Registered number: 03053545

Carl Zeiss Microscopy Limited

Annual report and financial statements
for the year ended 30 September 2017





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Company information

Directors

P Adderley M Albiez D Aldridge A McBride

Company secretary

V Lynch

Registered number

03053545

Registered office

509 Coldham's Lane

Cambridge Cambridgeshire CB1 3JS

Independent auditor

Ernst & Young LLP One Cambridge Business Park

Cambridge CB4 0WŽ

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Strategic report for the year ended 30 September 2017

The directors present their strategic report of the company for the year ended 30 September 2017.

Business review

The principal activity of the company is the manufacture and sale of electron microscopes and related components and accessories.

In early 2016, the company started the process of expanding the range of electron microscopes manufactured by transferring products previously manufactured in another Carl Zeiss group company. This also started a process towards contract manufacture to Carl Zeiss Microscopy Limited. The successful manufacture and shipment of these products in the second half of the year started to impact the results and structure of the company for the year ended 30 September 2017. This process of transfer will continue into the year ended September 2018 with the company continuing to expand the range of electron microscopes manufactured for Carl Zeiss as a contract manufacturer.

Principal risks and uncertainties

Competitive pressures in major markets from international companies is an on-going risk for the company. This is compounded by increasing budget restrictions leading to price pressure. This, in turn, can lead to the company losing sales to its key competitors, especially those that are low cost. The company manages this risk by implementing lean manufacturing methodology and continuously reducing its cost base. This cost base relies on good supply chain management and building strong partnerships with key strategic suppliers.

Financial risk management

The company's operations expose it to certain financial risks including foreign currency risk, credit risk and interest rate risk.

The company's sales overseas are made mostly in foreign currency. The company participates in the Group Cash Management and Treasury function, where risks relating to the US Dollar and the Euro are managed.

Additionally, the company employs various procedures to keep customer credit risk to a minimum. These include using letters of credit, company monitoring agencies and using appropriate terms of sale, such as prepayment, where deemed necessary.

To reduce interest rate risk, the group aggregates its constituent companies' cash holdings for purposes of effective treasury control.

Strategic report for the year ended 30 September 2017

Financial key performance indicators

The Board uses revenue and earnings before interest (inclusive of finance cost) and tax (EBIT) as its main indicators.

Revenue increased £12,475,000 compared to the prior year.

EBIT increased from £6,078,000 to £9,835,000 and was 20% of revenue. The Board considers this year's profitability to be an excellent result.

This report was approved by the board on

19 July 2018 and signed on its behalf.

D Aldridge **Director**

Directors' report for the year ended 30 September 2017

The directors present their report and the audited financial statements of the company for the year ended 30 September 2017.

Business review

The business review can be found in the strategic report on page 1.

Results and dividends

The profit for the year, after taxation, amounted to £7,657,000 (2016: £3,290,000).

During the year, the directors paid an interim dividend of £1,000,000 (2016: £3,500,000).

The directors do not recommend payment of a final dividend (2016: £Nil).

Going concern

The financial statements have been prepared on a going concern basis as, after making appropriate enquiries, the directors have a reasonable expectation that the company has adequate resources to continue in operational existence for the foreseeable future at the time of approving the financial statements.

Future developments

Continued product development and investment in research and development in the major product lines should strengthen the company position in future years.

Research and development activities

The company is committed to maintaining its significant research and development activities, which result in new products and improvements in existing products. Research and development projects currently exist in all product areas.

Directors

The directors who held office during the year and up to the date of signing the financial statements were:

P Adderley
M Albiez (appointed 7 September 2017)
D Aldridge (appointed 1 June 2018)
A McBride
R Taylor (resigned 1 June 2018)
Dr M Weber (resigned 7 September 2017)

Directors' report (continued) for the year ended 30 September 2017

Directors' responsibilities statement

The directors are responsible for preparing the strategic report, the directors' report and the audited financial statements of the company in accordance with applicable law and regulations.

Company law requires the directors to prepare audited financial statements of the company for each financial year. Under that law the directors have prepared the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101). 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 audited financial statements of the company, 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, including FRS 101, have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the audited financial statements of the company 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 to enable them to ensure that the audited financial statements of the company 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.

Qualifying third party indemnity provisions

The company has granted an indemnity to one or more of its directors against liability in respect of proceedings brought by third parties, subject to the conditions set out in the Companies Act 2006. Such qualifying third party indemnity provision remains in force as at the date of approving the directors' report.

