Fastening Systems	3.0%	3.0%	3.1%	3.2%	3.1%	3.1%	3.7%	4.4%
Engineered Structures	5.8%	4.2%	4.7%	3.8%	4.6%	4.7%	6.1%	6.3%
Forged Wheels	3.1%	3.1%	3.3%	3.7%	3.3%	5.2%	8.0%	5.8%
Combined Segment Depreciation and Amortization as % of Segment Revenue	**4.0%**	**3.8%**	**3.7%**	**3.6%**	**3.8%**	**4.0%**	**5.3%**	**5.8%**
Engine Products	$71M	$55M	$39M	$46M	$211M	$19M	$14M	$15M
Fastening Systems	$9M	$8M	$7M	$12M	$36M	$8M	$7M	$9M
Engineered Structures	$11M	$7M	$4M	$5M	$27M	$3M	$5M	$3M
Forged Wheels	$25M	$20M	$11M	$14M	$70M	$7M	$4M	$6M
Combined Segment Capital Expenditures[3]	**$116M**	**$90M**	**$61M**	**$77M**	**$344M**	**$37M**	**$30M**	**$33M**

HOWMET AEROSPACE

1) All metrics exclude Corporate 2) Howmet Consolidated: 1Q 2019 D&A (GAAP) = $76M, 2Q 2019 D&A (GAAP) = $78M, 3Q 2019 D&A (GAAP) = $70M, 4Q 2019 D&A (GAAP) = $71M, 1Q 2020 D&A (GAAP) = $71M, 2Q 2020 D&A (GAAP) = $73M, 3Q 2020 D&A (GAAP) = $68M 3) Howmet Consolidated: 1Q 2019 Capex (GAAP) = $245M, 2Q 2019 Capex (GAAP) = $160M, 3Q 2019 Capex (GAAP) = $127M, 4Q 2019 Capex (GAAP) = $109M, 1Q 2020 Capex (GAAP) = $152M, 2Q 2020 Capex (GAAP) = $32M, 3Q 2020 Capex (GAAP) = $36M.

Combined Segment Decremental Margins [1]

	2Q19	2Q20	2Q20 YoY	3Q19	3Q20	3Q20 YoY
Engine Products	$835M	$585M	($250M)	$844M	$485M	($359M)
Fastening Systems	$399M	$326M	($73M)	$391M	$271M	($120M)
Engineered Structures	$331M	$229M	($102M)	$318M	$206M	($112M)
Forged Wheels	$257M	$113M	($144M)	$241M	$172M	($69M)
Combined Segment 3rd Party Revenue[2]	**$1,822M**	**$1,253M**	**($569M)**	**$1,794M**	**$1,134M**	**($660M)**
Engine Products	$163M	$105M	($58M)	$161M	$39M	($122M)
Fastening Systems	$99M	$70M	($29M)	$102M	$33M	($69M)
Engineered Structures	$25M	$19M	($6M)	$40M	$10M	($30M)
Forged Wheels	$73M	$6M	($67M)	$60M	$35M	($25M)
Combined Segment Operating Profit[3]	**$360M**	**$200M**	**($160M)**	**$363M**	**$117M**	**($246M)**
Engine Products			23.2%			34.0%
Fastening Systems			39.7%			57.5%
Engineered Structures			5.9%			26.8%
Forged Wheels			46.5%			36.2%
Combined Segment Decremental Margin			**28.1%**			**37.3%**

HOWMET AEROSPACE

1) All metrics exclude Corporate 2) Howmet Consolidated: 2Q 2019 Revenue (GAAP) = $1,818M, 3Q 2019 Revenue (GAAP) = $1,794M, 2Q 2020 Revenue (GAAP) = $1,253M, 3Q 2020 Revenue (GAAP) = $1,134M. 3) Howmet Consolidated: 2Q 2019 Operating loss (GAAP) = ($176M), 3Q 2019 Operating income (GAAP) = $256M, 2Q 2020 Operating income (GAAP) = $74M, 3Q 2020 Operating income (GAAP) = $73M.

