RNS Number : 7838X
Morgan Advanced Materials PLC
28 April 2023

**Full-year results for the period ended 31 December 2022**

**Strong growth, returns and strategic progress**

| **£ million** unless otherwise stated | **2022** | 2021 | As reported change | Organic constant-currency[1] change |
|---|---|---|---|---|
| **Adjusted results** | | | | |
| Revenue | **1,112.1** | 950.5 | +17.0% | +11.2% |
| Group adjusted operating profit[1] | **151.0** | 124.5 | +21.3% | +14.7% |
| Group adjusted operating profit margin[1] | **13.6%** | 13.1% | +50bps | |
| Return on invested capital[1] | **22.4%** | 20.5% | +190bps | |
| Adjusted EPS[1] | **33.8p** | 27.2p | +24.3% | |
| Free cash flow before acquisitions, disposals and dividends[1] | **(46.9)** | 66.2 | -170.8% | |
| Net debt (incl. lease liabilities)[1] | **200.4** | 96.5 | +107.7% | |
| **Statutory results** | | | | |
| Revenue | **1,112.1** | 950.5 | | |
| Operating profit | **140.8** | 113.1 | +24.5% | |
| Profit before taxation | **131.6** | 104.3 | +26.2% | |
| Continuing EPS[2] | **30.6p** | 23.9p | +28.0% | |
| Continuing and discontinued EPS[2] | **31.0p** | 25.9p | +19.7% | |
| Total dividend per share | **12.0p** | 9.1p | +31.9% | |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16. Throughout this report these non-GAAP measures are clearly identified by an asterisk (*) where they appear in text.

2. EPS is presented on a 'continuing' and a combined 'continuing and discontinued' basis for statutory reporting. Further details are provided in note 8 to the consolidated financial statements.

## Group highlights

- Strong organic constant-currency* revenue growth of 11.2%
- Improving returns: adjusted operating profit margin* +50 bps to 13.6%, ROIC +190 bps to 22.4%, adjusted EPS* +24.3% to 33.8p and dividend per share up 31.9%
- Strong balance sheet with net debt*/EBITDA (excl. leasing)* of 0.8 times.
- Disciplined and targeted investment: £67.0 million pension contribution with UK pension funds substantially de-risked, and increased investment to support future growth in both working capital (+£35m) and capital expenditure (+£29.3m)
- Absolute $CO_2$e emissions (from scope 1 and 2) reduced by 8.2% compared with 2021
- Outlook for FY2023 adjusted operating profit* unchanged from 7 February 2023 guidance

## Commenting on the results, Chief Executive Officer, Pete Raby said:

"I am delighted with the progress we have made in delivering on all aspects of our strategy in 2022. We worked hard to recover significant cost inflation in a challenging environment which, together with robust growth in all of our markets, has enabled us to achieve further expansion of margin and ROIC. We were pleased to be able to take a further significant step in de-risking the Company's pension liabilities and have made good progress in reducing CO2e emissions. This performance, with our continued investment in product innovation, provides us with a very solid foundation to deliver the strategy and financial framework set out in our recent Capital Markets Event.

Demand has remained robust coming into this year, particularly from our faster growing markets. As previously announced, the cyber event we experienced in January has impacted sales and profitability in the short term, but our recovery is on track. We are also taking the opportunity to accelerate the modernisation of our IT infrastructure.

I want to thank our employees for their hard work since the start of this year and in achieving the excellent progress we made in 2022. Our leading, differentiated positions in attractive end markets and the calibre of our team position us well to continue to execute our strategy and further strengthen the growth and sustainability of the business."

## Outlook

Customer demand remains robust. As a consequence of the cyber incident, we expect revenue in our first half to be in line with prior year, whilst experiencing temporary cost inefficiency as previously highlighted. In the second half, we expect to return to growth, with growth and margins in line with our financial framework. Outlook for full year adjusted operating profit[1] is unchanged from our guidance of 7 February 2023.

We have seen further inflation as expected which we will continue to offset through pricing and operational improvement. Our targeted investment in capacity for our faster growing segments continues at pace and we expect to increase further our exposure to these markets.

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

## Our purpose

Our purpose is to use advanced materials to make the world more sustainable and to improve the quality of life. This purpose guides our actions: it underpins our work to reduce our environmental impact, informs how we treat our people, and ensures we fulfil our responsibility for good corporate governance.

We deliver on our purpose through the products that we make and the way that we make them.

- We improve the quality of life by supporting medical diagnostics with our power tubes in medical scanners. Our feedthroughs are at the core of cochlear implants and our seals are used in blood pumps. These products transform people's lives.
- Our products help keep people safe. We are proud to design fire protection in everything from cars to tunnels, and ships to oil platforms.
- We design and manufacture our products to help customers save energy.
- Our carbon brushes are integral to wind turbines and power generators, and enable electrified rail transport.
- Our ceramic rollers are used to make thin-film solar panels, our insulation is used in solar towers and steam turbines, and our ceramic cores are used to make more efficient industrial gas turbines. These are all products which promote a more sustainable and environmentally secure future for our planet.

## Our strategy

Our strategy builds on our strengths and focuses the Group on scalable businesses in attractive markets, and on the development of our three core capabilities in customer focus, application engineering and materials science. To continue the development of our core capabilities we have three execution priorities:

Big positive difference - making sure we govern our business the right way, looking after the environment, looking after our people and operating to high ethical standards. This priority supports our focus on living and breathing our commitments on inclusion, treating people fairly, reducing waste, managing our water consumption, and reducing emissions.

Delight the customer - following on from our foundational work on sales effectiveness, we are working to shape our product and service offerings further based on customer needs, with the overall objective of making our business more customer-centric. We gathered customer feedback during 2022 through a range of channels and are using that to understand our customer segments in more detail. This will enable us to align our product, service and support offerings more closely to customer needs.

Innovate to grow - many of our customers have an increasing need to reduce their energy consumption and $CO_2e$ emissions, and need our help. This priority supports our focus on working with the customer to innovate in traditional heavy industries whilst also contributing to greener technologies for the future.

We want to accelerate our growth, by winning in our core markets and increasing our exposure to four faster growing market segments: clean energy, clean transportation, semiconductors and healthcare.

We have been focusing our product and business development efforts in these markets over the recent years to develop new and differentiated products that solve complex problems for our customers.

- Clean energy. Growth in energy storage, brushes and slip rings for onshore wind applications and ceramic and carbon products used in solar panel manufacture.

- Clean transportation. Growth in our rail collector business for metro and main rail applications, and in water and vacuum pump components for electric vehicle applications.

- Semiconductors. Growth from carbon and ceramic consumable supply into key semiconductor process steps including crystal growth, deposition, lithography and etch.

- Healthcare. Growth from medical imaging and implantable devices.

During 2022, organic constant-currency* revenue growth in these segments was 11.7%, which represented 19.6% of our revenue overall.

## Our environment, social and governance (ESG) priorities

In March 2021, we set stretching targets to improve our environmental, social and governance performance and become a more sustainable business. We take these commitments seriously and have plans in place to deliver against them in the coming years, making a step change in our performance.

Whilst some progress has been made, we recognise that there is more work to do, particularly around water sustainability, safety and employee engagement.

*Protect the environment*

- Our goal is to be a scope 1 and 2 $CO_2e$ net zero business by 2050. Our 2030 target is to reduce our scope 1 and scope 2 $CO_2e$ emissions by 50% (from a 2015 baseline).

- Our aspiration is to use water sustainably across our business. Our 2030 target is to reduce our overall water usage by 30% and reduce our water usage in high and extremely high stress areas by 30% (from a 2015 baseline).

*Provide a safe, fair and inclusive workplace*

- Our aspiration is to create an environment and culture with zero harm to our employees. Our 2030 target is a lost-time accident rate below 0.1 (lost-time accidents per 100,000 hours worked).

- Our aspiration is that our employee demographics reflect the communities that we operate in. Our 2030 target is for 40% female representation across our leadership population of our organisation.

- Our aspiration is to be a welcoming and inclusive environment where our employees can grow and thrive. Our 2030 target is to attain a top quartile employee engagement score.

Our performance to date is as follows:

- Scope 1 & 2 $CO_2e$ emissions. We have continued to migrate to carbon-free electricity across the Group with 49% of our power carbon-free by the end of the year. We are continuing to improve the efficiency of our gas fired kilns and have started to evaluate electrically fired options for some kiln types. During the year we reduced our absolute scope 1 and 2 $CO_2$ emissions by 8.2%.

- Water usage in stressed areas. Our overall water usage increased by 11.6% during the year driven by volume increases, changes in mix to more water-intensive products and processes and some significant water leaks. A number of process and infrastructure improvements were completed during the year and we expect to see this reflected in our water usage in 2023. Our water usage in stressed areas decreased by 0.7%, despite volume growth, showing the impact of improvement projects in our plants in high water stress areas.

- Lost-time accident (LTA) rate. Our LTA rate was 0.28 (2021 0.22), a worsening of our accident performance, in part reflecting a larger number of new employees in the business as we ramped volumes up. We are not satisfied with this and we are working hard to improve. We have a broad programme of work underway across the Group to improve our safety position and performance. During the year we deployed our 'thinkSAFE' training in all of our plants. We increased the robustness of plant-level activities including start of shift briefings, safety tours, near miss identification and reporting and 5S (Sort, Straighten, Shine, Standardise and Sustain) and we put greater focus on cross-group learnings through safety shares and quarterly focus topics. Safety is our top priority and continues to receive a high level of focus throughout the organisation.

- Diversity in our leadership population. Our diversity position was unchanged over the year with 29% females in our leadership population. We implemented a number of changes during the year, including the establishment of three employee resource groups for women, veterans and the LGBTQ+ communities. We have also introduced training for hiring managers and we are standardising and modernising our parental leave policies, starting in the UK.

- We completed our engagement survey in December 2022 and our engagement score was 53, a three point improvement on 2021's engagement score of 50. We have a lot of activity underway at a local level to improve, and we have a long way to go, but we are pleased to see an improvement year-on-year.

Our Group Environment, Health and Sustainability Director and Group HR Director coordinate our improvement projects. In addition, the Board reviews progress quarterly and takes an active role in holding the executive team to account on improving ESG performance.

## Enquiries


| | | |
|---|---|---|
| Pete Raby<br>Richard Armitage | Morgan Advanced Materials<br>Morgan Advanced Materials | 01753 837 000 |
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## Results presentation today

There will be an analyst and investor presentation at 09:00 (UK time) today via web-conference.

A live audio webcast and slide presentation of this event will be available on www.morganadvancedmaterials.com
We recommend you register by 08:45 (UK time).

## Basis of preparation

## Non-GAAP measures

Throughout this report, adjusted measures are used to describe the Group's financial performance. These are not recognised under IFRS or other generally accepted accounting principles (GAAP). The Executive Committee and the Board manage and assess the performance of the business on these measures and they are presented as the Directors consider they provide useful information to shareholders, including additional insight into ongoing trading and year-on-year comparisons. These non-GAAP measures should be viewed as complementary to, not replacements for, the comparable GAAP measures.

Throughout this report these non-GAAP measures are clearly identified by an asterisk (*) where they appear in text, and by a footnote when they appear in tables and charts. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, and reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

## Operating review

| | Revenue | | Adjusted operating profit[1] | | Adjusted operating profit margin[1] % | |
|---|---|---|---|---|---|---|
| | **2022** | 2021 | **2022** | 2021 | **2022** | 2021 |
| | **£m** | £m | **£m** | £m | **%** | % |
| Thermal Ceramics | **421.4** | 364.7 | **48.7** | 42.0 | **11.6%** | 11.5% |
| Molten Metal Systems | **57.8** | 47.7 | **7.8** | 6.3 | **13.5%** | 13.2% |
| Electrical Carbon | **188.7** | 164.9 | **39.7** | 32.8 | **21.0%** | 19.9% |
| Seals and Bearings | **148.5** | 135.9 | **19.0** | 22.9 | **12.8%** | 16.9% |
| Technical Ceramics | **295.7** | 237.3 | **41.7** | 26.4 | **14.1%** | 11.1% |
| **Segment total** | **1,112.1** | 950.5 | **156.9** | 130.4 | **14.1%** | 13.7% |
| Corporate costs | | | **(5.9)** | (5.9) | | |
| **Group adjusted operating profit[1]** | | | **151.0** | 124.5 | **13.6%** | 13.1% |
| Amortisation of intangible assets | | | **(4.7)** | (6.0) | | |
| **Operating profit before specific adjusting items** | | | **146.3** | 118.5 | **13.2%** | 12.5% |
| Specific adjusting items included in operating profit[2] | | | **(5.5)** | (5.4) | | |
| **Operating profit** | | | **140.8** | 113.1 | **12.7%** | 11.9% |
| Net financing costs | | | **(9.2)** | (9.2) | | |
| Share of profit of associate (net of income tax) | | | **-** | 0.4 | | |
| **Profit before taxation** | | | **131.6** | 104.3 | | |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

2. Details of specific adjusting items from continuing operations are disclosed in note 4 to the consolidated financial statements.

### *Thermal Ceramics*

Revenue for Thermal Ceramics for the year was £421.4 million, representing an increase of 15.5% compared with £364.7 million in 2021. This has been driven by recovery in industrial, metals, aerospace and automotive markets, growing petrochemical project revenues and growth in clean energy applications. On an organic constant-currency* basis, year-on-year revenue increased by 11.4%.

Thermal Ceramics operating profit was £44.3 million (2021: £37.8 million), and operating profit margin was 10.5% (2021: 10.4%), with the slight margin improvement due to increased volumes, with price offsetting inflation. Details of the specific adjusting items of £2.8 million (2021: £2.1 million) are included in note 4. Adjusted operating profit* was £48.7 million (2021: £42.0 million) with an adjusted operating profit* margin of 11.6% (2021: 11.5%).

### *Molten Metal Systems*

Revenue for Molten Metals Systems for the year was £57.8 million, an increase of 21.2% compared with £47.7 million in 2021. Revenue growth was driven by a strong end-market demand, share wins in the aluminium market and growth in copper and precious metals. On an organic constant-currency* basis, year-on-year revenue increased by 15.8%.

Molten Metal Systems operating profit was £7.5 million (2021: £6.0 million), and operating profit margin was 13.0% (2021: 12.6%). Margin improvement was from volume leverage and price and efficiency actions more than offsetting inflation. Adjusted operating profit* was £7.8 million (2021: £6.3 million) with adjusted operating profit margin* of 13.5% (2021: 13.2%).

### *Electrical Carbon*

Revenue for Electrical Carbon for the year was £188.7 million, representing an increase of 14.4% compared with £164.9 million in 2021, driven by growth in the semiconductor and transportation market segments. On an organic constant-currency* basis, year-on-year revenue improved by 9.7%.