Directors' report (continued) for the year ended 30 September 2017

Disclosure of information to auditor

Each of the persons who are directors at the time when this directors' report is approved has confirmed that:

- so far as the director is aware, there is no relevant audit information of which the company's auditor is unaware; and
- the director has taken all the steps that ought to have been taken as a director in order to be aware of any relevant audit information and to establish that the company's auditor is aware of that information.

Auditor

The auditor, Ernst & Young LLP, will be proposed for reappointment in accordance with section 485 of the Companies Act 2006.

This report was approved by the board on 19 July 2018

and signed on its behalf.

D Aldridge Director

Independent auditor's report to the members of Carl Zeiss Microscopy Limited

Opinion

We have audited the financial statements of Carl Zeiss Microscopy Limited for the year ended 30 September 2017 which comprise the Profit and Loss Account, the Statement of Comprehensive income, the Balance Sheet, the Statements of Changes in Equity and the related notes1 to 23, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice) including FRS 101 'Reduced Disclosure Framework'.

In our opinion the financial statements:

- give a true and fair view of the company's affairs as at 30 September 2017 and of its profit for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice 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 under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report below. 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 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

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Independent auditor's report to the members of Carl Zeiss Microscopy Limited (continued)

Other information

The other information comprises the information included in the annual report set out on pages 1 to 5, other than the financial statements and our auditor's report thereon. The directors are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in this report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, 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 audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report in this regard.

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 directors' report have been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

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 material misstatements in the strategic report or directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us 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.

Independent auditor's report to the members of Carl Zeiss Microscopy Limited (continued)

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 4, 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 Financial Reporting Council's website at: https://www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of 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.

Rachel Wilden (Senior statutory auditor)

Chost a Young LLP

for and on behalf of Ernst & Young LLP, Statutory Auditor

Cambridge, United Kingdom

Date:

Profit and loss account for the year ended 30 September 2017

	Note	2017 £000	2016 £000
Turnover	4	49,593	37,118
Change in stocks of finished good and work in progress		442	(24)
Other operating income	5	168	178
Raw materials and consumables		(27,406)	(20,239)
Other external charges	_	(6,901)	(5,442)
Gross profit	_	15,896	11,591
Staff costs	6	(5,556)	(5,075)
Depreciation and amortisation		(505)	(438)
Operating profit	8	9,835	6,078
Interest receivable and similar income		5	29
Other finance costs	9	(399)	(1,952)
Profit on ordinary activities before tax	_	9,441	4,155
Tax on profit on ordinary activities	10	(1,784)	(865)
Profit for the financial year	_	7,657	3,290
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The notes on pages 13 to 32 form part of these financial statements.

Statement of comprehensive income for the year ended 30 September 2017

	Note	2017 £000	2016 £000
Profit for the financial year	_	7,657	3,290
Other comprehensive income:			
Actuarial gain/(loss) on defined benefit schemes Deferred tax (charge)/credit attributable to actuarial gains/(losses) Current tax credit attributable to actuarial gains/(losses)	20	1,907 (406) 94	(2,985) 370 95
Total other comprehensive income/(loss)		1,595	(2,520)
Total comprehensive income for the year	-	9,252	770

The notes on pages 13 to 32 form part of these financial statements.

Balance sheet as at 30 September 2017

	Note	2017 £000	2017 £000	2016 £000	2016 £000
Fixed assets					
Intangible assets	12		19		18
Tangible assets	13		1,573		1,452
			1,592		1,470
Current assets					
Stocks	14	11,854		7,569	
Debtors	15	22,766		17,822	
Cash at bank and in hand	_	251		511	
	-	34,871		25,902	
Creditors: amounts falling due within one year	16	(9,272)		(6,283)	
Net current assets	_		25,599		19,619
Total assets less current liabilities Provisions for liabilities		_	27,191		21,089
Provisions	18		(337)		(94)
Net assets excluding pension liability			26,854		20,995
Pension liability	20	_	(2,911)	· 	(5,304)
Net assets		_	23,943	_	15,691
Capital and reserves		-		_	`,
Called up share capital	19		2,700		2,700
Share premium account			1,670		1,670
Retained earnings			19,573		11,321
Total equity			23,943		15,691

The financial statements were approved and authorised for issue by the board and were signed on its behalf on

