Thermal Ceramics UK Limited

Directors' report and financial statements

Registered number

00890443

For the year ended 31 December 2018

Contents

Strategic report

Principal activities

The Company's principal activities are the sale of specialist thermal ceramic materials for a variety of demanding markets. There have not been any significant changes in the Company's principal activities in the year under review.

Financial Performance

Turnover has increased from 2017 by 3.4% with sales of £11,911,000 being posted. Sales into Europe (including the UK) remain the core of the Company territories at 96.5%. Operating loss has increased by £610,000. This is partly commensurate with an increase in the Research and Development costs being retained within the Company, high costs due to movement in exchange rates and an impairment loss with respect to an asset no longer in use. The Company therefore made a loss after tax of £1,238,000 for the year of 2018.

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 Company in the medium to long-term. This research and development activity has resulted in a number of improvements to existing products including our Superwool and Dense Castables product ranges.

The balance sheet on page 7 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 have reviewed the potential impact of the UK's exit from the EU, particularly with regard to the imposition of tariffs that may cause an increase in prices. It has taken action principally by negotiating price increases with customers and increased stock levels post year-end

The Company's business may be affected by fluctuations in the price and supply of key raw materials, although purchasing policies and practices seek to mitigate, where practicable, such risks.

The Company is a member of Morgan Group's multi-employer UK defined benefit pension plan which is currently in deficit. 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 Company's share of any deficit-reducing contributions made into the plan could materially impact the Company's trading results.
The Company has no loan obligations and has access to its ultimate parent company's overdraft facility when required.

By order of the board

Matthew J Price

MJ Price
Director
24th September 2019

Directors' report

The Directors present their annual report and audited financial statements for the year ended 31 December 2018.

Reasearch 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 £3,531,000 (2017:£3,572,000), of which £2,054,000 (2017:£2,360,000) 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:

Mr R A Pollard (Appointed 18 January 2019)
Dr M G Thomas (Resigned 18 January 2019)
Mr K C Dodd (Resigned 26 January 2018)
Mr M J Price
Mr A R Bloomer (Resigned 18 January 2019)

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

Employees

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.

Environment

The Company recognises the importance of its environmental responsibilities, monitors its impact on the environment and designs and implements policies to mitigate any adverse impact that might be caused by its activities. The Company operates in accordance with Morgan Group policies, as noted in Morgan Group's 2018 Annual Report, which does not form part of this Report. Initiatives aimed at minimising the Company's impact on the environment include safe disposal of manufacturing waste, recycling and reducing energy consumption.

Disclosure of information to auditor

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.

Dividend

The Directors do not recommend the payment of a dividend (2017: £nil).

Auditor

Pursuant to Section 487 of the Companies Act 2006, the auditor will be deemed to be reappointed and KPMG LLP will therefore continue in office.

By order of the board

Matthew Price

MJ Price
Director
Tebay Road
Bromborough
Wirral
Merseyside
CH62 3PH
24th September 2019

Statement of directors' responsibilities in respect of the Strategic report, Directors' report and the financial statements

The directors are responsible for preparing the Strategic Report, the Directors' 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 they have elected to prepare the financial statements in accordance with UK accounting standards and applicable law (UK Generally Accepted Accounting Practice), 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 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;
- assess the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

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 responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the company and to prevent and detect fraud and other irregularities.

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

Opinion

We have audited the financial statements of Thermal Ceramics UK Limited ("the company") for the year ended 31 December 2018 which comprise the Profit and loss account and other comprehensive income, Balance sheet, Statement of Changes in Equity and related notes, including the accounting policies in note 1.

In our opinion the financial statements:

- give a true and fair view of the state of the company's affairs as at 31 December 2018 and of its loss for the year then ended;
- have been properly prepared in accordance with UK accounting standards, including FRS 101 *Reduced Disclosure Framework*; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the company in accordance with, UK ethical requirements including the FRC Ethical Standard. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

The impact of uncertainties due to the UK exiting the European Union on our audit

Uncertainties related to the effects of Brexit are relevant to understanding our audit of the financial statements. All audits assess and challenge the reasonableness of estimates made by the directors and the appropriateness of the going concern basis of preparation of the financial statements. All of these depend on assessments of the future economic environment and the company's future prospects and performance.