Estimated Adjusted EBITDA Historical Results[1]

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Combined Segment 3rd Party Revenue[2]	$1,756M	$1,822M	$1,794M	$1,734M	$7,106M	$1,632M	$1,253M	$1,134M
Combined Segment Adjusted EBITDA[3]	$384M	$429M	$429M	$418M	$1,660M	$404M	$266M	$183M
Combined Segment Adjusted EBITDA Margin[3]	21.9%	23.5%	23.9%	24.1%	23.4%	24.8%	21.2%	16.1%
Estimated Corporate Costs[1]	($23M)	($23M)	($23M)	($23M)	($92M)	($18M)	($19M)	($15M)
Estimated Howmet Aerospace Adjusted EBITDA[1,3]	$361M	$406M	$406M	$395M	$1,568M	$386M	$247M	$168M
Estimated Howmet Aerospace Adjusted EBITDA Margin[1,3]	20.6%	22.3%	22.6%	22.8%	22.1%	23.7%	19.7%	14.8%

Adjusted EBITDA is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because this measure provides additional information with respect to historical operating performance and the company's ability to meet its current and future obligations.

HOWMET AEROSPACE

1) Estimated annual Corporate Costs excluding Special Items and D&A. 2) Howmet Consolidated: 1Q 2019 Revenue (GAAP) = $1,752M, 2Q 2019 Revenue (GAAP) = $1,818M, 3Q 2019 Revenue (GAAP) = $1,794M, 4Q 2019 Revenue (GAAP) = $1,734M, 1Q 2020 Revenue (GAAP) = $1,634M, 2Q 2020 Revenue (GAAP) = $1,253M, 3Q 2020 Revenue (GAAP) = $1,134M. 3) Howmet Consolidated: 1Q 2019 Operating income (GAAP) = $214M, 2Q 2019 Operating loss (GAAP) = ($176M), 3Q 2019 Operating income (GAAP) = $256M, 4Q 2019 Operating income (GAAP) = $285M, 1Q 2020 Operating income (GAAP) = $258M, 2Q 2020 Operating income (GAAP) = $74M, 3Q 2020 Operating income (GAAP) = $73M.

Reconciliation of income (loss) from continuing ops. excluding Special items

($ in millions, except per-share amounts)	Income (loss) from continuing operations excluding Special items		Diluted EPS excluding Special items	
	Quarter ended		Quarter ended	
	September 30, 2019	September 30, 2020	September 30, 2019	September 30, 2020
Income (loss) from continuing operations	$58	$36	$0.13	$0.08
Special items:				
Restructuring and other charges	56	22		
Discrete tax items(1)	14	(41)		
Other special items(2)	26	3		
Tax impact(3)	(6)	(7)		
Income (loss) from continuing operations excluding Special items	$148	$13	$0.33	$0.03

Income (loss) from continuing operations excluding Special items and Diluted EPS excluding Special items are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews the operating results of the Company excluding the impacts of Restructuring and other charges, Discrete tax items, and Other special items (collectively, "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 Income (loss) from continuing operations determined under GAAP as well as Income (loss) from continuing operations excluding Special items.

(1) Discrete tax items for each period are discussed further on the Reconciliation of the Operational Tax Rate.

(2) Other special items totaling $8 and $5 for the quarters ended September 30, 2019 and 2020, respectively, relate to plant related fire costs, legal and advisory costs related to Grenfell Tower and Arconic Inc. Separation transaction costs and are discussed further on the Reconciliation of Operating Income Excluding Special Items and Operating Income Margin, Excluding Special Items. The remaining other tax special items of $18 and ($2) for the quarters ended September 30, 2019 and 2020, relate to impact resulting from the difference between the Company's consolidated annual estimated tax rate and the statutory rate applied to special items and the interim period treatment of operational losses in certain foreign jurisdictions for which no tax benefit is recognized.

(3) The tax impact on Special items is based on the applicable statutory rates whereby the difference between such rates and the Company's consolidated estimated annual effective tax rate is itself a Special item.

