Morgan
Advanced Materials

2018 Results Presentation

26th February 2019

Agenda

- Introduction and key highlights – Pete Raby
- 2018 results – Peter Turner
- Operational and strategic update – Pete Raby

Key highlights

- Strategy implementation progressing, well accelerating growth
- Revenue growth of 7.4% and headline operating profit growth of 9.4% on an organic constant-currency basis
- Group headline operating profit margin 12.1%
- Headline EPS growth of 17.1% reflecting improvement in operating profit, lower financing charges and a lower effective tax rate
- Investment in R&D is now £10m per annum higher than in 2015
- Divestment of Composites and Defence Systems completed further reducing complexity
- Looking ahead to 2019:
  - there are significant macro economic uncertainties that could impact our markets
  - based on current trends, we expect to deliver modest revenue growth for the year
  - efficiency savings to deliver benefits to Group headline operating profit

2018 Results

Peter Turner

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Group performance summary

	FY 2018[1/2] £m	FY 2017[1/2] £m	% change from FY 2017 As reported	Organic % change from FY 2017 At constant currency
Revenue	**1,033.9**	**1,001.4**	**3.2%**	**7.4%**
Group headline operating profit[3]	**124.8**	**120.7**	**3.4%**	**9.4%**
Group headline operating profit margin %[3]	*12.1%*	*12.1%*		
Cash flow from operations[5]	**131.3**	**127.6**	**2.9%**	
Free cash flow before acquisitions, dividends and one-off US pension payment[5]	**48.9**	**52.8**		
Headline earnings per share[4]	**26.7p**	**22.8p**	**17.1%**	
Total dividend per share	**11.0p**	**11.0p**		

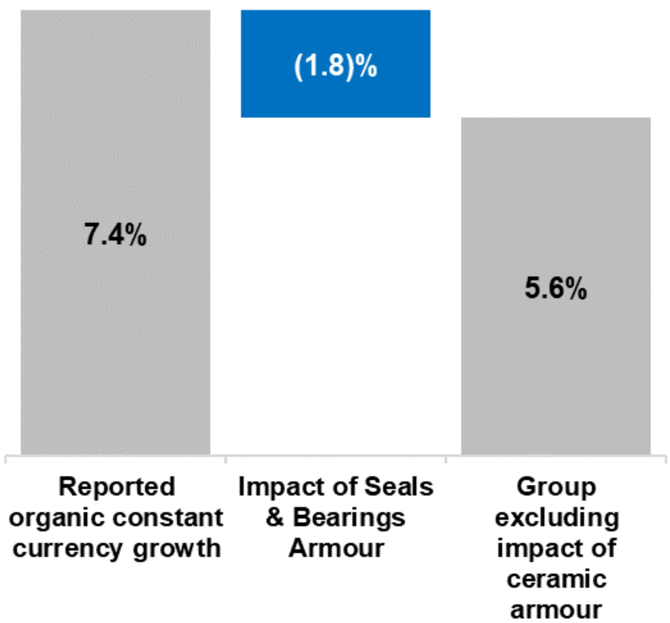
1 The year ended 31 December 2018 has been prepared reflecting the adoption of IFRS 15, and the disposal and treatment as discontinued operations of the Composites and Defence Systems business. The year ended 31 December 2017 has been restated to reflect the adoption of IFRS 15 and the disposal of discontinued business.
2 Results before specific adjusting items.
3 Group headline operating profit is before specific adjusting items and amortisation of intangibles.
4 Headline earnings per share excluding divestments.
5 Presented before additional accelerated payment into US pension scheme of £28m in 2017.

