Thermal Ceramics UK Limited

Annual report and financial statements

Registered number 00890443

For the year ended 31 December 2022

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Strategic report

Principal activities

The principal activities of Thermal Ceramics UK Limited ("the Company") are the sale of specialist thermal ceramic materials for a variety of markets. There have not been any significant changes in the Company's principal activities in the year under review.

Financial Performance

Turnover has decreased from 2021 by 4.6% with sales of £11,099,000 being made in 2022 compared to £11,631,000 in 2021. This is largely due to a change in approach at the beginning of 2022 with one of the Company's customers whereby sales are now made directly from the country where stock is located, rather than through Thermal Ceramics UK Limited regardless of location, which was the case in 2021. The total impact of this change in 2022 was £800,000. Sales into Europe (including the UK) remain the core of the Company's territories at 96.0% (2021: 98.6%). Operating loss of £697,000 (2021: £148,000) shows an increase of £549,000 for the year. This is prominently due to a decrease in sales for the year. The Company made a loss after tax of £497,000 for the year of 2022 compared to a profit of £9,168,000 in 2021. In 2021 the Company sold its 35% equity stake in Jemmtee Ltd of £14,182,000, recognising a gain of £9,682,000 relating to this transaction.

Debtors have increased from 2021 by 8.7% to £23,206,000. This is predominantly due to increased recharges to group undertakings for costs incurred by the Company on behalf of other group companies. Creditors falling due within one year have increased to £15,657,000 in 2022 compared to £4,948,000 in 2021. This is due to a recharge of lump sum defined benfit pension contributions made by group undertakings in December 2022, as referred to in the principal risks and uncertainties section of this report and detailed in note 20. Creditors falling due after more than one year have increased by £1,700,000. This is due to an additional loan of £4,700,000 being taken out from group undertakings provided as support for the Company's cash position, offset by an existing £3,000,000 loan due to Group undertakings now falling due within one year.

Business model

Morgan Advanced Materials plc (Morgan Group), of which the Company is a part, invests in research and development activities appropriate to the nature and size of its operations with the aim of supporting the future development of the group in the medium to long-term. This research and development activity has resulted in a number of improvements to existing product ranges.

The balance sheet on page 11 of the financial statements shows the Company's financial position at the year end.

The Company continues to search for strategies to improve its future financial performance.

The Company is a member of the Morgan Group, which, from March 2016, managed its operations on a global business unit basis. For this reason, the Company's Directors believe that further key performance indicators for the Company are not necessary or appropriate for an understanding of the development, performance or position of the business. The performance of the Thermal Products global business unit of Morgan Group, which include the Company, is discussed in Morgan Group's Annual Report which does not form part of this Report.

Principal risks and uncertainties

Competitive pressure in low cost countries is a continuing risk for the Company, which could result in it losing sales to its key competitors. To manage this risk, the Company strives to: provide added-value products and services to its customers; respond promptly in the supply of products and services and in the handling of customer queries; and maintain strong relationships with customers.

The Company sells products into international markets and it is therefore exposed to currency movements on such sales. Where appropriate, the Company manages this risk in accordance with Morgan Group Treasury policies.

The Company, in common with its competitors has faced increases in the cost of key raw materials, although purchasing policies and practices seek to mitigate these risks, where practicable. In 2022 the Company has seen higher than anticipated levels of inflation across the UK, Europe and other markets served. To mitigate this risk the Company has negotiated increased prices with its customers and where possible worked with suppliers to minimise price increases.

The Company is a member of Morgan Group's multi-employer UK defined benefit pension plan. The funding level of this pension plan is subject to adverse change resulting from movements in the actuarial assumptions underlying the calculation of plan liabilities, including decreasing discount rates and increasing longevity of plan members, as well as declines in the market value of plan investments. Significant adverse changes in the actuarial assumptions underlying the UK plan valuation and therefore the Company's share of any deficit-reducing contributions made into the plan could materially impact the Company's trading results. The Company made £9,239,000 of deficit-reducing contributions to the scheme during 2022 which were recharged from group undertakings and resulted in a net asset position of £3,019,000 at the balance sheet date (2021: £5,664,000 deficit).

The Company has a £11,460,000 loan obligation from a group undertaking and has access to its ultimate parent company's overdraft facility when required.

The Group risks to which Morgan Group is exposed are discussed in Morgan Group's Annual Report which does not form part of this report.

Strategic report (continued)

Outlook

In 2022 the macro-economic environment has declined, driven by increased energy costs and inflation, increased interest rates and the continued impact of the Ukraine/Russia conflict. The Company has seen a decline in the orderbook going into 2023 as a result of such market conditions. The Directors expect inflation to reduce through 2023. The Company will continue to pass on inflation in higher pricing to customers and the Directors expect pricing and continuous improvement efforts to more than offset inflation as they have in prior years. A strong focus is being placed on increasing the orderbook.

The Morgan Group, including the Company, 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, with the Company now being operational.

Statement by the directors in performance of their statutory duties in accordance with s172(1) of the Companies Act 2006 ("the Act")

The Board of Thermal Ceramics UK Limited considers that it is comprised of appropriate individuals with suitable skills and experience and the directors consider that they have acted, both individually and together, in ways which would most likely promote the success of the company for the benefit of its members as a whole, having regard to stakeholders and matters set out in s172 (1) (a-f) of the Act.

The Board has implemented policies and processes to inform and assist its strategic planning, management and decision-making in line with culture and values.

How the Board Takes Stakeholders Interests and Other Matters into Account

All decisions and business conducted by the Board are considered in the context of Morgan's overriding purpose to ensure alignment with the broader Morgan Group. During 2022 the Board reviewed the Group's key stakeholders and confirmed that they continue to be its investors, customers, employees, suppliers, pensioners and pension trustees and communities. The key stakeholders, why they are significant, the main methods used to engage with them, and the issues of interest to the stakeholders are set below.

Investors - those who own shares in the Company: The Directors regard Morgan Europe Holding Limited, incorporated in England and Wales, as being the Company's immediate parent undertaking and Morgan Advanced Materials plc, incorporated in England and Wales, the ultimate parent undertaking. It is these companies ('the Group') that the Directors regard as our investors as well as those individuals and organisations that own shares, or may wish to own shares, in the ultimate parent undertaking.

Our investors provide capital for our business. We value this commitment and want to ensure investors have a deep understanding of our business, our strategy, the market environment and our governance arrangements. It is important to us that we foster an open and transparent relationship to enable investors to make effective investment decisions

What is important to our investors:

- · Capital gain through share price appreciation
- · Capital return via dividends
- · Profitability and business growth potential
- Quality of governance
- · Responsibility and fairness
- · Environmental, social and governance factors (ESG Factors)

We engage with our investors directly through the formal presentation of results and we use these opportunities to talk about the future and the longer-term plans for our business. The Group also provide a dedicated section on their website which offers timely information on how we are performing and provides guidance on ESG factors.

Customers - Those who have purchased our products or will do so in the future: We aim to deliver great service so that our customers feel valued and choose us as their 'go to' supplier. To do this effectively we need to listen and engage with them. We develop relationships with our customers based on mutual trust and constructive dialogue. We are seeing growing demand for advanced materials as customers push the boundaries of technology. We have been working closely with our customers to develop new solutions for their next generation of products and processes. We are providing products that are differentiated from those of our connectitors.

What is important to our Customers:

- · Reliable and consistent service
- Quality products
- Product and process innovation
- · Ability to solve complex problems
- · Application engineering capabilities
- How we source our raw materials
- Environmental impact of the products we produce.

The relationship with our customers starts from the moment they look to find out about our products. We keep customers updated on the progress of our innovation and new product applications through digital and physical channels. Our sales and service colleagues also keep customers updated on the progress of manufacturing; sometimes working alongside the customer to fine-tune the product and production process. We also gather key feedback from customers about the service we provide and use this to help improve relationships and secure future business.