Brexit is one of the most significant economic events for the UK, and at the date of this report its effects are subject to unprecedented levels of uncertainty of outcomes, with the full range of possible effects unknown. We applied a standardised firm-wide approach in response to that uncertainty when assessing the company's future prospects and performance. However, no audit should be expected to predict the unknowable factors or all possible future implications for a company and this is particularly the case in relation to Brexit.

Going concern

The directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the company or to cease its operations, and as they have concluded that the company's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over its ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

We are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least a year from the date of approval of the financial statements. In our evaluation of the directors' conclusions, we considered the inherent risks to the company's business model, including the impact of Brexit, and analysed how those risks might affect the company's financial resources or ability to continue operations over the going concern period. We have nothing to report in these respects.

However, as we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the company will continue in operation.

Strategic report and directors' report

The directors are responsible for the strategic report and the directors' report. Our opinion on the financial statements does not cover those reports and we do not express an audit opinion thereon.

Our responsibility is to read the strategic report and the directors' report and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work:

- we have not identified material misstatements in the strategic report and the directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Matters on which we are required to report by exception

Under the Companies Act 2006 we are required to report to you 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 these respects.

Directors' responsibilities

As explained more fully in their statement set out on page 3, the directors are responsible for: the preparation of the financial statements and for being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; 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 they either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

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 our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not 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 aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

The purpose of our audit work and to whom we owe our responsibilities

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.

N Davies

Nicola Davies (Senior Statutory Auditor)
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
KPMG LLP
One Snowhill
Snow Hill Queensway
Birmingham
B4 6GH
24th September 2019

Profit and loss account and other comprehensive income

for the year ended 31 December 2018

	Note		2018		2017
			£000		£000
Turnover	2		11,911		11,521
Change in stocks of finished goods and work in progress		(9,334)		(8,919)	
Staff costs	5	(3,204)		(3,743)	
Past service credit	6	800		-	
Depreciation and other amounts written off tangible and intangible fixed assets	3	(829)		(474)	
Other operating income		-		619	
Other operating expenses		(950)		-	
			(13,517)		(12,517)
Operating loss			(1,606)		(996)
Interest receivable and similar income	7		162		157
Interest payable and similar expense	8		(408)		(502)
Loss before taxation			(1,852)		(1,341)
Tax on loss	9		614		(3)
Loss for the financial year			(1,238)		(1,344)
Other comprehensive income					
Items that are or may be recycled subsequently to profit or loss:					
Net change in fair value of cash flow hedges recycled to profit or loss			(16)		16
Items that will not be reclassified subsequently to profit or loss:					
Remeasurement gain on defined benefit plans			1,311		982
Other comprehensive income for the year, net of income tax			1,295		998
Total comprehensive income for the year			57		(346)

The notes on pages 9 to 33 form part of these financial statements.

Balance sheet
at 31 December 2018

	Note		**2018**		2017
			£000		£000
Fixed assets					
Tangible assets	*10*		**2,063**		2,465
Intangible assets	*11*		**300**		460
Investments	*12*		**4,500**		4,500
			6,863		7,425
Current assets					
Stocks	*13*	**686**		805	
Debtors (including £5,000,000 (2017: £5,000,000) due after more than one year)	*14*	**13,811**		14,837	
			14,497		15,642
Creditors: (amounts falling due within one year)	*15*		**(12,566)**		(11,330)
Net current assets			**1,931**		4,312
Total assets less current liabilities			**8,794**		11,737
Provisions for liabilities					
Other provisions	*16*		**(337)**		(337)
Pension liability	*19*		**(16,021)**		(19,021)
Net liabilities			**(7,564)**		(7,621)
Capital and reserves					
Called up share capital	*17*		**26,650**		26,650
Revaluation reserve			**154**		160
Other reserves			**-**		16
Profit and loss account			**(34,368)**		(34,447)
Shareholder's deficit			**(7,564)**		(7,621)

The notes on pages 9 to 33 form part of these finanical statements.