19 JULY 2018

D Aldridge Director

Statement of changes in equity for the year ended 30 September 2017

At 1 October 2016	Called up share capital £000 2,700	Share premium account £000 1,670	Retained earnings £000 11,321	Total equity £000 15,691
Profit for the financial year	-	-	7,657	7,657
Actuarial gain on pension scheme	-	-	1,907	1,907
Tax on gain on pension scheme	-	-	(312)	(312)
Dividends	-	-	(1,000)	(1,000)
At 30 September 2017	2,700	1,670	19,573	23,943

Statement of changes in equity for the year ended 30 September 2016

·	Called up share capital £000	Share premium account £000	Retained earnings £000	Total equity £000
At 1 October 2015	2,700	1,670	14,051	18,421
Profit for the financial year	-	-	3,290	3,290
Actuarial loss on pension scheme	-	-	(2,985)	(2,985)
Tax on loss on pension scheme	-	-	465	465
Dividends	-	-	(3,500)	(3,500)
At 30 September 2016	2,700	1,670	11,321	15,691

Share premium account

The share premium account represents the difference between the par value of the shares issued and the subscription or issue price.

Retained earnings

Retained earnings refer to the amount of net earnings not paid out as dividends, but retained by the company to be reinvested in its core business.

The notes on pages 13 to 32 form part of these financial statements.

Notes to the financial statements for the year ended 30 September 2017

1. General information

The principal activity of Carl Zeiss Microscopy Limited ("the company") is the manufacture and sale of electron microscopes and related components and accessories.

The company is a private company limited by shares and is incorporated and domiciled in England. The address of its registered office is 509 Coldham's Lane, Cambridge, Cambridgeshire, CB1 3JS.

2. Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation of financial statements

The financial statements have been prepared on a going concern basis under the historical cost convention, in accordance with Financial Reporting Standard 101 'Reduced Disclosure Framework' (FRS 101) and the Companies Act 2006.

The preparation of financial statements in conformity with FRS 101 requires the use of certain critical accounting estimates. It also requires management to exercise judgement in the process of applying the company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 3.

The following disclosure exemptions from the requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of:
 - paragraph 79(a)(iv) of IAS 1;
 - paragraph 73(e) of IAS 16 Property, plant and equipment;
 - paragraph 118(e) of IAS 38 Intangible assets (reconciliation's between the carrying amount at the beginning and end of the year);
- The following paragraphs of IAS 1, 'Presentation of financial statements:
 - 10(d) (statement of cash flows);
 - 10(f) (a statement of financial position as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in the financial statements);
 - 16 (statement of compliance with all IFRS);
 - 38A (requirement for minimum of two primary statements, including cash flow statements);
 - 38B to D (additional comparative information);
 - 40A to D (requirements for a third statement of financial position);
 - 111 (cash flow statement information);
 - 134 to 136 (capital management disclosures);
- IAS 7 'Statement of cash flows';
- Paragraph 30 and 31 of IAS 8 'Accounting policies, changes in accounting estimates and errors' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but not yet effective);

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.1 Basis of preparation of financial statements (continued)

- Paragraph 17 of IAS 24 'Related party disclosures' (key management compensation);
- The requirements in IAS 24 'Related party disclosures' to disclose related party transactions entered into between two or more wholly owned members of a group;
- IFRS 7, 'Financial Instruments: Disclosures'; and
- Paragraphs 134(d) to 134(f) and 135(c) to 135(e) of IAS 36 Impairment of assets.

For the purposes of FRS 101 reduced disclosure exemptions, equivalent disclosures are included in the publicly available consolidated financial statements of Carl Zeiss AG. See note 23 for details.

2.2 Turnover

Turnover is measured at the fair value of the consideration received or receivable and represents the amount receivable for goods supplied or services rendered, net of returns, discounts and rebates allowed by the company and value added taxes.

Sale of goods are recognised as at the date of delivery. Service related sales are recognised when the related work is performed or, in the case of long-term contracts, using a percentage completion method.

2.3 Operating leases

Rentals paid under operating leases are charged to the profit and loss account on a straight line basis over the term of the lease.

2.4 Research and development

(i) Research phase

As it is impossible to demonstrate whether or not a product or service at the research stage will generate any probable future economic benefit all expenditure incurred at the research stage is written off to the profit and loss account as an expense when incurred.

(ii) Development phase

Under IAS 38, an intangible asset arising from development is capitalised if an entity can demonstrate all of the following criteria:

- the technical feasibility of completing the intangible asset;
- intention to complete and use or sell the asset;
- ability to use or sell the asset;
- existence of a market or, if to be used internally, the usefulness of the asset;
- availability of adequate technical, financial, and other resources to complete the asset; and
- the cost of the asset can be measured reliably.