Strategic report (continued)

Employees - Anyone directly employed by Morgan: Having people who bring a diverse range of talents and perspectives, and who feel engaged in their role, is of paramount importance to our long-term success. Our employees have been instrumental in making Morgan the company it is today. They are key to driving the brand forward and ensuring it remains relevant in the future.

What is important to our Employees:

- · Meaningful roles linked to our purpose
- Flexible working
- · Focus on wellbeing
- · Career development
- · Recognition and competitive compensation
- · A safe, ethical and inclusive working environment

The Board is committed to fostering a safe, ethical and inclusive workplace and spends time engaging with a diverse cross-section of employees, as well as monitoring and assessing the Group's culture. These insights help inform the Board's discussions on health, safety and environmental matters, in monitoring progress in relation to embedding ethical conduct and implementation of the Morgan Code, and in strengthening the capabilities of the current and future potential leadership team. At a local level, leadership teams use feedback from surveys, focus groups, pilot groups, manager one-to-one conversations and employee communications to shape engagement activities with employees. In 2022, the Group introduced three new employee resource groups (PRISM, Women@Morgan and Military@Morgan) to give voice to those who may feel underrepresented. These ERGs are a key tool in undertanding the needs of employees and help to shape thinking and policy changes.

Suppliers - Those from whom we purchase goods or services: We believe in an open and collaborative business approach and seek opportunities for innovation. This collaborative approach is particularly important to ensure a more sustainable supply chain. We aim to use all our resources as efficiently as possible, minimising the impact on ourselves, our suppliers, our customers and the world around us.

What is important to our Suppliers:

- · Human rights
- Environmental and climate impact
- · Quality management
- Cost-efficiency
- · Ethical trading policies and sustainable sourcing
- · Developing long-term relationships

We treat our suppliers as an extension of our business and therefore expect them to uphold the same high standards we set for ourselves. To achieve this, we are in constant dialogue with our suppliers to address any issues and maintain productive relationships. We have publish a Supplier Code of Conduct which we expect our suppliers to sing up to and we have regular check points to ensure that it is adhered to. Our Supplier Code focuses on treating people fairly, complying with health and safety rules, protecting the environment, and adhering to important ethics and compliance obligations.

Pensioners and Trustees: After more than 160 years in business, we would not be as strong as we are today without the combined efforts of all those who went before. By keeping our pension commitments, we honour the hard work and dedication of both current and past employees. The commitment of the Company to ensure the pension scheme is fully funded and any deficit reduction plan is maintained.

We engage with both current pensioners and those yet to retire through regular pension communications in conjunction with our pension trustees. New employees receive communications about our pension schemes in a bid to promote financial wellbeing.

Communities - Those who live in areas where we work - for example residents, businesses and charities: Our people live and work within wider communities and relationships with these communities are key in supporting our business for the future. Our relationship with local communities is mutually beneficial, offering us the ideal place to find the talent of tomorrow, while enabling our people to get involved in activities which directly benefit these communities. We seek to build trust by understanding the issues core to our communities, operating responsibly and addressing concerns that are material to them. We aim to create long-term partnerships that drive positive change and help build a more sustainable future through the development.

What is important to our Communities:

- · Our commitment to the local environment
- · Our conduct as a socially responsible organisation
- The positive impact we can have on the community living and working around us
- · Employment opportunities

Our aim is to have a positive impact on the communities we serve, from supporting job creation and skills advancement, to reducing energy and water consumption at our plants. All our efforts and engagements are governed by the Morgan Code, our purpose and our policies on the environment. As our sites and operations are spread across the globe, we have the opportunity to work with many communities. We pride ourselves on engaging at a local level and look to understand each community's priorities and concerns. We also support our employees' involvement in their local community, from charity giving to local fundraising, and from volunteering to health and wellbeing initiatives.

Strategic report (continued)

Treasury Policies

The following policies were in place across the Group throughout the year. The manager of each global business unit is required to confirm compliance as part of the year-end process.

Financial Risk Management and Treasury Policy

Treasury activities undertaken by the Company operate within a framework of policies and procedures approved by the Group Audit Committee. Group Treasury provides a service to the Company and manages and controls risk in the treasury environment through the establishment of such procedures. Group Treasury is responsible for all of the Group's funding, liquidity, cash management, interest rate risk, foreign exchange risk and other treasury business. As part of the policies and procedures, there is strict control over the use of financial instruments to hedge foreign currencies and interest rates. Speculative trading in derivatives and other financial instruments is not permitted.

Foreign exchange risks

Currency transaction exposures exist as a result of the global nature of the Company. Given that the company's core business remains within Europe, it is predominantly exposed to fluctuations in the Euro. The Company has a policy in place to hedge all material firm commitments and a large proportion of highly probable forecast foreign currency exposures in respect of sales and purchases over the following 12 months, and achieves this through the use of the forward foreign exchange markets.

Interest rate risk

The Group Treasury function manages interest rate risk on behalf of the Company. The Group seeks to reduce the volatility in its interest charge caused by rate fluctuations. The proportions of fixed and floating rate debt are determined having regard to a number of factors, including prevailing market conditions, interest rate cycle, the Group's interest cover and leverage position, and any perceived correlation between business performance and rates.

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk on financial instruments such as liquid assets, derivative assets and trade receivables. Cash balances held by the Company are managed centrally through a number of pooling arrangements. The cash pooling arrangement of which the Company is a part of was re-executed in 2022 and the Company no longer provides any guaranatees for liabilities of the other participating companies to the bank. Liabilities of the Company are guaranteed by other group undertakings. Credit risk is managed by the Group Treasury function and is managed by investing in liquid assets and acquiring derivatives in a diversified way from high-credit-quality financial institutions. Counterparties are assessed through the use of rating agencies, systemic risk considerations, and regular review of the financial press.

Capital investment

The Company has well-established formal procedures for the approval of investment in new businesses and for capital expenditure, to ensure appropriate senior management review and sign-off.

Borrowing facilities and liquidity

All of the Company's borrowing facilities are arranged by Group Treasury with Morgan Advanced Materials ple as the principal obligor. Group Treasury seeks to obtain certainty of access to funding in the amounts, diversity of maturities and diversity of counterparties as required to support the Company's medium-term financing requirements and to minimise the impact of poor credit market conditions.

Tax risks

The Company follows the Group tax policy to fulfil local and international tax requirements, maintaining accurate and timely tax compliance whilst seeking to maximise long-term shareholder value. The Company adopts an open and transparent approach to relationships with tax authorities and continues to monitor and adopt new reporting requirements, for example those arising from the implementation of the OECD Base Erosion and Profit Shifting proposals within tax legislation across various jurisdictions. The tax strategy is aligned to the Group's business strategy and ensures that tax affairs have strong commercial substance.

Approved by the Board and signed on its behalf by

MJ Price

Director

15 August 2023

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Directors' report

The directors present their annual report on the affairs of Thermal Ceramics UK Limited ('the Company'), together with the financial statements and auditor's report, for the year ended 31 December 2022.

Going concern

The directors have prepared forecasts which indicate that, taking account of reasonably possible downsides, the company will have sufficient funds to meet its liabilities as they fall due. Those forecasts are dependent on Morgan Advanced Materials plc providing additional financial support during that period. Morgan Advanced Materials plc has indicated its intention to continue to make available such funds as are needed by the company for a period of no less than 12 months from the date of approval of these financial statements. A letter of support has been issued by Morgan Advanced Materials plc to confirm this position.

The Board, after making enquiries, and in the absence of any material uncertainties, have a reasonable expectation that the Company has adequate resources to continue in operational existence for a period of 12 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.

Subsequent event

The Morgan Group, including the Company, 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, with the Company now being operational. 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. Good relationships have been maintained with customers and delays were kept to a minimum. The Directors are confident that this does not impact the going concern status of the Company, as has been indicated by the latest forecasts and continued financial support provided by Morgan Advanced Materials plc.

Research and development

The Company will continue its programme of research and development, including projects to develop its current product range.