Group performance – specific adjusting items

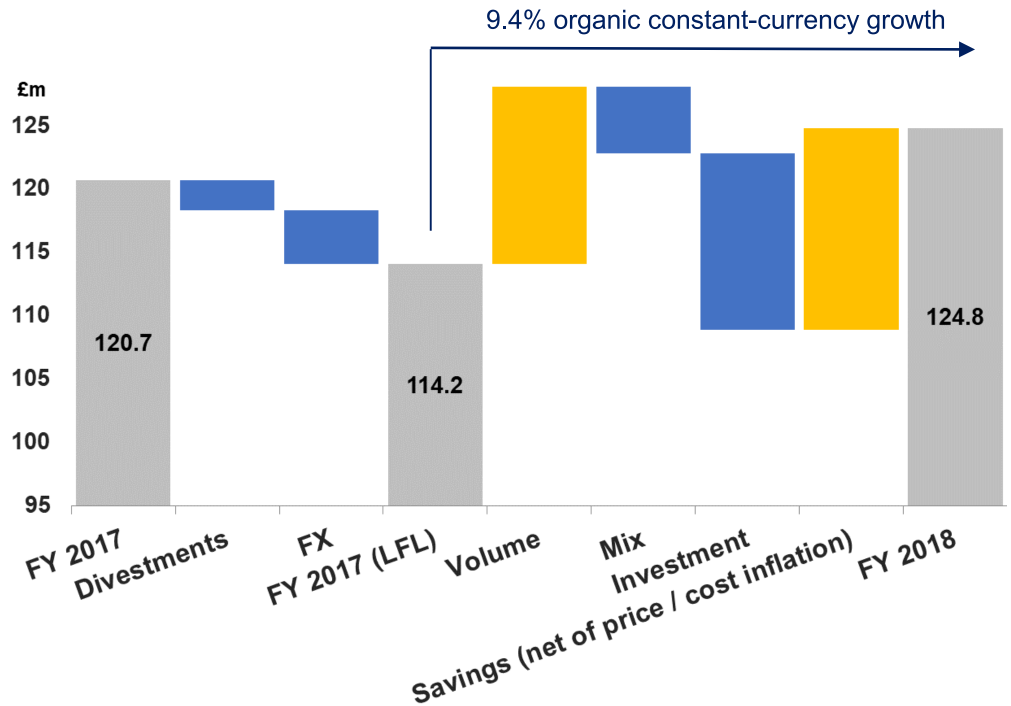
£'m	2018 specific adjusting items Cash	Non-cash	Total	2019 P&L Benefits
Brazil	(2.6)	(3.6)	(6.2)	2.6
China	-	(1.4)	(1.4)	0.4
Venezuela	-	(7.6)	(7.6)	-
Business Exits	**(2.6)**	**(12.6)**	**(15.2)**	**3.0**
Net pensions past service credit	5.7	-	5.7	
Total Continuing	**3.1**	**(12.6)**	**(9.5)**	