These financial statements were approved by the board of Directors on 24th September 2019 and were signed on its behalf by:

Matthew Price

MJ Price
Director
24th September 2019

Statement of changes in equity
for the year ended 31 December 2018

	Called up share capital	Revaluation reserve	Other Reserves	Profit and loss account	Total equity
	£000	£000		£000	£000
Balance at 1 January 2017	26,650	166	-	(34,091)	(7,275)
Loss for the year	-	-	-	(1,344)	(1,344)
Other comprehensive income	-	-	16	982	998
Total comprehensive income for the year	-	-	16	(362)	(346)
Transfers	-	(6)	-	6	-
Balance at 31 December 2017	26,650	160	16	(34,447)	(7,621)
Loss for the year	-	-	-	(1,238)	(1,238)
Other comprehensive income	-	-	(16)	1,311	1,295
Total comprehensive income for the year	-	-	(16)	73	57
Transfers	-	(6)	-	6	-
Balance at 31 December 2018	26,650	154	-	(34,368)	(7,564)

The notes on pages 9 to 33 form part of these finanical 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 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 EU ('Adopted IFRSs'), but makes amendments where necessary in order to comply with Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

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 Quadrant, 55-57 High Street, Windsor, Berkshire, SL4 1LP.

In 2018 the following amendments had been endorsed by the EU, became effective and therefore were adopted by the company:

- IFRS 15 Revenue from Contract with Customers
- IFRS 9 Financial Instruments

The above standards have not had a material impact on the Financial Statements.

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.

Measurement convention

The financial statements are prepared on the historical cost basis.

Going concern

Notwithstanding net liabilities of £7,564,000, principally resulting from the net deficit on the pension scheme, and an operating loss of £1,606,000 as at December 2018, the financial statements have been prepared on a going concern basis which the directors consider to be appropriate for the following reasons.

The directors have prepared cash flow forecasts for a period of 12 months from the date of approval of these financial statements which indicate that, taking account of reasonably possible downsides, the company will have sufficient funds, through its overdraft facility arranged by its ultimate parent company, Morgan Advanced Materials plc, to meet its liabilities as they fall due for that period.

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 the period covered by the forecasts. As with any company placing reliance on other group entities for financial support, the directors acknowledge that there can be no certainty that this support will continue although, at the date of approval of these financial statements, they have no reason to believe that it will not do so.

Consequently, the directors are confident that the company will have sufficient funds to continue to meet its liabilities as they fall due for at least 12 months from the date of approval of the financial statements and therefore have prepared the financial statements on a going concern basis.

Notes
(forming part of the financial statements)

1 Accounting policies

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 10%

No depreciation is provided on freehold land

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.

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 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.

Notes *(continued)*

1 Accounting policies (continued)

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 raw materials, consumables and goods purchased for resale, the weighted average purchase price is used. For work in progress and finished goods cost is taken as production cost, which includes an appropriate proportion of attributable overheads.

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.

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.

Notes *(continued)*

1 Accounting policies (continued)

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.

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. 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 recognised as an employee expense with a corresponding increase in equity. 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

The investment in associate is stated at cost less any amounts written off.

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 liabilities

The company recognises and measures 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 19.

Notes *(continued)*

2 Analysis of turnover

	2018	2017
By activity:	**£000**	£000
Ceramics & glass	**3,243**	2,491
Iron & steel	**2,735**	3,101
Other metals	**2,212**	2,513
Aerospace	**936**	565
Consumer goods	**731**	699
Building and construction	**473**	607
Other	**1,581**	1,545
	11,911	11,521

	2018	2017
By geographical market:	**£000**	£000
Europe	**11,494**	11,174
The Americas	**109**	73
Asia	**4**	184
Africa and Middle East	**304**	90
	11,911	11,521

Notes *(continued)*

3 Notes to the profit and loss account

	2018 Total £000	2017 Total £000
Loss before taxation is stated after charging		
Depreciation and other amounts written off tangible and intangible fixed assets:		
Owned	**829**	474
Auditor's remuneration		
Audit of these financial statements	**21**	19
Research and development expenditure	**3,642**	3,572
Operating lease rentals:		
Land and buildings	**-**	-
Plant and machinery	**28**	31

Amounts receivable by the Company's auditor and its associates in respect of services to the Company and its associates, other than the audit of the Company's financial statements, have not been disclosed as the information is required instead to be disclosed on a consolidated basis in the consolidated financial statements of the Company's ultimate parent, Morgan Advanced Materials plc.

Notes *(continued)*

4 Remuneration of Directors

	2018	2017
	£000	£000
Directors' emoluments	**13**	44
Company contributions to money purchase pension schemes	**1**	2
	14	46

	Numbers of Directors	
	2018	2017
Retirement benefits are accruing to the following number of directors under:		
Money purchase schemes	**2**	3
	2	3

The emoluments of M. G. Thomas were paid by other Group companies. He performed no qualifying services for the company in respect of the current or preceding financial years and therefore no emoluments were recharged to Thermal Ceramics UK Limited.
As of the 1st April 2017 A. R. Bloomer no longer performed qualifying services for the company.