Research and development expenditure incurred in the year was £3,272,000 (2021: £2,993,000), of which £2,244,000 (2021: £1,772,000) was recharged to other companies within the Group as research and development expenditure is incurred on behalf of the whole Group and not just the Company. No development expenditure incurred in the year met the criteria for capitalisation.

Directors

The Directors who held office during the year and at the date of signing this report were as follows:

Dr M G Thomas Mr M J Price Mr A R Bloomer Mr L A Holtkamp

Morgan Group purchases directors' and officers' insurance cover on behalf of all Group companies in the UK.

Directors' indemnities

The Company has entered into separate indemnity deeds with each Director containing qualifying indemnity provisions, as defined in Section 236 of the Companies Act 2006, under which the Company has agreed to indemnify each Director in respect of certain liabilities which may attach to each of them as a Director or as a former Director of the Company or any of its subsidiaries. The indemnity deeds were in force during the financial year to which this Directors' Report relates and are in force as at the date of approval of the Directors' Report.

Energy and Carbon Reporting

The Company complies with the Streamlined Energy and Carbon Reporting (SECR) requirements. We also support the recommendations of the Financial Stability Boards Taskforce on Climate related Financial Disclosures (TCFD) and will be taking action to implement these. Our energy use and associated GHG emissions from fuel and electricity in the UK for the 2020, 2021 and 2022 reporting years, in compliance with the mandatory reporting requirements by the UK Government's SECR policy, is shown on page 39 of the Group's Annual Report. The scope of this data includes five manufacturing sites and two non-manufacturing sites based in the UK. In 2022, the UK accounted for 3% of our global total Scope 1 and 2 emissions, as outlined in the Group's mandatory GHG reporting. Our absolute GHG emissions (Scopes 1 and 2) for our UK operations were up by 2.5% compared to 2021 levels.

Employee

Details of the number of employees and related costs can be found in note 5 to the financial statements.

Applications for employment by disabled persons are considered fully, bearing in mind the aptitudes of the applicant concerned. In the event of members of staff becoming disabled, every effort is made to ensure that their employment with the Company continues and that appropriate training is arranged. It is the policy of the Company that the training, career development and promotion of disabled persons should, as far as possible, be identical with that of other employees.

The Company participates in Morgan Group's policies and practices to keep employees informed on matters relevant to them as employees through appropriate means, such as employee meetings and newsletters.

Directors' report (Continued)

Disclosure of information to auditor

In accordance with section 418 of the Companies Act 2006, the Directors who held office at the date of approval of this Directors' report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware and each director has taken all the steps that he ought to have taken as a director to make himself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Other information

An indication of likely future developments in the business and particulars of significant events which have occurred since the end of the financial year have been included in the Strategic Report on page 1-4.

Dividend

The Directors do not recommend the payment of a dividend (2021: Enil).

Auditor

Pursuant to Section 487 of the Companies Act 2006, Deloitte LLP have been appointed as auditor.

Approved by the Board and signed on its behalf by

MJ Price

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Director

Tebay Road

Bromborough

Winel

Merseyside

CH62 3PH

F5 August 2023

Statement of directors' responsibilities

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations. Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have elected to prepare the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 101 "Reduced Disclosure Framework". Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements: and
- prepare the financial statements on the statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Independent auditor's report to the members of Thermal Ceramics UK Limited

Report on the audit of the financial statements

Opinion

In our opinion the financial statements of Thermal Ceramics UK Limited (the 'company'):

- give a true and fair view of the state of the company's affairs as at 31 December 2022 and of its loss for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and
- · have been prepared in accordance with the requirements of the Companies Act 2006

We have audited the financial statements which comprise:

- the profit and loss account and other comprehensive income;
- the balance sheet:
- the statement of changes in equity; and
- the related notes 1 to 24

The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report.

We are independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Independent auditor's report to the members of Thermal Ceramics UK Limited (Continued)

Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

We considered the nature of the company's industry and its control environment, and reviewed the company's documentation of their policies and procedures relating to fraud and compliance with laws and regulations. We also enquired of management and the directors about their own identification and assessment of the risks of irregularities, including those that are specific to the company's business sector.

We obtained an understanding of the legal and regulatory framework that the company operates in, and identified the key laws and regulations that:

- had a direct effect on the determination of material amounts and disclosures in the financial statements. These included UK Companies Act, pensions legislation, tax legislation; and
- do not have a direct effect on the financial statements but compliance with which may be fundamental to the company's ability to operate or to avoid a material penalty.

We discussed among the audit engagement team regarding the opportunities and incentives that may exist within the organisation for fraud and how and where fraud might occur in the financial statements.

As a result of performing the above, we identified the greatest potential for fraud in revenue recognition as a result of manual adjustments and/or fictious invoices. Our specific procedures performed to address it are described below:

- obtained an understanding of relevant controls the company has established in relation to revenue recognition; and
- Tested a sample of manual adjustments to revenue by obtaining an understanding of the nature of the adjustment and agreeing to supporting evidence.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override. In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments; assessed whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluated the business rationale of any significant transactions that are unusual or outside the normal course of business.

In addition to the above, our procedures to respond to the risks identified included the following:

- reviewing financial statement disclosures by testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- · performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- enquiring of management concerning actual and potential litigation and claims, and instances of non-compliance with laws and regulations; and
- reading minutes of meetings of those charged with governance and reviewing internal audit reports.

Report on other legal and regulatory requirements

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

Matters on which we are required to report by exception

Under the Companies Act 2006 we are required to report in respect of the following matters if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

We have nothing to report in respect of these matters.

Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

— DocuSigned by:

Rebella Drew

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Rebecca Drew (Senior statutory auditor)
For and on behalf of Deloitte LLP
Statutory Auditor
Birmingham, UK
15 August 2023

Profit and loss account and other comprehensive income

for the year ended 31 December 2022					
	Note		2022		2021
		000£	£000	£000	£000
Turnover	2		11,099		11,631
Cost of sales		(7,787)		(8,114)	
Staff costs	5	(5,018)		(5,020)	
Depreciation, amortisation and other amounts written off tangible and intangible fixed assets	3	(438)		(364)	
Deprecation - Right of use assets	3	(9)		(23)	
Other operating income	3	1,456		1,742	
			(11,796)		(11,779)
Operating loss			(697)		(148)
Profit from disposal of investment	б		-		9,682
Interest receivable and similar income	7		414		149
Interest payable and similar expense	8		(321)		(241)
(Loss)/profit before taxation			(604)		9,442
Tax on (loss)/profit	9		107		(274)
(Loss)/Profit for the financial year			(497)		9,168
Other comprehensive (loss)/income					
Items that will not be reclassified subsequently to profit or loss:					
Remeasurement (loss)/gain on defined benefit plans	20		(468)		5,910
Other comprehensive (loss)/income for the year, net of income tax		_	(468)		5,910
Total comprehensive (loss)/income for the year			(965)		15,078

Turnover and operating profit are all derived from continuing operations. The notes on pages 13 to 36 form part of these financial statements.

Balance sheet

at 31 December 2022

	Note	0003	2022	£000	2021 £000
Fixed assets		xann	£000	znien.	LUUU
Intangible assets	12		341		322
Tangible assets	10		2,507		2,191
Right of use assets	11				9
Investments	13		_		
mve same per			2,848	•	2,522
Current assets			2,0.0		
Stocks	14	528		470	
Debtors (including £12,186,000 (2021: £12,186,000)	15	23,206		21,347	
due after more than one year)		20,200		2.1,5	
Cash at bank and in hand		752		241	
Pension asset	20	3,019		÷	
	•		-		
			27,505		22,058
			ž		·
Creditors: amounts falling due within one year	16		(15,657)		(4.948)
			(10,027)		(1.5.15)
Net current assets			11,848	-	17.110
			-		•
Total assets less current liabilities			14,696		19,632
Creditors: amounts falling due after one year					
Amounts owed to Group undertaking	16		(8,460)		(6,769)
Provisions for liabilities					
Other provisions	17		(398)		(405)
Pension liability	20		-		(5.664)
				_	
Net assets		:	5,838	=	6,803
Capital and reserves					
Called up share capital	18		26,650		26,650
Revaluation reserve			130		136
Profit and loss account			(20,942)		(19,983)
				_	
Shareholder's funds		=	5,838	=	6,803

The notes on pages 13 to 36 form part of these financial statements.

