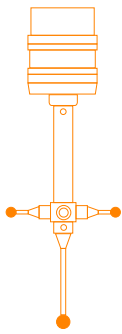
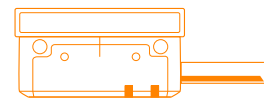
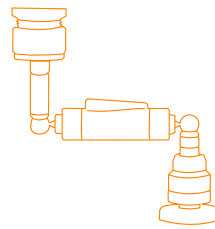
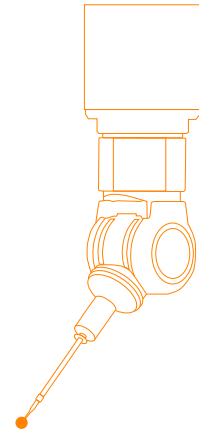


**RENISHAW**  <sup>®</sup>

Annual report and accounts 2016



“Our products are working behind the scenes,  
in more industries than you think...”



## Contents

### Strategic report

- 01 Introduction
- 02 At a glance
- 04 Chairman's statement
- 08 Additive manufacturing for custom solutions
- 09 Our business model
- 10 Our markets
- 12 Our business sectors – Metrology
- 14 The aerospace market
- 16 The automotive market
- 18 Our business sectors – Healthcare
- 20 The healthcare market
- 22 Our strategy
- 23 Key performance indicators
- 24 Our strategy in action
- 26 Our strategy in action  
– Focus on delivering solutions
- 28 Our strategy in action  
– Global customer support
- 30 Our strategy in action  
– Efficient high-quality manufacturing
- 32 Our strategy in action  
– Continual research creating strong  
market positions with innovative products
- 34 Performance – Overview
- 36 Performance – Metrology
- 38 The consumer products market
- 40 The construction market

- 42 Performance – Healthcare
- 44 Performance – Financial review
- 48 Risk and risk management
- 50 Principal risks and uncertainties
- 52 Corporate social responsibility
- 54 Our strategy in action – People
- 62 The power generation market

### Governance

- 64 Introduction
- 66 Board of directors and company secretary
- 68 Executive Board
- 69 International Sales and Marketing Board
- 70 Directors' corporate governance report
- 76 Nomination Committee report
- 77 Audit Committee report
- 80 Directors' remuneration report
- 87 Other statutory and regulatory disclosures
- 90 Directors' responsibilities
- 91 Independent auditor's report

### Financial statements

- 94 Consolidated income statement
- 95 Consolidated statement of comprehensive  
income and expense
- 96 Consolidated balance sheet
- 97 Consolidated statement of changes in equity
- 98 Consolidated statement of cash flow
- 99 Notes (forming part of the  
financial statements)
- 121 Company balance sheet
- 122 Company statement of changes in equity
- 123 Notes to the Company financial statements

### Shareholder information

- 134 10 year financial record
- 135 Shareholder information
- 136 Shareholder notes

## Applying innovation to a range of our markets



Construction see pages 40–41



Consumer products see pages 38–39



Power generation see pages 62–63



Automotive see pages 16–17



Aerospace see pages 14–15



Healthcare see pages 20–21

## Introduction

Renishaw is a world-leading metrology company.

With our highly experienced team, we are confidently driving our future growth through innovative and patented products and processes, efficient high-quality manufacturing, and the ability to provide local support in a growing number of geographies and markets. 95% of our sales are outside the UK.

Our continuing investment in new product development, plant and equipment, and facilities (c.£100m in the last year) is the key to our confidence in the Group's long-term strategy and prospects. With 4,286 skilled and motivated people, we continue to be at the leading edge of technological innovation.



For more information visit:

[www.renishaw.com](http://www.renishaw.com)

All dates within this document refer to financial years unless stated otherwise.

## At a glance

# 2016

in numbers

## £436.6m

Revenue

## £80.0m

Profit before tax

### Who we are

Renishaw is a world-leading metrology company operating in two key business areas, metrology and healthcare.

The Group has 79 locations in 35 countries from where we distribute and support products for our global customer base, with 95% of sales outside the UK.

We manufacture our products in the UK, Ireland, India, Germany, USA and France.

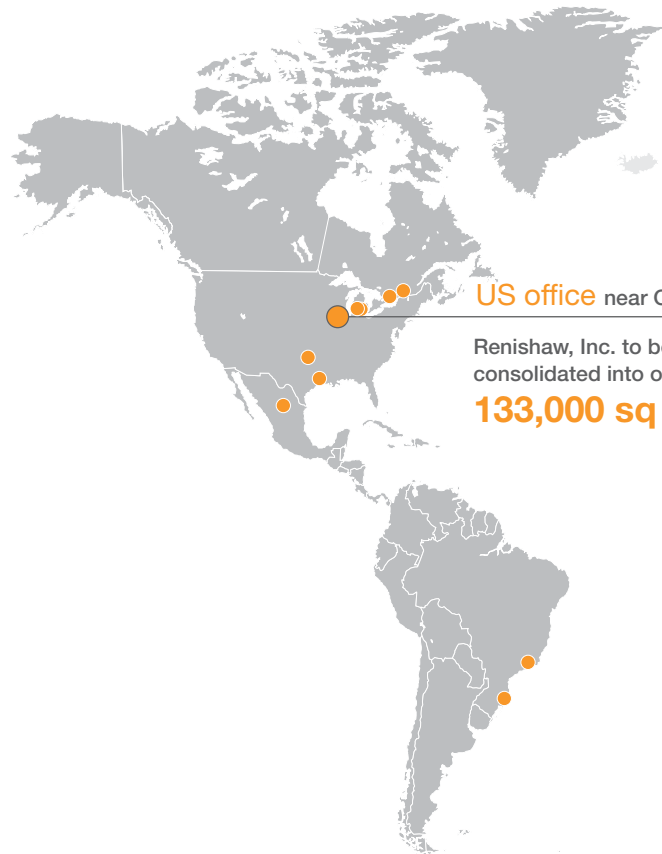
### What we do

#### Metrology products:

Our technology solutions help manufacturers to maximise production output, to significantly reduce the time taken to produce and inspect components, and to keep their machines running reliably. In the fields of industrial automation and motion systems, our high-quality position measurement and calibration systems allow machine builders to manufacture highly accurate and reliable products.

#### Healthcare products:

Our technologies are helping within applications such as craniomaxillofacial surgery, dentistry, neurosurgery, chemical analysis and nanotechnology research. These include engineering solutions for stereotactic neurosurgery, diagnosis of infectious diseases, analytical tools that identify and characterise the chemistry and structure of materials, supply of implants to hospitals and specialist design centres for craniomaxillofacial surgery, and products and services that allow dental laboratories to manufacture high-quality dental restorations.



#### North and South America

Locations

**11**

Metrology revenue

**£87.4m**

Healthcare revenue

**£4.8m**

● Indicates Renishaw Group locations

■ Metrology ■ Healthcare

48.0p

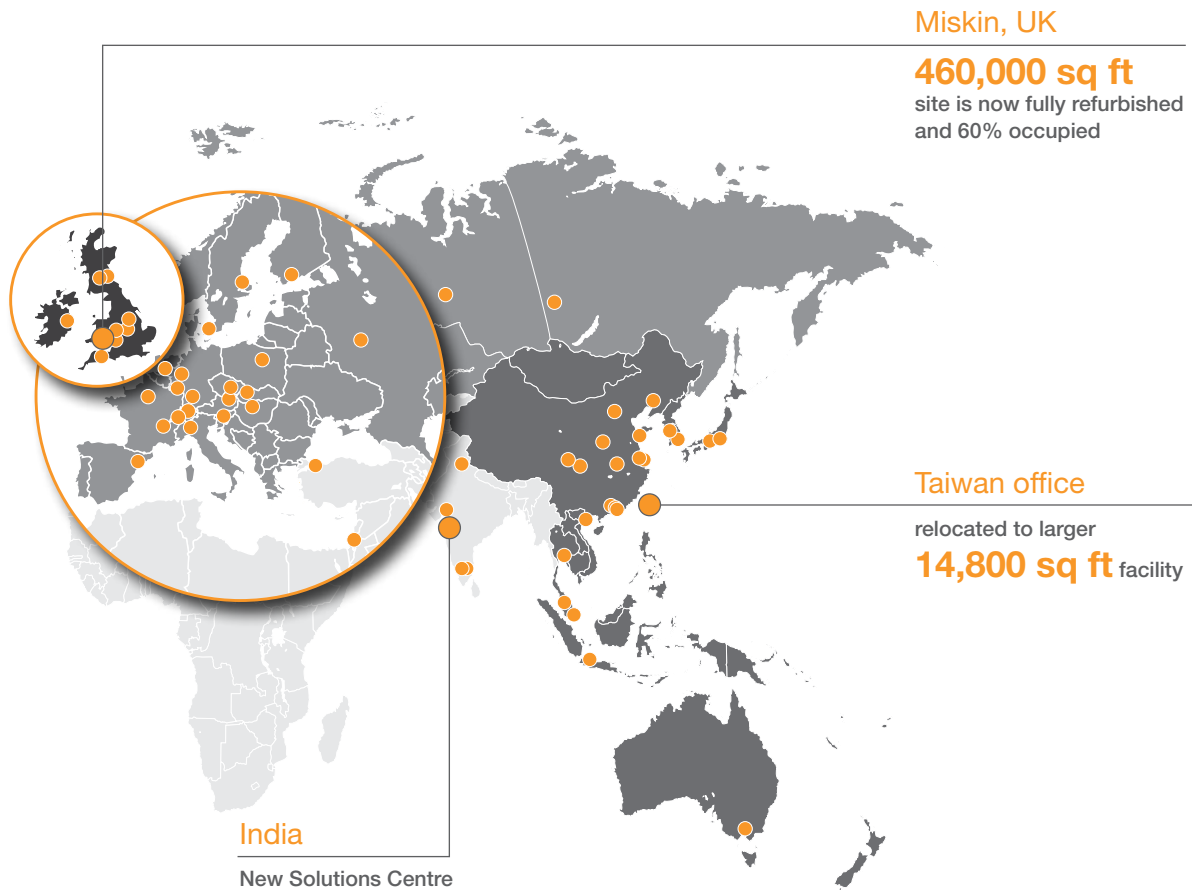
Total dividend for the year

4,286

Number of employees as at 30th June 2016

1,500+

Patents – continual innovation in new technologies



**UK and Ireland**

Locations

15

Metrology revenue

£18.5m

Healthcare revenue

£4.7m



**Continental Europe**

Locations

20

Metrology revenue

£103.1m

Healthcare revenue

£9.0m



**Other regions**

Locations

9

Metrology revenue

£11.6m

Healthcare revenue

£2.2m



**Far East**

Locations

24

Metrology revenue

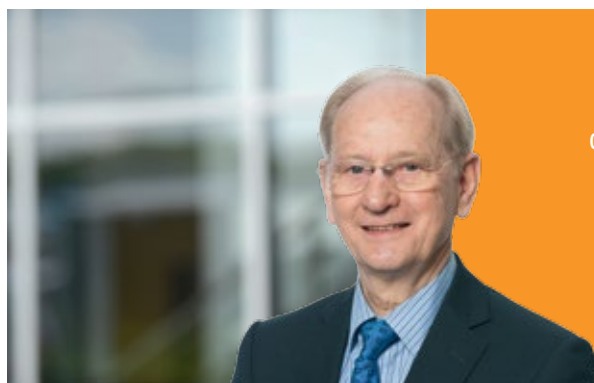
£187.6m

Healthcare revenue

£7.7m



## Chairman's statement



“ I am pleased to report our 2016 annual results, with revenue for the year ended 30th June 2016 of £436.6m compared to £494.7m for last year. The Group's profit before tax for the year was £80.0m. ”

Sir David R McMurtry, Chairman and Chief Executive

I am pleased to report our 2016 annual results, with revenue for the year ended 30th June 2016 of £436.6m compared to £494.7m for last year. As highlighted in our Interim results, we had a number of large orders from Far East customers in the consumer electronics markets during the previous year which generated exceptional growth in our metrology business sector. Adjusting for these large orders and restating revenue at last year's exchange rates resulted in an underlying revenue growth of 4% for the year and 6% at actual exchange rates.