Electrical Carbon operating profit was £39.1 million (2021: £25.6 million), and operating profit margin was 20.7% (2021: 15.5%). Margin improvement was driven by operational efficiency savings and the impact of pricing increases which more than offset cost inflation and investment. Adjusted operating profit* was £39.7 million (2021: £32.8 million) with an adjusted operating profit margin* of 21.0% (2021: 19.9%).

### *Seals and Bearings*

Revenue for Seals and Bearings in 2022 was £148.5 million, representing an increase of 9.3% compared with £135.9 million in 2021, with the expected reduction in armour sales more than offset by growth in industrial, petrochemical and aerospace markets. On an organic constant-currency* basis, year-on-year revenue increased by 2.8%. Ceramic armour sales in 2022 were £25.5 million (2021: £32.3 million).

Seals and Bearings operating profit was £16.6 million (2021: £22.0 million), and operating profit margin was 11.2% (2021: 16.2%). Details of the specific adjusting items of £1.6 million (2021: £nil) are included in note 4. The margin declined due to manufacturing inefficiencies in the second half and a provision for a quality claim with an armour customer. Adjusted operating profit* was £19.0 million (2021: £22.9 million), with an adjusted operating profit margin* of 12.8% (2021: 16.9%).

### *Technical Ceramics*

Revenue for the Technical Ceramics global business unit in 2022 was £295.7 million, an increase of 24.6% compared with £237.3 million in 2021, driven by growth in semiconductor, healthcare, industrial, defence and aerospace market segments, with a combination of market growth and share wins. On an organic constant-currency* basis, year-on-year revenue increased by 15.8%.

Technical Ceramics operating profit was £39.2 million (2021: £18.9 million), and operating profit margin was 13.3% (2021: 8.0%). Details of the specific adjusting items of £1.2 million (2021: £6.0 million) are included in note 4. Margin improvement was driven by volume leverage, pricing and efficiency actions and the remaining benefits from our 2020 restructuring programme. Adjusted operating profit* was £41.7 million (2021: £26.4 million), with an adjusted operating profit margin* of 14.1% (2021: 11.1%).

### *Group financial review*

Group revenue was £1,112.1 million (2021: £950.5 million), an increase of 17.0% on a reported basis compared with 2021, reflecting continued strong demand across all global business units.

2021, reflecting continued strong demand across all global business units.

Operating profit was £140.8 million (2021: £113.1 million) and operating profit margin was 12.7% (2021: 11.9%). Profit before tax was £131.6 million (2021: £104.3 million). Specific adjusting items from continuing operations before tax in 2022 were a net charge of £5.5 million (2022: £5.4 million), primarily relating to the impairment of non-financial assets. Further details are included under 'Specific adjusting items' below.

Group adjusted operating profit* was £151.0 million (2021: £124.5 million). Adjusted operating profit margin* was 13.6%, compared with 13.1% for 2021.

The Group amortisation charge was £4.7 million (2021: £6.0 million).

The net finance charge was £9.2 million (2021: £9.2 million), comprising: net bank interest and similar charges of £5.4 million (2021: £5.3 million); net interest on IAS 19 pension obligations of £1.4 million (2021: £1.6 million); and the interest expense on lease liabilities of £2.4 million (2021: £2.3 million) resulting from IFRS 16 Leases.

Looking forward to 2023, we anticipate that the net finance charge will be around £13-15 million, comprising: net bank interest and similar charges of £10-12 million; net interest on IAS 19 pension obligations of £0.5 million; and net interest expense on lease liabilities of £2 million.

The Group tax charge from continuing operations, excluding specific adjusting items, was £37.1 million (2021: £29.7 million). The effective tax rate, excluding specific adjusting items, was 27.0% (2021: 27.1%). Note 6 to the consolidated financial statements on page 32 provides additional information on the Group's tax charge. Looking forward to 2023, we anticipate that the effective tax rate will be around 26%-28%. On a statutory basis, the Group tax charge was £36.0 million (2021: £28.2 million), higher than the previous year due to the higher taxable profits.

Basic earnings per share from continuing operations was 30.6 pence (2021: 23.9 pence) and adjusted earnings per share* was 33.8 pence (2021: 27.2 pence). Details of these calculations can be found in note 8 to the consolidated financial statements on page 34.

The Group's balance sheet and liquidity remain robust. Net debt* for the year ended 31 December 2022 was £200.4 million, with net debt excluding lease liabilities* of £148.5 million, with £34.5 million of senior notes due to mature in October 2023. The Group has cash and cash equivalents* of £117.7 million and undrawn headroom on its revolving credit facility of £154.0 million.

Our key financial covenants are measured on a pre-IFRS 16 Leases basis. As at 31 December 2022, net debt* to EBITDA*, excluding lease liabilities, was 0.8 times compared to a covenant not to exceed 3.0 times, and our interest cover was 32.9 times, compared to a covenant to exceed 4.0 times.

### *Specific adjusting items*

In the consolidated income statement, the Group presents specific adjusting items separately. In the judgement of the Directors, as a result of the nature and value of these items they should be disclosed separately from the underlying results of the Group to allow the reader to obtain an alternative understanding of the financial information and an indication of the underlying performance of the Group.

Details of specific adjusting items arising from continuing operations during the year and the comparative period are given in note 4 to the consolidated financial statements. Specific adjusting items in relation to discontinued operations are disclosed in note 7 to the consolidated financial statements.

| | **2022 £m** | 2021 £m |
|---|---|---|
| **Specific adjusting items from continuing operations[1]** | | |
| Impairment of non-financial assets | **(6.5)** | (12.4) |
| Restructuring credit | **0.6** | 0.1 |
| Net profit on disposal of business | **0.4** | 7.1 |
| Business closure and exit costs | **-** | (0.2) |
| **Total specific adjusting items before income tax** | **(5.5)** | (5.4) |
| Income tax credit from specific adjusting items | **1.1** | 1.5 |
| **Total specific adjusting items after income tax** | **(4.4)** | (3.9) |

1.Specific adjusting items relating to discontinued operations are disclosed in note 7.

In 2022, pre-tax specific adjusting items from continuing operations totalled £5.5 million (2021: £5.4 million) and comprised the following:

*2022*

*Impairment of non-financial assets*

*Seals and Bearings, Asia*

An impairment charge of £0.6 million has been recognised relating to assets purchased to support a customer contract which did not materialise.

A further impairment charge of £1.0 million has been recognised after reassessing the value in use of property, plant and equipment in a business in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £5.2 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 12.9% was used to determine the value in use.

*Thermal Ceramics, Europe*

An impairment charge of £1.2 million has been recognised following a fire in December which destroyed a warehouse and inventory. The assets have subsequently been written off.

An impairment charge of £1.1 million has been recognised after reassessing the value in use of property, plant and equipment in a business in France which is experiencing limited growth and under utilisation of key assets. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £0.3 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 13.7% was used to determine the value in use.

*Thermal Ceramics, South America*

An impairment charge of £0.9 million has been recognised in relation to assets associated with a closed manufacturing line.

*Technical Ceramics, Asia*

An impairment charge of £1.7 million was recognised after reassessing the value in use of property, plant and equipment in a business in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £3.2 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 12.9% was used to determine the value in use.

*Review of cumulative impairment of non-financial assets*

Impairment charges of £52.6 million for non-financial assets which the business continues to use have been recorded during the current and previous years (Technical Ceramics, Asia £7.7 million, Technical Ceramics, ceramic cores £28.8 million, Thermal Ceramics £15.1 million and Seals and Bearings, Asia £1.0 million). These impaired amounts could be reversed if the related businesses were to outperform significantly against their budget. A sensitivity analysis was carried out using reasonably possible changes to key assumptions in assessing the value in use of these non-financial assets. This did not result in a material reversal of the impaired amounts.

*Restructuring costs*

A credit of £0.6 million has been recognised in the current year representing a release of restructuring provisions booked in previous years in relation to the Group's restructuring programme. Whilst this programme was completed in 2021, we retain restructuring provision of £10.5 million for the Group's obligations at the balance sheet date (2021: £11.8 million). This provision includes remaining lease exit costs and multi-employer pension obligations for two sites which were closed during the year ended 31 December 2021. The cash outflows relating to the pension obligations may continue for up to 19 years, subject to any settlement being reached in advance of that date. Cash outflows in relation to the lease may continue for the next four years. Refer to note 15 for further information.

*Net profit on disposal of business*

The Group disposed of its investment in the joint venture Sukhoy Log, based in Russia, during the year. This disposal generated a net profit of £0.4 million. Refer to note 2 for further information.

*2021*

*Impairment of non-financial assets*

*Technical Ceramics, Asia*

An impairment charge of £6.0 million was recognised after reassessing the value in use of property, plant and equipment in a business in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £5.4 million. The partial impairment of the assets, the carrying value of the assets following this impairment was £3.4 million. The calculation of value in use was performed as at December 2021. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 11.5% was used to determine the value in use.

*Electrical Carbon, Europe and North America*

Impairment charges of £4.8 million and £1.0 million were recognised after assessing the viability of two development assets in Europe and North America, respectively. The European asset was not deemed viable as we were unable to commission it safely and the American asset was not deemed to be commercially viable.

*Thermal Ceramics, North America*

An impairment charge of £0.6 million was recognised relating to assets associated with closed manufacturing lines within Thermal Ceramics.

*Restructuring costs*

A net credit of £0.1 million was recognised in the year ended 31 December 2021 representing £2.1 million of further redundancy and closure costs related to the Group's restructuring programme, offset by a £2.2 million release of restructuring provisions booked during 2020 in relation to this programme.

*Net profit on disposal of business*

The Group disposed of its 35% shareholding in Jemmtec Limited and the business assets associated with the Latrobe business during the year ended 31 December 2021. These disposals generated a profit of £7.2 million and a loss of £0.1 million, respectively. Refer to note 2 for further information.

*Business closure and exit costs*

A £0.2 million charge was recognised relating to the liquidation of businesses in Europe and Asia.

*Foreign currency impact*

The principal exchange rates used in the translation of the results of overseas subsidiaries were as follows:

| | **2022** | | 2021 | |
|---|---|---|---|---|
| GBP to: | **Closing rate** | **Average rate** | Closing rate | Average rate |
| US dollar | **1.21** | **1.24** | 1.35 | 1.38 |
| Euro | **1.13** | **1.17** | 1.19 | 1.16 |

For illustrative purposes, the table below provides details of the impact on 2022 revenue and Group adjusted operating profit* if the actual reported results, calculated using 2022 average exchange rates were restated for GBP weakening by 10 cents against USD in isolation and 10 cents against the Euro in isolation:

| **Increase in 2022 revenue/adjusted operating profit[1] if:** | **Revenue £m** | **Adjusted operating profit[1] £m** |
|---|---|---|
| GBP weakens by 10c against the USD in isolation | **16.9** | **2.2** |
| GBP weakens by 10c against the Euro in isolation | **21.8** | **3.5** |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

Retranslating the 2022 full year results at the March 2023 closing exchange rates would lead to revenue of £1,111.9 million and adjusted operating profit* of £149.2 million.

## Cash flow

| | **2022** | 2021 |
|---|---|---|
| | **£m** | £m |
| Cash generated from continuing operations | **59.1** | 135.9 |
| Net capital expenditure | **(57.4)** | (28.1) |
| Net interest on cash and borrowings | **(5.4)** | (5.3) |
| Tax paid | **(31.8)** | (25.4) |
| Lease payments and interest | **(11.4)** | (10.9) |
| **Free cash flow before acquisitions, disposals and dividends[1]** | **(46.9)** | 66.2 |
| Dividends paid to external plc shareholders | **(31.6)** | (19.1) |
| Net cash flows from other investing and financing activities | **(10.3)** | (15.0) |
| Cash flows from sale of subsidiaries and associates | **0.4** | 15.0 |
| Net cash flows from discontinued operations | **1.1** | 5.3 |
| Exchange movement and other non-cash movements | **(14.5)** | 1.9 |

| | | |
|---|---|---|
| Opening net debt[1] excluding lease liabilities | **(46.7)** | (101.0) |
| Closing net debt[1] excluding lease liabilities | **(148.5)** | (46.7) |
| Closing lease liabilities | **(51.9)** | (49.8) |
| **Closing net debt[1]** | **(200.4)** | (96.5) |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

Cash generated from continuing operations was £59.1 million (2021: 135.9 million).

Free cash flow before acquisitions, disposals and dividends* was £(46.9) million (2021: £66.2 million).

Net debt* at the year end was £200.4 million (2021: £96.5 million), representing a net debt* to EBITDA* ratio of 1.1 times (2021: 0.6 times).

Net debt* excluding lease liabilities was £148.5 million (2021: £46.7 million), representing a net debt* to EBITDA* ratio excluding lease liabilities of 0.8 times (2021: 0.3 times).

### *Defined benefit pension plans*

The Group pension deficit has decreased by £87.1 million since last year end to £15.6 million on an IAS 19 (revised) basis, following a one-off contribution of £67.0 million to the UK Schemes during the year.

- The UK Schemes' deficit decreased by £76.9 million to a surplus of £25.2 million (2021 deficit: £51.7 million), (discount rate 2022: 4.81%; discount rate 2021: 1.92%).
- The US Schemes' deficit increased by £1.5 million to £9.2 million (2021: £7.7 million), (discount rate 2022: 4.99%; discount rate 2021: 2.71%).
- The European Schemes' deficit decreased by £11.1 million to £27.9 million (2021: £39.0 million), (discount rate 2022: 3.70%; discount rate 2021: 0.90%).
- The Rest of World Schemes' deficit decreased by £0.6 million to £3.7 million (2021: £4.3 million), (discount rate 2022: 5.30%; discount rate 2021: 2.90%).

The most recent full actuarial valuations of the UK Schemes were undertaken as at 31 March 2022 and resulted in combined assessed deficits of £49.7 million on the 'Technical Provisions' basis. The Company subsequently agreed with the Trustees to make a lump sum contribution to the Schemes of £67.0 million on 29 December 2022 in lieu of the remaining contributions that would otherwise have been due under the existing recovery plans from the 31 March 2019 valuations. The sum paid also represented the value of the deficit on the more prudent 'Long Term Objective' basis on the date of that agreement, 25 October 2022. As a result, no further contributions to the Schemes are expected to be required pending the results of the next full valuations as at 31 March 2025.

### *Final dividend*

The Board is recommending a final dividend, subject to shareholder approval, of 6.7 pence per share on the Ordinary share capital of the Group, payable on 3 July 2023 to Ordinary shareholders on the register at the close of business on 9 June 2023. The ex-dividend date is 8 June 2023.

Together with the interim dividend of 5.3 pence per share paid on 18 November 2022, this final dividend, if approved by shareholders, brings the total distribution for the year to 12.0 pence per share (2021: 9.1 pence).