The financial statements of Thermal Ceramics UK Limited (registered number 00890443) were approved by the board of directors and authorised for issue on 15 August 2023. They were signed on its behalf by:

MJ Price

Director

15 August 2023

Statement of changes in equity for the year ended 31 December 2022

	Called up share capital £600	Revaluation reserve £000	Profit and loss account £000	Total equity
Balance at 1 January 2021	26,650	142	(35,067)	(8,275)
Profit for the year	•	•	9,168	9,168
Other comprehensive income	•	•	5,910	5,910
Total comprehensive income for the year	-	•	15,078	1,362
Transfers	•	(6)	6	•
Balance at 31 December 2021	26,650	136	(19,983)	6,803
Balance at 1 January 2022	26,650	136	(19,983)	6,803
Loss for the year	-	-	(497)	(497)
Other comprehensive loss	-	•	(468)	(468)
Total comprehensive loss for the year	•	•	(965)	(965)
Transfers	*	(6)	6	•
Balance at 31 December 2022	26,650	130	(20,942)	5,838

The notes on pages 13 to 36 form part of these financial statements.

Notes

(forming part of the financial statements)

1 Accounting policies

Thermal Ceramics UK Limited is a private company incorporated and domiciled in the UK. These financial statements are presented in pounds sterling which is the currency of the primary economic environment in which the Company operates.

These financial statements were prepared in accordance with Financial Reporting Standard 101 Reduced Disclosure Framework ('FRS 101').

In preparing these financial statements, the Company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the UK (UK-adopted international accounting standards), but makes amendments where necessary in order to comply with the Companies Act 2006 and to take advantage of FRS 101 disclosure exemptions.

The Company's ultimate parent undertaking, Morgan Advanced Materials plc, includes the Company in its consolidated financial statements. The consolidated financial statements of Morgan Advanced Materials plc are prepared in accordance with International Financial Reporting Standards and are available to the public and may be obtained from York House, Sheet Street, Windsor, Berkshire, SL4 1DD.

In these financial statements, the company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- · a Cash Flow Statement and related notes;
- Comparative period reconciliations for share capital, tangible fixed assets and intangible assets;
- The effects of new but not yet effective IFRSs;
- · Disclosures in respect of the compensation of Key Management Personnel and the services provided to them; and
- Disclosures in respect of capital management.

As the consolidated financial statements of Morgan Advanced Materials plc include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2 Share Based Payments in respect of group settled share based payments; and
- Certain disclosures required by IFRS 13 Fair Value Measurement and the disclosures required by IFRS 7 Financial Instrument Disclosures.

The accounting policies set out below have, unless otherwise stated, been applied consistently to the period presented in these financial statements.

Exemption from preparing Group financial statements

These financial statements are separate financial statements. The Company is exempt from the preparation of consolidated financial statements, because it is included in the group accounts

Measurement convention

The financial statements are prepared on the historical cost basis except that the following assets and liabilities are stated at their fair value - derivative financial instruments classified as fair value through the profit and loss account.

Notes (continued)

1 Accounting policies

Going concern

The directors have prepared forecasts which indicate that, taking account of reasonably possible downsides, the company will have sufficient funds meet its liabilities as they fall due. Those forecasts are dependent on Morgan Advanced Materials plc providing additional financial support during that period. Morgan Advanced Materials plc has indicated its intention to continue to make available such funds as are needed by the company for a period of no less than 12 months from the date of approval of these financial statements. A letter of support has been issued by Morgan Advanced Materials plc to confirm this position.

The Board, after making enquiries, and in the absence of any material uncertainties, have a reasonable expectation that the Company has adequate resources to continue in operational existence for a period of 12 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.

Tangible fixed assets and depreciation

Tangible fixed assets are stated at cost, net of depreciation and any provisions for impairment.

Depreciation is provided to write off the cost less the estimated residual value of tangible fixed assets by equal instalments over their estimated useful economic lives as follows:

Freehold buildings 2% per annum Plant and machinery 5% and 33%

No depreciation is provided on freehold land

Leasing

The Company assesses whether a contract is or contains a lease, at inception of the contract. The Company recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a term of 12 months or less) and leases of low value (defined as leases of a value less than £5,000 at lease commencement). For these leases the Company recognises the lease payments as an operating expense on a straight-line basis over the lease term.

Lease Liabilities

The lease liability is initially measured at the present value of future lease payments, discounted by using the rate implicit in the lease or, where cannot be readily determined, an incremental borrowing rate. The lease liability is subsequently measured by using the effective interest method and by reducing the carrying amount to reflect the lease payments made.

Right-of use assets

The right-of-use-assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement date, less any lease incentives received and initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses. Right-of-use assets are depreciated over the shorter period of the lease term and useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

Depreciation

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

Other intangible assets

Technology related operating intangible fixed assets purchased by the Company are amortised to nil by equal annual instalments over their useful economic lives of 5 years.

Notes (continued)

1 Accounting policies (continued)

Impairment

Assets, other than those held at fair value, are assessed for indicators of impairment at each balance sheet date. If there is objective evidence of impairment, an impairment loss is recognised in the profit and loss account.

A non-financial asset is impaired where there is objective evidence that, as a result of one or more events that occurred after initial recognition, the estimated recoverable value of the asset has been reduced. The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset or cash generating unit.

The present value calculation involves estimating future cash inflows and outflows to be derviced from continuing use of the asset, and from its ultimate disposal, applying an appropriate discount rate to those future cash flows.

Foreign currencies

Transactions in foreign currencies are recorded using the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated using the contracted rate or the rate of exchange ruling at the Balance sheet date and the gains or losses on translation are included in the profit and loss account.

Government grants

Capital based government grants are included within accruals and deferred income in the balance sheet and credited to the profit and loss account over the estimated useful economic lives of the assets to which they relate.

Non-derivative financial instruments

Non-derivative financial instruments comprise trade and other debtors, cash and cash equivalents, loans and borrowings, and trade and other creditors.

Trade and other debtors

Trade and other debtors are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method, less any impairment losses. Trade receivables are provided for based on historical loss experience for all debtors past due. Exceptions are made where historical experience with certain customers indicates otherwise. This is recognised in the profit and loss account. Trade receivables are written off when recoverability is assessed as being remote. Subsequent recoveries of amounts previously written off are credited to the profit and loss account.

Trade and other creditors

Trade and other creditors are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest method.

Related Party Transactions

As the Company is a wholly-owned subsidiary of Morgan Europe Holding Limited, part of Morgan Advanced Materials plc, the Company has taken advantage of the exemption from the requirement of IAS 24 contained in FRS 101 and has therefore not disclosed transactions or balances with wholly owned subsidiaries which form part of the Morgan Group.

Research and development expenditure

Expenditure on research and development is written off to the profit and loss account in the year in which it is incurred. Development expenditure is capitalised only where there is a clearly defined project, the expenditure is separately identifiable, the outcome of the project can be assessed with reasonable certainty, aggregate costs are expected to exceed related future sales and adequate resources exist to enable the project to be completed.

Stocks

Stocks are stated at the lower of cost and net realisable value. In determining the cost of goods purchased for resale, the weighted average purchase price is used. For finished goods cost is taken as production cost, which includes an appropriate proportion of attributable overheads.

Notes (continued)

1 Accounting policies (continued)

Turnover

Turnover represents the invoiced value of services to fellow subsidiary undertakings and sales to third parties exclusive of value added tax, less returns and allowances given in the normal course of trade. Turnover is recognised when or as the Company satisfies a performance obligation by transferring a promised good or service to a customer. The Company's principal performance obligation is the provision of specialist ceramic components, is satisfied at a point in time and subject to standard payment terms. Products and components are transferred when the customer obtains control of the goods. For goods that are collected by the customer, turnover is recognised at the point the customer has taken physical possession of the goods. For contracts that include delivery of goods, the delivery element of the contract constitutes a separate performance obligation because it is distinct. For these contracts, control of the goods does not transfer to the customer until the goods have been delivered and therefore both performance obligations are satisfied simultaneously. Turnover for these contracts is therefore recognised on delivery.