Reconciliation of Operational Tax Rate

($ in millions)

	Quarter ended September 30, 2020			Nine months ended September 30, 2020		
	As reported	Special items [1][2]	As adjusted	As reported	Special items [1][2]	As adjusted
Income (loss) from continuing operations before income taxes	$(12)	$27	$15	$100	$261	$361
Provision (benefit) for income taxes	(48)	50	2	(5)	104	99
Operational tax rate	400.0%		13.3%	(5.0)%		27.4%

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 the Company 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. Special items for the quarter ended September 30, 2020 include $22 of Restructuring and other charges and $5 related to plant-related fire costs and legal and other advisory costs related to Grenfell Tower as discussed further on the Reconciliation of Operating Income Excluding Special Items and Operating Income Margin, Excluding Special Items. Special items for the nine months ended September 30, 2020 include $166 of Restructuring and other charges, $65 of new debt and tender fees, $7 costs associated with the Arconic Inc. Separation Transaction, $22 in net costs related to plant-related fire costs, ($9) reimbursement of legal and advisory costs related to Grenfell Tower, $7 in interest costs and $3 for an inventory impairment.

2. Tax Special items includes discrete tax items and tax impact on Special items which is based on the applicable statutory rates whereby the difference between such rates and the Company's consolidated estimated annual effective tax rate and other tax related items. Discrete tax items for each period included the following:

- for the quarter ended September 30, 2020, a discrete tax benefit of $41 related to a $36 benefit for a U.S. tax law change as described below, a net $6 benefit for prior year items, and a net $1 charge for other items. The U.S. tax law change resulted from final regulations issued in July 2020 that provided an election to exclude from global intangible low-taxed income any foreign earnings subject to a local country tax rate of at least 90% of the U.S. tax rate.
- for the nine months ended September 30, 2020, a discrete tax benefit of $39 related to a $36 benefit for a U.S. tax law change as described below, a $6 charge for the remeasurement of deferred tax balances in various jurisdictions as a result of the Arconic Inc. Separation Transaction, a $5 benefit for stock compensation, a net $2 benefit for prior year items, and a net $2 benefit for other items. The U.S. tax law change resulted from final regulations issued in July 2020 that provided an election to exclude from global intangible low-taxed income any foreign earnings subject to a local country tax rate of at least 90% of the U.S. tax rate.

Calculation of Segment Operating Profit Margin

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Engine Products								
Third-party sales	$ 813	$ 835	$ 844	$ 829	$ 3,321	$ 781	$ 585	$ 485
Inter-segment sales	$ 5	$ 3	$ 1	$ 2	$ 11	$ 2	$ 1	$ 1
Segment operating profit	$ 141	$ 163	$ 161	$ 157	$ 622	$ 165	$ 105	$ 39
Segment operating profit margin	17.3 %	19.5 %	19.1 %	18.9 %	18.7 %	21.1 %	17.9 %	8.0 %
Provision for depreciation and amortization	$ 34	$ 35	$ 31	$ 30	$ 130	$ 30	$ 31	$ 31
Depreciation and amortization % of Revenue	4.2 %	4.2 %	3.7 %	3.6 %	3.9 %	3.8 %	5.3 %	6.4 %
Restructuring and other charges[1]	$ 3	$ 250	$ 43	$ 1	$ 297	$ 13	$ 22	$ 9
Capital expenditures	$ 71	$ 55	$ 39	$ 46	$ 211	$ 19	$ 14	$ 15
Fastening Systems								
Third-party sales	$ 395	$ 399	$ 391	$ 376	$ 1,561	$ 385	$ 326	$ 271
Inter-segment sales	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Segment operating profit	$ 96	$ 99	$ 102	$ 99	$ 396	$ 96	$ 70	$ 33
Segment operating profit margin	24.3 %	24.8 %	26.1 %	26.3 %	25.4 %	24.9 %	21.5 %	12.2 %
Provision for depreciation and amortization	$ 12	$ 12	$ 12	$ 12	$ 48	$ 12	$ 12	$ 12
Depreciation and amortization % of Revenue	3.0 %	3.0 %	3.1 %	3.2 %	3.1 %	3.1 %	3.7 %	4.4 %
Restructuring and other charges	$ 5	$ 1	$ —	$ —	$ 6	$ 2	$ 24	$ —
Capital expenditures	$ 9	$ 8	$ 7	$ 12	$ 36	$ 8	$ 7	$ 9

HOWMET AEROSPACE

1. Restructuring and other charges in 2Q19 included a portion of the $428 charge for the impairment of long-lived assets of the Disks business.

Differences between the total segment and consolidated totals are in Corporate.