A total dividend of 12.0 pence per share represents a dividend cover of adjusted EPS* of 2.8 times.

The Board has committed to grow the Ordinary dividend as the economic environment and the Group's earnings improve, targeting a dividend cover of around 2.5 times over the medium term. This level of cover ensures sufficient resources are available to continue to invest to support the Group's long-term prospects, as well as to meet the needs of other stakeholders of the Group, including by making deficit contributions to the Group's defined benefit pension schemes.

## Definitions and reconciliations of non-GAAP to GAAP measures

Reference is made to the following non-GAAP measures throughout this document. These measures are shown because the Directors consider they provide useful information to shareholders, including additional insight into ongoing trading and year-on-year comparisons. These non-GAAP measures should be viewed as complementary to, not replacements for, the comparable GAAP measures. As defined in the basis of preparation on page 23, these measures are calculated on a continuing basis.

### *Adjusted operating profit*

Adjusted operating profit is stated before specific adjusting items and amortisation of intangible assets. Specific adjusting items are excluded on the basis that they distort trading performance. Amortisation is excluded consistent with previous years.

| 2022 | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment total £m** | Corporate costs[1] £m | **Group £m** |
|---|---|---|---|---|---|---|---|---|
| **Operating profit** | 44.3 | 7.5 | 39.1 | 16.6 | 39.2 | **146.7** | (5.9) | **140.8** |
| Add back specific adjusting items included in operating profit | 2.8 | - | (0.1) | 1.6 | 1.2 | **5.5** | - | **5.5** |
| Add back amortisation of intangible assets | 1.6 | 0.3 | 0.7 | 0.8 | 1.3 | **4.7** | - | **4.7** |
| **Adjusted operating profit** | 48.7 | 7.8 | 39.7 | 19.0 | 41.7 | **156.9** | (5.9) | **151.0** |
| **Adjusted operating profit margin** | 11.6% | 13.5% | 21.0% | 12.8% | 14.1% | | | **13.6%** |

1. Corporate costs consist of central head office costs.

| 2021 | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment totals £m** | Corporate costs[1] £m | **Group £m** |
|---|---|---|---|---|---|---|---|---|
| **Operating profit** | 37.8 | 6.0 | 25.6 | 22.0 | 18.9 | **110.3** | 2.8 | **113.1** |
| Add back specific adjusting items included in operating profit | 2.1 | (0.3) | 6.3 | - | 6.0 | **14.1** | (8.7) | **5.4** |
| Add back amortisation of intangible assets | 2.1 | 0.6 | 0.9 | 0.9 | 1.5 | **6.0** | - | **6.0** |
| **Adjusted operating profit** | 42.0 | 6.3 | 32.8 | 22.9 | 26.4 | **130.4** | (5.9) | **124.5** |
| **Adjusted operating profit margin** | 11.5% | 13.2% | 19.9% | 16.9% | 11.1% | | | **13.1%** |

1. Corporate costs consist of central head office costs.

## *Organic growth*

Organic growth is the growth of the business excluding the impacts of acquisitions, divestments and foreign currency. This measure is used as it allows revenue and adjusted operating profit to be compared on a like-for-like basis.

Commentary on the underlying business performance is included as part of the Operational review on pages 6 and 7.

### *Year-on-year movements in segment revenue*

| | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment total £m** |
|---|---|---|---|---|---|---|
| 2021 revenue | 364.7 | 47.7 | 164.9 | 135.9 | 237.3 | **950.5** |
| Impact of foreign currency movements | 13.7 | 2.2 | 7.1 | 8.4 | 18.2 | **49.6** |
| Impact of acquisitions, disposals and business exits | - | - | - | 0.2 | (0.1) | **0.1** |
| Organic constant-currency change | 43.0 | 7.9 | 16.7 | 4.0 | 40.3 | **111.9** |
| Organic constant-currency change % | 11.4% | 15.8% | 9.7% | 2.8% | 15.8% | **11.2%** |
| **2022 revenue** | **421.4** | **57.8** | **188.7** | **148.5** | **295.7** | **1,112.1** |

### *Year-on-year movements in segment and Group adjusted operating profit*

| | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment total £m** | Corporate costs[1] £m | **Group £m** |
|---|---|---|---|---|---|---|---|---|
| 2021 adjusted operating profit | 42.0 | 6.3 | 32.8 | 22.9 | 26.4 | **130.4** | (5.9) | **124.5** |
| Impact of foreign currency movements | (1.1) | 0.1 | - | 1.2 | 1.0 | **1.2** | 5.7 | **6.9** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Impact of acquisitions, disposals and business exits | - | - | - | 0.1 | 0.2 | **0.3** | - | **0.3** |
| Organic constant-currency change | 7.8 | 1.4 | 6.9 | (5.2) | 14.1 | **25.0** | (5.7) | **19.3** |
| Organic constant-currency change % | 19.3% | 21.9% | 21.0% | (21.5%) | 51.1% | **14.7%** | | |
| **2022 adjusted operating profit** | 48.7 | 7.8 | 39.7 | 19.0 | 41.7 | **156.9** | (5.9) | **151.0** |

1. Corporate costs consist of central head office costs.

## *Group EBITDA*

Group EBITDA is defined as operating profit before specific adjusting items, depreciation and amortisation of intangible assets. The Group uses this measure as it is a key metric in covenants over debt facilities, these covenants use EBITDA on a pre-IFRS 16 basis. A reconciliation of operating profit to Group EBITDA is as follows:

| | **2022 £m** | 2021 £m |
|---|---|---|
| **Operating profit** | **140.8** | 113.1 |
| Add back specific adjusting items included in operating profit | **5.5** | 5.4 |
| Add back depreciation - property, plant and equipment | **30.3** | 30.1 |
| Add back depreciation - right-of-use assets | **7.8** | 7.9 |
| Add back amortisation of intangible assets | **4.7** | 6.0 |
| **Group EBITDA** | **189.1** | 162.5 |
| **Group EBITDA excluding IFRS 16 *Leases* impact** | **177.7** | 151.6 |

## *Free cash flow before acquisitions, disposals and dividends*

Free cash flow before acquisitions, disposals and dividends is defined as cash generated from continuing operations less net capital expenditure, net interest (interest paid on borrowings, overdrafts and lease liabilities, net of interest received), tax paid and lease payments. The Group discloses this measure of free cash flow as this provides readers of the consolidated financial statements with a measure of the cash flows from the business before corporate level cash flows (acquisitions, disposals and dividends).

A reconciliation of cash generated from continuing operations to free cash flow before acquisitions, disposals and dividends is as follows:

| | **2022 £m** | 2021 £m |
|---|---|---|
| **Cash generated from continuing operations** | **59.1** | 135.9 |
| Net capital expenditure | **(57.4)** | (28.1) |
| Net interest on cash and borrowings | **(5.4)** | (5.3) |
| Tax paid | **(31.8)** | (25.4) |
| Lease payments and interest | **(11.4)** | (10.9) |
| **Free cash flow before acquisitions, disposals and dividends** | **(46.9)** | 66.2 |

## *Net cash and cash equivalents*

Net cash and cash equivalents is defined as cash and cash equivalents less bank overdrafts. The Group also discloses this measure as it provides an indication of the net short term liquidity available to the Group.

| | **2022 £m** | 2021 £m |
|---|---|---|
| Cash and cash equivalents | **117.7** | 127.3 |
| Bank overdrafts | **(1.5)** | (0.5) |
| **Net cash and cash equivalents** | **116.2** | 126.8 |

## *Net debt*

Net debt is defined as borrowings, bank overdrafts and lease liabilities, less cash and cash equivalents. The Group also discloses this metric excluding lease liabilities as this is the measure used in the covenants over the Group's debt facilities.

| | **2022 £m** | 2021 £m |
|---|---|---|
| Cash and cash equivalents | **117.7** | 127.3 |
| Non-current borrowings | **(230.1)** | (174.0) |
| Non-current lease liabilities | **(41.4)** | (40.0) |
| Current borrowings and bank overdrafts | **(36.1)** | - |
| Current lease liabilities | **(10.5)** | (9.8) |
| **Closing net debt** | **(200.4)** | (96.5) |
| **Closing net debt excluding lease liabilities** | **(148.5)** | (46.7) |

### *Return on invested capital*

Return on invested capital (ROIC) is defined as the 12-month Group adjusted operating profit (operating profit excluding specific adjusting items and amortisation of intangible assets) divided by the 12-month average adjusted net assets (third-party working capital, plant and equipment, land and buildings, right-of-use assets, intangible assets and other balance sheet items). This measure excludes long-term employee benefits, deferred tax assets and liabilities, current tax payable, provisions, cash and cash equivalents, borrowings, overdrafts and lease liabilities.

| | **2022 £m** | 2021 £m |
|---|---|---|
| Operating profit | **140.8** | 113.1 |
| Add back specific adjusting items | **5.5** | 5.4 |
| Add back amortisation of intangible assets | **4.7** | 6.0 |
| **Group adjusted operating profit** | **151.0** | 124.5 |
| 12-month average adjusted net assets: | | |
| Third-party working capital | **183.8** | 135.0 |
| Plant and equipment | **166.5** | 152.2 |
| Land and buildings | **101.0** | 98.9 |
| Right-of-use assets | **33.1** | 33.0 |
| Intangible assets | **188.7** | 183.8 |
| Other assets (net) | **1.5** | 3.3 |
| **12-month average adjusted net assets** | **674.6** | 606.2 |
| **ROIC** | **22.4%** | 20.5% |

### *Adjusted earnings per share*

Adjusted earnings per share is defined as operating profit adjusted to exclude specific adjusting items and amortisation of intangible assets, plus share of profit of associate less net financing costs, income tax expense and non-controlling interests, divided by the weighted average number of Ordinary shares during the period. This measure of earnings is shown because the Directors consider it provides an indication of adjusted performance which is less impacted by adjusting items and therefore reflects the underlying performance trends in the business.

A reconciliation from IFRS profit to the profit used to calculate adjusted earnings per share* is included in note 8 to the consolidated financial statements on page 34.

### *Constant-currency revenue and adjusted operating profit*

Constant-currency revenue and adjusted operating profit are derived by translating the prior year results at current year average exchange rates. These measures are used as they allow revenue to be compared excluding the impact of foreign exchange rates. Page 10 provides further information on the principal foreign currency exchange rates used in the translation of the Group's results to constant-currency at average exchange rates.

## Consolidated Financial Statements

for the 12 months ended 31 December 2022

### Consolidated income statement

| | | **Year ended 31 December 2022** | | | Year ended 31 December 2021 | | |
|---|---|---|---|---|---|---|---|
| | | **Results before specific adjusting items** | **Specific adjusting items[1]** | **Total** | Results before specific adjusting items | Specific adjusting items[1] | Total |
| | Note | **£m** | **£m** | **£m** | £m | £m | £m |
| **Revenue** | 3 | **1,112.1** | **-** | **1,112.1** | 950.5 | - | 950.5 |
| Operating costs before amortisation of intangible assets | | **(961.1)** | **(5.5)** | **(966.6)** | **(826.0)** | **(5.4)** | **(831.4)** |
| **Profit from operations before amortisation of intangible assets** | 3 | **151.0** | **(5.5)** | **145.5** | **124.5** | **(5.4)** | **119.1** |
| Amortisation of intangible assets | | **(4.7)** | **-** | **(4.7)** | **(6.0)** | **-** | **(6.0)** |
| **Operating profit** | 3 | **146.3** | **(5.5)** | **140.8** | **118.5** | **(5.4)** | **113.1** |
| Finance income | | 1.6 | - | 1.6 | 0.8 | - | 0.8 |

| | Note | | | | | | |
|---|---|---|---|---|---|---|---|
| Finance income | | 1.6 | - | 1.6 | 0.8 | - | 0.8 |
| Finance expense | | (10.8) | - | (10.8) | (10.0) | - | (10.0) |
| **Net financing costs** | 5 | **(9.2)** | **-** | **(9.2)** | **(9.2)** | - | **(9.2)** |
| Share of profit of associate (net of income tax) | | - | - | - | 0.4 | - | 0.4 |
| **Profit before taxation** | | **137.1** | **(5.5)** | **131.6** | **109.7** | **(5.4)** | **104.3** |
| Income tax expense | 6 | (37.1) | 1.1 | (36.0) | (29.7) | 1.5 | (28.2) |
| **Profit from continuing operations** | | **100.0** | **(4.4)** | **95.6** | **80.0** | **(3.9)** | **76.1** |
| Profit from discontinued operations[2] | 7 | - | 1.1 | 1.1 | - | 5.7 | 5.7 |
| **Profit for the year** | | **100.0** | **(3.3)** | **96.7** | **80.0** | **1.8** | **81.8** |
| Profit for the year attributable to: | | | | | | | |
| Shareholders of the Company | | 91.3 | (3.3) | 88.0 | 71.5 | 2.3 | 73.8 |
| Non-controlling interests | | 8.7 | - | 8.7 | 8.5 | (0.5) | 8.0 |
| **Profit for the year** | | **100.0** | **(3.3)** | **96.7** | **80.0** | **1.8** | **81.8** |
| **Earnings per share** | 8 | | | | | | |
| **Continuing and discontinued operations** | | | | | | | |
| Basic earnings per share | | | | 31.0p | | | 25.9p |
| Diluted earnings per share | | | | 30.7p | | | 25.7p |
| **Continuing operations** | | | | | | | |
| Basic earnings per share | | | | 30.6p | | | 23.9p |
| Diluted earnings per share | | | | 30.3p | | | 23.7p |
| **Dividends**[3] | | | | | | | |
| Interim dividend - pence | | | | 5.30p | | | 3.20p |
| - £m | | | | 15.1 | | | 9.1 |
| Proposed final dividend - pence | | | | 6.70p | | | 5.90p |
| - £m | | | | 19.1 | | | 16.8 |

1. Details of specific adjusting items from continuing operations are given in note 4 to the consolidated financial statements.
2. Profits from discontinued operations are entirely attributable to the Shareholders of the Company.
3. The proposed final dividend is based upon the number of Ordinary shares outstanding at the balance sheet date.