Geographically, revenue in the Far East was £195.3m compared to £257.7m last year, but with an underlying growth of 12% when excluding the large orders. Revenue in Europe was £112.1m (2015: £103.1m), in the Americas was £92.2m (2015: £96.3m) and in the UK was £23.2m (2015: £25.5m).

The Group's profit before tax for the year was £80.0m compared to £144.2m last year.

This year's tax charge amounts to £11.5m (2015: £22.8m) representing a tax rate of 14.3% (2015: 15.8%). The tax rate has benefited from the continued phasing in of the patent box tax regime, the research and development tax credit and a further reduction in the UK corporation tax rate.

Earnings per share were 94.9p compared to 167.5p last year.

### Metrology

Revenue from our metrology business for the year was £408.2m compared to £467.0m last year.

Revenue in the Far East was £187.6m compared to £249.9m last year, a decrease of 25%, but an underlying increase of 13% after excluding the large orders. Revenue in the Americas was

£87.4m (2015: £89.4m), in Europe was £103.1m (2015: £96.2m) and in the UK was £18.5m (2015: £20.7m).

There was good growth in our measurement automation, additive manufacturing (AM) and encoder products lines.

Operating profit for our metrology business was £85.9m (2015: £150.7m).

We have continued to invest in research and development, with total engineering costs in this business segment of £60.1m net of capitalised costs (2015: £55.0m) and a number of new product launches during the year. The CMM products line launched both REVO-2, a new version of the REVO® multi-sensor 5-axis measurement system with a vision probe option, and MODUS 2™, a new CMM metrology software package. Our spatial measurements products line launched Merlin, a marine surveying system.

## 2016 performance

	2016	2015	Change
Revenue (£m)	<b>436.6</b>	494.7	-12%
Operating profit (£m)	<b>79.5</b>	143.9	-45%
Profit before tax (£m)	<b>80.0</b>	144.2	-44%
Earnings per share (pence)	<b>94.9</b>	167.5	-43%
Dividend per share (pence)	<b>48.0</b>	46.5	+3%



New RenAM 500M additive manufacturing system for volume production.



Open day in the Renishaw Innovation Centre attended by 1,100 people.

In relation to the AM products line we launched the AM400, demonstrated the RenAM 500M and established four innovative AM solution centres to support the adoption of AM technology in volume production.

**Healthcare**

Revenue from our healthcare business for the year was £28.4m, an increase of 3% over the £27.7m last year. We experienced growth in our medical dental and neurological products lines.

Healthcare also saw continued investment in research and development, with total engineering costs in this business segment of £9.0m net of capitalised costs (2015: £8.3m).

We have continued to expand the market for our neuromate® surgical robot, including sales in the UK and Spain, along with our neuroinspire™ surgical planning software. Our neuroinspire™ software has

now been approved for sale in Australia. In our medical dental products line we increased sales of AM machines for the manufacture of dental products and maxillofacial and cranial products.

In our spectroscopy products line, we introduced the inVia Qontor confocal Raman microscope, with the addition of Renishaw's latest innovation, LiveTrack™ focus tracking technology, which enables users to analyse samples with uneven, curved or rough surfaces.

There was an operating loss of £6.4m, compared to a loss of £6.8m last year. We remain focused on moving this business sector into profit.

**Continued investment for long-term growth**

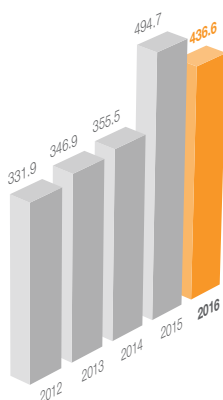
The Group continues its strategy to invest for the long-term, expanding our global marketing and distribution infrastructure, along with increasing manufacturing capacity and research and development activities. During the year, we established new sales and marketing subsidiary companies in Denmark, Finland and Hungary.

Our workforce at the end of June 2016 was 4,286, an increase of 174, of which 106 were apprentices and graduates taken on as part of our on-going aim and commitment to train and develop skilled resource for the Group in the future.

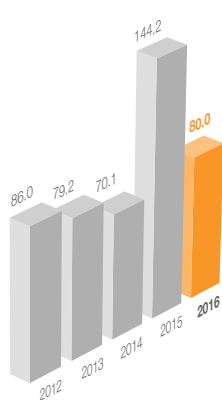
Capital expenditure on property, plant and equipment for the year was £53.0m, of which £17.4m was spent on property and £35.6m on plant and equipment. New premises for our USA headquarters near Chicago are nearing completion.

**Financial highlights**

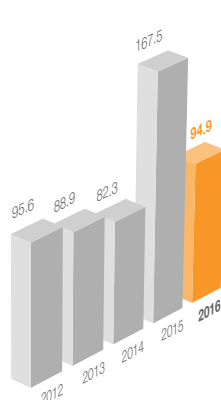
Revenue (£m)



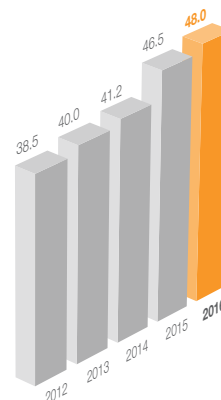
Adjusted profit before tax (£m)



Adjusted earnings per share (pence)



Dividend per share (pence)



## Chairman's statement (continued)

In the UK, the refurbishment of the remaining half of the facility at Miskin, South Wales, was completed and incorporates product display, training, research and development areas and a Healthcare Centre of Excellence. Also at Miskin we obtained planning consent for 1.74m sq ft building development at the site.

### Working capital

Group inventory increased from £77.7m at the start of the year to £95.0m, as we continued our policy of holding sufficient finished inventory to ensure customer delivery performance, given our short order book of approximately five weeks. Trade debtors increased from £101.2m to £114.9m, with debtor days outstanding at the end of the current year at 70 days (2015: 67 days).

Net cash balances at 30th June 2016 were £21.3m, compared to £82.2m at 30th June 2015. Additionally, there is an escrow account of £15.3m (2015: £14.7m) relating to the provision of security to the UK defined benefit pension scheme. The lower cash balance reflects the high capital expenditure during the year, along with higher working capital demands.

### Directors and employees

During the year we have made several changes at Board and senior management level to enhance the operations of the business. Will Lee, formerly the head of our machine tool products line and laser and calibration products line, was appointed as Director of Sales and Marketing to support Ben Taylor in the transition to his retirement from the Board at the end of July this year. I am now delighted to announce that Will is to be appointed to the Board as Group Sales and Marketing Director with effect from 1st August 2016.

I would like to take this opportunity to thank Ben for his outstanding contribution to the Group's performance over the last 31 years. Ben has helped me to articulate the vision for Renishaw and has been a partner in developing long-standing relationships with customers worldwide. He will be missed by all within the Group, both personally and professionally. We wish him well in his retirement.

Also at board level, Kath Durrant took on the role of Chair of the Remuneration Committee. This role was previously held by Sir David Grant, our senior independent director, who we are delighted to congratulate on his knighthood in the Queen's Birthday Honours 2016 for his contribution to engineering, technology and education.

We have reviewed the management of our overseas sales operations and appointed Leo Somerville as President – Renishaw North America to oversee our sales subsidiaries in Canada, USA and Mexico and Howard Salt as President – Renishaw Inc. our principal USA sales subsidiary. These new appointments will provide strategic focus to our sales activities in these regions.

The directors would also like to thank employees for their invaluable support and contribution during the year.

### UK defined benefit pension scheme

The Company and the trustees of the UK defined benefit pension scheme have entered into a funding agreement to conclude the latest triennial valuation of the fund as at 30th September 2015. This agreement came into effect on 30th June 2016 and provides for a 15-year recovery plan under which the Company will pay member pensions, retirement lump sums and transfer payments (up to £1m per annum) over this period.

In addition, the Company has provided security over UK property to the value of £62m, and the fund will retain the cash held in an escrow account providing further security for a period of six years, over which time this escrow account will be scaled back to zero.

The Company and the trustees have agreed a higher funding target than agreed previously in order to make the fund self-sufficient over the 15-year period (or earlier, if achieved in the meantime) and will measure this at each triennial actuarial valuation. The funding agreement has been submitted to The Pensions Regulator.

### Investor communications

In line with our commitment to improve investor communications, our third investor day was held on 12th May 2016, for existing and potential new investors. This involved presentations on group strategy, business segments and product lines, given by members of the Board and senior management, as well as tours covering the Group's activities and various Q&A sessions. The event was again well attended and gives shareholders another opportunity, in addition to the AGM and half-year and year-end webcasts, to learn more about Renishaw's business and strategy.

Merlin is a new dedicated time-tagged marine laser scanning system.





## Brexit

Whilst the full business implications of Brexit remain uncertain, and will do for some time, the Board believes the Group to be well positioned to react to the potential challenges and opportunities ahead. The Group has a strong presence in the EU, which this year comprised 23% of our revenue, with a number of subsidiaries performing a range of functions including sales, marketing and distribution, research and development and manufacturing. We believe this infrastructure will assist the Group in its planning for and response to changes in trading arrangements between the UK and the EU. Our risk committee will be assessing all potential impacts and putting in place strategies and actions, both in the shorter-term whilst the UK government negotiates the UK's exit from the EU and in the longer-term as the UK's trading arrangements with the EU become clearer.

## Outlook

The Group continues to invest in the development of new products and applications, along with targeted investment in production, and sales and marketing facilities around the world. Despite current uncertainty surrounding Brexit and significant fluctuations in currency exchange rates, your directors remain confident in the long-term prospects for the Group and currently anticipate growth in both revenue and profits over the next financial year.

## Dividend

A final dividend of 35.5p net per share will be paid on 17th October 2016, to shareholders on the register on 16th September 2016, giving a total dividend of 48.0p for the year, an increase of 3.2% over last year's 46.5p.

### Sir David R McMurtry

CDE, RDI, FRS, FREng, CEng, FIMechE  
Chairman and Chief Executive  
27th July 2016



RVP is a new vision measurement probe for use with the REVO® 5-axis measurement system.

The new inVia Qontor is Renishaw's most advanced Raman microscope.



The 2016 Investor Day was held at our Miskin site in South Wales.



Opening of new Additive Manufacturing Solutions Centre in Pune, India.

## Additive manufacturing for custom solutions

“People often say ‘we couldn’t have done it without you’, but the fact is Robot Bike Co really couldn’t have got to where it is today without the help and expertise that Renishaw provided us with, and for that we are hugely appreciative.”

Ed Haythornthwaite, CEO, Robot Bike Co  
(manufacturer of the world’s first fully customisable carbon fibre mountain bike frame).



① For further information on Renishaw’s additive manufacturing solutions please see the case study on pages 26–27 and more information on our website.

## Our business model

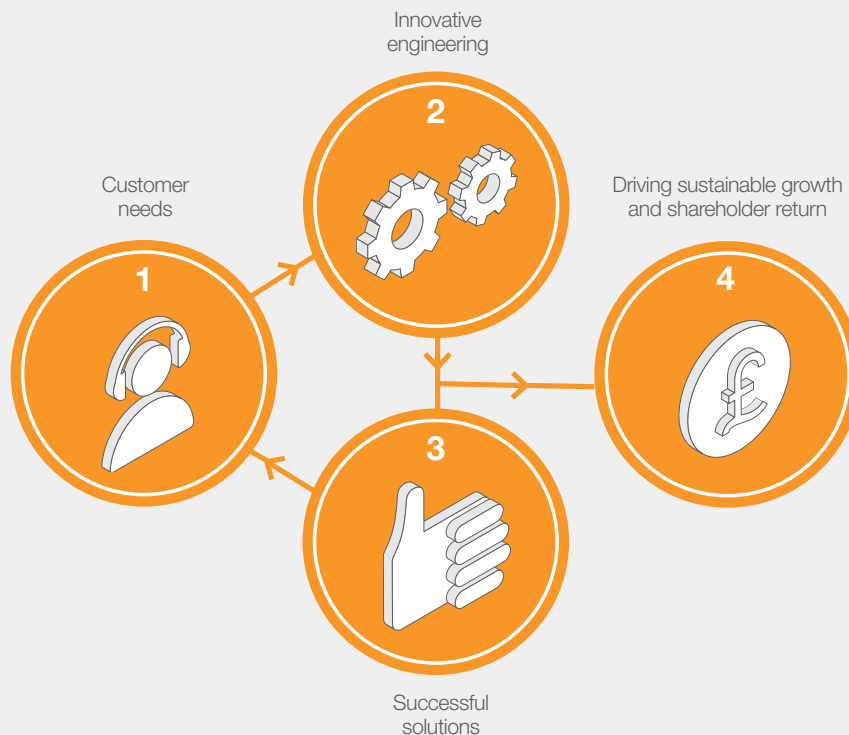
We identify customer needs, and then apply innovative engineering to deliver successful solutions.