Other income

The Company recognises other income where income is received outside the normal course of trade whether from fellow subsidiary undertaking or third parties.

Taxation

Tax on the profit or loss for the year comprises current tax. Tax is recognised in the profit and loss account except to the extent that it relates to items recognised directly in equity or other comprehensive income, in which case it is recognised directly in equity or other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustments to tax payable in respect of previous years.

Deferred tax is provided on temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for the initial recognition of goodwill; the initial recognition of assets or liabilities that affect neither accounting nor taxable profit other than in a business combination, and differences relating to investments in subsidiaries to the extent that they will probably not reverse in the foreseeable future. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the temporary difference can be utilised.

Employee benefits

Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which the Company pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an expense in the income statement in the periods during which services are rendered by employees.

Notes (continued)

1 Accounting policies (continued)

Employee benefits (continued)

Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any plan assets (at bid price) and any unrecognised past service costs are deducted. The liability discount rate is the yield at the balance sheet date on AA credit rated bonds denominated in the currency of, and having maturity dates approximating to the terms of the Company's obligations. The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Company, the recognised asset is limited to the total of any unrecognised past service costs and the present value of benefits available in the form of any future refunds from the plan, reductions in future contributions to the plan or on settlement of the plan and takes into account the adverse effect of any minimum funding requirements.

The Company participates in two defined benefit schemes in the UK. The assets of these schemes are held in separate trustee-administered funds, The Morgan Pension Scheme (MPS) and the Morgan Group Senior Staff Pension and Life Assurance Scheme (SSS). These schemes were closed to new entrants on 1 August 2011, with any new employees receiving benefits through the Morgan Group Personal Pension Plan, a defined contribution arrangement. The Morgan Group Senior Staff Pension and Life Assurance Scheme was closed to the future accrual of benefits on and with effect from 6 April 2016. The Morgan Pension Scheme was closed to the future accrual of benefits on and with effect from 6 April 2018. Employees active in both Scheme(s) as at that date were enrolled in The Morgan Group Personal Pension Plan, with the option to opt out under relevant UK legislation. During 2016 the Company adopted a new Morgan-Group policy to allocate costs associated with the UK pension schemes between the various Participating Employers, based on an evaluation of each entity's share of overall Scheme liabilities. This ensures that the pension liability is reflected in the entity that employed the participant. In 2016 this resulted in a reallocation of £23,900,000 of the Schemes' net liabilities into the Company. Previously none of the scheme assets and liabilities were recognised on the balance sheet of the Company.

Share based payments

The share option programme allows employees to acquire shares of the ultimate parent company. The Company took advantage of the option available in IFRS 1 to apply IFRS 2 only to equity instruments that were granted after 7 November 2002 and that had not vested by 1 January 2015. The fair value of these options are recharged by the ultimate parent company, with a corresponding entry in the Company's profit and loss account. The fair value is measured at grant date and spread over the period during which the employees become unconditionally entitled to the options. The fair value of the options granted is measured using an option pricing model, taking into account the terms and conditions upon which the options were granted. The amount recognised as an expense is adjusted to reflect the actual number of share options that vest except where forfeiture is only due to share prices not achieving the threshold for vesting.

For cash-settled share based payment transactions, with the exception of those awards settled before the transition date, the fair value of the amount payable to the employee is recognised as an expense with a corresponding increase in liabilities. The fair value is measured at grant date and spread over the period during which the employees become unconditionally entitled to payment. The fair value is measured based on an option pricing model taking in to account the terms and conditions upon which the instruments were granted. The liability is revalued at each balance sheet date and settlement date with any changes to fair value being recognised in the profit and loss account.

Where the Company's ultimate parent grants rights to its equity instruments to the Company's employees, which are accounted for as equity-settled in the consolidated accounts of the parent, the Company accounts for these share-based payments as equity-settled.

Investments

Investments are carried at cost less provision for impairment. The Company tests balances for impairment annually or when there are indicators for impairment. If any such indication of impairment exists, the Company makes an estimate of its recoverable amount. Where the carrying value exceeds its recoverable amount, the investment is considered impaired and is written down to its recoverable amount. Profit on the disposal of investments is calculated as the proceeds received less the carrying value of the asset in the balance sheet.

Thermal Ceramics UK Limited Annual report and financial statements Registered Number 00890443 Thermal Ceramics UK Limited

Notes (continued)

1 Accounting policies (continued)

Significant accounting estimates and judgements

The preparation of financial statements in conformity with FRS 101 requires the directors to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. The most significant judgements and estimates made in applying the Company accounting policies relate to:

Measurement of defined benefit scheme asset

The company estimates and recognises costs relating to defined benefit schemes in accordance with IAS 19 (Revised) Employee Benefits ("IAS 19 (Revised)"). In applying IAS 19 (Revised) the costs are assessed in accordance with the advice of independent qualified actuaries. This requires the exercise of judgement in relation to the estimation of future changes in salaries and inflation, as well as mortality rates, expected return on plan assets and the selection of suitable discount rates. Further detail is provided in note 20.

Reconition of defined benefit scheme surplus

The recognition of a surplus in respect of the defined benefit pension scheme reflects legal and actuarial advice that we have taken regarding recognition of surpluses under IFRIC 14. We have concluded the the Company has an unconditional right to a refund from the plan, in the event of a winding up (note 20).

Notes (continued)

2 Analysis of turnover

	2022 £000	2021 £000
By activity:		2000
Ceramics & glass	2,246	2,015
Petrochemical	2,218	3,891
Industrial Equipment	2,066	1,573
Other metals	1,391	1,178
Iron & steel	785	459
Consumer goods	760	823
Aerospace	392	608
Electric Vehicles	341	•
Building & construction	91	466
Other	809	618
	11,099	11,631
	2022	2021
	£000	£000
By geographical market:		
Europe	10,651	11,468
The Americas	284	117
Asia	34	4
Africa and Middle East	130	42
	11,099	11,631

3 Notes to the profit and loss account

Operating loss is stated after (charging)/crediting	Note	2022 £000	2021 £000
Depreciation, amortisation and other amounts written off tangible and intangible fixed assets	10, 11	(438)	(364)
Depreciation - Right of use assets	11	(9)	(23)
		(447)	(387)
	=		
		2022	2021
		£000	£000
Research and development expenditure excluding staff costs of £1,254,000 (2021: £1,404,000)		(2,018)	(1,589)
Research and development expenditure recharged		2,244	1,772
Recharge of costs incurred on behalf of other group undertakings		2,759	3,244
Net foreign exchange (gains)/losses		36	(31)
Loss on disposal of tangible fixed assets		(16)	•
Auditor's remuneration		(48)	(26)
Other operating costs		(1,501)	(1,628)
		1,456	1,742

Auditor's remuneration relates to the audit of these financial statements.

Research and development expenditure relates to costs incurred on projects undertaken to develop new products and improve existing products. This expenditure is incurred on behalf of the whole Group and not just the Company and is therefore recharged to other Group companies.

The recharge of costs incurred on behalf of other group undertakings includes staff costs.