## Consolidated Financial Statements (continued)

for the 12 months ended 31 December 2022

### Consolidated statement of comprehensive income

| | Note | 31 December 2022 £m | 31 December 2021 £m |
|---|---|---|---|
| **Profit for the year** | | **96.7** | 81.8 |
| **Other comprehensive income/(expense):** | | | |
| **Items that will not be reclassified subsequently to profit or loss:** | | | |
| Remeasurement gain on defined benefit plans | 14 | 5.5 | 55.5 |
| Tax effect of components of other comprehensive income not reclassified | 6 | (3.4) | (0.6) |
| | | 2.1 | 54.9 |
| **Items that may be reclassified subsequently to profit or loss:** | | | |
| Foreign exchange translation differences | | 17.5 | 1.0 |
| Tax effect of components of other comprehensive income that may be reclassified | 6 | - | (0.8) |
| Cash flow hedges: | | | |
| Change in fair value | | (0.2) | (0.1) |
| Transferred to profit or loss | | 0.1 | (0.4) |
| | | 17.4 | (0.3) |
| **Total other comprehensive income** | | **19.5** | 54.6 |
| **Total comprehensive income** | | **116.2** | 136.4 |
| **Attributable to:** | | | |
| Shareholders of the Company | | 106.7 | 128.5 |
| Non-controlling interests | | 9.5 | 7.9 |
| | | 116.2 | 136.4 |
| **Total comprehensive income attributable to shareholders of the Company arising from:** | | | |
| Continuing operations | | 105.6 | 122.8 |
| Discontinued operations | | 1.1 | 5.7 |
| | | 106.7 | 128.5 |

## Consolidated balance sheet

| | Note | As at 31 December 2022 £m | As at 31 December 2021 £m |
|---|---|---|---|
| **Assets** | | | |
| Property, plant and equipment | 9 | **283.2** | **248.1** |
| Right-of-use assets | 10 | **33.6** | 31.9 |
| Intangible assets: goodwill | 11 | **181.9** | **172.9** |
| Intangible assets: other | 11 | **7.1** | **10.2** |
| Other receivables | | **3.2** | **2.9** |
| Deferred tax assets | | **15.3** | **15.9** |
| **Total non-current assets** | | **524.3** | **481.9** |
| Inventories | | **174.2** | **140.7** |
| Derivative financial assets | **13** | **1.3** | **0.6** |
| Trade and other receivables | | **202.5** | **161.4** |
| Current tax receivable | | **0.3** | **0.6** |
| Cash and cash equivalents | 12 | **117.7** | **127.3** |
| **Total current assets** | | **496.0** | **430.6** |
| **Total assets** | | **1,020.3** | **912.5** |
| **Liabilities** | | | |
| Borrowings | | **230.1** | **174.0** |
| Lease liabilities | | **41.4** | 40.0 |
| Employee benefits: pensions | **14** | **15.6** | **102.7** |
| Provisions | 15 | **16.1** | **14.8** |
| Non-trade payables | | **2.1** | **2.4** |
| Deferred tax liabilities | | **2.0** | **1.2** |
| **Total non-current liabilities** | | **307.3** | **335.1** |
| Borrowings and bank overdrafts | | **36.1** | - |
| Lease liabilities | | **10.5** | 9.8 |
| Trade and other payables | | **195.0** | **177.2** |
| Current tax payable | | **30.3** | **25.4** |
| Provisions | 15 | **9.9** | **14.8** |
| Derivative financial liabilities | **13** | **1.6** | **0.6** |
| **Total current liabilities** | | **283.4** | 227.8 |
| **Total liabilities** | | **590.7** | 562.9 |
| **Total net assets** | | **429.6** | 349.6 |
| **Equity** | | | |
| Share capital | | **71.3** | **71.3** |
| Share premium | | **111.7** | **111.7** |
| Reserves | | **35.1** | **18.5** |
| Retained earnings | | **170.9** | **109.1** |
| **Total equity attributable to shareholders of the Company** | | **389.0** | **310.6** |
| **Non-controlling interests** | | **40.6** | **39.0** |
| **Total equity** | | **429.6** | **349.6** |

## Consolidated statement of changes in equity

| | Share capital £m | Share premium £m | Translation reserve £m | Hedging reserve £m | Fair value reserve £m | Capital redemption reserve £m | Other reserves £m | Retained earnings £m | **Total parent equity £m** | Non-controlling interests £m | **Total equity £m** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **At 1 January 2021** | 71.3 | 111.7 | (17.0) | 0.4 | (1.0) | 35.7 | 0.6 | 0.6 | 202.3 | 37.7 | 240.0 |
| **Profit for the year** | - | - | - | - | - | - | - | 73.8 | 73.8 | 8.0 | 81.8 |
| **Other comprehensive income/(expense):** | | | | | | | | | | | |
| Remeasurement gain on defined benefit plans and related taxes | - | - | - | - | - | - | - | 54.9 | 54.9 | - | 54.9 |
| Foreign exchange differences and related taxes | - | - | 0.3 | - | - | - | - | - | 0.3 | (0.1) | 0.2 |
| Cash flow hedging fair value changes and transfers | - | - | - | (0.5) | - | - | - | - | (0.5) | - | (0.5) |
| **Total other comprehensive income/(expense)** | - | - | 0.3 | (0.5) | - | - | - | 54.9 | 54.7 | (0.1) | 54.6 |
| **Total comprehensive income/(expense)** | - | - | 0.3 | (0.5) | - | - | - | 128.7 | 128.5 | 7.9 | 136.4 |
| **Transactions with owners:** | | | | | | | | | | | |
| Dividends | - | - | - | - | - | - | - | (19.1) | (19.1) | (6.6) | (25.7) |
| Equity-settled share-based payments | - | - | - | - | - | - | - | 4.5 | 4.5 | - | 4.5 |
| Own shares acquired for share incentive schemes (net) | - | - | - | - | - | - | - | (5.6) | (5.6) | - | (5.6) |
| **At 31 December 2021** | 71.3 | 111.7 | (16.7) | (0.1) | (1.0) | 35.7 | 0.6 | 109.1 | 310.6 | 39.0 | 349.6 |
| **[At 1 January 2022]** | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **At 1 January 2022** | **71.3** | **111.7** | **(16.7)** | **(0.1)** | **(1.0)** | **35.7** | **0.6** | **109.1** | **310.6** | **39.0** | **349.6** |
| **Profit for the year** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **88.0** | **88.0** | **8.7** | **96.7** |
| **Other comprehensive income/(expense):** | | | | | | | | | | | |
| Remeasurement gain on defined benefit plans and related taxes | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **2.1** | **2.1** | **-** | **2.1** |
| Foreign exchange differences and related taxes | **-** | **-** | **16.7** | **-** | **-** | **-** | **-** | **-** | **16.7** | **0.8** | **17.5** |
| Cash flow hedging fair value changes and transfers | **-** | **-** | **-** | **(0.1)** | **-** | **-** | **-** | **-** | **(0.1)** | **-** | **(0.1)** |
| **Total other comprehensive income/(expense)** | **-** | **-** | **16.7** | **(0.1)** | **-** | **-** | **-** | **2.1** | **18.7** | **0.8** | **19.5** |
| **Total comprehensive income/(expense)** | **-** | **-** | **16.7** | **(0.1)** | **-** | **-** | **-** | **90.1** | **106.7** | **9.5** | **116.2** |
| **Transactions with owners:** | | | | | | | | | | | |
| Dividends | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **(31.6)** | **(31.6)** | **(7.9)** | **(39.5)** |
| Equity-settled share-based payments | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **5.7** | **5.7** | **-** | **5.7** |
| Own shares acquired for share incentive schemes (net) | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **(2.4)** | **(2.4)** | **-** | **(2.4)** |
| **At 31 December 2022** | **71.3** | **111.7** | **-** | **(0.2)** | **(1.0)** | **35.7** | **0.6** | **170.9** | **389.0** | **40.6** | **429.6** |

## Consolidated statement of cash flows

| | Note | **Year ended 31 December 2022 £m** | Year ended 31 December 2021 restated[1] £m |
|---|---|---|---|
| **Operating activities** | | | |
| Profit for the year from continuing operations | | **95.6** | **76.1** |
| Profit for the year from discontinued operations | 7 | **1.1** | 5.7 |
| Adjustments for: | | | |
| Depreciation - property, plant and equipment | | **30.3** | **30.1** |
| Depreciation - right-of-use assets | | **7.8** | 7.9 |
| Amortisation | | **4.7** | **6.0** |
| Net financing costs | 5 | **9.2** | **9.2** |
| Profit on disposal of business | 2,4 | **(0.4)** | **(7.1)** |
| Non-cash specific adjusting items included in operating profit | | **6.6** | 10.4 |
| Share of profit from associate (net of income tax) | | **-** | **(0.4)** |
| (Profit)/loss on sale of property, plant and equipment | | **(0.3)** | **0.3** |
| Income tax expense | 6 | **36.0** | **28.2** |
| Equity-settled share-based payment expense | | **5.1** | **4.5** |
| **Cash generated from operations before changes in working capital and provisions** | | **195.7** | **170.9** |
| Increase in trade and other receivables | | **(26.5)** | **(17.2)** |
| Increase in inventories | | **(25.2)** | **(20.1)** |
| Increase in trade and other payables | | **7.0** | **28.3** |
| Decrease in provisions | | **(4.9)** | **(5.8)** |
| Payments to defined benefit pension plans (net of IAS 19 pension charges) | 14 | **(85.9)** | **(16.9)** |
| **Cash generated from operations** | | **60.2** | **139.2** |
| Interest paid - borrowings and overdrafts | | **(7.0)** | **(6.1)** |
| Interest paid - lease liabilities | | **(2.4)** | (2.3) |
| Income tax paid | | **(31.8)** | **(25.4)** |
| **Net cash from operating activities** | | **19.0** | **105.4** |
| **Investing activities** | | | |
| Purchase of property, plant and equipment and software | | **(58.0)** | (31.6) |
| Purchase of investments | | **-** | (0.9) |
| Acquisition of business assets | | **-** | (1.9) |
| Proceeds from sale of property, plant and equipment | | **0.6** | 5.5 |
| Interest received | | **1.6** | 0.8 |
| Disposal of investments | | **0.4** | 14.2 |
| Disposal of subsidiaries, net of cash disposed | | **-** | 0.8 |
| **Net cash from investing activities** | | **(55.4)** | **(13.1)** |
| **Financing activities** | | | |
| Purchase of own shares for share incentive schemes | | **(2.9)** | **(5.9)** |
| Proceeds from exercise of share options | | **0.5** | **0.3** |
| Increase in borrowings | | **113.3** | 27.3 |
| Reduction and repayment of borrowings | | **(39.0)** | (99.6) |
| Payment of lease liabilities | | **(9.0)** | **(8.6)** |
| Dividends paid to shareholders of the Company | | **(31.6)** | **(19.1)** |
| Dividends paid to non-controlling interests | | **(7.9)** | **(6.6)** |
| Purchase of shares from non-controlling interest | | **-** | - |
| **Net cash from financing activities** | | **23.4** | **(112.2)** |
| Net decrease in cash and cash equivalents | | **(13.0)** | **(19.9)** |
| Cash and cash equivalents at start of the year | | **127.3** | **147.8** |
| Effect of exchange rate fluctuations on cash held | | **3.4** | **(0.6)** |
| **Cash and cash equivalents at year end** | 12 | **117.7** | **127.3** |

1. Comparative information has been restated to present the increase and reduction in borrowings separately.

## Notes on consolidated financial statements

### Note 1. Basis of preparation, changes in accounting policies and areas of significant judgement and estimate

The preliminary announcement for the year ended 31 December 2022, which is an abridged statement of the full Annual Report and Accounts, has been prepared in accordance with the requirements of the Companies Act 2006 and International Financial Reporting Standards ('IFRSs') as adopted by the UK. Except for the changes set out in the adoption of new and revised standards section, there has been no other significant impact arising from new accounting policies adopted in the year.

The financial information set out in this report does not constitute the Company's statutory accounts for the years ended 31 December 2022 or 31 December 2021. Statutory accounts for the year ended 31 December 2021 have been delivered to the registrar of companies, and those for the year ended 31 December 2022 will be delivered in due course.

The auditors have reported on those accounts; their report was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report and (iii) did not contain a statement under Section 498(2) or (3) of the Companies Act 2006 in respect of the accounts for 2022 and 2021.

*Critical accounting judgements and key sources of estimation uncertainty*

In preparing these consolidated financial statements, management has made judgements, estimates and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. Final outcomes may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis.

*Critical accounting judgements*

Information about judgements made in applying accounting policies that have the most significant effects on the amounts recognised in the consolidated financial statements is included in the following notes:

*Note 4: Specific adjusting items*

The Group uses specific adjusting items, which are not defined or specified under IFRS. These specific adjusting items, which are not considered to be a substitute for IFRS measures, provide additional helpful information. In the consolidated income statement the Group presents specific adjusting items separately. In the judgement of the Directors, due to the nature and value of these items they should be disclosed separately from the underlying results of the Group to provide the reader with an alternative understanding of the financial information and an indication of the underlying performance of the Group. These items which occur infrequently and include (but are not limited to):

- Individual restructuring projects which are material or relate to the closure of a part of the business and are not expected to recur.
- Impairment of non-financial assets which are material.
- Gains or losses on disposal or exit of businesses.
- Significant costs incurred as part of the integration of an acquired business.
- Gains or losses arising on significant changes to or closures of defined benefit pension plans.

Determining whether an item is part of specific adjusting items requires judgement to determine the nature and the intention of the transaction.

*Note 15: Provisions and contingent liabilities*

Due to the nature of its operations, the Group holds provisions for its environmental obligations. Judgement is needed in determining whether a contingent liability has crystallised into a provision. Management assesses whether there is sufficient information to determine that an environmental liability exists and whether it is possible to estimate with sufficient reliability what the cost of remediation is likely to be. For environmental remediation matters, this tends to be at the point in time when a remediation feasibility study has been completed, or sufficient information becomes available through the study to estimate the costs of remediation.

The Group will recognise a legal provision at the point when the outcome of a legal matter can be reliably estimated. Estimates are based on past experience of similar issues, professional advice received and the Group's assessment of the most likely outcome. The timing of utilisation of these provisions is frequently uncertain, reflecting the complexity of issues and the outcome of various court proceedings and associated negotiations.

*Key sources of estimation uncertainty*

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are included in the notes below.

*Note 14: Pensions and other post-retirement employee benefits: key actuarial assumptions*

The principal actuarial assumptions applied to pensions are shown in note 14, including a sensitivity analysis. The actuarial evaluation of pension assets and liabilities is based on assumptions in respect of inflation, future salary increases, discount rates, returns on investments and mortality rates. Relatively small changes in the assumptions underlying the actuarial valuations of pension schemes can have a significant impact on the net pension liability included in the balance sheet.

*Note 15: Environmental provisions and contingent liabilities*

Provisions for environmental costs are estimated based on current legal and constructive requirements. Actual costs and cash outflows can differ from current estimates because of changes in underlying factors including laws and regulations, public expectations, prices, more detailed analysis of site conditions and innovations in clean-up technology. The ultimate requirement for remediation and its costs are inherently difficult to estimate. Amounts provided are the Group's best estimate of exposure based on currently available information. Although at present no additional costs of environmental issues have been identified beyond our best estimate, future possible costs that are not provided for could be material to the Group's results in the period in which they are recognised. However, we do not expect these costs to have a material impact on the Group's financial position or liquidity.