### 1. Customer needs

- We anticipate future trends and seek to solve problems before they appear to be happening.
- All areas of our organisation work in partnership with their customers to understand and solve their customers' current and anticipated real-life problems.
- We provide solutions that drive efficiency and reduce costs.

### 2. Innovative engineering

- Renishaw's strategy of investment in R&D and engineering skills enables us to take a longer-term view of the viability of new technologies.
- We are actively expanding our significant portfolio of innovative and patented products.



### 3. Successful solutions

- We are a highly vertically integrated company so that we can ensure success for our customers. We not only undertake design of innovative products, we also manufacture and sell them through our wholly-owned manufacturing and sales organisations.

### 4. Driving sustainable growth and shareholder return

- Our ordinary dividend, funded from our annual cash flows, is the primary form of shareholder return. We have increased the ordinary dividend per share by over 20% over the last three years. We aim to maintain a progressive and sustainable dividend policy.

#### **i Key performance indicators**

Our key performance indicators are shown on page [23](#).

#### **i Risks and uncertainties**

Information on the risks associated with our business and how we manage them is contained on pages [48](#) to [51](#).

## Our markets

We develop innovative products that significantly advance our customers' operational performance – from improving manufacturing efficiencies and raising product quality, to maximising research capabilities and improving the efficacy of medical procedures.

Our products serve truly diverse markets across a wide range of industries, customer types and geographic regions. From the manufacture of jet engines and wind turbines, through to dentistry and brain surgery, our products, and our people who service them, are making a real difference to the capabilities of our manufacturing and healthcare clients. These benefits are extended to the end consumer of our clients' products and services, whether using a smartphone, driving a car, riding a mountain bike, or having a new dental crown fitted, many of these products rely on Renishaw's technology and applications expertise.

As Sir David McMurtry has said, "We are confident that there are not many modern-day planes, trains or automobiles in the world that have not been touched in some way by Renishaw products."

On these two pages we have listed some of our principal markets and the specific key drivers of growth within those markets, for our products. However, there are more generic market growth drivers that are positive for our business:

- Global skills shortages – increased investments in automation and user-friendly technology.
- Rising energy costs – increased demand for products that maximise output.
- Focus on reducing emissions and waste – increased demand for high performance products with ever tighter manufacturing tolerances and products that help minimise waste and re-work.

- Population growth and rising incomes – increased consumption in our principal markets.
- Life expectancy rising globally – increased demand for healthcare products and continuing demand for consumer products.

We are also increasingly spreading risk through the diversification of our applications for product lines, our customer base and our routes to market.

Renishaw's business has transitioned over recent years from primarily being a supplier of products to capital equipment manufacturers, to becoming much more focused on delivering a full solution directly to end-users. Our experience in our core product lines, which has highlighted that our global customers need assistance in solving their problems, is being carried across into our newer offerings.

Today, many of our products lines including measurement and automation, additive manufacturing and healthcare lines are primarily sold direct to the end-user. This helps to build brand loyalty and open up new revenue opportunities including hardware and software upgrades, the cross-selling of complementary products and maintenance contracts.

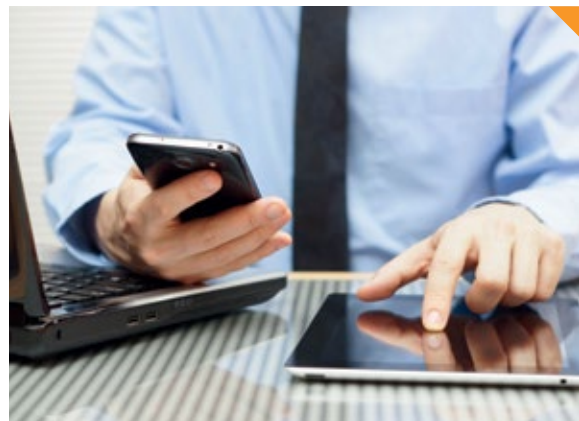
Our business focus is to provide solutions for our customers across these highlighted markets and to be seen as a trusted technology partner meeting their needs.



### Automotive

Continuing investment in manufacturing capacity to meet growing global demand. Improved fuel efficiency requires tighter tolerances on powertrain components. Cost efficiencies and automated processes required throughout the supply chain.

See pages 16–17



### Power generation

Manufacture of components for civil nuclear, wind and solar energy. Increasing focus on maximising output from machinery used in power generation. Increasing research into energy storage.

See pages 62–63



### Aerospace



New aircraft production to meet growing global demand for civil air transport. New fuel-efficient engines with complex parts requiring faster measurement. Improvements to fuel efficiency by minimising airframe weight.

See pages 14–15



### Agriculture



Increasing global demand for food products from developing nations. Increasing global demand for biofuels. Greater investment in machinery for intensive farming capabilities.



### Construction



Major infrastructure projects driving heavy equipment sales. Skills shortages requiring more automation in equipment manufacturers.

See pages 40–41



### Consumer products



Ever shorter product life cycles require flexible manufacturing systems. New generations of electronic devices demand precision manufacturing systems for form and function.

See pages 38–39



### Healthcare



Neurological disorders require highly precise surgical therapies. Growing demand for cosmetic dentistry with superior aesthetics. Need to rapidly diagnose infectious diseases for faster, more specific treatments. Growing demand for patient-specific implants.

See pages 20–21



### Resource exploration



Equipment manufactured to stringent safety requirements requires accurate, cost-effective and traceable processes. Non-renewable resources require exploration in demanding terrains and appropriate surveying tools. Global population growth and urbanisation drive long-term demand for fossil fuels.



## Our business sectors – Metrology

Our metrology products help manufacturers to maximise production output, significantly reduce the time taken to produce and inspect components, and keep their machines running reliably. In the fields of industrial automation and motion systems, our position measurement and calibration systems allow machine builders to manufacture highly accurate and reliable products.

Metrology revenue (-13%)

**£408.2m**

Metrology operating profit (-43%)

**£85.9m**

Percentage of group revenue

**93%**



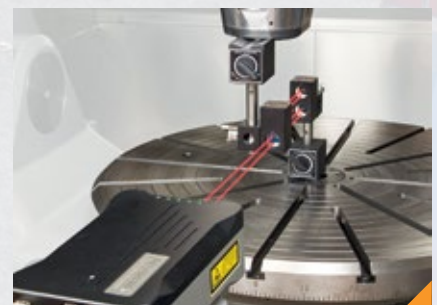
Equator™ gauge integrated within a robot-loaded manufacturing cell.



Machine tool probe system for on-machine measurement.



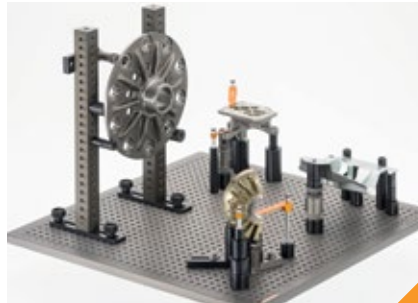
Precision styli ensure accurate acquisition of measurement data.



Laser calibration system being used to test positioning accuracy of a rotary axis.



Incremental encoder for rotary motion control on an air-bearing stage.



Modular fixtures are used to hold parts securely for dimensional inspection.



Prototype manifold produced by a vacuum casting machine.

## The product range includes the following:

### Co-ordinate measuring machine (CMM) products

Sensors, software and control systems for three-dimensional CMMs, including touch-trigger and scanning probes, automated probe changers, motorised indexing probe heads and 5-axis measurement systems, which enable the highly accurate measurement of manufactured components and finished assemblies.

### Machine tool probe systems

Sensors and software for computer numerically controlled (CNC) metal-cutting machine tools that allow the automation of setting and on-machine measurement operations, leading to more productivity from existing machines and reductions in scrap and rework. These include laser tool setters, contact tool setters, tool breakage detectors, touch probes, contact scanning systems and high-accuracy inspection probes.

### Styli for probe systems

Precision styli that attach to probe sensors for CMMs, machine tools and Equator™ gauging systems to ensure that accurate measurement data is acquired at the point of contact.

### Performance testing products

Calibration and testing products to determine the positioning accuracy of a wide range of industrial and scientific machinery to international standards, including a laser interferometer, rotary axis calibrator, wireless telescoping ballbar and software for data capture and analysis.

### Gauging

Equator™ enables process control by delivering highly repeatable, thermally insensitive, versatile and reprogrammable gauging to the shop floor, both as a standalone device and as part of an automated manufacturing cell. Combined with INTUO™ software, Equator is also an ideal alternative to traditional manual gauging, with training in a few hours, allowing engineers to program parts in minutes.

### Spatial measurement

High-speed laser measurement and surveying systems for use in extreme environments, such as mine and quarry surveying, marine positioning and mobile mapping.

### Fixtures

Modular and custom fixtures used to hold parts securely for dimensional inspection on CMM, vision and gauging systems.

### Position encoders

Position encoders that ensure accurate linear and rotary motion control in a wide range of applications from electronics, flat panel displays, robotics and semiconductors to medical, precision machining and print production. These include magnetic encoders, incremental optical encoders, absolute optical encoders and laser interferometer encoders.

### Additive manufacturing (AM)

Advanced metal AM systems for direct manufacturing of 3D-printed metallic components. A total solution is offered from systems, materials, ancillaries and software through to consultancy, training and support for a range of industries including industrial, healthcare and mould tooling.

### Vacuum casting

Vacuum casting machines from entry-level to high capacity for rapid prototyping and production of polymer end-use parts.

## The aerospace market



Equator gauging system is used at Renishaw's customer, High-Tech Engineering to inspect aerospace components.

## Applied innovation to the aerospace market

Air travel popularity continues to grow, especially in Asia, and demand for passenger aircraft is higher than ever as a result. The 2015 Boeing Global Market Forecast sees the commercial fleet doubling by 2034, with 58% of the 38,000 new aircraft required to accommodate growth. New fuel-efficient engines with complex parts require faster measurement, whilst there is also a drive to minimise airframe weight to further aid fuel efficiency.

### Gauging success

High-Tech Engineering, a precision engineering company based in Dunstable, Bedfordshire, UK, has always focused on the quality of the parts it produces. Started in 1985, High-Tech built a reputation in the motorsport industry for delivering high-quality machined parts. The company has since moved into the aerospace market and gained some key industry approvals, including becoming

a preferred supplier to leading UK aerospace companies. Recently High-Tech won a contract to produce precision-milled titanium parts for a large aerospace customer. Due to the nature of the parts, High-Tech was instructed to carry out 100% part inspection, and for this requirement, Hi-Tech is using a Renishaw Equator™ gauging system for one particularly complex component.

The Equator system works by comparing the manufactured parts against a matching master part, gauging all the features in a single operation with an immediate pass/fail decision, along with a report of the component dimensions. High-Tech has also managed to reduce the cost of producing the aerospace part by 27%. This has had a real impact on the competitiveness of this type of production, allowing the company to make the same precision quality parts, whilst also delivering better value to its customers.

Around 150 features on the part are inspected by the Equator system, including a number of bores, thicknesses

and form measurements, with typical tolerances of plus or minus 25 microns. The Equator does this within 10 minutes, and well within the production requirements, far less than the machining time. This is almost a 50% reduction in cycle time compared to running the program on High-Tech's co-ordinate measuring machines.

The Equator is fully programmable and can be used on multiple parts, meaning High-Tech can perform highly repeatable and rapid automated routines across numerous contracts, resulting in significantly reduced labour costs.

Following the success of High-Tech's manufacturing cell, the company plans to use Equator as part of future cells they will be commissioning for jobs in the pipeline. According to High-Tech's Managing Director, Steve Tickner, "Since we started using Equator we have not made a single bad part. When you find something which helps you make a perfect part every time, reduces manpower commitments, reduces overall costs and doesn't cost a fortune itself, it's a winning solution".

Typical parts manufactured by High-Tech Engineering.