Revenue & margin progression

Underlying organic growth FY 2018



Group headline operating profit progression



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Cash flow summary

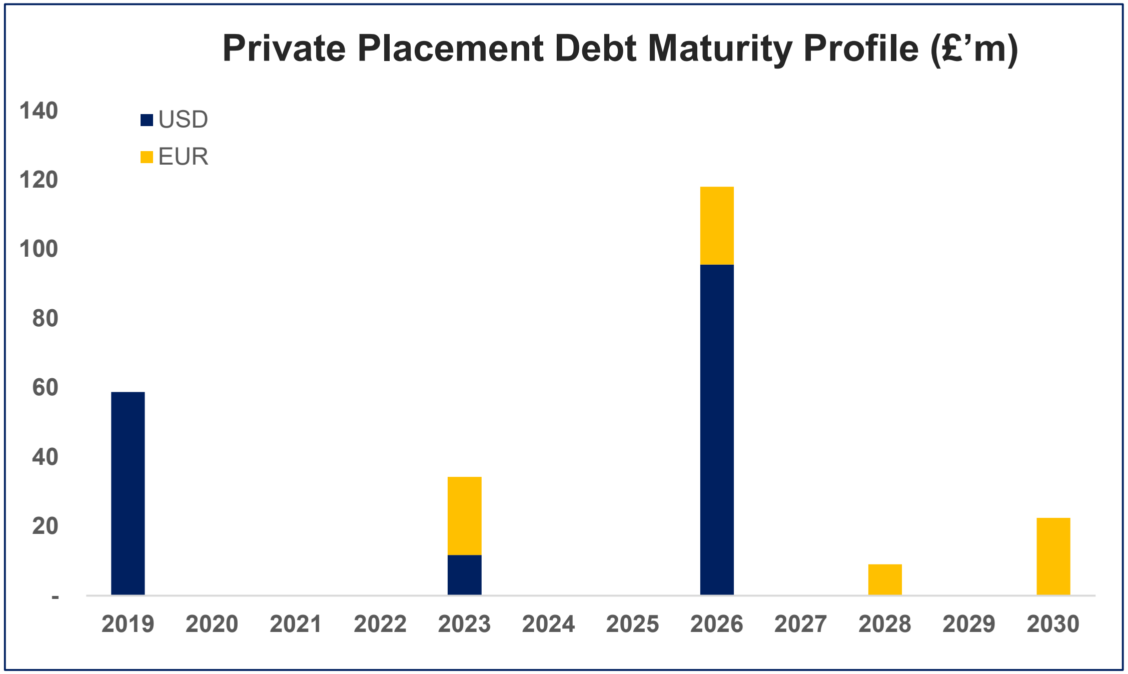
	FY 2018 £m	FY 2017 £m
EBITDA	156.1	150.7
Change in working capital	(9.7)	(0.9)
Change in provisions & other	(15.1)	(22.2)
Additional US pension payment	-	(28.0)
Cash flow from operations	**131.3**	**99.6**
Capital expenditure	(53.1)	(33.7)
Net interest	(8.4)	(16.6)
Tax paid on ordinary activities	(20.9)	(24.5)
Free cash flow before acquisitions and dividends	**48.9**	**24.8**
Free cash flow before acquisitions and one-off US pension payment	**48.9**	**52.8**
Dividends paid	(31.4)	(31.4)
Cash flows from other investing and financing	(5.2)	(18.2)
Cash flows from divestments and discontinued operations	(1.2)	77.7
Exchange movement	(9.8)	8.3
Opening net debt	(181.3)	(242.5)
Closing net debt	**(180.0)**	**(181.3)**

- Working capital outflow in line with business growth
- Capex driven by investments for growth and efficiency
- Lower interest following refinancing
- Lower tax following US pension payment at the end of 2017
- Adverse exchange rate movement leaving net debt to EBITDA: 1.2x (2017: 1.2x)

Refinancing completed – strengthens balance sheet

- Revolving Credit Facility refinanced ahead of 2019 maturity on terms substantially equivalent to the existing facility
- New private placements completed December 2018 as pre-financing ahead of 2019 maturities extending the maturity profile of debt at lower financing cost

Private placement debt	Amount	Average coupon	Weighted average maturity
Dec-18	EUR 25m	2.89%	12 years
Jan-19	USD 25m	4.87%	7 years



Net debt	£'m
Borrowings	247.6
Cash	(67.6)
Net debt	**180.0**

- Net debt to EBITDA: 1.2x (2017: 1.2x)
- £200m Revolving Credit Facility matures September 2023
- Private Placement Maturity due in 2019 will be repaid using cash / or revolving credit facility

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Pensions update – funding position continues to improve

Deficit movement since 31 Dec 2017 (£'m)	
Deficit at 31 December 2017	**(218)**
Return on assets	(32)
Contributions (net of service/finance costs)	15
Actuarial gains on liabilities	46
Currency Adjustment	(1)
Deficit at 31 December 2018	**(190)**

£m	31 December 2018	31 December 2017	31 December 2016
Equities	*106*	*164*	*208*
Bonds	*256*	*211*	*85*
Annuities	*175*	*188*	*194*
Other	*7*	*9*	*37*
Total Assets	544	572	524
Liabilities	734	(790)	(795)
Deficit	**(190)**	**(218)**	**(271)**
UK bond yields	*2.7%*	*2.4%*	*2.6%*
US bond yields	*4.3%*	*3.7%*	*4.2%*