*Note 4: Impairment of non-financial assets (excluding goodwill)*

In addition to the impairment assessment of goodwill, described below, management also monitors the performance of individual assets and cash-generating units. Where indicators of impairment exist, they perform an impairment review on those assets or cash-generating units.

For assets or cash-generating units which the business continues to use, the review process relies on the use of estimates of the future profitability and cash flows which may differ from the actual results delivered.

Where non-financial assets or cash-generating units are not utilised by the business and will not be utilised in the future they are written down to their recoverable amount. There is a lower level of judgement associated with these impairments.

*Adoption of new and revised accounting standards*

*Newly adopted standards*

There were no new accounting standards or amendments to standards that were required to be adopted in the period and the Group did not adopt any of the new accounting standards that could have been adopted early.

*Accounting developments and changes*

*New accounting standards in issue but not yet effective*

New standards and interpretations that are in issue but not yet effective are listed below:

- IFRS 17 - Insurance Contracts
- Amendments to IFRS 17 - Initial Application of IFRS17 & IFRS 9 - Comparative Information
- Amendments to IAS 1 - Classification of Liabilities as Current or Non-current
- Amendments to IAS 1 and IFRS Practice Statement 2 - Disclosure of Accounting Policies
- Amendments to IAS 8 - Definition of Accounting Estimates
- Amendments to IAS 12 - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The adoption of the above standards and interpretations is not expected to lead to any material changes to the Group's accounting policies or have any other material impact on the financial position or performance of the Group.

There are no other upcoming accounting standards or amendments that are applicable to the Group.

Non-GAAP measures

Where non-GAAP measures have been referenced these have been identified by an asterisk (*) where they appear in the text and by a footnote where they appear in a table.

**Definitions of these non-GAAP measures, and their reconciliation to the relevant GAAP measure, are provided on pages 13 to 16.**

Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic Report contained in the Annual Report and Accounts. The financial position of the Group, its cash flows, liquidity position and borrowing facilities, are described in the Financial Review contained in the Annual Report and Accounts. In addition, note 21 to the Annual Report and Accounts includes the Group's policies and processes for managing financial risk, details of its financial instruments and hedging activities and details of its exposures to credit risk and liquidity risk.

The Group meets its day-to-day working capital requirements through local banking arrangements underpinned by the Group's £230.0 million unsecured multi-currency revolving credit facility, which matures in November 2027. As at 31 December 2022, the Group had both significant available liquidity and headroom on its covenants. Total committed borrowing facilities were £418.3 million. The amount drawn under these facilities was £264.3 million, which together with net cash and cash equivalents of £116.2 million, gave a total headroom of £270.3 million. The multi-currency revolving credit facility was £76.0 million drawn. £34.5 million of senior notes are due to mature in October 2023.

The principal borrowing facilities are subject to covenants that are measured semi-annually in June and December, being net debt to EBITDA of a maximum of 3 times and interest cover of a minimum of 4 times, based on measures defined in the facilities agreements which are adjusted from the equivalent IFRS amounts.

The Group has carefully modelled its cash flow outlook, taking account of reasonably possible changes in trading performance, exchange rates and plausible downside scenarios, including the impact of the cyber security incident on 2023 cashflows. This review indicated that there was sufficient headroom and liquidity for the business to continue for the 18-month period based on the facilities available as discussed in note 21 to the Annual Report and Accounts. The Group was also expected to be in compliance with the required covenants discussed above.

The Board has also reviewed the Group's reverse stress testing performed to demonstrate how much headroom is available on covenant levels in respect of changes in net debt, EBITDA, and underlying revenue. Based on this assessment, a combined reduction in EBITDA of 40% and an increase in net debt of 45% would still allow the Group to operate within its financial covenants. The Directors do not consider either of these scenarios to be plausible given the diversity of the Group's end-markets and its broad manufacturing base.

The Board and Executive Committee have regular reporting and review processes in place in order to closely monitor the ongoing operational and financial performance of the Group. As part of the ongoing risk management process, principal and emerging risks are identified and reviewed on a regular basis. In addition, the Directors have assessed the risk of climate change and do not consider that it will impact the Group's ability to operate as a going concern for the period under consideration.

The Board fully recognises the challenges that lie ahead but, after making enquiries, and in the absence of any material uncertainties, the Directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for a period of 18 months from the date of signing this Annual Report and Accounts. Accordingly, they continue to adopt the going concern basis in preparing the Annual Report and Accounts.

Directors' Responsibility Statement

**The 2022 Annual Report and Accounts which will be issued in April 2023, contains a responsibility statement in compliance with DTR 4.1.12 of the Listing Rules which sets out that as at the date of approval of the Annual Report on 27 April 2023, the directors confirm to the best of their knowledge:**

**- the Group and unconsolidated Company financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and Company, and the undertakings included in the consolidation taken as a whole; and**

**- the performance review contained in the Annual Report and Accounts includes a fair review of the development and performance of the business and the position of the Group and the undertakings including the consolidation taken as a whole, together with a description of the principal risks and uncertainties they face.**

whole, together with a description of the principal risks and uncertainties they face.

## Note 2. Acquisitions and disposals

### 2022

### Disposal of Sukhoy Log

On 29 July 2022, the Group completed the sale of its investment in the joint venture Sukhoy Log, based in Russia. The investment had a carrying value of £nil having been fully impaired in previous years. The Group received consideration of £0.6 million and incurred transaction costs of £0.2 million, resulting in a net consideration of £0.4 million. A profit on disposal of £0.4 million was recognised in specific adjusting items within the consolidated income statement, see also note 4.

There was no income received from Sukhoy Log in the year ended 31 December 2022 (2021: £nil). The disposal group was included in the Thermal Ceramics operating segment.

### 2021

### Disposal of Latrobe

On 15 January 2021, the Group completed the sale of assets associated with the Technical Ceramics business, based in Latrobe, US. The transaction was structured as a sale of the business and related assets for total consideration of £0.6 million. The disposal resulted in a loss of £0.1 million which was recognised in specific adjusting items within the consolidated income statement, see also note 4.

The loss on disposal was as follows:

| | **31 December 2021 £m** |
|---|---|
| Trading net assets of disposal group | 0.6 |
| Goodwill of disposal group | 0.1 |
| Cumulative foreign exchange gains and losses recycled on disposal | (0.1) |
| Total net assets | 0.6 |
| | |
| Total consideration | 0.6 |
| Transaction costs associated with the disposal | (0.1) |
| **Loss on disposal** | **(0.1)** |

In 2021, Latrobe generated an operating profit of £nil on revenues of £0.1 million in the period prior to the disposal.

The disposal group was included in the Technical Ceramics operating segment.

### Disposal of Jemmtec

On 28 April 2021, the Group completed the sale of its investment in associate, Jemmtec Limited ('Jemmtec'). The Group's share of the total consideration was £14.2 million, comprising £12.2 million of initial consideration, on a cash-free, debt-free basis, a further consideration of £0.2 million for working capital adjustments and £1.8 million of contingent consideration that has been received in full in 2021. The disposal resulted in a gain of £7.2 million which was recognised in specific adjusting items within the consolidated income statement, see also note 4.

The gain on disposal was as follows:

| | **31 December 2021 £m** |
|---|---|
| Investment carrying value | 7.0 |
| Total consideration | 14.2 |
| **Gain on disposal** | **7.2** |

In 2021, the Group's share of profit in associate (net of income tax) was £0.4 million in the period prior to the disposal.

### Acquisition of Delamag

On 1 March 2021, Morgan Technical Ceramics Limited wholly purchased the business and assets of the 'Delamag' business of sourcing raw materials for the processing and manufacture of magnesium oxide from Delamin Limited. The acquisition comprised primarily all rights to the 'Delamag' business name, technical knowledge, intellectual property and business contracts.

The assets acquired and the consideration was as follows:

| | **31 December 2021 £m** |
|---|---|
| Identifiable intangible assets acquired | 1.8 |
| Goodwill | 0.1 |
| **Total consideration** | **1.9** |

The intangible assets recognised represent customer listings, trademarks and intellectual property rights.

The acquisition was a vertical integration and preserves existing income, as such the incremental profit from acquisition was immaterial in 2022 and 2021. The Delamag acquisition forms part of the Seals and Bearings operating segment.

## Note 3. Segment reporting

The Group's results are reported as five separate global business units, which have been identified as the Group's reportable operating segments. These have been identified on the basis of internal management reporting information that is regularly reviewed by the Group's Board of Directors (the Chief Operating Decision Maker) in order to allocate resources and assess performance.

Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly investments and related income, borrowings and related expenses, corporate assets and head office expenses, and income tax assets and liabilities.

The information presented below represents the operating segments of the Group:

**Year ended 31 December 2022**

| Continuing operations | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment totals £m** | Corporate costs £m | **Group £m** |
|---|---|---|---|---|---|---|---|---|
| **Revenue from external customers** | **421.4** | **57.8** | **188.7** | **148.5** | **295.7** | **1,112.1** | **-** | **1,112.1** |
| **Segment adjusted operating profit[1]** | **48.7** | **7.8** | **39.7** | **19.0** | **41.7** | **156.9** | **-** | **156.9** |
| Corporate costs[2] | | | | | | | **(5.9)** | **(5.9)** |
| **Group adjusted operating profit[1]** | | | | | | | | **151.0** |
| Amortisation of intangible assets | **(1.6)** | **(0.3)** | **(0.7)** | **(0.8)** | **(1.3)** | **(4.7)** | **-** | **(4.7)** |
| **Operating profit before specific adjusting items** | **47.1** | **7.5** | **39.0** | **18.2** | **40.4** | **152.2** | **(5.9)** | **146.3** |
| Specific adjusting items included in operating profit/(loss)[3] | **(2.8)** | **-** | **0.1** | **(1.6)** | **(1.2)** | **(5.5)** | **-** | **(5.5)** |
| **Operating profit/(loss)** | **44.3** | **7.5** | **39.1** | **16.6** | **39.2** | **146.7** | **(5.9)** | **140.8** |
| Finance income | | | | | | | | **1.6** |
| Finance expense | | | | | | | | **(10.8)** |
| Share of profit of associate (net of income tax) | | | | | | | | **-** |
| **Profit before taxation** | | | | | | | | **131.6** |
| Segment assets | **361.2** | **44.0** | **159.5** | **115.8** | **199.8** | **880.3** | **140.0** | **1,020.3** |
| Segment liabilities | **93.2** | **8.9** | **32.6** | **26.5** | **86.3** | **247.5** | **343.2** | **590.7** |
| Segment capital expenditure | **16.8** | **3.5** | **8.7** | **9.7** | **19.3** | **58.0** | **-** | **58.0** |
| Segment depreciation - property, plant and equipment | **11.2** | **2.1** | **5.3** | **6.0** | **5.7** | **30.3** | **-** | **30.3** |
| Segment depreciation - right-of-use assets | **3.2** | **0.3** | **1.0** | **0.6** | **2.7** | **7.8** | **-** | **7.8** |
| Segment impairment of non-financial assets | **3.2** | **-** | **-** | **1.6** | **1.7** | **6.5** | **-** | **6.5** |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

2. Corporate costs consist of central head office costs.

3. Details of specific adjusting items from continuing operations are given in note 4 to the consolidated financial statements.

**Year ended 31 December 2021**

| Continuing operations | Thermal Ceramics £m | Molten Metal Systems £m | Electrical Carbon £m | Seals and Bearings £m | Technical Ceramics £m | **Segment totals £m** | Corporate costs £m | **Group £m** |
|---|---|---|---|---|---|---|---|---|
| **Revenue from external customers** | 364.7 | 47.7 | 164.9 | 135.9 | 237.3 | 950.5 | - | 950.5 |
| **Segment adjusted operating profit[1]** | 42.0 | 6.3 | 32.8 | 22.9 | 26.4 | 130.4 | - | 130.4 |
| Corporate costs[2] | | | | | | | (5.9) | (5.9) |
| **Group adjusted operating profit[1]** | | | | | | | | 124.5 |
| Amortisation of intangible assets | (2.1) | (0.6) | (0.9) | (0.9) | (1.5) | (6.0) | - | (6.0) |
| **Operating profit before specific adjusting items** | 39.9 | 5.7 | 31.9 | 22.0 | 24.9 | 124.4 | (5.9) | 118.5 |
| Specific adjusting items included in operating profit/(loss)[3] | (2.1) | 0.3 | (6.3) | - | (6.0) | (14.1) | 8.7 | (5.4) |
| **Operating profit** | 37.8 | 6.0 | 25.6 | 22.0 | 18.9 | 110.3 | 2.8 | 113.1 |
| Finance income | | | | | | | | 0.8 |
| Finance expense | | | | | | | | (10.0) |
| Share of profit of associate (net of income tax) | | | | | | | | 0.4 |
| **Profit before taxation** | | | | | | | | 104.3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Profit before taxation** | | | | | | | | [illegible] |
| Segment assets | 319.9 | 41.8 | 137.6 | 107.5 | 156.5 | 763.3 | 149.2 | 912.5 |
| Segment liabilities | 88.9 | 8.4 | 30.6 | 23.6 | 73.9 | 225.4 | 337.5 | 562.9 |
| Segment capital expenditure | 8.0 | 2.2 | 5.9 | 7.6 | 7.9 | 31.6 | - | 31.6 |
| Segment depreciation - property, plant and equipment | 10.2 | 2.0 | 5.5 | 6.4 | 6.0 | 30.1 | - | 30.1 |
| Segment depreciation - right-of-use assets | 3.5 | 0.3 | 1.1 | 0.6 | 2.4 | 7.9 | - | 7.9 |
| Segment impairment of non-financial assets | 0.7 | - | 5.7 | - | 6.0 | 12.4 | - | 12.4 |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

2. Corporate costs consist of central head office costs.

3. Details of specific adjusting items from continuing operations are given in note 4 to the consolidated financial statements.

## Revenue from external customers and non-current assets by geography

| | Revenue from external customers | | Non-current assets (excluding tax and financial instruments) | |
|---|---|---|---|---|
| **Continuing operations** | **2022 £m** | **2021 £m** | **2022 £m** | 2021 £m |
| US | **405.6** | 336.4 | **212.6** | 181.3 |
| China | **121.4** | 114.4 | **45.5** | 29.1 |
| Germany | **85.1** | 68.7 | **38.0** | 34.4 |
| UK (the Group's country of domicile) | **53.2** | 38.5 | **101.1** | 101.6 |
| Other Asia, Australasia, Middle East and Africa | **194.1** | 174.6 | **61.2** | 61.4 |
| Other Europe | **182.0** | 157.4 | **37.5** | 36.3 |
| Other North America | **39.1** | 33.4 | **2.1** | 6.1 |
| South America | **31.6** | 27.1 | **11.0** | 15.8 |
| | **1,112.1** | 950.5 | **509.0** | 466.0 |

Revenue from external customers is based on geographic location of the end-customer. Segment assets are based on geographical location of the assets. No customer represents more than 5% of revenue.