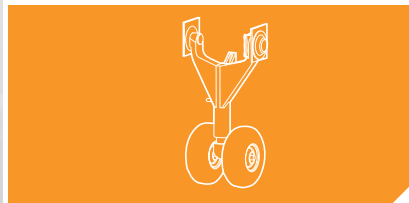


Renishaw's Equator is a highly repeatable and versatile shop floor gauging system.



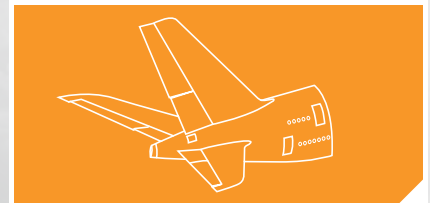


Aircraft are highly complex structures and key assemblies, from engines and wings to control systems and landing gear, all rely on Renishaw products for process control and post-process inspection during their manufacture. This illustration of a typical passenger aircraft highlights a few key applications for our products.



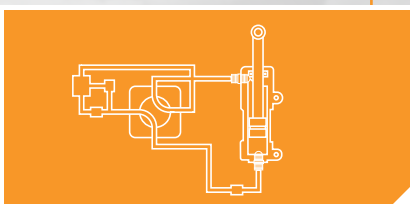
**Landing gear components**

Precision machining of high-value materials uses on-machine probing to eliminate costly scrap in the production of undercarriage and landing gear equipment.



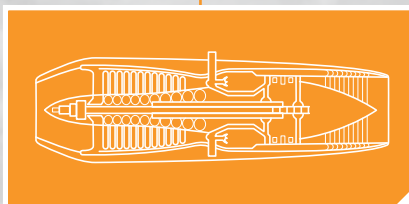
**Advanced manufacture of control surfaces**

Adaptive machining relies on probing technology and advanced software to enable the economic production of aircraft control surfaces (e.g. flaps and rudders) with complex geometries.



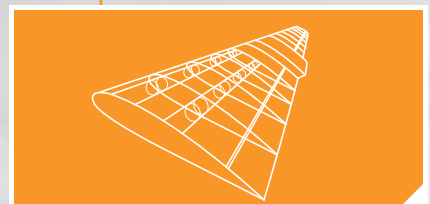
**Control systems and actuators**

Fluid power componentry, including control valves and actuators, benefit from metal additive manufacturing which enables part consolidation, functional improvements and significant weight reductions.



**Quiet and efficient aero engines**

Scanning technology for machine tools and inspection equipment benefits the production and maintenance of a broad range of engine components, including the adaptive machining and precision inspection of blades.



**Wings and wing spars**

Long-range laser encoders provide the accuracy required for large-scale machining of composite wing skins whilst on-machine probing systems enable efficient production of wing spars and other machined components.

## The automotive market



Dr Henry Shih, CEO of automotive supplier SuperAlloy Industrial Company (SAI).

## Improving quality and throughput

Worldwide demand for vehicles continues to grow and there is increasing focus on fuel efficiency and emissions control from both domestic and commercial transport. There is also an increasing need to produce extremely accurate and reliable manufacturing systems, with a trend towards automated manufacturing processes to reduce cycle times.

### Applying additive technology to automotive production

Katcon, based in Nuevo Leó, Mexico, is a manufacturer of catalytic converters, treatment devices and exhaust modules for diesel and for gasoline systems, all designed to protect the environment from vehicle emissions. Katcon decided to adopt additive manufacturing (3D printing) technology to speed up and improve their processes to develop components.

The company believes that metal 3D printing allows more design freedom; it is ideal for producing prototypes and it is also more efficient for the production of parts that are currently very costly due to the multiple processes involved in their manufacture. After investigating available additive manufacturing systems, Katcon chose Renishaw's AM 250 additive manufacturing system. Alberto Serna, Tooling Engineer at Katcon explains, "The advantage we have with the additive technology is that we design in a free space, in a free volume, and we generate our welding fixtures. Compared to the normal process of machining which can take up to four to five weeks, we have been able to reduce the time to 36 hours depending on the complexity of the design. We are offering in some scenarios a lower cost at a higher speed."

### Driving down re-work and scrap

Another company benefiting from Renishaw's technology within the automotive industry is Taiwanese manufacturer SuperAlloy Industrial Company Ltd (SAI). The company is a supplier of high-quality lightweight forged metal products. They produce more than 200 types of wheel and have 600 CNC machine tools working on wheel rim production.

In order to increase production precision and reduce scrap, SAI equipped the relevant lathes with Renishaw OLP40 touch probes. The CNC milling machines were equipped with RMP60 machine tool probes which measure workpiece position as well as providing in-line key dimension detection, thereby increasing production performance. The OLP40 systems allow SAI to carry out in-process measurement control to improve cutting and efficiency for surface precision processing after coating. Even more importantly, it reduces rework by 80%.

Dr Shih says, "When we choose suppliers, we don't just look at the price of the product; we also attach a great deal of value to their R&D capabilities and service. Renishaw has an excellent reputation in manufacturing industries, and also provides service for different industries, so it doesn't just offer a product or a solution, but also shares with us its experience, expertise and the industry's best practices."

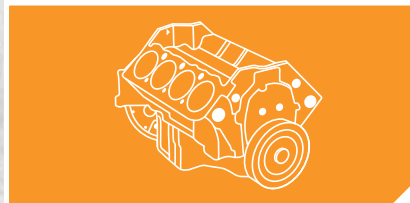
Katcon, Mexico, produces automotive parts using a Renishaw additive manufacturing system.



A Renishaw RMP60 touch probe measuring an alloy wheel at SAI.



The majority of key components on domestic and commercial vehicles are subject to process control using Renishaw products. This illustration highlights just a few key applications for our products relating to a typical car.



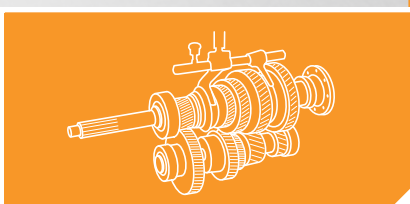
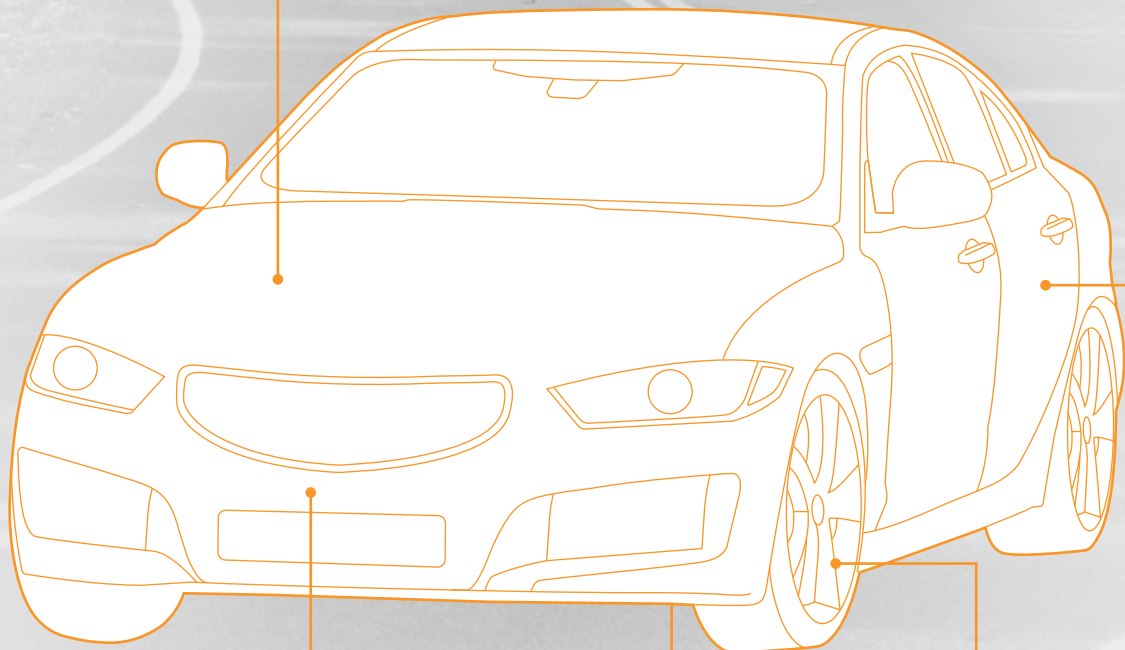
**Latest engine technology**

From camshaft manufacture to quality control of valve seats, probing systems enable modern engines to deliver enhanced performance, higher reliability and reduced emissions.



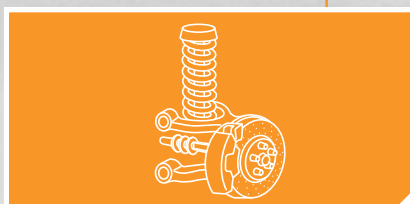
**Body panels and components**

Automated production lines rely on indexable and scanning probe systems for checking car bodies (known as Body in White) prior to painting and assembly.



**Precision gears and reliable gearbox components**

High-volume precision machining and rapid part inspection necessary to support automotive gearbox and drivetrain production are made possible with process control and gauging technologies.



**Suspension and braking components**

Systems which enable automation and the quality control of parts on the shop floor are paramount for the economic production of high-quality components in the volumes required by the automotive industry.



**Wheels**

Alloy wheel manufacture requires highly productive precision machining which can adapt to the variation inherent in forging processes. On-machine probing systems ensure productivity through automated process control.

## Our business sectors – Healthcare

Our technologies are helping within applications such as craniomaxillofacial surgery, dentistry, neurosurgery, chemical analysis and nanotechnology research. These include engineering solutions for stereotactic neurosurgery, diagnosis of infectious diseases, analytical tools that identify and characterise the chemistry and structure of materials, the supply of implants to hospitals and specialist design centres for craniomaxillofacial surgery, and products and services that allow dental laboratories to manufacture high-quality dental restorations.

Healthcare revenue (+3%)

**£28.4m**

Healthcare operating loss

**£6.4m**

Percentage of group revenue

**7%**



Neuroinspire software is used in the planning of stereotactic neurosurgery.



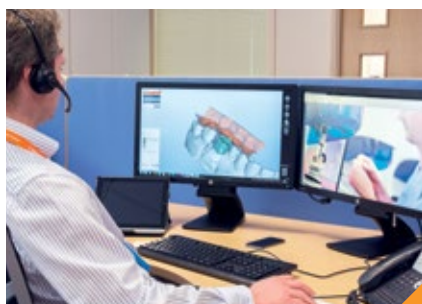
The neuromate stereotactic robot is used for a range of functional neurosurgical procedures.



inVia Raman microscope integrated with a Bruker atomic force microscope.



RenDx SP-2000 used to process a diagnostic assay for infectious disease diagnosis.



Support for a dental laboratory using Renishaw's dental CAD software.



Titanium craniomaxillofacial implants produced using a Renishaw metal additive manufacturing system.



DS30 blue light dental scanner and accessories.

## The product range includes the following:

### Dental scanners

3D contact scanners and non-contact optical scanners used for digitising of dental preparations and the measurement of implant locations for tooth-supported frameworks and custom abutments.

### Dental computer-aided design (CAD) software

Dental CAD software that allows set-up of scanning routines and enables laboratory staff to design abutments and structures for crowns and bridges, including powerful anatomic design functions.

### Dental structures manufacturing service

A central manufacturing service that can handle CAD files from a wide variety of dental CAD systems to produce structures for crowns and bridges in zirconia, cobalt chrome, PMMA (used for temporary restorations) and wax, and abutments in cobalt chrome.

### Craniomaxillofacial custom-made implants

Additively manufactured from titanium, custom-made craniomaxillofacial implants are structural implants that are used in the reconstruction of a patient's head, face or jaw. These are most commonly required after oncology treatment or as a result of trauma.

### Neurosurgical robot

A stereotactic robot that provides a platform solution for a broad range of functional neurosurgical procedures including deep brain stimulation (DBS), stereoelectroencephalography (SEEG), neuroendoscopy and stereotactic biopsies, and is being used within the context of clinical trials for both neurosurgical disorders and brain oncology.

### Neurosurgical planning software

Software that allows advanced planning of targets and trajectories for stereotactic neurosurgery.