Calculation of Segment Operating Profit Margin (continued)

	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Engineered Structures								
Third-party sales	$ 294	$ 331	$ 318	$ 312	$ 1,255	$ 275	$ 229	$ 206
Inter-segment sales	$ 3	$ 3	$ 4	$ 3	$ 13	$ 3	$ 2	$ 1
Segment operating profit	$ 16	$ 25	$ 40	$ 39	$ 120	$ 28	$ 19	$ 10
Segment operating profit margin	5.4 %	7.6 %	12.6 %	12.5 %	9.6 %	10.2 %	8.3 %	4.9 %
Provision for depreciation and amortization	$ 17	$ 14	$ 15	$ 12	$ 58	$ 13	$ 14	$ 13
Depreciation and amortization % of Revenue	5.8 %	4.2 %	4.7 %	3.8 %	4.6 %	4.7 %	6.1 %	6.3 %
Restructuring and other charges[1]	$ 4	$ 193	$ 1	$ 1	$ 199	$ 17	$ (5)	$ 9
Capital expenditures	$ 11	$ 7	$ 4	$ 5	$ 27	$ 3	$ 5	$ 3
Forged Wheels								
Third-party sales	$ 254	$ 257	$ 241	$ 217	$ 969	$ 191	$ 113	$ 172
Inter-segment sales	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Segment operating profit	$ 60	$ 73	$ 60	$ 60	$ 253	$ 50	$ 6	$ 35
Segment operating profit margin	23.6 %	28.4 %	24.9 %	27.6 %	26.1 %	26.2 %	5.3 %	20.3 %
Provision for depreciation and amortization	$ 8	$ 8	$ 8	$ 8	$ 32	$ 10	$ 9	$ 10
Depreciation and amortization % of Revenue	3.1 %	3.1 %	3.3 %	3.7 %	3.3 %	5.2 %	8.0 %	5.8 %
Restructuring and other charges	$ 4	$ 1	$ —	$ (1)	$ 4	$ 2	$ 1	$ —
Capital expenditures	$ 25	$ 20	$ 11	$ 14	$ 70	$ 7	$ 4	$ 6

[1] Restructuring and other charges in 2Q19 included a portion of the $428 charge for the impairment of long-lived assets of the Disks business.

Differences between the total segment and consolidated totals are in Corporate.

HOWMET AEROSPACE

Calculation of Total Segment Operating Profit Margin

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Sales – Engine Products	$813	$835	$844	$829	$3,321	$781	$585	$485
Sales – Fastening Systems	$395	$399	$391	$376	$1,561	$385	$326	$271
Sales – Engineered Structures	$294	$331	$318	$312	$1,255	$275	$229	$206
Sales – Forged Wheels	$254	$257	$241	$217	$969	$191	$113	$172
Total segment sales	$1,756	$1,822	$1,794	$1,734	$7,106	$1,632	$1,253	$1,134
Total segment operating profit(1)	$313	$360	$363	$355	$1,391	$339	$200	$117
Total segment operating profit margin	17.8%	19.8%	20.2%	20.5%	19.6%	20.8%	16.0%	10.3%

(1) See Reconciliation of Total Segment Operating Profit Consolidated income before income taxes.

HOWMET AEROSPACE

Reconciliation of Total Segment to Consolidated Totals

Reconciliation of Total segment operating profit to Consolidated income before income taxes

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Total segment operating profit	$313	$360	$363	$355	$1,391	$339	$200	$117
Unallocated amounts:								
Restructuring and other charges	(44)	(472)	(56)	(10)	(582)	(39)	(105)	(22)
Corporate expense[(1)]	(55)	(64)	(51)	(60)	(230)	(42)	(21)	(22)
Consolidated operating income (loss)	214	(176)	256	285	579	258	74	73
Interest expense	(85)	(86)	(85)	(82)	(338)	(84)	(144)	(77)
Other expense, net	(12)	(6)	(8)	(5)	(31)	24	(16)	(8)
Income (loss) from continuing operations before income taxes	$117	$(268)	$163	$198	$210	$198	$(86)	$(12)