Matching Assets
2016: 53%
2017: 70%
2018: 79%

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Impact of new accounting standards

IFRS 16 *Leases* will have the following impact on transition (1 January 2019)

		Current lease accounting £m	After application of IFRS 16 £m	Net impact £m
Income statement	Revenue	-	-	-
	Depreciation	-	(9)	(9)
	Other operating costs	(12)	-	12
	Headline operating profit(1)	**(12)**	**(9)**	**3**
	Finance charges	-	(3)	(3)
	Profit before tax	**(12)**	**(12)**	**-**
Cash flow	Headline operating profit	(12)	(9)	3
	Depreciation	-	9	9
	Cash flow from operations	**(12)**	**-**	**12**
	Net interest	-	(3)	(3)
	Repayment of lease liabilities	-	(9)	(9)
	Net cash flow	**(12)**	**(12)**	**-**
Balance sheet at 1 Jan 19	**Right of use assets**	-	51	51
	Lease liabilities	-	(67)	(67)
	Equity adjustment	-	**(16)**	**(16)**

1 The net increase in Headline Operating Profit of c.£3m comprises £1m in Thermal Ceramics and £2m in Technical Ceramics.

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FY19 guidance – financial items

Headline tax rate	**28%**
Interest charge (at current FX rates)	**c. £8m**
IAS19 pensions finance charge	**c. £4.5m**
IFRS 16 lease interest	**c. £3m**
Funded pension scheme contributions	**c. £17m**

c. £16m

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Operational and Strategic Update

Pete Raby

Broad based growth across most major market segments

Organic % change from FY 2017 at constant-currency

	Organic % change	% Group revenue[1]	
Industrial	4.0%	48%	Growth across all regions, particularly in Asia
Transportation	3.3%	21%	Aerospace and rail growth partially offset by decline in automotive
Petrochemical & Chemical	15.4%	9%	Thermal project activity and Seals and Bearings
Energy	(3.9%)	6%	Growth in solar and wind with IGT declining
Semiconductor & Electronics	11.8%	6%	Growth in Technical Ceramics and specialty carbon for semiconductor applications
Healthcare	10.9%	5%	Growth in Technical Ceramics and Seals and Bearings

1 Full reconciliation of end market mix as a % of Group revenue is provided on slide 26.

Thermal Ceramics: performance summary

£m	FY 2018	FY 2017	% change from FY 2017 As reported	Organic % change from FY 2017 At constant-currency
Revenue	433.6	427.3	*1.5%*	*5.3%*
EBITA	52.9	56.9	*(7.0%)*	*(3.3%)*
EBITA margin %	12.2%	13.3%		

Performance commentary

- Strong project growth in Asia, particularly China and India
- North America was down on prior year
- Margin decline driven by adverse mix - higher project activity in Asia and lower sales in the US, and Brazil.

Strategic focus

- Growth in petrochemical and passive fire protection
- Further Superwool® conversion
- Investment in sales and new product development to support growth
- Operational efficiency

Molten Metal Systems: performance summary

£m	FY 2018	FY 2017	% change from FY 2017 As reported	Organic % change from FY 2017 At constant-currency
Revenue	48.6	47.1	*3.2%*	*7.3%*
EBITA	6.6	7.0	*(5.7%)*	*(1.5%)*
EBITA margin %	13.6%	14.9%		

Performance commentary

- Growth driven by a strong performance in North America and Asia, in particular India, in precious metal refining and aluminium casting
- Margin declined following planned investment in research and product development, and sales effectiveness

Strategic focus

- Sales effectiveness remains a priority, including focus on value selling and distribution in key growth market segments
- Ongoing operational improvements funding Research and Development and sales effectiveness

Electrical Carbon: performance summary

£m	FY 2018	FY 2017	% change from FY 2017 As reported	Organic % change from FY 2017 At constant-currency
Revenue	166.8	156.9	*6.3%*	*12.6%*
EBITA	19.4	16.7	*16.2%*	*31.1%*
EBITA margin %	11.6%	10.6%		