### Neurosurgical implants

Implantable devices that allow surgeons to verify expected DBS electrode position relative to targeted anatomy using magnetic resonance imaging (MRI) for the treatment of Parkinson's disease, other movement disorders and neuropathic pain.

### Neurosurgical accessories

Specialist electrodes and instruments for use in epilepsy neurosurgery, manufactured by DIXI Medical.

### Raman microscopes

Scientists and engineers worldwide use Renishaw's research-grade inVia Raman microscope for the non-destructive chemical analysis and imaging of materials. Its high-speed, high-quality results and upgradeability are valued in fields as diverse as nanotechnology, biology and pharmaceuticals.

### Hybrid Raman systems

Renishaw's hybrid systems unite the chemical analysis power of Raman spectroscopy with the high spatial resolution of other techniques, such as atomic force microscopy and scanning electron microscopy. These new instruments are vital tools for investigating materials and devices for nanotechnology applications.

### Turn-key Raman analysis

The RA800 benchtop platform provides companies with a high-performance chemical imaging and analysis system that can be tailored for the needs of their customers. RA800 gives research-grade Raman microscopy performance in a Class 1 laser-safe, simple-to-use form.

### Diagnostic systems

Renishaw Diagnostics Limited has developed the RenDx Multiplex Assay System, an automated, multiplex platform for clinical diagnosis of infectious disease, and has CE certification for the platform and its first assay, Fungiplex, for diagnosis of invasive fungal infections.

## The healthcare market



Pre and post surgery comparison for cranioplasty procedure at the Centro Médico Teknon in Barcelona, Spain.

## Additive manufacturing for customised care

From complex reconstructive facial surgery to orthopaedic and trauma surgery, advances in additive manufacturing have inspired a growing number of progressive surgeons to commission metal 3D-printed patient specific implants (PSIs) and cutting guides for both complex and straightforward procedures.

### Personalising patient treatments

UK NHS hospitals, in their quest for better quality and efficiency, have used 3D-printed anatomical models, guides and implants to improve the predictability, accuracy, safety and speed of operations.

Now, a hospital in Spain has proved that the technology can also be used across international borders in a classic example of global technology transfer with UK experts.

At the Centro Médico Teknon in Barcelona, neurosurgeon Bartolomé Oliver

MD, PhD, was introduced to a 68-year-old female patient with a benign growth from the left side of her cranium, caused by a meningioma, a tumour that arises from the meninges – the membranes surrounding brain and spinal cord.

The computerised tomography (CT) scan revealed the growth was expanding outwards into the skull-bone. The patient required a craniotomy to remove the growth and a cranioplasty to rebuild her skull. Dr Oliver planned for the combined craniotomy and cranioplasty operation allowing the patient to be treated in a single procedure.

The hospital's CT scans were transferred from Spain to PDR, a world-leading design consultancy and applied research centre, based in Cardiff, UK, where they were imported into the MIMICS® software program and then converted into an STL file for modelling by PDR.

Renishaw received the files of the approved designs for both the implant and cutting guide and 3D-printed them at its central manufacturing unit in Stonehouse,

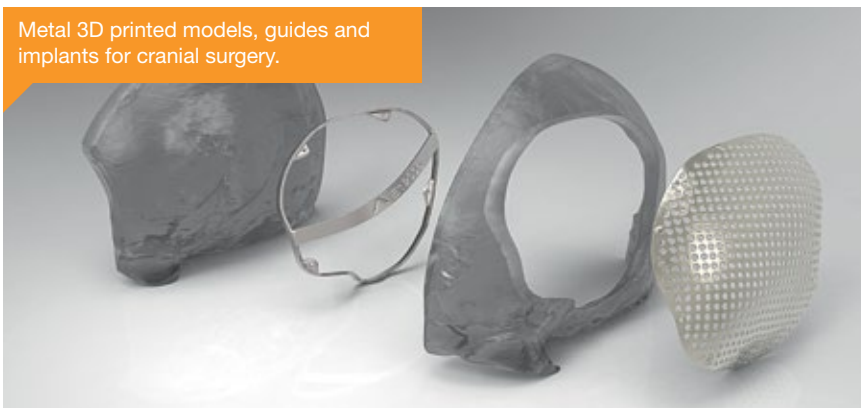
UK. The parts were manufactured on a Renishaw AM 250 metal additive manufacturing machine in titanium with a satin finish as per Dr Oliver's specification. The material used was Ti MG1 tested to ISO 10993 part 1, which was then treated with Renishaw's X-flex™ technology. This ensures high ductility, which is important to prevent the risk of breakages in surgery should the implant need to be adjusted, for example, due to unexpected hard tissue changes.

The operation was successful and incident-free with the cranial plate being fitted safely and accurately.

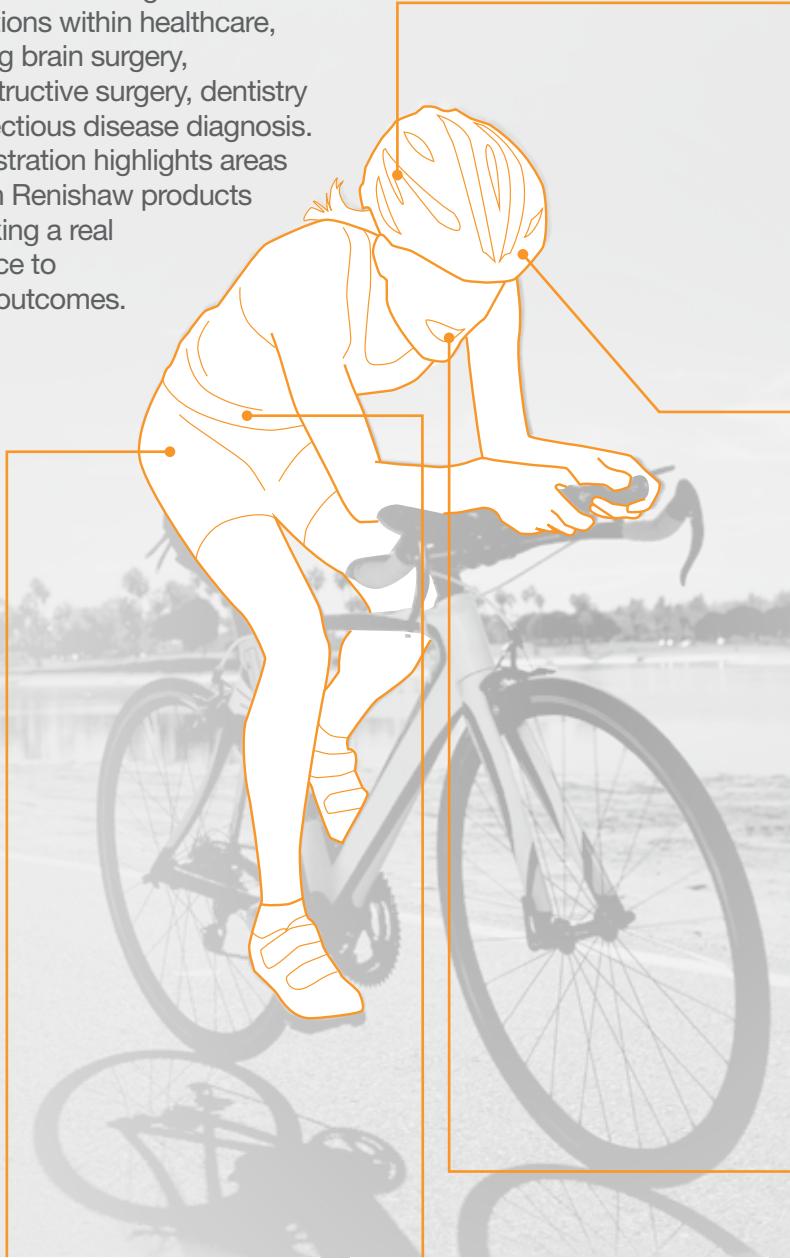
With safety being the paramount priority, supplying a predefined cutting guide and the corresponding implant helped eliminate all the risk that might come from the current manual nature of the procedure. Dr Oliver's own verdict: "It ensured an absolutely safe operation with no risk to the patient."

Dr Oliver reported a 30% saving in theatre time which was a further benefit of this streamlined method.

Metal 3D printed models, guides and implants for cranial surgery.



Our technologies are being applied to an ever increasing number of applications within healthcare, including brain surgery, re-constructive surgery, dentistry and infectious disease diagnosis. This illustration highlights areas in which Renishaw products are making a real difference to patient outcomes.



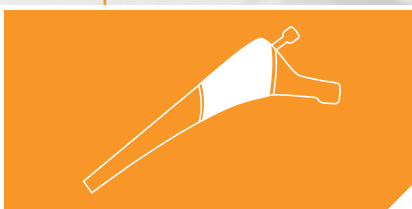
**Drug delivery systems for oncology and other treatments**

Metal 3D printing techniques are used to build compact multi-channel ports and the neuromate surgical robot with neuroinspire planning software enables precise placement of implantables.



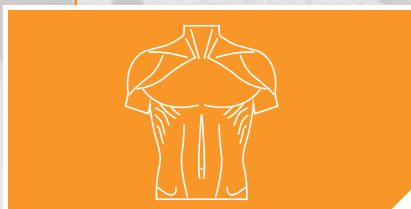
**Maxillofacial implants and surgical guides**

Customised implants and cutting guides for use during surgery are designed using specially developed software and built with additive manufacturing systems, optimised for healthcare applications.



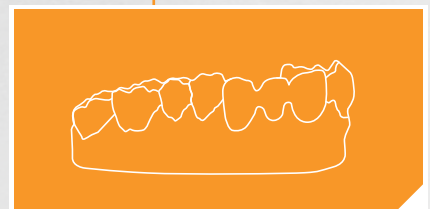
**Orthopaedic implants**

Metal 3D printing machines enable the production of patient specific custom implants in bio-compatible materials, and with surfaces that aid osseointegration.



**Rapid diagnosis of infectious disease**

In vitro tests for rapid identification of fungal diseases reduce the need for costly prophylaxis and improve patient outcomes through earlier diagnosis of life threatening infections.

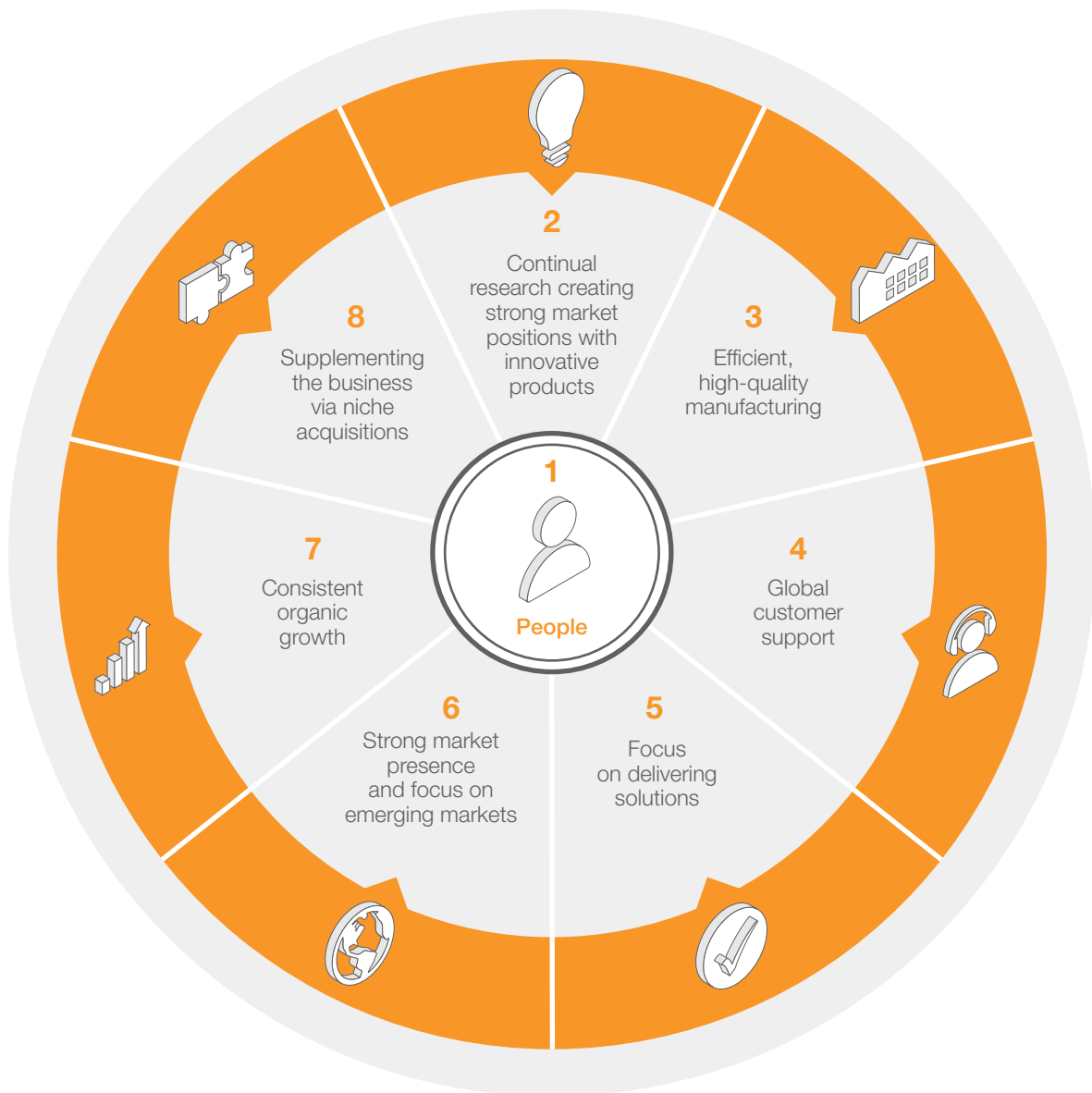


**Dental implants and restorations**

Precision machining combined with 3D printing results in shorter manufacturing lead times and improved fit of dental frameworks, meaning patients need to spend less time in the dentist's chair.