(1) For the quarter ended March 31, 2019, Corporate expense included $1 of costs associated with the Arconic Inc. Separation Transaction, $8 of legal and advisory charges related to the strategic review and Grenfell tower. For the quarter ended June 30, 2019, Corporate expense included $1 of costs associated with the Arconic Inc. Separation Transaction, $9 impairment of assets of the energy business, $4 of costs related to a fire at a fasteners plant and $3 of legal and advisory charges related to Grenfell tower. For the quarter ended September 30, 2019, Corporate expense included $1 of costs associated with the Arconic Inc. Separation Transaction, $5 of costs related to a fire a fasteners plant and $2 of legal and advisory charges related to Grenfell tower. For the quarter ended December 31, 2019, Corporate expense included $2 of costs associated with the Arconic Inc. Separation Transaction, $1 in an impairment of assets of the energy business and $1 of legal and advisory charges related to Grenfell tower. For the quarter ended March 31, 2020, Corporate expense included $4 of costs associated with the Arconic Inc. Separation Transaction, $11 of net costs related to fires at two plants, and impairment costs related to facilities closures of $3 offset by ($1) net reimbursement related to legal and advisory charges related to Grenfell Tower. For the quarter ended June 30, 2020, Corporate expense included $3 of costs associated with the Arconic Inc. Separation Transaction, ($6) of reimbursement on a related to legal and advisory charges related to Grenfell Tower, and $4 of net costs related to a fire at two plants (net of insurance reimbursements). For the quarter ended September 30, 2020, Corporate expense included ($2) of reimbursement on a related to legal and advisory charges related to Grenfell Tower, and $7 of net costs related to a fire at two plants (net of insurance reimbursements).

Reconciliation of Total segment Capital expenditures to Consolidated Capital expenditures

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Total segment capital expenditures	$116	$90	$61	$77	$344	$37	$30	$33
Corporate and discontinued operations	129	70	66	32	297	115	2	3
Capital expenditures	$245	$160	$127	$109	$641	$152	$32	$36

HOWMET AEROSPACE

Reconciliation of Operating Income Excluding Special Items and Operating Income Margin, Excluding Special Items

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Operating income (loss)	$214	$(176)	$256	$285	$579	$258	$74	$73
Special items:								
Restructuring and other charges	44	472	56	10	582	39	105	22
Costs associated with the Arconic Inc. Separation Transaction	1	1	1	2	5	4	3	—
Impairment of energy business assets	—	9	—	1	10	—	—	—
Legal and other advisory costs related to Grenfell Tower	2	3	2	1	8	(1)	(6)	(2)
Strategy and portfolio review costs	6	—	—	—	6	—	—	—
Plant fire costs, net	—	4	5	—	9	11	4	7
Impairment costs related to facilities closures	—	—	—	—	—	3	—	—
Operating income excluding Special items	$267	$313	$320	$299	$1,199	$314	$180	$100
Sales	$1,752	$1,818	$1,794	$1,734	$7,098	$1,634	$1,253	$1,134
Operating income margin	12.2%	n/a	14.3%	16.4%	8.2%	15.8%	5.9%	6.4%
Operating income margin, excluding Special items	15.2%	17.2%	17.8%	17.2%	16.9%	19.2%	14.4%	8.8%

Operating income excluding Special items and Operating income margin, excluding Special items are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews the operating results of the Company 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 Operating income determined under GAAP as well as Operating income excluding Special items.

HOWMET AEROSPACE

Reconciliation of Adjusted EBITDA excluding Special Items

($ in millions)	Quarter ended Juner 30, 2020	Quarter ended September 30, 2020
Income (loss) from continuing operations after income taxes	$(84)	$36
Add:		
Provision (benefit) for income taxes	(2)	$(48)
Other (income) expense, net	16	$8
Interest expense	144	$77
Restructuring and other charges	105	$22
Provision for depreciation and amortization	73	$68
Adjusted EBITDA	$252	$163
Add:		
Costs associated with the Arconic Inc. Separation Transaction	$3	$—
Plant fire costs(1)	$(2)	$7
Legal and other advisory costs related to Grenfell Tower	$(6)	$(2)
Adjusted EBITDA excluding Special items	$247	$168
Third-party sales	$1,253	$1,134
Adjusted EBITDA excluding Special items Margin	19.7%	14.8%

[1] Plant fire costs excludes the impacts of $6 of depreciation in the quarter ended June 30, 2020.