Performance commentary

- Growth in all regions, with particularly strong performance in Asia and North America
- Rail, wind, industrial and semiconductor segments have delivered growth on prior year
- Margin improvement driven by volume increases and operational efficiencies

Strategic focus

- Growth opportunities in transport and wind segments
- Development and introduction of new products through the Carbon Science Centre of Excellence

Seals and Bearings: performance summary

£m	FY 2018	FY 2017	% change from FY 2017 As reported	Organic % change from FY 2017 At constant-currency
Revenue	132.7	113.3	*17.1%*	*18.9%*
EBITA	23.7	17.5	*35.4%*	*37.8%*
EBITA margin %	17.9%	15.4%		

Performance commentary

- Organic growth driven by the water, chemical and petrochemical segments partially offset by continuing weakness in the Korean automotive market
- Ceramic armour sales increased from £6m in 2017 to £24m in 2018
- Excluding armour, organic revenue growth on core business was 3.3%
- Margins improved due to volume increases

Strategic focus

- Growth opportunities targeted in automotive, petrochemical, water pumps and consumer appliances
- Carbon Science Centre of Excellence to build our technical differentiation

Technical Ceramics: performance summary

£m	FY 2018	FY 2017	% change from FY 2017 As reported	Organic % change from FY 2017 At constant-currency
Revenue	252.2	256.8	*(1.8%)*	*2.8%*
EBITA	28.1	28.3	*(0.7%)*	*6.0%*
EBITA margin %	11.1%	11.0%		

Performance commentary

- Growth in aerospace, renewable energy and medical segments
- Margins improved slightly despite a reduction in higher margin IGT sales, and the dilutive impact of the disposals

Strategic focus

- Growth opportunities in aerospace, medical and semiconductor
- Increasing Research and Development investment
- Improving sales effectiveness, especially key account management
- Improving yields and reducing scrap

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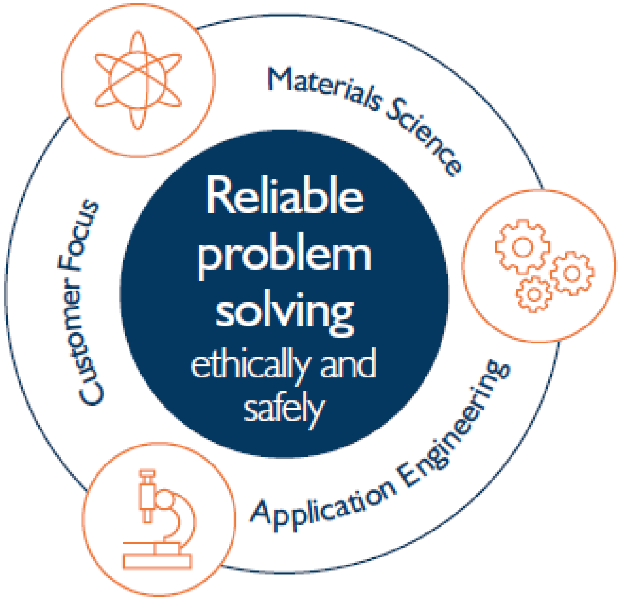
Our strategy for growth

We have a strategy to ensure we are the leaders in our field, with the customer and materials insight to apply our capabilities quickly and effectively



We apply these skills to a portfolio of businesses where:

- Our technical expertise and differentiation is valued
- We can operate on a global scale
- We are scalable
- Market segments are growing and we have room to grow

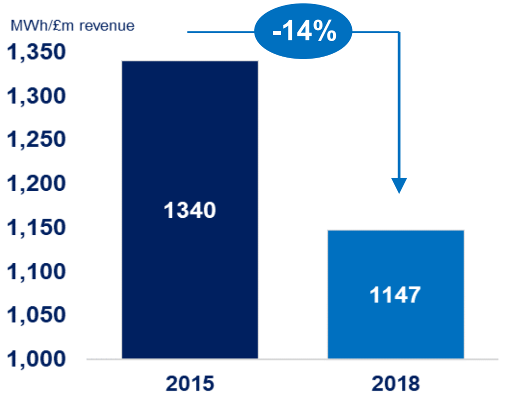
Strengthening the Group to deliver resilient financial performance and faster growth