4 Remuneration of Directors

4 Remuneration of Directors		
	2022	2021
	£000	£000
Directors' emoluments	207	162
Aggregate amount of money paid to directors on the exercise of share options	2	2
Company contributions to money purchase pension schemes	7	7
	216	171

The aggregate of emoluments and amounts receivable under long-term incentive schemes of the highest paid Director was £161,000 (2021: £136,000)

	Numbers of Directors		
	2022	2021	
Retirement benefits are accruing to the following number of directors under:			
Money purchase schemes	3	3	
	3	3	

5 Staff numbers and costs

The average number of persons employed by the Company (including directors) during the year, analysed by category, was as follows:

	2022	2021
	Number	Number
Sales and marketing	12	10
Research and development	24	26
Logistics/warehouse	3	3
IT	3	3
Administration	18	16
	60	58
The aggregate payroll costs of these persons were as follows:	2022	2021
	2022 £000	2021 £000
	2000	
Wages and salaries	4,027	4,287
Social security costs	481	391
Other pension costs	315	288
Share based payments	191	54
Redundancy and reorganisation costs	4	-
	5,018	5,020

6 Profit from disposal of investment

o i i out ti out disposat of invest	iment	
	2022	2021
	£000	£000
Proceeds received from disposal	-	14,182
Carrying value of investment	-	(4,500)
	-	9,682

There has been no disposal of investments in the year ended 31 December 2022. On 27 April 2021 Thermal Ceramics UK Limited sold its 35% equity stake in Jemmtec Limited for proceeds of £14,182,000, recognising a profit on disposal of £9,682,000.

7 Interest receivable and similar income

	2022	2021
	000£	£000
Interest receivable from Group undertakings	414	149
	414	149

Unsecured loan owed by Group undertakings of £12,186,000 was provided in 2021 and is repayable on 24 May 2024.

Interest has been charged on this loan at the following rates:

- From 1 January 2022 to 30 September 2022: Libor plus 2.0%
- From 1 October 2022 to 17 November 2022: SONIA plus 2.0%
- From 18 November 2022 to 31 December 2022: SONIA plus 2.40%.

8 Interest payable and similar expense

	2022	2021
	£000	£000
Interest on lease liabilities	-	(1)
Interest payable to third parties	(1)	(1)
Interest payable to group undertakings	(232)	(90)
Net interest on defined benefit liabilities	(88)	(149)
	(321)	(241)

Unsecured loans from Group undertaking relate to two separate loans of £3,000,000 and £8,460,000 which are due for repayment on 18 September 2023 and 22 December 2025 repsectively.

Interest has been charged on these loans at the following rates:

- From 1 January 2022 to 30 September 2022: Libor plus 2.0%
- From 1 October 2022 to 17 November 2022: SONIA plus 2.0%
- From 18 November 2022 to 31 December 2022: SONIA plus 2.40%.

9 Taxation

Analysis of (credit)/charge in year		
	2022	2021
	£000£	£000
UK corporation tax		
Current tax on income for the year	•	-
Adjustments in respect of prior years	(107)	274
	(107)	274
Total current tax	(107)	274
Tax on (loss)/profit	(107)	274

There were no deferred tax charges or credits in the year to 31 December 2022 (2021: nil).

Reconciliation of effective tax rate

The tax credit for the period is lower (Tax charge for 2021: lower) than the standard rate of corporation tax in the UK of 19.00% (2021: 19.00%). The differences are explained below:

	2022	2021
	£000	£000
Tax reconciliation		
(Loss)/profit before tax	(603)	1,530
	(603)	1,530
Current tax at 19.00% (2021: 19.00%)	(115)	1,794
Effects of:	·	
Expenses not deductible for tax purposes	22	21
Deferred tax not recognised	93	25
Adjustments to tax charge in respect of previous years	(107)	274
Income not taxable	-	(1,840)
Total tax (credit)/charge (see above)	(107)	274

Legislation introduced in the Finance Bill 2021 set the main rate of Corporation Tax at 19%, which applied for the financial year beginning 1 April 2022. At Spring Budget 2021, the government announced changes to corporation tax rates from 1 April 2023 onward. Finance Act 2021 included legislation to impose the charge to corporation tax for financial years 2022 and 2023, and to increase the main rate of corporation tax to 25% for financial year 2023 in line with the announcement at Spring Budget 2021. Legislation was introduced in the Spring Finance Bill 2023 to charge corporation tax and set the main rate at 25% and the small profits rate at 19% for the financial year beginning 1 April 2024.

10 Tangible fixed assets

	Land and buildings £000	Plant and machinery £000	Total £000
Cost			
At beginning of year	2,921	5,006	7,927
Additions	341	277	618
Disposals		(1,747)	(1,747)
At end of year	3,262	3,536	6,798
Depreciation and impairment			
At beginning of year	1,782	3,954	5,736
Depreciation charge for year	118	168	286
Disposals	-	(1,731)	(1,731)
At end of year	1,900	2,391	4,291
Net book value			
At 31 December 2022	1,362	1,145	2,507
At 31 December 2021	1,139	1,052	2,191
•			

An impairment review has been carried out during the year and no impairment has been charged (2021: nil).

11 Right of use assets

The company leases assets including plant and machinery. Information about leases for which the Company is a lessee is presented below

	Plant and machinery
	£000
Cost	
At the beginning of the year	76
Disposals	(76)
At end of year	-
Depreciation and impairment	
At the beginning of the year	67
Depreciation charge for year	9
Disposals	(76)
At end of year	-
Net book value	
At 31 December 2021	9
At 31 December 2022	-
Lease Liabilities	
	Plant and machinery
	0003
Balance at 1 January 2022	01
Payments made	(10)
Interest charge	
Balance at 31 December 2022	-
Amounts falling due after more than one year	•
Amounts falling due before one year	-

During 2022, the Company has returned all leased assets that were in place as at 31 December 2021. Leases in place as at 31 December 2022 are short term arrangements of less than 12 months. The Company has recongised the lease payments as an operating expense on a straight-line basis over the lease term and therefore has not recognised any lease liabilities or right of use assets in relation to these leases.

There are no undiscounted cash flows relating to lease liabilities (2021: nil).

Amounts recognised in profit or loss

	2022	2021
	€000	£000
Depreciation charge on right of use assets	9	23
Interest on lease liabilities	-	1
Expenses on short term leases not capitalised	2	-
Expenses on low value asset leases not capitalised		-

12 Intangible fixed assets

	Technology related intangible assets £000
Cost	2.000
At beginning of year	1,266
Additions At end of year	171 1,437
Amortisation	
At beginning of year	944
Charge for year	152
At end of year	1,096
Net book value At 31 December 2022	341
At 31 December 2021	322
Amortisation charge	
The amortisation charge is recognised in the following line item in the profit and loss account:	
	2022 2021
	0003 0003
Amortisation and other amounts written off intangible fixed assets	152 81

The cyber security incident experienced by the Group in January 2023 has not impacted upon the carrying values or estimated useful lives of the Company's technology related intangible assets. These assets have been fully recovered and are in ongoing use, with plans to continue utilising these assets until the end of their useful lives.

An impairment review has been carried out during the year and no impairment has been charged (2021: nil).

Notes (continued)

13 Investments in Related Parties

	Country of		% of Shares
	Incorporation	Registered Office Address	Owned
Undertakings Directly owned:	•		
		c/o Baker & McKenzie, 15/f,	
	•	168 Tun Hwa North Road,	
Morganite Thermal Ceramics (Taiwan) Limited	Taiwan	Taipei 105, Taiwan, ROC	88%

On 27 April 2021 Thermal Ceramics UK Limited sold it's 35% equity stake in Jemmtec Limited for £14,182,000. A gain of £9,682,000 was recognised in 2021 in relation to this transaction.

14 Stocks

14	Stocks		
		2022	2021
		£000	£000
Finished (goods and goods for resale	528	470
		528	470

The amount of stocks expensed in the profit and loss account during the year was £7,022,000. (2021: £7,127,000). The value of stocks written down and expensed in the profit and loss account during the year amounted to £36,000. (2021: £53,000). Transportion costs incurred on the delivery of stocks sold and expensed in the profit and loss account during the year amounted to £729,000 (2021: £739,000).

15 Debtors

	2022	2021
	£000	£000
Trade debtors	2,102	1,881
Amounts owed by Group undertakings	20,613	18,951
Taxation and social security	107	68
Other debtors	208	299
Prepayments and accrued income	176	148
·	23,206	21,347
Due within one year	11,020	9,161
Due after more than one year	12,186	12,186

Unsecured loan owed by Group undertakings of £12,186,000 was provided in 2021 and is repayable on 24 May 2024.