Notes *(continued)*

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:

	2018	2017
	Number	Number
Sales and marketing	**11**	12
Research and development	**28**	28
Logistics/warehouse	**3**	3
IT	**3**	3
Administration	**14**	13
	59	59

The aggregate payroll costs of these persons were as follows:

	2018	2017
	£000	£000
Wages and salaries	**2,774**	3,077
Social security costs	**289**	304
Other pension costs	**141**	362
	3,204	3,743

Notes *(continued)*

6 Pension Scheme Past Service Credit

	2018	2017
	£000	£000
IAS 19 - Early and Late Retirement Adjustment	**(1,067)**	-
IAS 19 - Impact of Removing GMP Inequalities	**267**	-
	(800)	-

Early and Late Retirement Adjustment

During 2018, the Group reviewed with the Trustees of Morgan Pension Scheme the factors applied on early and late retirement, and clarified the practice regarding the calculation of pension payments with members who elected to retire other than at the normal date of retirement. This was effected via a Deed of Amendment. This change resulted in a net gain of £1.1 million in the income statement.

Adjustment for Guaranteed Minimum Pensions (GMPs)

On 26 October 2018, the High Court ruled that the Trustee of the Lloyds Banking Group pension schemes needed to remove the inequalities in pension scheme benefits that arise from unequal GMPs. We have included a charge of £0.3 million to reflect the potential cost of removing the GMP inequalities for the Group's UK defined benefit pension schemes in the income statement.

The net impact of these pension adjustments is a credit to the income statement of £0.8 million.

Notes *(continued)*

7 Interest receivable and similar income

	2018	2017
	£000	£000
Interest receivable from Group undertakings	**162**	157
	162	157

Notes *(continued)*

8 Interest payable and similar expense

	2018	2017
	£000	£000
Interest payable to third parties	(8)	(2)
Net interest on defined benefit liabilities	(400)	(500)
	(408)	(502)

Notes *(continued)*

9 Taxation

Analysis of charge in year

		2018		2017
		£000		£000
UK corporation tax				
Current tax on income for the year	(737)		(153)	
Adjustments in respect of prior years	123		156	
	(614)		3	
Total current tax		(614)		3
Deferred tax				
Origination & reversal of temporary differences	-		-	
Total deferred tax	-		-	
Tax on loss		(614)		3

Reconciliation of effective tax rate

The tax (credit)/charge for the period is higher (2017: higher) than the standard rate of corporation tax in the UK of 19.00% (2017: 19.25%). The differences are explained below:

	2018	2017
	£000	£000
Tax reconciliation		
Loss before tax	(1,852)	(1,344)
	(1,852)	(1,344)
Current tax at 19.00% (2017: 19.25%)	(351)	(259)
Effects of:		
Expenses not deductible for tax purposes	122	43
Deferred tax not recognised	(508)	63
Adjustments to tax charge in respect of previous years	123	156
Total tax (credit)/charge (see above)	(614)	3

Reductions in the UK corporation tax rate from 20% to 19% (effective from 1 April 2017) and to 18% (effective 1 April 2020) were substantively enacted on 26 October 2015, and an additional reduction to 17% (effective 1 April 2020) was substantively enacted on 6 September 2016. This will reduce the company's future current tax charge accordingly.

Notes *(continued)*

10 Tangible fixed assets

	Land and buildings £000	Plant and machinery £000	Total £000
Cost or Valuation			
At beginning of year	2,774	3,970	6,744
Additions	20	236	256
Disposals	-	-	-
At end of year	**2,794**	**4,206**	**7,000**
Depreciation and impairment			
At beginning of year	1,363	2,916	4,279
Disposals	-	-	-
Depreciation charge for year	103	198	301
Impairment losses	-	357	357
At end of year	**1,466**	**3,471**	**4,937**
Net book value			
At 31 December 2018	**1,328**	**735**	**2,063**
At 31 December 2017	1,411	1,054	2,465

An impairment loss of £357,000 has been recognised in profit or loss during the period within depreciation and amounts written off tangible and intangible fixed assets. This was recognised with respect to an asset that is no longer in use by the Company.