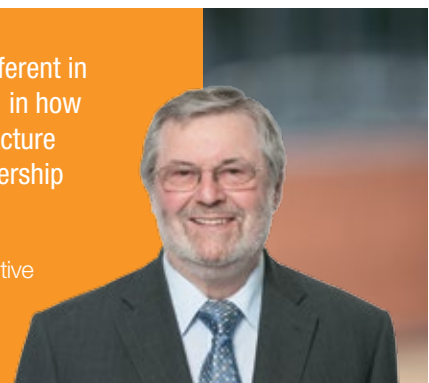
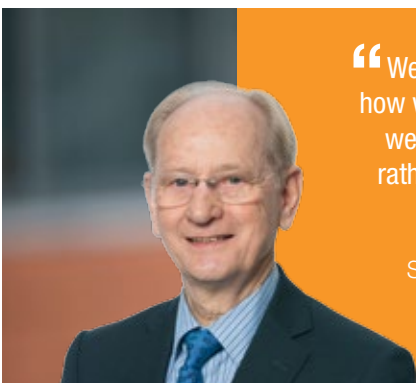
## Our strategy

### Eight strategic priorities drive our business model



“ We have tried to build a different company. Different in how we apply technology to real world problems; in how we invest for the long term; in how we manufacture rather than outsource; in how we work in partnership with our customers. ”

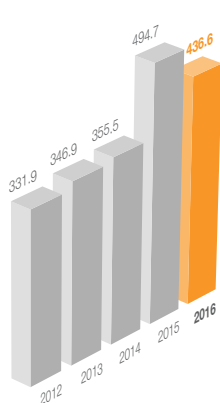
Sir David R McMurtry, Chairman and Chief Executive  
John Deer, Deputy Chairman





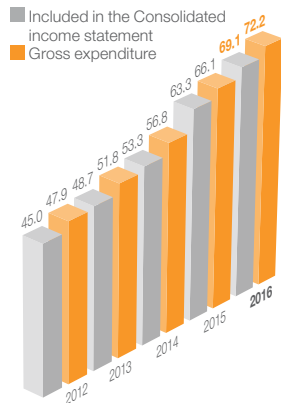
## Key performance indicators The main performance measures monitored by the Board are:

### Financial KPIs



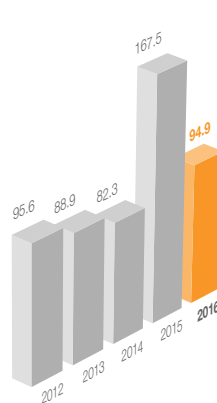
#### Revenue (£m)

We are focused on growth in revenue, through increasing our market and geographic penetration and continually introducing new products. We have also made a number of acquisitions over the last five years which expand our product range and will support revenue growth by using the Group's worldwide marketing and distribution infrastructure to expand these businesses.



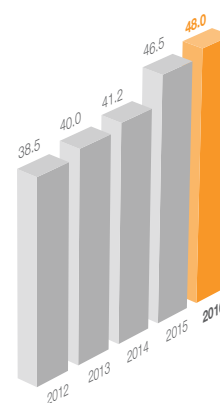
#### Total engineering costs including research and development (£m)

The growth of the business is fundamentally dependent on the continuing investment in engineering costs for the development of new products and processes. The Group continues to make significant investment in future products, with engineering costs equal to approximately 16% of group revenue, and has also been accelerating new product development in certain areas.



#### Adjusted earnings per share (pence)

In order to provide an increasing return to shareholders, along with retaining adequate funds for reinvestment in the business, we aim to achieve year-on-year growth in earnings per share.

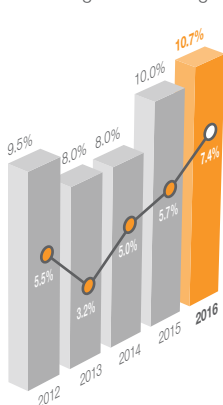


#### Dividend per share (pence)

We aim to achieve significant long-term returns to shareholders by maintaining a progressive dividend policy, whilst maintaining a solid capital base with sufficient working capital to support the forecast growth.

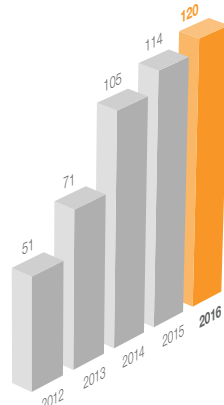
### Non-financial KPIs

— Renishaw employee turnover compared to the bar chart showing the UK average.



#### Employee turnover (%)

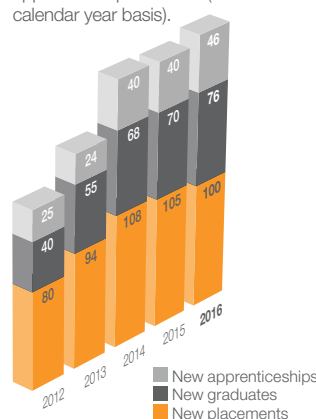
We continue to train, develop and reward our employees so that we retain skilled and effective teams of people. Our aim is to maintain a UK employee turnover rate which is below the UK average for the manufacturing and production sector.



#### Number of apprentices in training

We believe we need to provide many options for career entry for young people and we are proud of our apprenticeship scheme and the success it has achieved, both for the apprentices that have trained with us and for Renishaw in terms of addressing skills gaps. In a period of growth, we intend to increase the number of apprentices taken into training each year.

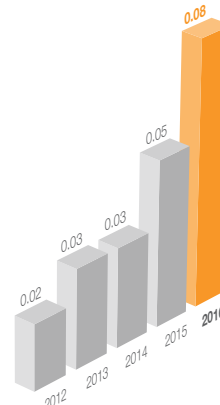
Number of new placements and members of the graduate and apprenticeship schemes (on a calendar year basis).



#### Training

Our strategy is to grow organically, so developing students and taking on apprentices and graduates forms a key element of this strategy. Dependent on economic conditions, we propose to increase year-on-year the number of new apprenticeships, graduate and student placements we take on.

Total lost working time injuries per 100,000 hours worked.



#### Health and safety

In a manufacturing environment, it is crucial that we maintain high standards of health and safety. Our aim is to have zero fatalities and zero lost working time injuries.

## Our strategy in action



### People



Renishaw's people are central to the success of its business. Our innovative, hard-working and loyal employees make Renishaw the business success that it is. A significant number of them have worked in the Group for two or three decades, creating a large collaborative team with a wealth of specialised engineering expertise. Renishaw has actively focused on the ongoing recruitment and training of many bright and enthusiastic young graduates and apprentices and experienced professionals in order to further develop talent.

 For further information see pages 54–55



### Continual research creating strong market positions with innovative products



Renishaw is well known for its sector-leading investment in R&D and engineering. “Apply innovation” is a way of life for Renishaw employees, not just a strap-line. We have continued to protect our core businesses with exciting new patented technology and process developments, whilst also diversifying into new product and market areas.

 For further information see pages 32–33



### Efficient high-quality manufacturing



Renishaw is a highly vertically integrated organisation with significant in-house manufacturing capabilities.

With high-quality manufacturing plants located in the UK, Ireland, India, Germany, USA and France, we are able to deliver robust and reliable products tested to our exacting standards. Our efficiencies, through in-house automation and the use of our own latest product developments, enable us to be competitive with the highest volume processes.

 For further information see pages 30–31



### Global customer support



Renishaw is founded on the belief that excellent customer support delivers success. Our customers are often global, with an order being placed in one country, the product shipped to another and the eventual end-user often located on a different continent. By having “local” global support through our wholly-owned subsidiary network, we are able to assure customers that whatever their needs, we are able to support and assist them, resulting in a positive return on their investment.

 For further information see pages 28–29



### Focus on delivering solutions



Renishaw's business has transitioned over recent years from primarily being a supplier of products to capital equipment manufacturers, to becoming much more focused on delivering a full solution directly to the end-user. Our experience in our core product lines, which has highlighted that our global customers need assistance in solving their problems, is being carried across into our newer offerings.

 For further information see pages 26–27



### Strong market presence and focus on emerging markets



Renishaw has always been a global group with a strong local presence. By ensuring we target emerging markets we are able to develop strong working partnerships with newly developing businesses. These loyal relationships build quickly as our customers realise that all our customers are important to us.

#### Progress

Renishaw's expansion into new growth economies continues, and this year we have established new subsidiaries in Finland, Denmark and Hungary. We have also relocated to larger 14,800 sq ft premises in Taiwan in order to accommodate growth in the Far East region. The process of developing larger offices in the USA, Mexico, Spain and Sweden is also underway.



### Consistent organic growth



Whilst Renishaw does invest for the long term, it also closely manages costs at all levels and ensures that it does not undertake undue risks. It is through this approach that Renishaw has been able to deliver such a long-term track record of profitable growth.

#### Progress

Renishaw has continued to experience underlying growth, which has justified further investment in infrastructure including our people, facilities and subsidiaries. For example, our ROW (Rest of the World) sales operation, which is responsible for 11 overseas areas has expanded this year by opening new subsidiaries in Finland, Denmark and Hungary as well as recruiting extra sales and technical support staff, in order to support growth. ROW is also progressing upgraded facilities in Sweden and new offices in Turkey and Hungary as well as increased investment generally in India. Furthermore, our additive manufacturing business is establishing a global network of Solutions Centres in order to support existing and future growth. This year we have already opened our first Solutions Centres in Europe, North America and Asia with further facilities due to open later in 2016, see page 27 for more information.



### Supplementing the business via niche acquisitions



We actively undertake acquisitions as a means to expand our product portfolio, quicken geographic market penetration and gain access to new patents, technologies and customers.

#### Progress

We continue to integrate acquired businesses and evaluate acquisition opportunities. We have deepened our relationship with and increased our investment to 24.9% in HiETA Technologies Limited, a UK company specialising in the design and delivery of additive manufacturing products, such as heat exchangers for a range of applications – a complementary business for our additive manufacturing products line.



## Our strategy in action – Focus on delivering solutions

Additive manufacturing (AM) provides tremendous freedom to create complex, intricate and customised products, manufactured direct from a “sliced” CAD model, with no need for expensive tooling. Renishaw is leading the transition of metal AM to volume production applications.





Additive manufacturing machines build components up layer by layer.