HOWMET AEROSPACE

Reconciliation of Adjusted Free Cash Flow

($ in millions)	1Q20	2Q20	3Q20
Cash (used for) provided from operations	$(208)	$31	$35
Cash receipts from sold receivables	$48	$66	$144
Capital expenditures	(152)	(32)	(36)
Adjusted free cash flow	(312)	65	143
Costs associated with the Arconic Inc. Separation Transaction	66	11	—
Adjusted free cash flow, excluding costs associated with the Arconic Inc. Separation Tranasaction	$(246)	$76	$143

The net cash funding from the sale of accounts receivables was $329 million in the first quarter of 2020 which represented a $21 million use of cash in the first quarter. The net cash funding from the sale of accounts receivables was $299 million in the second quarter of 2020 which represented a $30 million use of cash in the second quarter. The net cash funding from the sale of accounts receivables was $255 million in the third quarter of 2020 which represented a $45 million use of cash in the third quarter.

During the third quarter ended September 30, 2020, the Company identified a misclassification in the presentation of changes in accounts payable and capital expenditures in its previously issued Statement of Consolidated Cash Flows. Although management has determined that such misclassification did not materially misstate such prior financial statements, the Company has revised its Statement of Consolidated Cash Flows for the first quarter ended March 31, 2020 and nine months ended September 30, 2020 resulting in an increase of $83 million to previously reported capital expenditures and a corresponding offset to accounts payable, trade. The Company will also prospectively revise, in connection with future filings, its Statement of Consolidated Cash Flows.

Adjusted free cash flow and Adjusted free cash flow, excluding costs associated with the Arconic Inc. Separation Transaction are non-GAAP financial measures. Management believes that these measures are meaningful to investors because management reviews cash flows generated from operations after taking into consideration capital expenditures (due to the fact that these expenditures are considered necessary to maintain and expand the Company's asset base and are expected to generate future cash flows from operations), cash receipts from net sales of beneficial interest in sold receivables, as well as costs associated with the Arconic Inc. Separation Transaction. It is important to note that Adjusted free cash flow and Adjusted free cash flow, excluding costs associated with the Arconic Inc. Separation Transaction, measures do not represent the residual cash flow available for discretionary expenditures since other non-discretionary expenditures, such as mandatory debt service requirements, are not deducted from the measure.

Reconciliation of Net Debt

($ in millions)	September 30, 2019	December 31, 2019	March 31, 2020	June 30, 2020	September 30, 2020
Short-term debt	$1,434	$1,034	$1,336	$391	$384
Long-term debt, less amount due within one year	4,905	4,906	4,608	4,695	4,697
Total debt	6,339	5,940	5,944	5,086	5,081
Less: Cash, cash equivalents, and restricted cash	1,278	1,632	2,143	1,285	1,368
Net debt	$5,061	$4,308	$3,801	$3,801	$3,713

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses the Company's leverage position after factoring in cash that could be used to repay outstanding debt.

Reconciliation of Net debt to Adjusted EBITDA Excluding Special Items

($ in millions)	Trailing-12 months ended	
	June 30, 2020	September 30, 2020
Income (loss) from continuing operations after income taxes	$ 245	$ 223
Add:		
Provision for income taxes	228	75
Other (income) expense, net	5	5
Interest expense, net	395	387
Restructuring and other charges	210	176
Provision for depreciation and amortization	284	283
Adjusted EBITDA	$ 1,367	$ 1,149
Add:		
Costs associated with the Arconic Inc. Separation Transaction	$ 10	$ 9
Impairment of energy business assets	1	1
Plant fire costs, net (1)	14	16
Legal and other advisory costs related to Grenfell Tower	(4)	(8)
Impairment costs related to facilities closures	3	3
Adjusted EBITDA excluding Special items	$ 1,391	$ 1,170
Net debt	$ 3,801	$ 3,713
Net debt to Adjusted EBITDA excluding Special items	2.73	3.17

The Company's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net margin plus an add-back for depreciation and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation and amortization. Management believes that this measure is meaningful to investors because it provides additional information with respect to the Company's operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies.

Net debt is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management assesses the Company's leverage position after factoring in cash that could be used to repay outstanding debt.

(1) Plant fire costs excludes the impacts of $6 of depreciation in the second quarter of 2020.