Notes *(continued)*

11 Intangible fixed assets

	Technology related intangible assets
	£000
Cost	
At beginning of year	872
Additions	11
At end of year	**883**
Amortisation	
At beginning of year	412
Charge for year	171
At end of year	**583**
Net book value	
At 31 December 2018	**300**
At 31 December 2017	460

Amortisation charge

The amortisation charge is recognised in the following line item in the profit and loss account:

	2018	2017
	£000	£000
Depreciation and other amounts written off tangible and intangible fixed assets	**171**	171

Notes *(continued)*

12 Investments in Related Parties

	Associate
	£000
Cost	
At beginning and end of year	4,500
Provisions	
At beginning and end of year	-
Net book value	
At 31 December 2017 and 2018	4,500

The investment represents a 35% shareholding in Jemmtec Limited.

	Country of Incorporation	Registered Office Address	% of Shares Owned
Undertakings Directly owned:			
Morganite Thermal Ceramics (Taiwan) Limited	Taiwan	c/o Baker & McKenzie, 15/f, 168 Tun Hwa North Road, Taipei 105, Taiwan, ROC	88%
Jemmtec Limited	UK	Magma Ceramics, Low Road, Earlsheaton, Dewsbury, West Yorkshire, WF12 8BU, United Kingdom	35%

Notes *(continued)*

13 Stocks

	2018	2017
	£000	£000
Finished goods and goods for resale	686	805
	686	805

The amount of stocks expensed to the profit and loss account in the year was £9,280,000. (2017 : £8,672,000)
The value of stocks written down and expensed in the profit and loss account amounted to £60,000. (2017:£50,000)

14 Debtors

	2018	2017
	£000	£000
Trade debtors	2,251	2,091
Amounts owed by Group undertakings	10,387	12,132
Taxation and social security	1,142	555
Derivative financial instruments	-	21
Other debtors	-	13
Prepayments and accrued income	31	25
	13,811	14,837
Due within one year	8,811	9,837
Due after more than one year	5,000	5,000

Debtors include amounts owed by Group undertakings of £5,000,000 (2017: £5,000,000) due after more than one year.
Interest has been charged on this loan at libor plus 2.8% during the year.

15 Creditors

	2018	2017
	£000	£000
Trade creditors	1,540	1,447
Amounts owed to Group undertakings	1,019	878
Bank overdraft	8,031	6,017
Other creditors	962	1,318
Accruals and deferred income	1,014	1,670
	12,566	11,330

Amounts owed to group undertakings are repayable on demand and no interest is charged.

Notes *(continued)*

16 Provisions for liabilities

	2018	2017
	£000	£000
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 exptected to be utilised within 2019.

Deferred Tax

At the end of the year there is an unprovided deferred tax asset of £3,561,000 (2017: £4,201,000) from unclaimed capital allowances. 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 17% substantively enacted at the balance sheet date.

17 Called up share capital

	Ordinary shares
In thousands of shares	2018
On issue at 1 January 2018 and 31 December 2018	**26,650**

	2018	2017
	£000	£000
Allotted, called up and fully paid		
Ordinary shares of £1 each	26,650	26,650

Notes *(continued)*

18 Commitments and contingent liabilities

Annual commitments under non-cancellable operating leases are as follows:

	2018	2017
	Other	Other
	£000	£000
Operating leases which expire:		
Within one year	**27**	26
In the second to fifth years inclusive	**62**	70
	89	96

The Company participates in a cash pooling arrangement provided by Barclays Bank plc with other UK Group Companies. As part of that pooling arrangement, the Company has provided a Guarantee for any liabilities of the other participating Companies to the bank, limited to the lower of:

a) an amount equal to the base currency amount of the total liabilities in the cash pool (Dec 2018:£37.7m); and

b) an amount equal to the base currency amount of such guarantor's own credit balance in the cash pool (Dec 2018: nil).

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.

Notes *(continued)*

19 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.

	2018	2017
Pension plans and employee benefits	**£000**	£000
Present value of funded defined benefit obligations	(55,800)	(60,800)
Fair value of plan assets	39,779	41,779
Net obligations	(16,021)	(19,021)
Movements in present value of defined benefit obligation		
At 1 January	(60,800)	(60,000)
Reallocation of defined benefit obligation	-	-
Current service cost	-	(200)
Interest cost	(1,400)	(1,500)
Remeasurement (losses)/gains:		
Changes in financial assumptions	3,400	(1,800)
Changes in demographic assumptions	400	900
Experience adjustments on benefit obligations	(200)	(400)
Benefits paid	2,000	2,200
Past service costs	800	-
Contributions by members	-	-
At 31 December	(55,800)	(60,800)
Movements in fair value of plan assets		
At 1 January	41,779	39,479
Reallocation of fair value of plan assets	-	-
Interest on plan assets	1,000	1,000
Remeasurement gains/(losses)	(2,300)	2,300
Contributions by employer	1,300	1,200
Contributions by members	-	-
Benefits paid	(2,000)	(2,200)
Administrative expenses	-	-
At 31 December	39,779	41,779
Actual return on assets	(1,300)	3,300
Pension plans and employee benefits	**£000**	£000
Expense recognised in the consolidated income statement		
Current service cost	-	(200)
Administrative expenses	-	-
Net interest on net defined benefit liability	(400)	(500)
Total expense	(400)	(700)