## Revenue from external customers by end-market

| **Continuing operations** | **2022 £m** | **2021 £m** |
|---|---|---|
| Semiconductors | **91.3** | 62.1 |
| Healthcare | **74.7** | 68.2 |
| Clean energy and clean transportation | **51.7** | 53.0 |
| **Faster growing markets** | **217.7** | 183.3 |
| Industrial | **344.5** | 296.4 |
| Conventional transportation | **179.9** | 142.6 |
| Metals | **159.9** | 137.4 |
| Petrochemical and chemical | **112.6** | 99.4 |
| Security and defence | **65.2** | 60.9 |
| Conventional energy | **32.3** | 30.5 |
| **Core markets** | **894.4** | 767.2 |
| | **1,112.1** | 950.5 |

## Intercompany sales to other segments

| | Thermal Ceramics | | Molten Metal Systems | | Electrical Carbon | | Seals and Bearings | | Technical Ceramics | | **Segment totals** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Continuing operations** | **2022 £m** | **2021 £m** | **2022 £m** | **2021 £m** | **2022 £m** | **2021 £m** | **2022 £m** | **2021 £m** | **2022 £m** | **2021 £m** | **2022 £m** | **2021 £m** |
| Intercompany sales to other segments | **0.4** | **0.8** | **0.1** | 0.1 | **0.5** | 0.2 | **0.7** | **1.0** | **1.0** | **0.5** | **2.7** | 2.6 |

## Note 4. Specific adjusting items

| Continuing operations | Note | 2022 £m | 2021 £m |
|---|---|---|---|
| Impairment of non-financial assets | | **(6.5)** | (12.4) |
| Restructuring credit | | **0.6** | 0.1 |
| Net profit on disposal of business | 2 | **0.4** | 7.1 |
| Business closure and exit costs | | **-** | (0.2) |
| **Total specific adjusting items before income tax** | | **(5.5)** | (5.4) |
| Income tax credit from specific adjusting items | | **1.1** | 1.5 |
| **Total specific adjusting items after income tax** | | **(4.4)** | (3.9) |

Specific adjusting items in relation to discontinued operations are disclosed in note 7.

### 2022

#### Impairment of non-financial assets

*Seals & Bearings, Asia*

An impairment charge of £0.6 million has been recognised relating to assets purchased to support a customer contract which did not materialise.

A further impairment charge of £1.0 million has been recognised after reassessing the value in use of property, plant and equipment in a business in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £5.2 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 12.9% was used to determine the value in use.

*Thermal Ceramics, Europe*

An impairment charge of £1.2 million has been recognised following a fire in December which destroyed a warehouse and inventory. The assets have subsequently been written off.

An impairment charge of £1.1 million has been recognised after reassessing the value in use of property, plant and equipment in a business in France which is experiencing limited growth and under-utilisation of key assets. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £0.3 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 13.7% was used to determine the value in use.

*Thermal Ceramics, South America*

An impairment charge of £0.9 million has been recognised in relation to assets associated with a closed manufacturing line.

*Technical Ceramics, Asia*

An impairment charge of £1.7 million was recognised after reassessing the value in use of property, plant and equipment in a business in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £3.2 million. The calculation of value in use was performed as at December 2022. A long-term growth rate of 1.0% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 12.9% was used to determine the value in use.

*Review of cumulative impairment of non-financial assets*

Impairment charges of £52.6 million for non-financial assets which the business continues to use have been recorded during the current and previous years (Technical Ceramics, Asia £7.7 million, Technical Ceramics, ceramic cores £28.8 million, Thermal Ceramics £15.1 million and Seals and Bearings, Asia £1.0 million). These impaired amounts could be reversed if the related businesses were to outperform significantly against their budget. A sensitivity analysis was carried out using reasonably possible changes to the key assumptions in assessing the value in use of these non-financial assets. This did not result in a material reversal of the impaired amounts.

#### Restructuring costs

A credit of £0.6 million has been recognised in the current year representing a release of restructuring provisions booked in previous years in relation to the Group's restructuring programme. Whilst this programme was completed in 2021, we retain a restructuring provision of £10.5 million for the Group's obligations at the balance sheet date (2021: £11.8 million). This provision includes remaining lease exit costs and multi-employer pension obligations for two sites which were closed during the year ended 31 December 2021. The cash outflows relating to the pension obligations may continue for up to 19 years, subject to any settlement being reached in advance of that date. Cash outflows in relation to the lease may continue for the next four years. Refer to note 15 for further information.

#### Net profit on disposal of business

The Group disposed of its investment in the joint venture Sukhoy Log, based in Russia, during the year. This disposal generated a net profit of £0.4 million. Refer to note 2 for further information.

### 2021

#### Impairment of non-financial assets

Technical Ceramics, Asia

An impairment charge of £6.0 million was recognised after reassessing the value in use of property, plant and equipment in Asia which is taking longer than anticipated to generate revenues. This represented a partial impairment of the assets; the carrying value of the assets following this impairment was £5.4 million. The calculation of value in use was performed as at December 2021. A long-term growth rate of 1% was used for years beyond the five-year forecast period and in calculating the terminal value. A pre-tax discount rate of 11.5% was used to determine the value in use.

Electrical Carbon, Europe and North America

Impairment charges of £4.8 million and £1.0 million were recognised after assessing the viability of two development assets in Europe and North America, respectively. The European asset was not deemed viable as we were unable to commission it safely and the American asset was not deemed to be commercially viable.

Thermal Ceramics, North America

An impairment charge of £0.6 million was recognised relating to assets associated with closed manufacturing lines within Thermal Ceramics.

### Restructuring costs

A net credit of £0.1 million was recognised in the year ended 31 December 2021 representing £2.1 million of further redundancy and closure costs related to the Group's restructuring programme, offset by a £2.2 million release of restructuring provisions booked during 2020 in relation to this programme.

### Net profit on disposal of business

The Group disposed of its 35% shareholding in Jemmtec Limited and the business assets associated with the Latrobe business during the year ended 31 December 2021. These disposals generated a profit of £7.2 million and a loss of £0.1 million, respectively. Refer to note 2 for further information.

### Business closure and exit costs

A £0.2 million charge was recognised relating to the liquidation of businesses in Europe and Asia.

## Note 5. Finance income and expense

| Continuing operations | 2022 £m | 2021 £m |
|---|---|---|
| **Recognised in profit or loss** | | |
| Interest on bank balances and cash deposits | **1.6** | 0.8 |
| Finance income | **1.6** | 0.8 |
| | | |
| Interest expense on borrowings and overdrafts | **(7.0)** | (6.1) |
| Interest expense on lease liabilities | **(2.4)** | (2.3) |
| Net interest on IAS 19 defined benefit pension obligations | **(1.4)** | (1.6) |
| Finance expense | **(10.8)** | (10.0) |
| **Net financing costs recognised in profit or loss** | **(9.2)** | (9.2) |

No finance income or expense related to discontinued operations in either the current or preceding year.

## Note 6. Taxation

| Continuing operations | 2022 £m | 2021 £m |
|---|---|---|
| **Recognised in profit or loss** | | |
| **Current tax** | | |
| Current year | **36.5** | **30.7** |
| Adjustments for prior years | **0.5** | **0.4** |
| | **37.0** | **31.1** |
| **Deferred tax** | | |
| Current year | **(0.4)** | **(2.3)** |
| Adjustments for prior years | **(0.6)** | **(0.6)** |
| | **(1.0)** | **(2.9)** |
| **Total income tax expense recognised in profit or loss** | **36.0** | **28.2** |
| | | |
| **Recognised in other comprehensive income** | | |
| Tax effect on components of other comprehensive income: | | |
| Deferred tax associated with defined benefit schemes | **3.4** | **0.6** |
| Deferred tax associated with foreign exchange differences | **-** | **0.8** |
| **Total tax recognised in other comprehensive income** | **3.4** | **1.4** |

| Reconciliation of effective tax rate | 2022 £m | 2022 % | 2021 £m | 2021 % |
|---|---|---|---|---|
| Profit before tax | **131.6** | | **104.3** | |
| | | | | |
| Income tax charge using the domestic corporation tax rate | **25.0** | **19.0** | **19.8** | **19.0** |
| Effect of different tax rates in other jurisdictions | **7.5** | **5.7** | **5.8** | **5.5** |
| Local taxes including withholding tax suffered | **3.4** | **2.6** | **2.6** | **2.5** |
| Permanent differences | **0.2** | **0.2** | 0.4 | 0.4 |
| Movements related to unrecognised temporary differences | **(0.1)** | **(0.1)** | **(0.2)** | **(0.2)** |
| Adjustments in respect of prior years | **-** | **-** | **(0.2)** | **(0.2)** |
| **Statutory effective rate of tax** | **36.0** | **27.4** | **28.2** | **27.0** |

The effective rate of tax before specific adjusting items is 27.0% (2021: 27.1%).

The Group operates in many jurisdictions around the world and is subject to factors that may impact future tax charges including the recently enacted US tax reform, implementation of the OECD's BEPS actions, tax rate and legislation changes, expiry of the statute of limitations and resolution of tax audits and disputes.

## Note 7. Discontinued operations

The Group disposed of its Composites and Defence Systems business on 20 November 2018. The business represented a separate reportable segment and therefore, in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations, the disposal group was classified as discontinued.

The results from discontinued operations, which have been disclosed in the consolidated income statement, are set out below:

| | | **Year ended 31 December 2022** | | | Year ended 31 December 2021 | | |
|---|---|---|---|---|---|---|---|
| | Note | **Results before specific adjusting items £m** | **Specific adjusting items £m** | **Total £m** | Results before specific adjusting items £m | Specific adjusting items £m | Total £m |
| **Revenue** | | **-** | **0.7** | **0.7** | - | 3.3 | 3.3 |
| Operating income | | **-** | **0.4** | **0.4** | - | 2.4 | 2.4 |
| **Profit before taxation** | | **-** | **1.1** | **1.1** | - | 5.7 | 5.7 |
| Income tax expense | | **-** | **-** | **-** | - | - | - |
| **Profit from discontinued operations** | | **-** | **1.1** | **1.1** | - | 5.7 | 5.7 |
| Basic earnings per share from discontinued operations | 8 | | | **0.4p** | | | 2.0p |
| Diluted earnings per share from discontinued operations | 8 | | | **0.4p** | | | 2.0p |

In 2022, a gain of £1.1 million was recognised following the receipt of cash from a long-term contract and disposal of an investment in accordance with the terms of the disposal agreement.

In 2021, £3.3 million of the specific adjusting items balance relate to the full and final settlement of certain long-term contracts. A further £2.4 million relates to the reassessment of certain provisions associated with the disposal of the Composites and Defence Systems business.

There is no income tax expense in relation to the discontinued operations in either the current or preceding year.

Cash flows from discontinued operations are set out below:

| | **Year ended 31 December 2022 £m** | Year ended 31 December 2021 £m |
|---|---|---|
| Net cash generated in operating activities | **1.1** | 3.3 |
| Net cash generated from investing activities | **-** | **2.0** |
| Net cash flow used in financing activities | **-** | - |
| | **1.1** | **5.3** |

## Note 8. Earnings per share

| | **Year ended 31 December 2022** | | | Year ended 31 December 2021 | | |
|---|---|---|---|---|---|---|
| | **Earnings £m** | **Basic earnings per share pence** | **Diluted earnings per share pence** | Earnings £m | **Basic earnings per share pence** | **Diluted earnings per share pence** |
| **Profit for the year attributable to shareholders of the Company** | **88.0** | **31.0p** | **30.7p** | **73.8** | **25.9p** | **25.7p** |
| Profit from discontinued operations | **(1.1)** | **(0.4)p** | **(0.4)p** | **(5.7)** | **(2.0)p** | **(2.0)p** |
| **Profit from continuing operations** | **86.9** | **30.6p** | **30.3p** | **68.1** | **23.9p** | **23.7p** |
| Specific adjusting items | **5.5** | **1.9p** | **1.9p** | **5.4** | **1.9p** | **1.9p** |
| Amortisation of intangible assets | **4.7** | **1.7p** | **1.6p** | **6.0** | **2.1p** | **2.1p** |
| Tax effect of the above[1] | **(1.1)** | **(0.4)p** | **(0.4)p** | **(1.5)** | **(0.5)p** | **(0.5)p** |
| Non-controlling interests' share of the above adjustments | **-** | **-** | **-** | **(0.5)** | **(0.2)p** | **(0.2)p** |
| **Adjusted profit for the year from continuing operations as used in adjusted earnings per share[2]** | **96.0** | **33.8p** | **33.5p** | **77.5** | **27.2p** | **27.0p** |

1. The tax effect of the amortisation of intangible assets was £nil (2021: £nil).
2. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

| | **2022** | 2021 |
|---|---|---|

| | 2022 | 2021 |
|---|---|---|
| **Number of shares (millions)** | | |
| Weighted average number of Ordinary shares for the purposes of basic earnings per share[1] | **284.2** | **284.6** |
| Effect of dilutive potential Ordinary shares: | | |
| Share options | **2.6** | **2.4** |
| **Weighted average number of Ordinary shares for the purposes of diluted earnings per share** | **286.8** | **287.0** |

1. The calculation of the weighted average number of shares excludes the shares held by The Morgan General Employee Benefit Trust, on which the dividends are waived.