If any of the recognition criteria are not met then the expenditure is charged to the profit and loss account as incurred.

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.5 Employee benefits

The company provides a range of benefits to employees, including paid holiday arrangements, and defined benefit and defined contribution pension plans.

(i) Short term benefits

Short term benefits, including holiday pay and other similar non-monetary benefits, are recognised as an expense in the period in which the service is received.

(ii) Defined contribution pension plan

The company operates a defined contribution plan for its employees. A defined contribution plan is a pension plan under which the company pays fixed contributions into a separate entity. Once the contributions have been paid the company has no further payment obligations. The contributions are recognised as an expense in the statement of comprehensive income when they fall due. Amounts not paid are shown in accruals as a liability in the balance sheet. The assets of the plan are held separately from the company in independently administered funds.

(iii) Defined benefit pension plan

The company operates a defined benefit plan for certain employees. A defined benefit plan defines the pension benefit that the employee will receive on retirement, usually dependent upon several factors including but not limited to age, length of service and remuneration. A defined benefit plan is a pension plan that is not a defined contribution plan.

The asset/liability recognised in the balance sheet in respect of the defined benefit plan is the fair value of plan assets at the balance sheet date (if any) out of which the obligations are to be settled less the present value of the defined benefit obligation at the end of the balance sheet date.

The defined benefit obligation is calculated using the projected unit credit method. Annually the company engages independent actuaries to calculate the obligation. The present value is determined by discounting the estimated future payments using market yields on high quality corporate bonds that are denominated in sterling and that have terms approximating to the estimated period of the future payments ('discount rate').

The fair value of plan assets is measured in accordance with the FRS 101 fair value hierarchy and in accordance with the company's policy for similarly held assets. This includes the use of appropriate valuation techniques.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to other comprehensive income. These amounts together with the return on plan assets, less amounts included in net interest, are disclosed as other comprehensive income.

The cost of the defined benefit plan, recognised in statement of comprehensive income as employee costs, except where included in the cost of an asset, comprises:

- a) the increase in net pension benefit liability arising from employee service during the period; and
- b) the cost of plan introductions, benefit changes, curtailments and settlements.

The net interest cost is calculated by applying the discount rate to the net balance of the defined benefit obligation and the fair value of plan assets. This cost is recognised in the profit and loss account as a 'other finance expense/income'.

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.6 Foreign currencies

(i) Functional and presentational currency

The company's functional and presentational currency is the Pound sterling.

(ii) Transactions and balances

Monetary assets and liabilities denominated in foreign currencies are translated into sterling at rates of exchange ruling at the statement of financial position date.

Transactions in foreign currencies are translated into sterling at the rate ruling on the date of the transaction.

Exchange gains and losses are recognised in the profit and loss account.

2.7 Interest receivable

Interest income is recognised in the profit and loss account using the effective interest method.

2.8 Interest payable

Interest payable is recognised in the profit and loss account over the term of the debt using the effective interest method.

2.9 Current and deferred tax

The tax expense for the year comprises current and deferred tax. Tax is recognised in the profit and loss account, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case the tax is also recognised in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the statement of financial position date in the countries where the company operates and generates taxable income. Management periodically evaluates positions taken in tax returns in respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognised on temporary timing differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the statement of financial position date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.10 Intangible assets

Intangible assets are initially recognised at cost. After recognition, under the cost model, intangible assets are measured at cost less any accumulated amortisation and any accumulated impairment losses.

The estimated useful lives range as follows:

Software - 3 years

Amortisation is calculated on a straight line basis over the useful life of the asset and is charged to the profit and loss account.

2.11 Tangible fixed assets

Tangible assets are recognised at cost and subsequently stated at cost less depreciation. Depreciation is provided at rates calculated to write off the cost of fixed assets, less their estimated residual value.

The estimated useful lives range as follows:

Leasehold improvements - 10 years or the remaining period of the lease if

sooner

Plant and equipment - 3 - 10 years

Depreciation is charged to the profit and loss account.

2.12 Stocks

Stocks are stated at the lower of cost and net realisable value. Cost includes all costs incurred in bringing each product to its present location and condition. Raw materials, consumables and goods for resale comprise of purchase cost on a first-in, first-out basis. Work in progress and finished goods comprise of the cost of direct materials and labour plus attributable overheads, based on a normal level of activity.

Net realisable value is based on estimated selling price less any further costs expected to be incurred to completion or disposal. Provision is made for obsolete, slow-moving and defective items where appropriate.