Execution priorities - 2015 to 2018

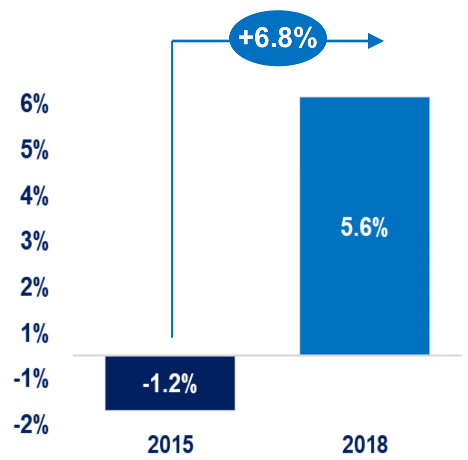
Move to a global structure	Completed in 2016, the simplified organisational structure delivers a co-ordinated approach to global customers and markets.
Extend our technology leadership	We are investing £10m per year more in R&D than 2015, established two new Centres of Excellence, and strengthened project management.
Improve operational execution	We have deployed lean manufacturing, process automation and procurement tools to fund significant reinvestment in the business and expand margins.
Drive sales effectiveness and market focus	We are redesigning our sales processes, building capability, deploying new tools, increasing business development resources, changing sales incentives and deploying sales systems.
Increase investment in people management and development	We have strengthened the leadership of the Group, introduced leadership behaviours, and adjusted our incentives.
Simplify the business	We have completed three divestments, receiving proceeds of £82m and are closing three small loss making sites.

Group progress - 2015 to 2018

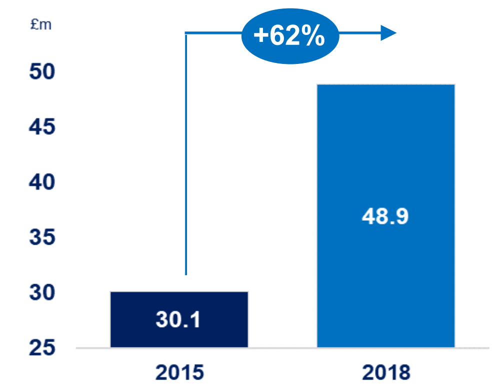
Energy consumption[1]



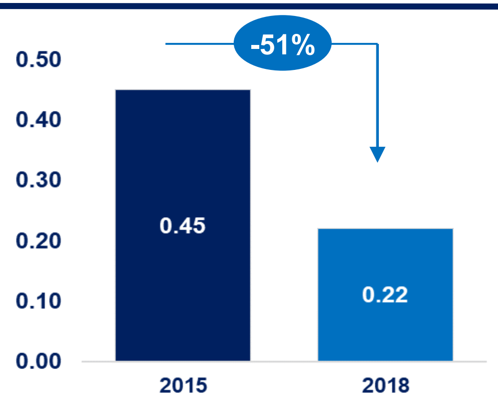
Organic growth[2]



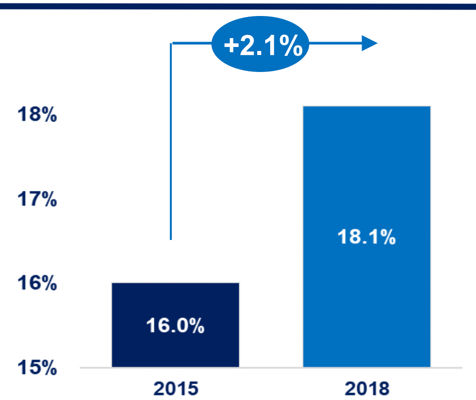
Free cash flow



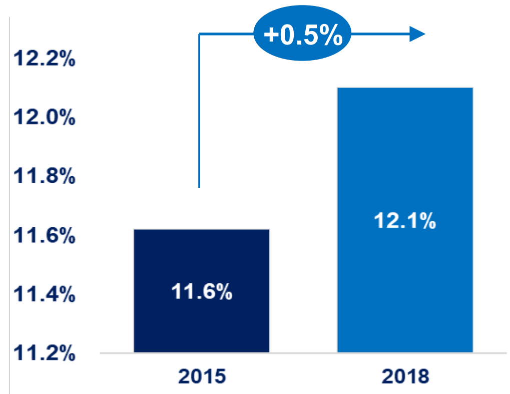
Lost-time accident rate[3]