## Note 9. Property, plant and equipment

| | Note | Land and buildings £m | Plant, equipment and fixtures £m | Total £m |
|---|---|---|---|---|
| **Cost** | | | | |
| **Balance at 1 January 2021** | | 215.2 | 678.2 | 893.4 |
| Additions | | **2.6** | **27.9** | **30.5** |
| Disposals | | **(16.7)** | **(21.1)** | **(37.8)** |
| Sale of business | 2 | **(0.8)** | **(3.5)** | **(4.3)** |
| Transfers between categories | | **1.2** | **(1.2)** | - |
| Effect of movement in foreign exchange | | **(1.7)** | **(3.1)** | **(4.8)** |
| **Balance at 31 December 2021** | | **199.8** | **677.2** | **877.0** |
| | | | | |
| **Balance at 1 January 2022** | | **199.8** | **677.2** | **877.0** |
| Additions | | **3.8** | **49.7** | **53.5** |
| Disposals | | **(1.3)** | **(9.1)** | **(10.4)** |
| Transfers between categories | | **0.3** | **(0.3)** | - |
| Effect of movement in foreign exchange | | **16.6** | **52.7** | **69.3** |
| **Balance at 31 December 2022** | | **219.2** | **770.2** | **989.4** |
| | | | | |
| **Depreciation and impairment losses** | | | | |
| **Balance at 1 January 2021** | | 109.7 | 516.1 | 625.8 |
| Depreciation charge for the year | | 5.3 | 24.8 | 30.1 |
| Impairment losses | | - | 12.3 | 12.3 |
| Disposals | | (11.6) | (20.1) | (31.7) |
| Sale of business | 2 | (0.6) | (3.5) | (4.1) |
| Transfers between categories | | 0.3 | (0.3) | - |
| Effect of movement in foreign exchange | | (0.1) | (3.4) | (3.5) |
| **Balance at 31 December 2021** | | 103.0 | 525.9 | 628.9 |
| | | | | |
| **Balance at 1 January 2022** | | **103.0** | **525.9** | **628.9** |
| Depreciation charge for the year | | **5.0** | **25.3** | **30.3** |
| Impairment losses | | **2.0** | **2.6** | **4.6** |
| Disposals | | **(0.7)** | **(8.4)** | **(9.1)** |
| Transfers between categories | | **(0.4)** | **0.4** | - |
| Effect of movement in foreign exchange | | **8.8** | **42.7** | **51.5** |
| **Balance at 31 December 2022** | | **117.7** | **588.5** | **706.2** |
| **Carrying amounts** | | | | |
| At 1 January 2021 | | 105.5 | 162.1 | 267.6 |
| At 31 December 2021 | | **96.8** | **151.3** | **248.1** |
| **At 31 December 2022** | | **101.5** | **181.7** | **283.2** |

In 2022, no assets were pledged as security for liabilities (2021: none). Profit on sale of property, plant and equipment presented in the cash flow includes £nil (2021: £nil) of insurance proceeds for replacement of assets.

## Note 10. Leases

The reconciliation in the movement of the Group's right-of-use assets is set out in the table below:

| | **Land and buildings £m** | **Plant and equipment £m** | **Total £m** |
|---|---|---|---|
| **Balance at 1 January 2021** | 29.2 | 6.3 | 35.5 |
| Additions | **2.7** | **1.5** | **4.2** |
| Remeasurements | **0.6** | **0.1** | **0.7** |
| Depreciation charge for the year | (4.7) | (3.2) | (7.9) |
| Effect of movement in foreign exchange | **(0.3)** | **(0.3)** | **(0.6)** |
| **Balance at 31 December 2021** | **27.5** | **4.4** | **31.9** |

| | | | |
|---|---|---|---|
| **Balance at 1 January 2022** | **27.5** | **4.4** | **31.9** |
| Additions | **1.2** | **1.8** | **3.0** |
| Remeasurements | **3.1** | **0.6** | **3.7** |
| Depreciation charge for the year | **(5.1)** | **(2.7)** | **(7.8)** |
| Effect of movement in foreign exchange | **2.3** | **0.5** | **2.8** |
| **Balance at 31 December 2022** | **29.0** | **4.6** | **33.6** |

The weighted average lease term is 11.6 years for land and buildings and 3.3 years for plant and equipment (2021: 12.2 years and 3.5 years respectively).

Amounts recognised in the consolidated income statement in respect of leasing arrangements are set out in the table below:

| | **2022 £m** | 2021 £m |
|---|---|---|
| **Depreciation expense on right-of-use assets** | **(7.8)** | (7.9) |
| Interest expense on lease liabilities | **(2.4)** | **(2.3)** |
| Expense relating to short-term leases and leasing of low value assets | **(0.5)** | **(0.3)** |
| Income from leasing owned assets | **-** | 0.2 |
| | **(10.7)** | **(10.3)** |

The total cash flows from leasing activities in the year ended 31 December 2022 was £11.9 million (2021: £11.0 million) as set out in the table below:

| | **2022 £m** | 2021 £m |
|---|---|---|
| Payment of lease liabilities | **(9.0)** | (8.6) |
| Interest expense on lease liabilities | **(2.4)** | (2.3) |
| Expenses relating to short-term leases of low value assets | **(0.5)** | (0.3) |
| Income from leasing owned assets | **-** | 0.2 |
| | **(11.9)** | (11.0) |

At 31 December 2022, the Group is committed to future payments of £0.6 million (2021: £0.6 million) for short-term leases and leasing of low value assets.

At 31 December 2022, future cash flows in respect of lease which the Group had entered into but which had not yet commenced was £nil (2021: £0.2 million).

The total of future minimum lease income under non-cancellable leases, where the Group is a lessor is £nil (2021: £nil).

## Note 11. Intangible assets

| | **Goodwill £m** | **Customer relationships £m** | **Technology and trademarks £m** | **Capitalised development costs £m** | **Computer software £m** | **Total £m** |
|---|---|---|---|---|---|---|
| **Cost** | | | | | | |
| **Balance at 1 January 2021** | 173.2 | 56.2 | 3.6 | 0.7 | 34.5 | 268.2 |
| Acquisition of businesses | **0.1** | **1.1** | **0.7** | - | - | **1.9** |
| Additions (externally purchased) | - | - | - | - | **2.0** | **2.0** |
| Disposals of businesses | **(0.1)** | - | - | - | - | **(0.1)** |
| Disposals | **-** | - | - | - | **(1.9)** | **(1.9)** |
| Effect of movement in foreign exchange | **(0.3)** | **0.3** | **(0.2)** | - | **0.2** | - |
| **Balance at 31 December 2021** | **172.9** | **57.6** | **4.1** | **0.7** | **34.8** | **270.1** |
| | | | | | | |
| **Balance at 1 January 2022** | **172.9** | **57.6** | **4.1** | **0.7** | **34.8** | **270.1** |
| Additions (externally purchased) | **-** | **-** | **-** | **-** | **1.2** | **1.2** |
| Disposals | **-** | **-** | **-** | **-** | **(0.1)** | **(0.1)** |
| Effect of movement in foreign exchange | **9.0** | **6.3** | **0.2** | **0.1** | **1.9** | **17.5** |
| **Balance at 31 December 2022** | **181.9** | **63.9** | **4.3** | **0.8** | **37.8** | **288.7** |
| | | | | | | |
| **Amortisation and impairment losses** | | | | | | |
| **Balance at 1 January 2021** | - | 54.8 | 3.6 | 0.7 | 23.7 | 82.8 |
| Amortisation charge for the year | **-** | **1.0** | **0.1** | - | **4.9** | **6.0** |
| Disposals | **-** | - | - | - | **(1.9)** | **(1.9)** |
| Effects of movement in foreign exchange | **-** | **0.3** | **(0.2)** | - | - | **0.1** |
| **Balance at 31 December 2021** | **-** | **56.1** | **3.5** | **0.7** | **26.7** | **87.0** |
| | | | | | | |
| **Balance at 1 January 2022** | **-** | **56.1** | **3.5** | **0.7** | **26.7** | **87.0** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Amortisation charge for the year | - | 0.7 | 0.1 | - | 3.9 | 4.7 |
| Disposals | - | - | - | - | (0.1) | (0.1) |
| Effects of movement in foreign exchange | - | 6.3 | 0.2 | 0.1 | 1.5 | 8.1 |
| **Balance at 31 December 2022** | **-** | **63.1** | **3.8** | **0.8** | **32.0** | **99.7** |
| | | | | | | |
| **Carrying amounts** | | | | | | |
| At 1 January 2021 | 173.2 | 1.4 | - | - | 10.8 | 185.4 |
| At 31 December 2021 | **172.9** | **1.5** | **0.6** | **-** | **8.1** | **183.1** |
| **At 31 December 2022** | **181.9** | **0.8** | **0.5** | **-** | **5.8** | **189.0** |

## Impairment test for cash-generating units or groups of cash-generating units containing goodwill

In accordance with the requirements of IAS 36 Impairment of Assets, goodwill is allocated to the Group's cash-generating units or groups of cash-generating units that are expected to benefit from the synergies of the business combination that gave rise to the goodwill. Goodwill impairment testing is performed at the operating segment level as defined by IFRS 8, as this is the lowest level at which goodwill is monitored.

Goodwill is attributed to each operating segment as follows:

| | **2022 £m** | 2021 £m |
|---|---|---|
| Thermal Ceramics | **88.8** | **84.5** |
| Molten Metal Systems | **9.4** | **9.0** |
| Electrical Carbon | **30.7** | **29.3** |
| Seals and Bearings | **15.8** | **14.9** |
| Technical Ceramics | **37.1** | **35.2** |
| | **181.8** | **172.9** |

Each operating segment is assessed for impairment annually and whenever there is an indication of impairment.

The carrying value of goodwill has been assessed with reference to its value in use, reflecting the projected discounted cash flows of each operating segment to which goodwill has been allocated. The key assumptions used in determining value in use relate to short and long-term growth rates and discount rates.

The cash flow projections in year one are based on the most recent Board approved budget. Cash flow projections for years two to five are based on the most recent Board approved strategic plan. The key assumptions that underpin these cash flow projections relate to sales and operating margins, which are based on past experience, taking into account the effect of known or likely changes in market or operating conditions. External data sources have been considered as to the strength and recovery of the Group's end-markets in building an expectation of the future cash flows of each operating segment.

In 2022, a 1.0% growth rate (2021: 1.0%) has been used for years beyond 2027 and to calculate a terminal value. Management has assessed these growth rates, including the terminal growth rate as reasonable for each operating segment.

In 2022, the Group has used the following pre-tax discount rates for calculating the value in use of each of the operating segments: Thermal Ceramics: 13.8% (2021: 13.2%), Molten Metal Systems: 15.6% (2021: 12.9%), Electrical Carbon: 14.6% (2021: 12.3%), Seals and Bearings: 14.0% (2021: 11.2%), Technical Ceramics 14.1% (2021: 11.1%).

The Directors have considered the following individual sensitivities and are confident that no impairment would arise for each of the Thermal Ceramics, Molten Metal Systems, Electrical Carbon, Seals and Bearings and Technical Ceramics operating segments in any one of the following three circumstances, which are considered reasonably possible changes:

- If the pre-tax discount rate was increased to 18%.
- If no growth was assumed for years two to five and in the calculation of terminal value.
- If the cash flow projections of all businesses were reduced by 25%.

## Note 12. Cash and cash equivalents

| | **2022 £m** | 2021 £m |
|---|---|---|
| Bank balances | **105.8** | **101.2** |
| Cash deposits | **11.9** | **26.1** |

| Cash and cash equivalents | 117.7 | 127.3 |
|---|---|---|

In 2022, the Group had restricted cash of £4.0 million (2021: £1.5 million) as a result of exchange controls in Argentina.

### Reconciliation of cash and cash equivalents to net debt[1]

| | 2022 £m | 2021 restated[2] £m |
|---|---|---|
| **Opening borrowings and lease liabilities** | **(223.8)** | (303.4) |
| Increase in borrowings | **(113.3)** | (27.3) |
| Reduction and repayment of borrowings | **39.0** | 99.6 |
| Payment of lease liabilities | **9.0** | 8.6 |
| **Total changes from cash flows** | **(65.3)** | 80.9 |
| New leases and lease remeasurement | **(6.7)** | (4.4) |
| Effect of movements in foreign exchange | **(22.3)** | 3.1 |
| **Closing borrowings and lease liabilities** | **(318.1)** | (223.8) |
| Cash and cash equivalents | **117.7** | 127.3 |
| **Closing net debt[1]** | **(200.4)** | (96.5) |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.
2. Comparative information has been restated to present the increase and reduction in borrowings separately.

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes.

| | Borrowings £m | Lease liabilities £m | **Total financing liabilities £m** | Cash and cash equivalents £m | **Movement in net debt[1] £m** |
|---|---|---|---|---|---|
| **At 1 January 2021** | (248.8) | (54.6) | (303.4) | 147.8 | **(155.6)** |
| Cash outflow | - | - | - | (5.6) | **(5.6)** |
| Borrowings and lease liability cash flow | 72.3 | 8.6 | 80.9 | - | **80.9** |
| Net interest paid | - | - | - | (8.4) | **(8.4)** |
| **Net cash inflow/(outflow)** | 72.3 | 8.6 | 80.9 | (14.0) | **66.9** |
| Share purchases | - | - | - | (5.9) | **(5.9)** |
| New leases and lease remeasurement | - | (4.4) | (4.4) | - | **(4.4)** |
| Exchange and other movements | 2.5 | 0.6 | 3.1 | (0.6) | **2.5** |
| **At 31 December 2021** | (174.0) | (49.8) | (223.8) | 127.3 | **(96.5)** |
| | | | | | |
| **At 1 January 2022** | (174.0) | (49.8) | **(223.8)** | 127.3 | **(96.5)** |
| Cash outflow | - | - | - | (0.7) | **(0.7)** |
| Borrowings and lease liability cash flow | (74.3) | 9.0 | **(65.3)** | - | **(65.3)** |
| Net interest paid | - | - | - | (9.4) | **(9.4)** |
| **Net cash inflow/(outflow)** | (74.3) | 9.0 | **65.3** | (10.1) | **(75.4)** |
| Share purchases | - | - | - | (2.9) | **(2.9)** |
| New leases and lease remeasurement | - | (6.7) | **(6.7)** | - | **(6.7)** |
| Exchange and other movements | (17.9) | (4.4) | **(22.3)** | 3.4 | **(18.9)** |
| **At 31 December 2022** | (266.2) | (51.9) | **(318.1)** | 117.7 | **(200.4)** |

1. Definitions of these non-GAAP measures can be found in the glossary of terms on page 45, reconciliations of the statutory results to the adjusted measures can be found on pages 13 to 16.

2.