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.13 Financial instruments

(i) Financial assets

Basic financial assets, including trade debtors, amounts owed by group undertakings and other debtors shown in note 15 are initially recognised at transaction price.

Such assets are subsequently carried at amortised cost using the effective interest method and at the end of each reporting period are assessed for objective evidence of impairment. If objective evidence of impairment is found, an impairment loss is recognised in the profit and loss account.

(ii) Financial liabilities

Basic financial liabilities, including trade creditors, amounts owed to group undertakings and other creditors shown in note 16 are initially recognised at transaction price and subsequently measured at amortised cost.

Financial liabilities are derecognised when the liability is extinguished, that is when the contractual obligation is discharged, cancelled or expires.

(iii) Offsetting

Financial assets and liabilities are offset and the net amount reported in the statement of financial position when there is an enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

2.14 Derivatives

The company has not applied hedge accounting and all derivatives are measured at fair value through profit and loss account.

2.15 Provisions for liabilities

Provisions are recognised when the company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated.

Estimated future costs of the warranty offered on instrument system sales are charged to the profit and loss account as the revenues derived from the related instrument system sales are recognised.

Notes to the financial statements for the year ended 30 September 2017

2. Summary of significant accounting policies (continued)

2.16 Called up share capital

Ordinary shares are classified as equity.

2.17 Dividends

Equity dividends are recognised when they become legally payable. Interim equity dividends are recognised when paid. Final equity dividends are recognised when approved by the shareholders at an annual general meeting. Dividends on shares recognised as liabilities are recognised as expenses and classified within interest payable.

3. Critical accounting estimates and judgements

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The company makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(i) Taxation

Determining income tax provisions involves judgements on the tax treatment of certain transactions. Deferred tax is recognised on tax losses not yet used on temporary differences where it is probable that there will be taxable income against which these can be offset. See note 10.

(ii) Useful economic lives of intangible and tangible assets

The annual depreciation charge for intangible and tangible assets is sensitive to changes in the estimated useful economic lives and residual values of the assets. The useful economic lives and residual values are re-assessed annually. They are amended when necessary to reflect current estimates, based on technological advancement, future investments, economic utilisation and the physical condition of the assets. See notes 12 and 13 for the carrying amount of the intangibles and tangibles respectively, and notes 2.10 and 2.11 for the useful economic lives for each class of assets.

(iii) Defined benefit pension scheme

The company has an obligation to pay pension benefits to certain employees. The cost of these benefits and the present value of the obligation depend on a number of factors, including; life expectancy, salary increases, asset valuations and the discount rate on corporate bonds. Management estimates these factors in determining the net pension asset/liability in the balance sheet. The assumptions reflect historical experience and current trends. See note 20 for the disclosures relating to the defined benefit pension scheme.

(iv) Provisions

The company makes an estimate of the present value of the warranty provision which relates to estimated future costs of the warranty offered on instrument system sales. The company assesses the valuation at each reporting date. See note 18.

Notes to the financial statements for the year ended 30 September 2017

4. Turnover

All of the company's turnover derives from the company's principal activity.

Turnover is derived entirely from the sale of goods.

The company has made use of the exemption, in paragraph 68(5), part 3 of schedule 1 of SI 2008/410, not to disclose the analysis of turnover by geographical market as, in the opinion of the directors, it would be seriously prejudicial to the interests of the company to do so.

5. Other operating income

	2017 £000	2016 £000
RDEC grant income Asset writebacks	168 -	168 10
	168	178

6. Employees

Staff costs, including directors' remuneration, were as follows:

	2017 £000	2016 £000
Wages and salaries	4,740	4,314
Social security costs	472	432
Cost of defined contribution pension scheme	344	329
	5,556	5,075

The average monthly number of employees, including the directors, during the year was as follows:

	2017	2016
	No.	No.
Production	27	33
Marketing and selling	16	14
Service and spares	7	10
Research and development	33	37
Administration	11	11
	94	105

Notes to the financial statements for the year ended 30 September 2017

7. Directors' remuneration

	2017 £000	2016 £000
Emoluments Pension contributions to defined contribution schemes	325 18	304 18
•	343	322

The aggregate emoluments of the highest paid director were £174,076 (2016: £159,229) and company pension contributions paid to a defined contribution pension scheme on his behalf amounted to £9,784 (2016: £9,527).

During the year two directors (2016: two) participated in a defined contribution pension scheme.

During the year three other directors (2016: two) were employed by other group undertakings and their remuneration for qualifying services to the company is deemed to be negligible so that they would not be able to allocate any remuneration received to Carl Zeiss Microscopy Limited.