## How AM works

Unlike subtractive manufacturing processes such as machining, which start with a billet of metal and then remove material to create finished features, additive manufacturing (AM) builds components up layer by layer. In Renishaw's metal laser powder bed fusion machines, a thin layer of fine metal powder is spread evenly across a build plate and a focused laser beam traces out a slice of the CAD model. The laser melts the powder, which cools to form a dense alloy. The build plate drops by a small amount so that another layer of powder can be deposited and the next slice of the component is built on top of the previous one. Unmelted powder is available for re-use on subsequent builds, creating very little waste. This layer-wise build process yields benefits in both the manufacturing process itself and in product performance. Production benefits include the minimisation of tooling, reduction of waste and automation of the manufacturing process. But the real power of AM lies in its ability to create innovative products that are difficult or impossible to make by alternative methods. AM components can be made lighter by making them hollow, filling them with lattice structures or by locally optimising wall sections. Surfaces can be shaped and textured for effective bonding, and complex assemblies can be integrated into a single, multi-functional component. AM can also be used to manufacture parts from high-performance alloys that are very difficult to process conventionally. Finally, there is minimal cost penalty to making products that are customised for perfect adaptation to their application.

Whilst AM has been used very effectively for many years to produce prototypes, its future lies in the volume manufacture of

innovative products. AM is transitioning from a niche technique to a mainstream manufacturing process.

## Solutions Centres

To accelerate this process, Renishaw is establishing a global network of Solutions Centres, where it can work collaboratively with companies that intend to deploy AM in production. The Solutions Centres support customers from conceptual design, through product and process optimisation, to pre-production scale-up and production deployment. Customers can access AM machines and application engineering support, as well as Renishaw's expertise in machining, metrology and finishing operations. Private "incubator cells" provide a secure environment in which to develop AM designs, whilst pre-production facilities enable stable, capable production processes to be established. The first Solutions Centres in Europe, North America and Asia are now operational, with further facilities due to open later in 2016.

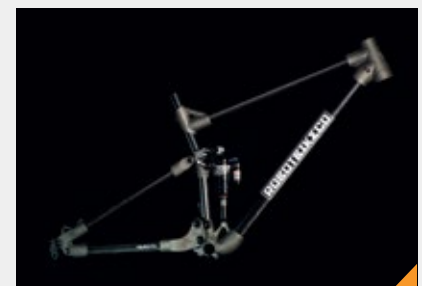
Renishaw is working with customers to develop production AM processes in a wide range of sectors, including civil aerospace, defence, space, automotive, medical devices, mould and die, oil and gas, consumer electronics and sporting goods.

## Re-using AM powder

At the end of a build, unmelted metal powder is collected and sieved ready for re-use. Potentially, powder can change either physically and/or chemically with repeated re-use, causing it to go out of specification and rendering it unsuitable for the AM process. Renishaw has conducted a study examining to what extent powder is affected by multiple re-uses. Tests were carried out on the Renishaw AM 250 metal additive manufacturing system, which features a class-leading inert atmosphere inside the build chamber whilst processing. Titanium alloy (Ti6Al4V) was selected for the study, due to its high cost and propensity to pick up oxygen and nitrogen impurities from the atmosphere. Over the course of 38 builds the same batch of titanium powder was used, with no addition of fresh powder, to test a "worst case" scenario. The conclusion was that the powder did not change to any significant extent, either chemically or physically, over multiple re-use cycles. For more details, see [www.renishaw.com/powder-recycling](http://www.renishaw.com/powder-recycling).



Build plate showing a set of titanium lugs for a bespoke mountain bike.



Robot Bike Co's R160 mountain bike frame benefits from additive manufacturing.

## Customised AM parts

Robot Bike Co's R160 mountain bike features a unique construction using additive manufactured titanium lugs, proprietary carbon fibre tubing and double lap bonded joints. AM enables each bike to be tailored to suit its owner's body shape and riding style – a great example of product and business model innovation using AM.

 For further information see page 8



## Our strategy in action – Global customer support

Through the life-cycle of all our product ranges, Renishaw is focused on providing innovative services to support changing customer expectations and market requirements. We are flexible with our approach, and support customer needs from initial purchase right through to obsolescence, irrelevant of global location.





Our skilled support engineers provide service in maintenance, retrofits and any breakdowns.



All of our global service centres carry out product repairs to the same high standards as our manufacturing facilities.

Top-tier service centres

7

Test and calibration locations

10

### Understanding our customers

With a diversity of products and markets to service, Renishaw understands the requirement to be flexible with any after-sale offerings.

Customer satisfaction is a fundamental factor when creating any after-sale product. Renishaw doesn't just want to meet customer requirements, it wishes to exceed expectations.

Innovation in the support of our products is critical in the long-term relationship with our current and future customers and this is why we have implemented:

- repair by exchange service – for customers that require a fast repair turnaround time, ensuring minimal system downtime;
- loan units – for those customers requiring return of their original unit once repaired;
- transfer of equipment operational skills – from healthcare applications, where our technical teams proactively attend medical procedures, to our metrology customers who visit our global training centres for bespoke courses; and
- support agreements – from extended warranty to 24/7 support, whatever the customer requires, we will try and flex our offer to meet each individual customer's needs.

We continually review our support policies and create new services to help our customers in their changing markets.

### Accessing Renishaw support

Renishaw continues to invest in the infrastructure and service capabilities to provide seamless customer service through the variety of channels used to distribute products. In many cases our relationship with customers now encompasses multiple product solutions, each with unique service requirements.

We are constantly reviewing our customer journey, whenever they have a need to contact our support department, whether their request is for:

- detailed information regarding any of our after-sales product offerings;
- access to our technical literature;
- purchase of spare parts; or
- emergency contact in a breakdown situation.

Irrelevant of which Renishaw subsidiary will be looking after the local customer, we recognise the importance that our support message is cohesive and easily accessible.

### Renishaw support structure

As well as local support within our subsidiary network, we have invested in seven top-tier service centres as well as ten test and calibration locations. Our local offices have facilities and the ability to provide local training courses in product operation, applications and maintenance.

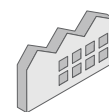
We have invested in over 400 support personnel, offering their expertise in field service, application support, training and technical help desk assistance.

The majority of our support teams have had a long career within Renishaw and we encourage them to develop skills and technical knowledge so that they can become a specialist in a particular product range.

We invest heavily in training our people, providing test rigs and documentation when a new product is launched, and also throughout the life-cycle of the product.

Where we don't have a local subsidiary, we have agreements with local agents and distributors to support our customers. These have been trained and supported as though they themselves were employees of Renishaw.

We are very focused on having a long-term relationship with our customers. It is not just about a sale but more about supporting and helping our customers develop their processes and improving the quality of their product output. Whenever they need our support, we are there providing them with tailored service solutions to meet their needs.



## Our strategy in action – Efficient high-quality manufacturing



PCB test equipment installed within the Miskin electronics facility.



Line of RAMTIC systems used to machine precision metal components.

### Manufacturing overview

During the last year, the manufacturing operations have continued to support significant activity levels for all product lines, the development of in-house processes to support new product development and growth for the future of the healthcare and additive manufacturing businesses. A substantial investment has been made during the year by refurbishing the second manufacturing hall at Miskin and the associated office accommodation to create additional capacity, and also manufacturing facilities to support the healthcare business, as well as reorganising the operations to separate piece parts manufacturing and assembly operations to allow for future capacity requirements.

### Strategy

At a strategic level, Renishaw's manufacturing operations are highly vertically integrated. This is as a result of our commitment to delivering exceptional service levels in terms of delivery, service, and product quality to our customers. This approach also ensures that we are in control of our costs, quality and many of the supply chains that are critical to the success of our business. This approach has continued during the year with substantial investments in processes and capital to support the future of the AM business.

Over many years, we have strived to ensure that our products are designed to optimise manufacturing capability, whether in relation to our machining and assembly processes, or that of third-party suppliers. This is best illustrated by our approach to metal cutting, where a high degree of standardisation has been

applied to the hardware used to perform machining operations, since we have an excellent understanding of process capability for each platform. A secondary benefit to this strategy is that it provides the ability to upscale production through duplication, as required, without the need to invent alternative techniques, and this has been key to delivering the growth in our turnover in recent years.

The same standardisation philosophies are applied to design for assembly and test during product and process development, and during the last year, a number of new products have transferred from pre-production to the assembly sites in the UK, Ireland and India.

The Group has manufacturing facilities in the UK (Woodchester 165,000 sq ft, Stonehouse 100,000 sq ft, Miskin 460,000 sq ft and smaller operations at New Mills, Old Town, Stone and York), Ireland (Swords 70,000 sq ft), India (Pune 50,000 sq ft), Germany (Völklingen 19,000 sq ft), France (Lyon 5,500 sq ft) and the USA (Grand Haven 14,000 sq ft).

### Long-term investment

Renishaw continues to be committed to significant investment in its manufacturing capability for both the medium and long-term. The Renishaw Automated Mill Turn Inspection Centre (RAMTIC) system developed in the early 1990s uses a standard machine tool platform that has been modified to provide a highly efficient manufacturing solution, involving a high degree of automation and closed-loop control that is facilitated by Renishaw probing technology for tool setting, in-process monitoring and component validation. Whilst the base machine platform has evolved with

improvements in machine tool technology, the fundamental process remains the same and is the mainstay of Renishaw's standard machining platforms for prismatic parts, with 62 RAMTIC systems now in operation.

The same approach has also been taken with respect to our investments in assembly-based technologies. Renishaw has a very broad product range that is largely produced in low to medium volumes, but through our strategies of standardisation and design for manufacture we have created the circumstances to develop and invest in highly efficient and capable assembly systems that deliver exceptional process control and efficiencies. The electronics production facilities utilise the very latest technology capable of placing 40,000 components per hour, process control by using in-line component validation, automated optical inspection and innovative technology to validate the performance of assembled printed circuit boards (PCBs). Another example is the in-house development of automation systems for assembly of certain products in the UK and Ireland facilities, where automation and closed-loop controls have delivered significant reductions in process variation, hence providing enhanced product quality, as well as reducing our costs.

There has been continual and substantial investment in the latest manufacturing technologies in order to optimise the cost and capability of our manufacturing systems, where investment in new equipment in the UK over the period 2010 to 2016 has been £35m.





Renishaw apprentice being trained at an apprentice training centre.



Electronics production lines at the award-winning Woodchester assembly facility.

## Supply chain management

As a manufacturer operating in a high mix/low volume situation, with a strategy of delivering exceptional customer service, our approach has been to maintain as much control as possible of our supply chains. This has been achieved through a combination of in-house manufacturing (including the creation of in-house capability for critical processes as they become financially viable), duplication of critical processes, dual sourcing and strategic long-term partnerships with our third-party suppliers. We also have supply chain management teams based in China, India and at our manufacturing facilities in Ireland.

## Risk management

We have duplicated key processes in order to reduce the risks associated with certain critical in-house supply chains such as machining, anodising of aluminium components and the assembly and test of electronic PCBs. For third-party supply chains, regular monitoring and review takes place with a view to determining supply risk, dual sourcing strategies and our contractual terms with suppliers in order to ensure continuity of supply.

## People

Consistent with the strategy in other parts of the business, the manufacturing operations take a long-term view with regard to development of people. In many cases employees transfer from manufacturing into other parts of the business to assist other roles such as new product development or applications engineering, making best use of the experience gained within the manufacturing arena.

The investment in apprentices and graduates is very much in evidence at the manufacturing operations at each site. All manufacturing graduates and apprentices follow a well-defined programme that provides exposure to a wide range of functions and technologies such that we develop well-rounded individuals with a broad grounding in a variety of manufacturing-related disciplines. Many of our apprentices and graduates succeed in developing career paths into more senior engineering and operational roles within the organisation (for example, see pages 54 and 55).

## Progress at a glance

During the last year, investment in manufacturing facilities and equipment have continued to ensure that future requirements can be satisfied in a highly efficient and cost-effective manner.

The remaining factory floor space has been refurbished at the Miskin facility and operations have been relocated to create separation between assembly and piece part manufacturing.

Substantial capital investments and process development activities have taken place to provide both in-house piece part manufacturing capabilities and new assembly processes for the new RenAM 500M machine.

Production of various products have transferred to alternative assembly locations in the UK, Ireland and India as a result of capacity forecasts or the completion of new product development activities.



Our strategy in action – Continual research creating strong market positions with innovative products

**“From the perspective of societal impact, the Renishaw technology that excites me the most has to be our neurological developments and the potential of significantly improving survival rates in oncology. Commercially, I think that the application of metal additive manufacturing is very exciting.”**

Geoff McFarland  
Group Engineering Director





REVO measuring system for co-ordinate measuring machines.