Interest has been charged on this loan at the following rates:

- From 1 January 2022 to 30 September 2022: Libor plus 2.0%
- From 1 October 2022 to 17 November 2022: SONIA plus 2.0%
- From 18 November 2022 to 31 December 2022: SONIA plus 2.40%.

16 Creditors

Creditors: amounts falling due within one year	Note	2022 £000	2021 £000
Trade creditors		1,408	817
Amounts owed to Group undertakings		11,471	805
Lease liabilities	11	-	10
Other creditors		1,375	989
Accruals		1,403	2,327
	<u>-</u>	15,657	4,948

Amounts owed to group undertakings relate to trading balances of £8,471,000 which are unsecured and repayable on demand and no interest is charged; and an unsecured loan of £3,000,000 which is due for repayment on 18 September 2023.

Interest has been charged on this loan at the following rates:

- From 1 January 2022 to 30 September 2022: Libor plus 2.0%
- From 1 October 2022 to 17 November 2022: SONIA plus 2.0%
- From 18 November 2022 to 31 December 2022: SONIA plus 2.40%.

Creditors: amounts falling due after more than one year	2022	2021
	£000	£000
Unsecured loan owed to Group undertakings	8,460	6,760

Unsecured loan from Group undertakings is due for repayment on 22 December 2025.

Interest has been charged on this loan at the following rates:

- From 1 January 2022 to 30 September 2022: Libor plus 2.0%
- From 1 October 2022 to 17 November 2022: SONIA plus 2.0%
- From 18 November 2022 to 31 December 2022: SONIA plus 2.40%.

17 Provisions for liabilities

Dilapidations:	
At beginning of year 337	337
Utilised during year	-
At end of year 337	337

The provision held for dilapidation costs relates to the contractual obligation that exists to restore the previously leased property at Commercial Road to its original condition. The provision is management's best estimate to comply with this obligation. The provision is expected to be utilised within 2023.

2022	2021
€000	£000
Employee Litigation	
At beginning of year 68	-
Provided during year 10	68
Released during year (17)	•
At end of year 61	68

The provision held is for Employee litigation made against the Company. The provision is management's best estimate and is expected to be utilised within 2023.

Deferred Tax

At the end of the year there is an unprovided deferred tax asset of £4,684,000 (2021: £3,502,000). This increase of £1,182,000 is because the balance as at 31 December 2022 was calculated at the rate of 25% (the enacted tax rate), whereas the balance at 31 December 2021 was calculated at the tax rate of 19%. The deferred tax asset is not provided as management believe there is insufficient certainty that future taxable profits will be generated to utilise the deferred tax asset in the Company as it is the intention of management to offset taxable profits to other loss-making entities within the Group via group relief. The deferred tax asset will be recovered if the Company generates sufficient taxable profits in the future which are not offset via group relief. The deferred tax asset has been calculated on the rate of 25% substantively enacted at the balance sheet date.

18 Capital and reserves

In thousands of shares On issue at 1 January 2022 and 31 December 2022	Ordi	2022 26,650
	2022	2021 £000
Allotted, called up and fully paid Ordinary shares of £1 each	£000 26,650	26,650
Reserves	2022 £000	2021 £000
Revaluation reserve Revaluation of land and building	130	136

Notes (continued)

19 Commitments and contingent liabilities

The Company participates in a cash pooling arrangement provided by Lloyds Bank plc with other UK Group companies. This cash pooling arrangement was revised in 2022 leading to a change in the provision of guarantees. The Company no longer provides any guarantees for liabilities of the other participating companies to the bank. In 2021, the Company did provide such guarantees and these were limited to the lower of:

- a) an amount equal to the base currency amount of the total liabilities in the cash pool; and
- b) an amount equal to the base currency amount of such guarantor's own net credit balance in the cash pool.

At the balance sheet date, the guaranteed amount was £nil (2021: £50,000).

Where the Company enters into financial guarantee contracts to guarantee the indebtedness of other companies within its group, the Company considers these to be insurance arrangements and accounts for them as such. In this respect, the Company treats the guarantee contract as a contingent liability until such time as it becomes probable that the Company will be required to make a payment under the guarantee.

For the year ended 31 December 2022

Notes (continued)

20 Employee benefits: pensions

The Morgan Pension Scheme and the Morgan Group Senior Staff Pension and Life Assurance Scheme

The Company participates in two defined benefit schemes in the UK. The assets of these schemes are held in separate trustee-administered funds, The Morgan Pension Scheme (MPS) and the Morgan Group Senior Staff Pension and Life Assurance Scheme (SSS). These schemes were closed to new entrants on 1 August 2011, with any new employees receiving benefits through the Morgan Group Personal Pension Plan, a defined contribution arrangement. The Morgan Group Senior Staff Pension and Life Assurance Scheme was closed to the future accrual of benefits on and with effect from 6 April 2016. Employees active in the Scheme as at that date were enrolled in The Morgan Group Personal Pension Plan, with the option to opt out under relevant UK legislation.

On 30th September 2016 the Company adopted a new Morgan-Group policy to allocate costs associated with the UK pension schemes between the various Participating Employers, based on an evaluation of each entity's share of overall Scheme liabilities. This ensures that the pension liability is reflected in the entity that employed the participant. This resulted in a reallocation of £23,900,000 of the Schemes' net liabilities into the Company. Previously none of the scheme assets and liabilities were recognised on the balance sheet of the Company.

Pension plans and employee benefits £000 £000 Present value of funded defined benefit obligations (36,164) (54,928) Fair value of plan assets 39,183 49,264 Net asset/(obligation) 3,019 (5,664) Movements in present value of defined benefit obligation """"""""""""""""""""""""""""""""""""		2022	2021
Fair value of plan assets 39,183 49,264 Not asset/(obligation) 3,019 (5,664) Movements in present value of defined benefit obligation 5,664 At 1 January (54,928) (60,825) Reallocation of defined benefit obligation - - Current service cost 1,034 (735) Remeasurement gains/(losses): 19,274 4,310 Changes in financial assumptions (52) 840 Experience adjustments on benefit obligations (16,35) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December 36,164 (54,928) Movements in fair value of plan assets 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits 2002 2021	Pension plans and employee benefits	£000	£000
Movements in present value of defined benefit obligation 3,019 (5,664) At 1 January (54,928) (60,825) Reallocation of defined benefit obligation - - Current service cost 1,034 (735) Interest cost (1,034) (735) Remeasurement gains/(losses): Totages in financial assumptions (52) 840 Changes in demographic assumptions (52) 840 Experience adjustments on benefit obligations (52) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December 36,164) (54,928) Movements in fair value of plan assets At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid 2,211 2,033 At 31 December 2021	Present value of funded defined benefit obligations	(36,164)	(54,928)
Movements in present value of defined benefit obligation At 1 January (54,928) (60,825) Reallocation of defined benefit obligation - - Current service cost - - Interest cost (1,034) (735) Remeasurement gains/(losses): 19,274 4,310 Changes in financial assumptions (52) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Persion plans and employee benefits 2021 2021 Pension plans and employee benefits 2022 2021	Fair value of plan assets	39,183	49,264
At 1 January (54,928) (60,825) Reallocation of defined benefit obligation - - Current service cost 1,034) (735) Interest cost (1,034) (735) Remeasurement gains/(losses): ************************************	Net asset/(obligation)	3,019	(5,664)
Reallocation of defined benefit obligation - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	Movements in present value of defined benefit obligation		
Current service cost - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	At 1 January	(54,928)	(60,825)
Interest cost (1,034) (735) Remeasurement gains/(losses): 19,274 4,310 Changes in financial assumptions (52) 840 Changes in demographic assumptions (551) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits 2022 2021 Pension plans and employee benefits 5000 5000 Expense recognised in the income statement - - - Past service cost - - - Administrative expenses (88) </td <td>Reallocation of defined benefit obligation</td> <td>•</td> <td>-</td>	Reallocation of defined benefit obligation	•	-
Remeasurement gains/(losses): 19,274 4,310 Changes in financial assumptions (52) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits 2022 2021 Expense recognised in the income statement 2022 2021 Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (104)	Current service cost	-	-
Changes in financial assumptions 19,274 4,310 Changes in demographic assumptions (52) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Interest cost	(1,034)	(735)
Changes in demographic assumptions (52) 840 Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (1049)	Remeasurement gains/(losses):		
Experience adjustments on benefit obligations (1,635) (551) Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets - - At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Changes in financial assumptions	19,274	4,310
Benefits paid 2,211 2,033 Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets - - At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Changes in demographic assumptions	(52)	840
Past service costs - - At 31 December (36,164) (54,928) Movements in fair value of plan assets - - At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement 2022 2021 Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Experience adjustments on benefit obligations	(1,635)	(551)
Movements in fair value of plan assets (36,164) (54,928) At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Benefits paid	2,211	2,033
Movements in fair value of plan assets At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits Expense recognised in the income statement Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Past service costs		-
At 1 January 49,264 47,705 Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	At 31 December	(36,164)	(54,928)
Interest on plan assets 946 586 Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Movements in fair value of plan assets		
Remeasurement gains (18,055) 1,311 Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	At 1 January	49,264	47,705
Contributions by employer 9,239 1,695 Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Interest on plan assets	946	586
Benefits paid (2,211) (2,033) At 31 December 39,183 49,264 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Remeasurement gains	(18,055)	1,311
At 31 December 39,183 49,264 2022 2021 Pension plans and employee benefits £000 £000 Expense recognised in the income statement - - Past service cost - - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Contributions by employer	9,239	1,695
Pension plans and employee benefits £000 £000 Expense recognised in the income statement Past service cost - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Benefits paid	(2,211)	(2,033)
Pension plans and employee benefits £000 £000 Expense recognised in the income statement Past service cost - Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	At 31 December	39,183	49,264
Expense recognised in the income statement Past service cost Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)		2022	2021
Expense recognised in the income statement Past service cost Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)	Pension plans and employee benefits	£000	£000
Administrative expenses (88) (100) Net interest on net defined benefit liability (88) (149)			
Net interest on net defined benefit liability (88) (149)	Past service cost	•	-
Net interest on net defined benefit liability (88) (149)	Administrative expenses	(88)	(100)
	Net interest on net defined benefit liability	(88)	• ,
	Total expense	(176)	(249)