2016

8. Operating profit

The operating profit is stated after charging:

		2017 £000	2016 £000
	Research and development expenditure	3,214	3,371
	Depreciation of tangible fixed assets	491	406
	Amortisation of intangible fixed assets	16	31
	Net loss on foreign exchange	743	1,016
	Auditor's remuneration - audit of the financial statements of the company	17	16
	Defined contribution pension cost	344	329
	Operating lease rentals - land and buildings	691	653
	Operating lease rentals - other	56	73
9.	Other finance costs		
٠.	Other intunde costs		•
		2017 £000	2016 £000
	Net interest on defined benefit pension liability (note 20)	(109)	(93)
	Movement on derivative	(290)	(1,859)
		(399)	(1,952)

Notes to the financial statements for the year ended 30 September 2017

10. Taxation

	2017 £000	2016 £000
Corporation tax		
Current tax on profits for the year	1,843	767
Adjustments in respect of previous periods	(30)	(19)
Total current tax	1,813	748
Deferred tax		
Current year	(15)	83
Effect of changes in tax rate	2	34
Adjustment in respect of previous periods	(16)	-
Total deferred tax	(29)	117
Taxation on profit on ordinary activities	1,784	865

Factors affecting tax charge for the year

The tax assessed for the year is lower than (2016: higher than) the standard rate of corporation tax in the UK of 19.5% (2016: 20%). The differences are explained below:

	2017 £000	2016 £000
Profit on ordinary activities before tax	9,441	4,155
Profit on ordinary activities multiplied by standard rate of corporation tax in the UK of 19.5% (2016: 20%) Effects of:	1,841	831
Expenses not deductible for tax purposes	(13)	(4)
Adjustments to tax charge in respect of prior periods	(46)	(19)
Tax rate changes	2	34
Exempt amounts	-	7
Non qualifying assets	-	16
Total tax charge for the year	1,784	865

Notes to the financial statements for the year ended 30 September 2017

10. Taxation (continued)

Factors that may affect future tax charges

A change to the UK corporation tax rate was announced in the Chancellor's Budget on 16 March 2016. The change announced is to reduce the main rate to 17% from 1 April 2020. Changes to reduce the UK corporation tax rate to 19% from 1 April 2017 and to 18% from 1 April 2020 had already been substantively enacted on 26 October 2015.

The further reduction of corporation tax to 17% (effective from April 2020, to replace the previous 18% rate) was also substantively enacted at the balance sheet date.

11. Dividends

		2017 £000	2016 £000
Dividends paid on ordinary shares	•	1,000	3,500

12. Intangible assets

	Software £000
Cost At 1 October 2016 Additions	206 17
At 30 September 2017	223
Accumulated amortisation At 1 October 2016 Charge for the year At 30 September 2017	188 16 204
Net book value	
At 30 September 2017	19
At 30 September 2016	18

Notes to the financial statements for the year ended 30 September 2017

13. Tangible fixed assets

	Leasehold improvements £000	Plant and equipment £000	Total £000
Cost			
At 1 October 2016	1,247	2,046	3,293
Additions	172	495	667
Disposals	-	(198)	(198)
At 30 September 2017	1,419	2,343	3,762
Accumulated depreciation			
At 1 October 2016	788	1,053	1,841
Charge for the year	136	355	491
Disposals	•	(143)	(143)
At 30 September 2017	924	1,265	2,189
Net book value			
At 30 September 2017	495 —————	1,078	1,573
At 30 September 2016	459	993	1,452

Notes to the financial statements for the year ended 30 September 2017

14. Stocks

201 £000	
Raw materials and consumables 6,996	3,911
Work in progress 3,953	3,014
Finished goods and goods for resale 905	644
11,854	7,569

There is no significant difference between the replacement cost of stocks and their carrying amounts.

Stocks are stated after provisions for impairment of £522,000 (2016: £301,000).

15. Debtors

	2017 £000	2016 £000
Trade debtors	1,756	1,838
Amounts owed by fellow group companies	13,040	12,541
Amounts owed by parent company	5,106	1,183
Other debtors (including VAT)	1,424	312
Prepayments and accrued income	340	509
Corporation tax	-	345
Deferred taxation (note 17)	564	941
Derivative financial instruments	536	153
	22,766 	17,822

Amounts owed by fellow group undertakings and the parent company are unsecured, interest free and repayable on demand.

Trade debtors are stated after provisions for impairment of £293,000 (2016: £Nil).