ROIC



EBITA %



1 Energy consumed in MWh per £m of third party revenue
2 Excluding ceramic amour in 2018.
3 Lost-time accidents per 100,000 hours worked.

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Execution priorities – 2019 and beyond

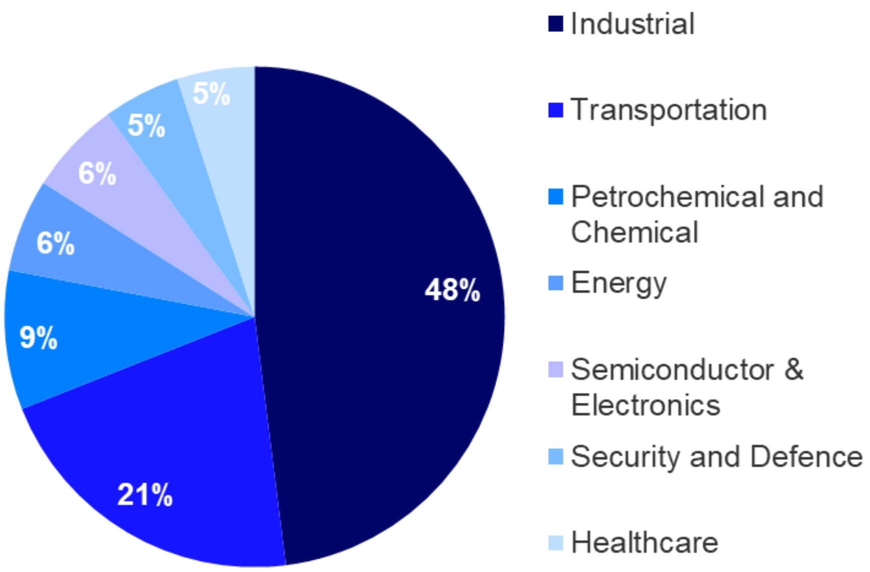
Drive sales effectiveness and market focus	Continue the deployment of our tools, processes and training to improve our capabilities and market insight and drive sales growth.
Extend our technology leadership	Accelerating the development of new materials and manufacturing processes, and strengthening our technical teams capability.
Increase investment in people management and development	Focus on building our leadership teams and launching new talent programmes to support the development of our future leaders.
Improve operational execution	Continue improvement projects tailored to each business unit to drive operational savings to offset material and labour inflation and enable reinvestment.

Summary

- Strategy implementation progressing, well accelerating growth
- Revenue growth of 7.4% and headline operating profit growth of 9.4% on an organic constant-currency basis
- Group headline operating profit margin 12.1%
- Headline EPS growth of 17.1% reflecting improvement in operating profit, lower financing charges and a lower effective tax rate
- Investment in R&D is now £10m per annum higher than in 2015
- Divestment of Composites and Defence Systems completed further reducing complexity
- Looking ahead to 2019:
  - there are significant macro economic uncertainties that could impact our markets
  - based on current trends, we expect to deliver modest revenue growth for the year
  - efficiency savings to deliver benefits to Group headline operating profit

Appendix

End Market Mix (as a % of revenue)



Main markets by GBU

Thermal Ceramics:
Industrial, Chemical & Petrochemical, Metals, Automotive

MMS:
Aluminium (automotive), Copper (construction), Precious Metals

Electrical Carbon:
Rail, Industrial Equipment, Power Generation

Seals and Bearings:
Petrochemical, Pumps, Aerospace, Automotive, Home Appliances

Technical Ceramics:
Industrial Equipment, Electronics, Aerospace, Healthcare, Energy