## Note 13. Financial risk management

Fair Values

| | 31 December 2022 | | | | 31 December 2021 | | | |
|---|---|---|---|---|---|---|---|---|
| | | Fair value | | | | Fair value | | |
| | **Carrying amount £m** | **Level 1 £m** | **Level 2 £m** | **Total £m** | **Carrying amount £m** | **Level 1 £m** | **Level 2 £m** | **Total £m** |
| **Financial assets and liabilities held at amortised cost** | | | | | | | | |
| 1.18% Euro Senior Notes 2023 | **(22.1)** | - | **(21.6)** | **(21.6)** | **(21.0)** | - | (21.1) | **(21.1)** |
| 3.17% US Dollar Senior Notes 2023 | **(12.4)** | - | **(12.1)** | **(12.1)** | **(11.1)** | - | **(11.3)** | **(11.3)** |
| 1.55% Euro Senior Notes 2026 | **(22.2)** | - | **(20.1)** | **(20.1)** | **(21.1)** | - | **(21.4)** | **(21.4)** |
| 3.37% US Dollar Senior Notes 2026 | **(80.6)** | - | **(73.5)** | **(73.5)** | **(72.2)** | - | **(72.8)** | **(72.8)** |
| 1.74% Euro Senior Notes 2028 | **(8.9)** | - | **(7.7)** | **(7.7)** | **(8.4)** | - | **(8.6)** | **(8.6)** |
| 2.89% Euro Senior Notes 2030 | **(22.1)** | - | **(19.0)** | **(19.0)** | **(21.0)** | - | **(22.1)** | **(22.1)** |
| 4.87% US Dollar Senior Notes 2026 | **(21.1)** | - | **(20.2)** | **(20.2)** | **(18.8)** | - | **(20.6)** | **(20.6)** |
| 5.50% Cumulative First Preference shares | **(0.1)** | - | **(0.1)** | **(0.1)** | **(0.1)** | - | **(0.1)** | **(0.1)** |
| 5.00% Cumulative Second Preference shares | **(0.3)** | - | **(0.3)** | **(0.3)** | **(0.3)** | - | **(0.3)** | **(0.3)** |
| | **(189.8)** | - | **(174.6)** | **(174.6)** | **(174.0)** | - | **(178.3)** | **(178.3)** |
| | | | | | | | | |
| Derivative financial assets held at fair value | **1.3** | - | **1.3** | **1.3** | **0.6** | - | **0.6** | **0.6** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Derivative financial liabilities held at fair value | **(1.6)** | **-** | **(1.6)** | **(1.6)** | **(0.6)** | - | **(0.6)** | **(0.6)** |

The table above analyses the fair values of financial instruments held by the Group, by valuation method, together with the carrying amounts shown in the balance sheet.

The fair value of cash and cash equivalents, current trade and other receivables/payables and floating-rate bank and other borrowings are excluded from the preceding table as their carrying amount approximates their fair value.

*Fair value hierarchy*
The different levels have been defined as follows:
Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
Level 2: not traded in an active market but the fair values are based on quoted market prices or alternative pricing sources with reasonable levels of price transparency. Fair value is calculated using discounted cash flow methodology, future cash flows are estimated based on forward exchange rates.
Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The major methods and assumption used in estimating the fair values of financial instruments reflected in the preceding table are as follows:

*Equity securities*
Fair value is based on quoted market prices at the balance sheet date.

*Derivatives*
Forward exchange contracts are marked to market either using listed market prices or by discounting the contractual forward price and deducting the current spot rate.

*Fixed-rate borrowings*
Fair value is calculated based on discounted expected future principal and interest cash flows. The interest rates used to determine the fair value of borrowings are 4.2%-6.4% (2021: 1.0%-3.1%).

There have been no transfers between Level 1 and Level 2 during 2022 and 2021 and there were no Level 3 financial instruments in either 2022 or 2021.

## Note 14. Pensions and other post-retirement employee benefits

| | | | | | **31 December 2022** |
|---|---|---|---|---|---|
| | **UK** | **US** | **Europe** | **Rest of World** | **Total** |
| | **£m** | **£m** | **£m** | **£m** | **£m** |
| **Summary of net obligations** | | | | | |
| Present value of unfunded defined benefit obligations | **-** | **(5.8)** | **(26.7)** | **(4.0)** | **(36.5)** |
| Present value of funded defined benefit obligations | **(359.5)** | **(116.1)** | **(1.6)** | **(8.1)** | **(485.3)** |
| Fair value of plan assets | **384.7** | **112.7** | **0.4** | **8.4** | **506.2** |
| | **25.2** | **(9.2)** | **(27.9)** | **(3.7)** | **(15.6)** |
| | | | | | |
| **Movements in present value of defined benefit obligation** | | | | | |
| **At 1 January 2022** | **(544.0)** | **(139.3)** | **(39.4)** | **(11.8)** | **(734.5)** |
| Current service cost | - | - | **(1.1)** | **(1.6)** | **(2.7)** |
| Interest cost | **(10.3)** | **(3.9)** | **(0.3)** | **(0.2)** | **(14.7)** |
| Actuarial gain/(loss) | | | | | |
| Experience gain/(loss) on plan obligations | **(14.7)** | **(0.1)** | **0.4** | **-** | **(14.4)** |
| Changes in financial assumptions - gain | **184.5** | **28.2** | **12.2** | **0.7** | **225.6** |
| Changes in demographic assumptions - gain/(loss) | **0.9** | **-** | **(0.1)** | **-** | **0.8** |
| Benefits paid | **24.1** | **9.2** | **1.6** | **1.2** | **36.1** |
| Curtailments and settlements | - | - | - | **0.2** | **0.2** |
| Exchange adjustments | - | **(16.0)** | **(1.6)** | **(0.6)** | **(18.2)** |
| **At 31 December 2022** | **(359.5)** | **(121.9)** | **(28.3)** | **(12.1)** | **(521.8)** |
| | | | | | |
| **Movements in fair value of plan assets** | | | | | |
| **At 1 January 2022** | **492.3** | **131.6** | **0.4** | **7.5** | **631.8** |
| Interest on plan assets | **9.4** | **3.8** | - | **0.1** | **13.3** |
| Remeasurement loss | **(177.2)** | **(28.9)** | - | **(0.4)** | **(206.5)** |
| Contributions by employer | **84.3** | **0.7** | **1.6** | **2.0** | **88.6** |
| Benefits paid | **(24.1)** | **(9.2)** | **(1.6)** | **(1.2)** | **(36.1)** |
| Exchange adjustments | - | **14.7** | **-** | **0.4** | **15.1** |
| **At 31 December 2022** | **384.7** | **112.7** | **0.4** | **8.4** | **506.2** |
| | | | | | |
| Actual return on assets | **(167.8)** | **(25.1)** | **-** | **(0.3)** | **(193.2)** |

| | | | | | **31 December 2022** |
|---|---|---|---|---|---|
| | **UK** | **US** | **Europe** | **Rest of World** | **Total** |
| | **£m** | **£m** | **£m** | **£m** | **£m** |
| **Fair value of plan assets by category** | | | | | |
| Equities | **-** | **6.1** | **-** | **-** | **6.1** |
| Growth assets[1] | **40.3** | **-** | **-** | **-** | **40.3** |
| Bonds | **18.0** | **104.8** | **-** | **-** | **122.8** |
| Liability-driven investments (LDI)[2] | **210.9** | **-** | **-** | **-** | **210.9** |

| | | | | | |
|---|---|---|---|---|---|
| Matching insurance policies | **106.1** | **1.4** | **0.4** | **6.4** | **114.3** |
| Other | **9.4** | **0.4** | **-** | **2.0** | **11.8** |
| | **384.7** | **112.7** | **0.4** | **8.4** | **506.2** |

1. Growth assets include investment in Global Diversified and Multi-Asset Funds as well as UK Property.

2. The LDI assets are pooled funds in the UK that provide a leveraged return linked to long duration fixed interest and index-linked government bonds valued at the bid price of the units. This provides interest rate and inflation hedging equivalent in size to circa 100% of the invested assets of the UK Schemes measured on the 'Long Term Objective' basis (Gilts +50bps) (excluding matching insurance policies).

The Group expects to contribute £3.8 million to these arrangements in 2023.

| | | | | 31 December 2021 | |
|---|---|---|---|---|---|
| | UK | US | Europe | Rest of World | Total |
| | £m | £m | £m | £m | £m |
| **Summary of net obligations** | | | | | |
| Present value of unfunded defined benefit obligations | - | (6.4) | (37.5) | (3.4) | (47.3) |
| Present value of funded defined benefit obligations | (544.0) | (132.9) | (1.9) | (8.4) | (687.2) |
| Fair value of plan assets | 492.3 | 131.6 | 0.4 | 7.5 | 631.8 |
| | (51.7) | (7.7) | (39.0) | (4.3) | (102.7) |

| | **UK** | **US** | **Europe** | **Rest of World** |
|---|---|---|---|---|
| **Principal actuarial assumptions at 31 December 2022 were:** | **%** | **%** | **%** | **%** |
| Discount rate | **4.81** | **4.99** | **3.70** | **5.30** |
| Inflation (UK: RPI/CPI) | **3.26/2.47** | **n/a** | **2.20** | **n/a** |
| **Principal actuarial assumptions at 31 December 2021 were:** | % | % | % | % |
| Discount rate | 1.92 | 2.71 | 0.90 | 2.90 |
| Inflation (UK: RPI/CPI) | 3.40/2.61 | n/a | 1.90 | n/a |

## Note 15. Provisions and contingent liabilities

| | **Closure and restructuring provisions** | **Legal and other provisions** | **Environmental provisions** | **Total** |
|---|---|---|---|---|
| | **£m** | **£m** | **£m** | **£m** |
| **Balance at 1 January 2022** | **11.8** | **10.0** | **7.8** | **29.6** |
| Provisions made during the year | **1.3** | **0.2** | **1.1** | **2.6** |
| Provisions used during the year | **(3.2)** | **(1.7)** | **(1.3)** | **(6.2)** |
| Provisions reversed during the year | **(0.6)** | **(0.6)** | **(0.5)** | **(1.7)** |
| Effect of movements in foreign exchange | **1.2** | **0.2** | **0.3** | **1.7** |
| **Balance at 31 December 2022** | **10.5** | **8.1** | **7.4** | **26.0** |
| Current | **2.5** | **3.5** | **3.9** | **9.9** |
| Non-current | **8.0** | **4.6** | **3.5** | **16.1** |
| | **10.5** | **8.1** | **7.4** | **26.0** |

*Closure and restructuring provisions*

Closure and restructuring provisions are based on the Group's restructuring programmes and represent committed expenditure at the balance sheet date. The amounts provided are based on the costs of terminating relevant contracts, under the contract terms, and management's best estimate of other associated restructuring costs including professional fees.

Whilst the Group's restructuring programme was completed in 2021, we retain provisions for remaining lease exit costs and multi-employer pension obligations from two sites which were closed during 2021. The cash outflows relating to the pension obligations may continue for up to 19 years, subject to any settlement being reached in advance of that date. Cash outflows in relation to the lease may continue for the next four years.

*Legal and other provisions*

Legal and other provisions mainly comprise amounts provided against open legal and contractual disputes arising in the normal course of business and long-service costs. Provisions are made for the expected costs associated with such matters, based on past experience of similar items and other known factors, taking into account professional advice received, and represent management's best estimate of the most likely outcome. The timing of utilisation of these provisions is frequently uncertain, reflecting the complexity of issues and the outcome of various court proceedings and associated negotiations.

Where obligations are not capable of being reliably estimated, or if a material outflow of economic resources is considered remote, it is classified as a contingent liability. The Group is of the opinion that any associated claims that might be brought can be defeated successfully and, therefore, the possibility of any material outflow in settlement is assessed as remote.

Subsidiary undertakings within the Group have given unsecured guarantees of £10.2 million (2021: £10.5 million) in the ordinary course of business.

*Environmental provisions*

Environmental provisions are made for quantifiable environmental liabilities arising from known environmental issues. The amounts provided are based on the best estimate of the costs required to remedy these issues. At one site, a remediation feasibility study is currently being conducted in relation to a known environmental issue and in conjunction with the local environmental regulator. A remediation plan has been prepared. The provision recorded reflects the estimated costs of remediation and awaits final regulatory approval. The provision is expected to be utilised in the next five years.

utilised in the next five years.

*Environmental contingent liabilities*
The Group is subject to local health, safety and environmental laws and regulations concerning its manufacturing operations around the world. These laws and regulations may require the Group to take future action to remediate the impact of historical manufacturing processes on the environment or lead to other economic outflows. Such contingencies may exist for various sites which the Group currently operates or has operated in the past. There is a contingent liability arising from the as yet unknown environmental issues at the site referred to above, pending the completion of the feasibility study.

*Tax contingent liabilities*
The Group is subject to periodic tax audits by various fiscal authorities covering corporate, employee and sales taxes in the various jurisdictions in which it operates. We have provided for estimates of the Group's likely exposures where these can be reliably estimated.

## Note 16. Subsequent events

Morgan experienced a cyber security incident in January 2023, having detected unauthorised activity on the network. Immediate steps were taken to contain the incident, launch incident response plans, engage specialist support services and embark on restoring systems. All manufacturing sites are operational, although some continue to use manual processes as work continues to restore their systems.

This has been treated as a non-adjusting post balance sheet event and there has been no impact on the financial results reported for the year ended 31 December 2022.

We expect to incur around £15 million of system recovery and specialist support costs, including IT asset impairment charges of £0.7 million. These charges will be presented separately as specific adjusting items in the consolidated income statement for the year ending 31 December 2023. At the date of signing, and following consultation with our advisors, we also have a non-adjusting post balance sheet contingent liability relating to potential enforcement action or civil claims pending the completion of our investigation into what data was accessed and regulatory engagement.

## Glossary

| | |
|---|---|
| Constant-currency[1] | Constant-currency revenue and Group adjusted operating profit are derived by translating the prior year results at current year average exchange rates. |
| Corporate costs | Corporate costs consist of the costs of the central head office. |
| Free cash flow before acquisitions, disposals and dividends[1] | Cash generated from continuing operations less net capital expenditure, net interest paid, tax paid and lease payments. |
| Group earnings before interest, tax, depreciation and amortisation (EBITDA)[1] | EBITDA is defined as operating profit before specific adjusting items, amortisation of intangible assets and depreciation. |
| Group adjusted operating profit[1] | Operating profit adjusted to exclude specific adjusting items and amortisation of intangible assets. |
| Group organic[1] | The Group results excluding acquisition, disposal and business exit impacts at constant-currency. |
| Adjusted earnings per share (EPS)[1] | Adjusted earnings per share is defined as operating profit adjusted to exclude specific adjusting items and amortisation of intangible assets, plus share of profit of associate less net financing costs, income tax expense and non-controlling interests, divided by the weighted average number of Ordinary shares during the period. |
| Net debt[1] | Borrowings, bank overdrafts and lease liabilities less cash and cash equivalents. |
| Net cash and cash equivalents[1] | Net cash and cash equivalents is defined as cash and cash equivalents less bank overdrafts. |
| Return on invested capital (ROIC)[1] | Group adjusted operating profit (operating profit excluding specific adjusting items and amortisation of intangible assets) divided by the 12-month average adjusted net assets (excludes long term employee benefits, deferred tax assets and liabilities, current tax payable, provisions, cash and cash equivalents, borrowings, bank overdrafts and lease liabilities. |
| Specific adjusting items | See note 4 to the consolidated financial statements for further details. |
| Underlying | Reference to underlying reflects the trading results of the Group without the impact of specific adjusting items and amortisation of intangible assets that would otherwise impact the users understanding of the Group's performance. The Directors believe that adjusted results provide additional useful information on the core operational performance of the Group, and review the results of the Group on an adjusted basis internally. |

1. See definitions and reconciliations of non-GAAP measures to GAAP measures on page 13 to 16.

END

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