Notes to the financial statements for the year ended 30 September 2017

16. Creditors: Amounts falling due within one year

	2017 £000	2016 £000
Bank overdraft	625	-
Trade creditors	3,964	2,739
Amounts owed to fellow group undertakings	845	747
Amounts owed to parent company	592	386
Corporation tax	1,105	-
Other creditors	161	346
Accruals and deferred income	1,715	994
Derivative financial instruments	265	1,071
	9,272	6,283

The bank overdrafts are secured by a floating charge over certain assets of the company.

Amounts owed to fellow group undertakings and the parent company are unsecured, interest free and repayable on demand.

Trade creditors are non-interest bearing and normally settled on 30 day terms.

Other creditors are non-interest bearing and have an average term of 1 month.

17. Deferred taxation

	2017 £000	2016 £000
At beginning of year	941	688
Credited/(charged) to profit and loss account	29	(117)
(Charged)/credited to other comprehensive income	(406)	370
At end of year	564	941
The deferred tax asset is made up as follows:		
	2017 £000	2016 £000
Fixed assets	69	39
Pension	495	902
	564	941

Notes to the financial statements for the year ended 30 September 2017

18. Provisions

	Warranty £000	Lease dilapidations £000	Total £000
At 1 October 2016	94	-	94
Additions	109	228	337
Released	(31)	-	(31)
Utilised in year	(63)	-	(63)
At 30 September 2017	109	228	337

Warranty

The warranty provision covers the costs of future parts to be supplied and labour costs provided as part of the initial cover sold with the company's main systems. The parts and service warranties usually cover up to two years after the initial delivery and commissioning of the system.

Lease dilapidations

The lease dilapidation provision covers the costs of restoring leased assets to their original condition at the end of the lease term in March 2019.

19. Share capital

Shares classified as equity	2017 £000	2016 £000
Allotted, called up and fully paid 2,700,000 ordinary shares of £1 each	2,700	2,700

There have been no issues or cancellations of share capital during the year.

Notes to the financial statements for the year ended 30 September 2017

20. Pension commitments

Defined contribution scheme

The company operates a defined contribution pension scheme. The assets of the scheme are held separately from those of the company in an independently administered fund. The pension cost charge for the year represents contributions payable by the company to the scheme and amounted to £344,000 (2016: £329,000). There are no outstanding or prepaid contributions at the year end (2016: £Nil).

Defined benefit scheme

The company also operates a defined benefit pension scheme providing benefits based on final pensionable pay, which is now closed to future accruals. The latest full actuarial valuation was carried out at 31 March 2014 and was updated for IAS 19 purposes to 30 September 2017 by a qualified independent actuary.

The scheme is a registered pension scheme with a funded defined benefit section under which benefit accrual ceased with effect from 30 September 2012. The scheme operates under the regulatory framework of the Pensions Act 2004.

Under the scheme a trustee company has primary responsibility for governance of the scheme. Benefit payments are made from trustee administered funds. Scheme assets are held under trusts which are governed by UK regulation. Responsibility for governance of the scheme, including setting contribution rates, lies jointly with the company and the trustee. Investment decisions are the responsibility of the trustee only.

Through its defined benefit pension plan, the company is exposed to a number of risks, the most significant of which are detailed below:

(i) Asset volatility

The liabilities are calculated using a discount rate set with reference to corporate bond yields; if assets underperform this yield, this will create a deficit. The Scheme holds a significant proportion of growth assets (diversified growth fund) which are expected to outperform corporate bonds in the long-term while providing volatility and risk in the short term. The allocation to growth assets is monitored such that it is suitable for the Scheme's long term objectives.

(ii) Changes in bond yields

A decrease in corporate bond yields will increase the Scheme's liabilities, although this will be partially offset by an increase in the value of the Scheme's bond holdings. As noted above, the Scheme's investment in liability driven investments ("LDI") partially mitigates this risk.

(iii) Inflation risk

The majority of the Scheme's benefit obligations are linked to inflation, and higher inflation will lead to higher liabilities (although, in most cases, caps on the level of inflationary increase are in place to protect against extreme inflation). As noted above, the Scheme's investment in LDI partially mitigates this risk.

(iv) Life expectancy

The majority of the schemes obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the liabilities.