Reported Statutory Figures

	Results before specific adjusting items	Specific adjusting items	Total
	FY 2018 (£m)	FY 2018 (£m)	FY 2018 (£m)
Revenue	**1,033.9**	**-**	**1,033.9**
Operating costs before restructuring costs and other items and amortisation of intangible assets	(909.1)	-	(909.1)
Profit from operations before restructuring costs and other items and amortisation of intangible assets	**124.8**	**-**	**124.8**
Restructuring costs and other items:	-	(9.5)	(9.5)
Profit from operations before amortisation of intangible assets	**124.8**	**(9.5)**	**115.3**
Amortisation of intangible assets	(8.0)	-	(8.0)
Operating profit	**116.8**	**(9.5)**	**107.3**
Finance income	1.3	-	1.3
Finance expense	(14.5)	-	(14.5)
Net financing costs	**(13.2)**	**-**	**(13.2)**
Share of profit of associate (net of income tax)	0.8	-	0.8
Profit before taxation	**104.4**	**(9.5)**	**94.9**
Income tax expense	(29.0)	(1.7)	(30.7)
Profit for the period from continuing operations	**75.4**	**(11.2)**	**64.2**
Profit from discontinued operations	**(1.4)**	**(9.3)**	**(10.7)**
Profit for the period	**74.0**	**(20.5)**	**53.5**
Profit for the period attributable to:			
External plc shareholders	66.8	(20.5)	46.3
Non-controlling interests	7.2	-	7.2
Profit for the period	**74.0**	**(20.5)**	**53.5**

See slide 6 for further information on Specific adjusting items

Key Exchange Rates

GBP to:	FY 2018 Closing rate	FY 2018 Average rate	FY 2017 Closing rate	FY 2017 Average rate
USD	1.28	1.33	1.35	1.29
EUR	1.11	1.13	1.13	1.14

Key exchange rate sensitivities on interim results	Revenue	Profit
Increase in full year revenue / Group headline operating profit if:	**£m**	**£m**
GBP weakens by 10c against the US dollar in isolation	+34.9	+5.1
GBP weakens by 10c against the Euro in isolation	+21.2	+3.8

Retranslating the 2018 actual results at the January 2019 closing exchange rates would lead to revenue of **£1,026.2m** and headline operating profit of **£123.1m**

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Headline EPS

	FY 2018 £m	FY 2017 £m
Profit for the period attributable to Ordinary shareholders	46.3	107.6
Loss from discontinued operations	10.7	1.0
Profit from continuing operations	57.0	108.6
Amortisation	8.0	7.3
Total specific adjusting items post-income tax	11.2	(50.7)
Headline earnings	**76.2**	**65.2**
Weighted average number of shares in the period	285.2m	285.0m
Headline earnings per share	26.7p	22.8p

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Divisional Performance

	Revenue (£m)		Divisional EBITA (£m)		Margin (%)	
	FY 2018	FY 2017	FY 2018	FY 2017	FY 2018	FY 2017
Thermal Ceramics	433.6	427.3	52.9	56.9	12.2%	13.3%
Molten Metal Systems	48.6	47.1	6.6	7.0	13.6%	14.9%
Thermal Products	**482.2**	**474.4**	**59.5**	**63.9**	**12.3%**	**13.5%**
Electrical Carbon	166.8	156.9	19.4	16.7	11.6%	10.6%
Seals and Bearings	132.7	113.3	23.7	17.5	17.9%	15.4%
Technical Ceramics	252.2	256.8	28.1	28.3	11.1%	11.0%
Carbon and Technical Ceramics	**551.7**	**527.0**	**71.2**	**62.5**	**12.9%**	**11.9%**
Corporate costs			**(5.9)**	**(5.7)**		
Group	**1,033.9**	**1,001.4**	**124.8**	**120.7**	**12.1%**	**12.1%**

2018 Results Presentation

26th February 2019