The fair values of the plan assets were as follows:

	£000	£000
Equities and growth assets	9,500	16,000
Bonds	14,700	9,300
Matching insurance policies	13,500	14,500
Other	2,079	1,979
Total	39,779	41,779

Notes *(continued)*

19 Employee benefits: pensions (continued)

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:

	2018
Assumptions:	**%**
Inflation (RPI & CPI)	**3.20/2.10**
Discount rate	**2.70**
Pensions increase	**3.00/3.10/3.70**
Salary increase	**n/a**
Mortality - post-retirement:	
Life expectancy of a male aged 60 in accounting year	**26.5 years**
Life expectancy of a male aged 60 in accounting year + 20	**28.0 years**

History of the plans

The history of the plans are as follows:

Balance Sheet	2018	2017
	£000	£000
Present value of the defined benefit obligation	(55,800)	(60,800)
Fair value of plan assets	39,779	41,779
Deficit	(16,021)	(19,021)

Funding:

The most recent full actuarial valuations of the UK Schemes were undertaken as at March 2016 and resulted in combined assessed deficits of £132 million. On the basis of these full valuations, the Trustees of the UK Schemes, having consulted with the Group, agreed past service deficit recovery payments totalling £12 million a year from April 2017, increasing by 2.75% pa until 2025, with further payments to Morgan Pension Scheme for 2026 and 2027 and contributions in respect of future service as accrued. New full valuations are due with effective dates of March 2019 and the outcome of those consultations will determine the Group's future contribution requirements, with any new deficit arising needing to be met through the payment of additional contributions.

Sensitivity analysis

The sensitivities of the Company's net balance sheet to the principal assumptions are:

	Change in assumption	2018 Increase effect £000	2017 Increase effect £000
Discount rate	Decrease by 0.1%	800	1,000
Inflation	Increase by 0.1%	400	500
Mortality - post retirement	Pensioners live 1 year longer	1,500	1,700

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 2018 was £141,000 (2017: £88,000). Total pension contributions outstanding at the year end amounted to £23,000 (2017: £7,000).

Notes *(continued)*

20 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 recognised as an employee expense, with a corresponding increase in equity, over the period that the employees become unconditionally entitled to the options. 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.

The 2018 consolidated financial statements of Morgan Advanced Materials plc gives full information on the terms and conditions applying to share options outstanding at 31 December 2018.

Notes *(continued)*

21 Related party transactions

During the year ended 31 December 2018, the company sold goods and services to its associate, Jemmtec Limited, to a value of £9,492 (2017: £9,020). Amounts receivable from Jemmtec Limited was £1,357 (2017: £1,033) at the year end.

During the year ended 31 December 2018, the company purchased goods and services from its associate, Jemmtec Limited, to a value of £4,041 (2017: £167). Amounts payable to Jemmtec Limited was £0 (2017: £0) at the year end.

22 Derivative financial assets and liabilities

	2018	2017
	£000	£000
Derivative financial assets		
Forward foreign exchange contracts designated as cash flow hedges	-	21
	-	**21**

Fair values are measured using a hierachy where the inputs are:

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities,

Level 2 - inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly,

Level 3 - inputs for the assets or liability that are not based on observable market data (unobservable inputs).

The derivative financial assets and liabilities are all measured using Level 2 inputs. The fair value of forward foreign exchange contracts is estimated by discounting the future cash flows using appropriate market sourced data at the balance sheet date.

Notes *(continued)*

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

The Directors regard Morgan Advanced Materials plc, incorporated in England and Wales, as being the Company's ultimate parent undertaking. The Annual Report and Accounts of Morgan Advanced Materials plc may be obtained from its registered office situated at Quadrant, 55-57 High Street, Windsor, Berkshire SL4 1LP.