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Reconciliation of Corporate Expense Excluding Special Items

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Corporate expense	$55	$64	$51	$60	$230	$42	$21	$22
Special items:								
Costs associated with the Arconic Inc. Separation Transaction	1	1	1	2	5	4	3	—
Legal and other advisory costs related to Grenfell Tower	2	3	2	1	8	(1)	(6)	(2)
Strategy and portfolio review costs	6	—	—	—	6	—	—	—
Plant fire costs	—	4	5	—	9	11	4	7
Impairment of energy business assets	—	9	—	1	10	—	—	—
Impairment costs related to facilities closures	—	—	—	—	—	3	—	—
Corporate expense excluding Special items	$46	$47	$43	$56	$192	$25	$20	$17

Corporate expense excluding Special items is a non-GAAP financial measure. Management believes that this measure is meaningful to investors because management reviews the operating results of the Company 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 Corporate expense determined under GAAP as well as Corporate expense excluding Special items.

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Reconciliation of Segment End Markets Revenue

($ in millions)	Engine Products	Fastening Systems	Engineered Structures	Forged Wheels	Total Segment
Third quarter ended September 30, 2019					
Aerospace - Commercial	$571	$267	$226	$—	$1,064
Aerospace - Defense	$120	$41	$65	$—	$226
Commercial Transportation	$5	$59	$—	$241	$305
Industrial and Other	$148	$24	$27	$—	$199
Third-party sales end-market revenue	$844	$391	$318	$241	$1,794
Third quarter ended September 30, 2020					
Aerospace - Commercial	$199	$169	$104	$—	$472
Aerospace - Defense	$142	$37	$82	$—	$261
Commercial Transportation	$—	$38	$—	$172	$210
Industrial and Other	$144	$27	$20	$—	$191
Third-party sales end-market revenue	$485	$271	$206	$172	$1,134

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Reconciliation of Segment Adjusted EBITDA

($ in millions)	1Q19	2Q19	3Q19	4Q19	2019	1Q20	2Q20	3Q20
Engines Products								
Segment operating profit	$141	$163	$161	$157	$622	$165	$105	$39
Provision for depreciation and amortization	34	35	31	30	130	30	31	31
Adjusted EBITDA	$175	$198	$192	$187	$752	$195	$136	$70
Third-party sales	$813	$835	$844	$829	$3,321	$781	$585	$485
Adjusted EBITDA margin	21.5%	23.7%	22.7%	22.6%	22.6%	25.0%	23.2%	14.4%
Fastening Systems								
Segment operating profit	$96	$99	$102	$99	$396	$96	$70	$33
Provision for depreciation and amortization	12	12	12	12	48	12	12	12
Adjusted EBITDA	$108	$111	$114	$111	$444	$108	$82	$45
Third-party sales	$395	$399	$391	$376	$1,561	$385	$326	$271
Adjusted EBITDA margin	27.3%	27.8%	29.2%	29.5%	28.4%	28.1%	25.2%	16.6%
Engineered Structures								
Segment operating profit	$16	$25	$40	$39	$120	$28	$19	$10
Provision for depreciation and amortization	17	14	15	12	58	13	14	13
Adjusted EBITDA	$33	$39	$55	$51	$178	$41	$33	$23
Third-party sales	$294	$331	$318	$312	$1,255	$275	$229	$206
Adjusted EBITDA margin	11.2%	11.8%	17.3%	16.3%	14.2%	14.9%	14.4%	11.2%
Forged Wheels								
Segment operating profit	$60	$73	$60	$60	$253	$50	$6	$35
Provision for depreciation and amortization	8	8	8	8	32	10	9	10
Adjusted EBITDA	$68	$81	$68	$68	$285	$60	$15	$45
Third-party sales	$254	$257	$241	$217	$969	$191	$113	$172
Adjusted EBITDA margin	26.8%	31.5%	28.2%	31.3%	29.4%	31.4%	13.3%	26.2%

Adjusted EBITDA and Adjusted EBITDA margin are non-GAAP financial measures. Management believes that these measures are meaningful to investors because Adjusted EBITDA and Adjusted EBITDA margin provide additional information with respect to the operating performance and the Company's ability to meet its financial obligations. The Adjusted EBITDA presented may not be comparable to similarly titled measures of other companies. Howmet Aerospace's definition of Adjusted EBITDA (Earnings before interest, taxes, depreciation, and amortization) is net margin plus an add-back for depreciation and amortization. Net margin is equivalent to Sales minus the following items: Cost of goods sold; Selling, general administrative, and other expenses; Research and development expenses; and Provision for depreciation and amortization.

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