Notes to the financial statements for the year ended 30 September 2017

20. Pension commitments (continued)

Reconciliation of present value of plan liabilities:

	2017 £000	2016 £000
Liabilities		
At the beginning of the year	25,010	20,189
Interest cost	538	727
Benefits paid	(632)	(1,177)
Experience gains	(195)	(405)
Actuarial (gains)/losses - financial assumption changes	(1,221)	5,676
At the end of the year	23,500	25,010
Assets	2017 £000	2016 £000
At the beginning of the year	19,706	17,397
Interest income	429	634
Employer contributions	595	566
Benefits paid	(632)	(1,177)
Return on assets excluding interest income	491	2,286
At the end of the year	20,589	19,706

For the year ended 30 September 2018, employer contributions are expected to be £618,000 (2017: £595,000).

Composition of plan assets are as follows:

	2017	2016
	£000	£000
Equities	9,080	7,897
Index linked gilts	4,035	4,434
Absolute return	3,150	3,092
Corporate bonds	4,180	4,235
Cash	144	48
Total plan assets	20,589	19,706
·		

Within the scheme's planned assets, only equities and index linked gilts are quoted on active markets.

Notes to the financial statements for the year ended 30 September 2017

20. Pension commitments (continued)

The amounts recognised in the balance sheet are as follows:

	2017 £000	2016 £000
Fair value of plan assets	20,589	19,706
Present value of plan liabilities	(23,500)	(25,010)
Net pension scheme liability	(2,911)	(5,304)
The amounts recognised in profit or loss are as follows:	2017 £000	2016 £000
Interest on obligation (net)	(109)	(93)

For the year ended 30 September 2018, it is expected that the company will have a net interest expense on the defined benefit pension of £67,000 (2017: £109,000).

The amounts recognised in the statement of comprehensive income are as follows:

	2017 £000	£000
Experience gains	(195)	(405)
Actuarial (gains)/losses - financial	(1,221)	5,676
Changes in adjustment	(491)	(2,286)
	(1,907)	2,985

Notes to the financial statements for the year ended 30 September 2017

20. Pension commitments (continued)

A reconciliation of the net liability from the beginning to the end of the year is shown below:

	2017	2016
	£000	£000
At the beginning of the year	5,304	2,792
Employer contributions	(595)	(566)
Interest recognised in the profit and loss account	109	93
Actuarial losses	(1,907)	2,985
	2,911	5,304

Principal actuarial assumptions at the balance sheet date (expressed as weighted averages):

	2017 %	2016 %
Discount rate	2.59	2.18
Expected return on scheme assets at 30 September		-
Future pension increases, capped at 5%	3.34	3.18
Future pension increases, capped at 3%	2.50	2.45
Inflation assumption (RPI)	3.54	3.33
Inflation assumption (CPI)	2.64	2.43
Section 52A orders	2.64	2.43
The mortality assumptions used were as follows (years):		
- for a male aged 65 now	24	24
- at 65 for a male aged 45 now	25	25
- for a female aged 65 now	26	26
- at 65 for a female member aged 45 now	27	27

Notes to the financial statements for the year ended 30 September 2017

20. Pension commitments (continued)

A sensitivity analysis in respect of the present value of the defined benefit obligation to a change in each significant actuarial assumption above, assuming the other assumptions remain constant, at the end of the reporting period is shown below:

2017 £000

Discount rate at 2.84% (plus 0.25% pa)	21,672
Discount rate at 2.34% (less 0.25% pa)	25,566
RPI and CPI at 3.79% and 2.89% (plus 0.25% pa)	24,330
RPI and CPI at 3.29% and 2.39% (less 0.25% pa)	22,576
Long term mortality improvement reduced by 0.5% pa	22,639
Long term mortality improvement increased by 0.5% pa	24,363

21. Commitments under operating leases

At 30 September the company had future minimum lease payments under non-cancellable operating leases as follows:

	2017 £000	2016 £000
Not later than 1 year	779	842
Later than 1 year and not later than 5 years	404	1,284
Total	1,183	2,126

22. Related party transactions

The company is exempt from disclosing related party transactions with companies that are wholly owned within the Carl Zeiss AG group.

23. Immediate parent undertaking and ultimate controlling party

The company's immediate parent undertaking is Carl Zeiss Microscopy GmbH, a company incorporated in Germany.

The ultimate parent undertaking and controlling party is Carl Zeiss Stiftung, a company incorporated in Germany.

The smallest and also largest group in which the results of the company are consolidated is that headed by Carl Zeiss AG, an intermediate parent company, incorporated in Germany.

The consolidated financial statements of Carl Zeiss AG are available to the public and may be obtained from their registered office at Carl-Zeiss-Strasse 22, 73447 Oberkochen, Germany.