For the year ended 31 December 2022

20 Employee benefits: pensions (continued)

• • • • • • •		
Remeasurement gains/(losses) recognised on defined benefit obligation:		
Changes in financial assumptions	19,274	4,310
Changes in demographic assumptions	(52)	840
Experience adjustments on benefit obligations	(1,635)	(551)
Remeasurement gains recognised on plan assets	(18,055)	1,311
	(468)	5,910
The fair values of the plan assets were as follows:		
	£000	£000
Equities and growth assets	2,626	14,047
Bonds	1,887	9,857
Matching insurance policies	8,166	11,265
Liability Driven Investments	23,703	11,899
Other	2,801	2,196
Total	39,183	49,264

The assumptions used are best estimate assumptions chosen from a range of possible actuarial assumptions which may not be borne out in practice. The principal assumptions are the discount rate and inflation assumptions which are long-term and measured on external factors, based upon each plan's duration. In addition to these, the mortality assumption in the UK is material to the cost of the promised benefits. The assumed increases in salaries and pensions in payment are derived from assumed future inflation.

Principal actuarial assumptions at the year end were as follows:

	2022	2021
Assumptions:	<u></u>	%
Inflation (RPI & CPI)	3.26/2.47	3.40/2.61
Discount rate	4.81	1.92
Pensions increase	3.00/3.11/3.70	3.00/3.22/3.75
Salary increase	n/a	n/a
Mortality - post-retirement:		
Life expectancy of a male aged 60 in accounting year	25.8 years	26.0 years
Life expectancy of a male aged 60 in accounting year + 20	27.2 years	27.4 years
History of the plans		
The history of the plans are as follows:		
Balance Sheet	2022	2021
	£000	£000
Present value of the defined benefit obligation	(36,164)	(54,928)
Fair value of plan assets	39,183	49,264
Asset/(Deficit)	3,019	(5,664)

20 Employee benefits: pensions (continued)

Funding:

The most recent full actuarial valuations of the Schemes were undertaken as at March 2022 and resulted in combined assessed deficits of £49.7 million on the 'Technical Provisions' basis. On the basis of these full valuations, the Trustees of the UK Schemes, having consulted with the Group, agreed to make a lump sum contribution to the scheme of £67.0 million on 29 December 2022 in lieu of the remaining contributions that would otherwise have been due under the existing recovery plan from the 31 March 2019 valuations. The sum paid also represented the value of the deficit on the more prudent 'Long Term Objective' basis. 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.

Sensitivity analysis

The sensitivities of the Company's net balance	ce sheet to the principal assumptions are:	2022	2021
		Increase effect	Increase effect
	Change in assumption	£000	£000
			•
Discount rate	Decrease by 0.1%	399	805
Inflation	Increase by 0.1%	162	336
Mortality - post retirement	Pensioners live 1 year longer	957	1,939

These sensitivities have been calculated to show the movement in the net balance sheet in isolation, and assuming no other changes in market conditions at the accounting date. This is unlikely in practice - for example, a change in discount rate is unlikely to occur without any movement in the value of the assets held by the Company's schemes.

Defined contribution plans

The Company operates a defined contribution pension plan (the Morgan Group Personal Pension Plan). The total Company expense relating to this plan in 2022 was £227,000 (2021: £188,000).

Total pension contributions outstanding at the year end was £Nil (2021: £Nil).

Notes (continued)

21 Share-based payments

Certain employees of the Company participate in various share option programmes that allow Morgan Group employees to acquire shares in the ultimate parent company. Under the Morgan Advanced Materials plc Long-Term Incentive Plan ('LTIP') awards of shares are made or have been made to various key executives. The ultimate parent company also maintains a UK all-employee Sharesave scheme ('Employee Sharesave Scheme 2004'). The grant date fair value of options granted to employees is is recharged by the ultimate parent company, with a corresponding entry in the Company's profit and loss account. The amount recognised as an expense is adjusted to reflect the actual number of share options for which the related service and non-market vesting conditions are met.

In the year ended 31 December 2022, the Company has recongised expenses in the profit and loss account related to share-based payments of £191,000 (2021: £54,000).

The 2022 consolidated financial statements of Morgan Advanced Materials plc gives full information on the terms and conditions applying to share options outstanding at 31 December 2022.

22 Related party transactions

There were no related party transactions during the year ended 31 December 2022.

During the year ended 31 December 2021, the company sold goods and services to its associate, Jemmtec Limited up to the 27th April 2021, to a value of £22,000. Amounts receivable from Jemmtec Limited was £4,000 as at the year ended 31 December 2021.

During the year ended 31 December 2021, the company purchased goods and services from its associate, Jemmtec Limited, to a value of £4,000. Amounts payable to Jemmtec Limited was £1,000 at the year end.

On 27 April 2021 Thermal Ceramics UK Limited sold it's 35% equity stake in Jemmtec Limited.

23 Ultimate parent company and parent undertaking of larger group of which the company is a member

The Directors regard Morgan Europe Holding Limited, incorporated in England and Wales, as being the Company's immediate parent undertaking and Morgan Advanced Materials plc, incorporated in England and Wales, the ultimate parent undertaking. The smallest and largest group in which the results of the Company are consolidated is that headed by Morgan Advanced Materials plc. The Consolidated accounts of Morgan Advanced Materials plc are available to the public and may be obtained from its registered office situated at York House, Sheet Street, Windsor, Berkshire SL4 1DD.

24 Subsequent events

The Morgan Group, including the Company, 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, with the Company now being operational.

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. Good relationships have been maintained with customers and delays were kept to a minimum. The Directors are confident that this does not impact the going concern status of the Company.

There were no other reportable subsequent events following the balance sheet date.