A Renishaw engineer discusses the Company's innovative products at an open day.

**We asked, Geoff McFarland, Group Engineering Director to explain what drives Renishaw's strong culture of innovation.**

**Q Why has Renishaw been able to sustain innovation for so long?**

**A** There is a fundamental answer to this and watching my kids reinforces this for me. When my daughter first started cooking as a seven-year-old she had no fear of the outcome – Renishaw also has that in-built confidence that we can make things work, that we can always find a solution. It is also because there is a real understanding that behind every problem lies an opportunity.

**Q Where does this in-built confidence come from?**

**A** It was the original culture – it was there when I joined. Lots of people, especially engineers, have lots of great ideas about how they might solve a problem, but it never gets any further because they don't know how they are going to put the back-end together; they haven't a clue how they are going to make it. That's the bit that was a real eye-opener to me when I first joined Renishaw. When someone suggested a great technical idea, but then said "How are we going to make this?", the answer was always go away and find out – see what knowledge we already have within the business and then "let's have a go!"

The front-end idea is the easy bit. Renishaw's advantage is that we have the core knowledge of how it might be made, whether it's electronics, optics, software, machining, fabrication or

additive layer manufacturing – knowledge built up over many decades. I think that we really underrate our process technology innovation.

**Q Where do ideas for new products originate?**

**A** Many come from the market bringing us a problem, but they are also generated internally – what issues do we face in our own manufacturing and what we would like to solve? However a key differentiator is that part of the Renishaw culture is saying "well if you solve that problem, what is the next problem – are they connected and where do you want to jump to?"

Quite often customers will ask you for a solution but at the same time they are usually asking other suppliers exactly the same question, and often they are also suggesting a solution. What we really need to understand is the fundamental problem – we can then create a solution that is well beyond what other suppliers will conceive, and which therefore gives rise to the potential for the creation of valuable intellectual property.

**Q How do you decide which ideas should go forward?**

**A** Saying "no" is a difficult thing to do, but the sooner we can say "no" the more productive we can be. We also get many approaches from all sorts of people in differing sectors presenting us with what they believe is a great idea and asking for us to get involved. But unfortunately, an awful lot of those ideas are knocked out quickly by considering the application of the suggested products – whether

querying how they will work in a difficult environment or, in the case of healthcare products, how it can be easily adapted, as each patient is different.

You really have to turn the decision-making around and find out reasons why you can say "yes" to an idea – if it's a reason to say "no" then it can overwhelm your decision-making.

**Q You have been involved with many products, but is there one that gives you the most satisfaction?**

**A** Probably the REVO measuring system, as I spent a lot of my early design career working on that project. It gives me the most satisfaction, and it also gives me the most frustration – it was such a breakthrough product, but manufacturing is quite a conservative industry and the adoption of something that is such a breakthrough is so difficult, because you have to create the market.

**Q What makes you most proud about Renishaw?**

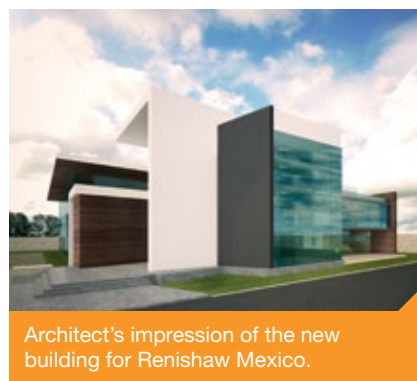
**A** One of the things that I am incredibly proud about is our employees and the Renishaw "family". I think that we have a group of talented and like-minded people who are really well respected within the wider engineering community, where most people have heard of Renishaw. The respect that we receive is very gratifying.

The other thing that I am very proud about is our technology pipeline because there are awful lot of projects in there, at very different stages in the development life cycle.

## Performance – Overview



The Healthcare Centre of Excellence includes an “operating theatre” for training.



Architect's impression of the new building for Renishaw Mexico.

Despite a reduction in revenue and profit due to a number of large orders in the Far East in the previous year not repeating to the same extent this year, Renishaw continued its focus on investments required to achieve long-term business growth, including new product development, global marketing and distribution infrastructure, manufacturing capacity, and the recruitment and training of skilled people.

### Review of 2016

Revenue last year benefited from a number of large orders in the Far East, particularly in the consumer electronics markets, which have not been repeated to the same extent this year. After adjusting for these factors, there was still underlying growth of 6%. This provided us with the confidence to continue our ongoing investments for the long-term sustainability of the Group, including recruitment and training of skilled employees, global marketing and distribution infrastructure, IT infrastructure, new product development and manufacturing capacity.

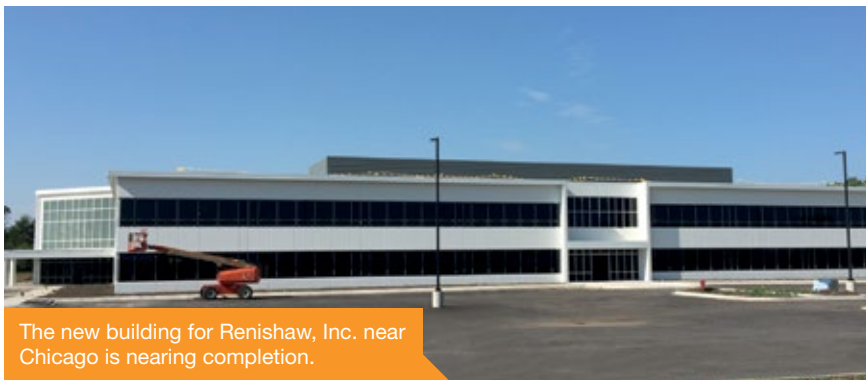
The year saw another high level of capital investment in the development and refurbishment of property. At the Miskin site in South Wales, around £40m has now been invested in site acquisition, refurbishment and purchase of plant and machinery. During the second half of the year the refurbishment of a 122,000 sq ft production hall was completed, which has enabled machining and assembly operations to be separated, whilst an annexe now houses newly completed R&D facilities, a demonstration area, a Fabrication Development Centre for educating students and a Healthcare Centre of Excellence. The latter, which includes an “operating theatre” for training neurosurgeons, will be formally opened in September 2016 and is already producing additively manufactured metal dental and medical components.

The planning application for 1.74m sq ft of development at the Miskin site, including 400,000 sq ft for long-term use by Renishaw, has now been granted and work has started on the next stage in this exciting development.

The Old Town site in Wotton-under-Edge, which was vacated by our spectroscopy products line at the start of the year, has also been fully refurbished as an R&D facility and re-occupation will start during the summer of 2016.

In Stone, Staffordshire, there has been significant ongoing refurbishment of the two adjacent properties, totalling 90,000 sq ft, which were purchased last year to allow Renishaw's additive manufacturing products line to relocate from its former premises. The new facilities now house our UK Solutions Centre, one of a global network that is being established to increase the adoption of additive manufacturing technology by providing a secure development environment in which our customers can expand their AM knowledge and confidence to enable it to be deployed in their own facilities for volume production (see page 26).

Outside the UK, there were further investments in group facilities, including the creation of new Solutions Centres – a new facility in Canada close to our existing office and a centre at our existing facility in Pune, India, which was formally opened by the British Deputy High Commissioner, Colin Wells, in June 2016. In the USA, the new build of a 133,000 sq ft facility in West Dundee, near Chicago, Illinois, is nearing completion. This new US facility will allow us to consolidate operations from two existing sites and is due for occupation in autumn 2016.



The new building for Renishaw, Inc. near Chicago is nearing completion.



UK Additive Manufacturing Solutions Centre at Stone, Staffordshire.

Following the acquisition of land last year, work is underway to create a new building that will provide expansion space for sales and marketing operations in Mexico, whilst in Europe, refurbishment of existing premises in Sweden, Italy and France is also in progress. In Taiwan, we have moved to a facility in an industrial area of Taichung that provides a new demonstration facility and is close to many of our key customers in the machine tool and motion control industries.

These new facilities require supporting IT infrastructure, and during the year, there was also a focus on the creation of regional data centres to improve performance across our subsidiary network.

Competition for the best talent that will ensure the future success of the business is very strong and we continue to promote Renishaw regionally and nationally as a desirable employer. This has been aided by Renishaw being recognised for the third consecutive year by The JobCrowd (a UK graduate job review website) as a Top 3 employer of graduates in the UK's engineering/manufacturing sector. We have a planned record intake of 75 graduates and 45 apprentices this summer, whilst our in-house academy delivered 6,500 training days (2015: 5,700).

### Market conditions

Last year was exceptional for our Far East business, primarily due to large orders from China and South Korea for our machine tool products used in the manufacture of consumer electronics. However these did not repeat at the same levels this year, but there was a favourable environment for position encoders as a result of new investments in LED manufacture and the semiconductor sector.

Whilst there was weaker trading in the Far East electronics sector, globally we are still seeing ongoing investment in production systems and processes for key sectors such as aerospace, automotive and energy, as evidenced by our underlying growth. All these sectors require Renishaw systems to meet their need for ever tighter production tolerances and cost controls.

### Strategy

To meet our key strategic aims, we continued to make investments, which this year included focusing on enhancing our manufacturing capabilities, our ability to demonstrate our products and their applications, and our continuing drive to develop a strong market presence in both established and emerging markets.

Our investment during the year at the Miskin facility has further reduced supply chain risk, whilst increasing manufacturing capacity for component part machining, electronics assembly, the production of additive manufacturing machines, and dental structures/medical implants. It has also provided a healthcare training facility and product demonstration area, and importantly for our talent pipeline, has also seen the creation of a Fabrication Development Centre which aims to raise awareness amongst students and teachers of the value of a career in engineering.

We continued to invest heavily in R&D to create strong market positions through technology leadership, with £69.1m (net of capitalised costs) expenditure on R&D and engineering during the year. We filed 45 new patent applications and there were 68 previously filed applications granted this year.

During the year we also created new subsidiaries in Denmark (Renishaw ApS), Hungary (Renishaw Hungary Kft) and Finland (Renishaw Oy) to support the increasing level of sales and potential for growth in those countries.

## Performance – Metrology

### Performance

There was a large reduction for our machine tool products line due to non-repeating large orders from the Far East, but there was good growth for our measurement and automation, metal additive manufacturing and encoder products lines. As for the previous year, the measurement and automation products line, currently focused on the Equator™ gauging system, continues to see high levels of success in the automotive, aerospace and consumer electronics sectors on a global basis, with integration within automation cells continuing to be a notable trend.

The AM products line, which includes the LBC business in Germany (specialising in AM parts manufacture, including conformally cooled mould tools and tool inserts for injection moulding and die-casting applications), continues to benefit from high levels of investment and integration within the Group's infrastructure, including the previously mentioned Solutions Centres. These new centres require machines for benchmarking and customer use with additional machines required for demonstration facilities around the Group. Whilst the majority of AM machine sales are still for research and prototyping, these are being supplied worldwide to major manufacturing OEMs and key suppliers in a range of sectors, including aerospace, automotive and medical.

Awareness of our fixtures line continues to grow and whilst the R&R brand has been retained in the USA due to long-term recognition, elsewhere we sell under the Renishaw name. Growth is also being aided by our increasing drive to provide full metrology solutions to end-use customers, which includes the supply of fixtures to users of co-ordinate measuring machines and Equator gauging systems.

The web shop, introduced last year, continues to increase the range of styli, fixtures and other metrology accessories available for sale or quotation, including products for the measurement and automation, co-ordinate measuring machine, machine tool and calibration products lines. The site is now available in 25 different countries.

Position encoders again achieved solid growth, with particular benefit derived from the ongoing global drive towards industrial automation which aims to increase capacity and flexibility, whilst reducing manufacturing lead times and costs. There were also high levels of investment in the Far East semiconductor, electronics and robotics sectors, including in flat panel displays. All these sectors require rapid, reliable and accurate measurement of position between moving parts, and our award-winning RESOLUTE absolute encoder continues to win new business.

Especially in Asia, we are seeing orders for position encoders on ever shorter lead times. Our ongoing investments in manufacturing capacity have given us an agile capability that allows us to respond quickly to such demands.

### Market conditions

The drivers for our metrology business are similar across the world. Many of our lines are benefiting from global skills shortages in the engineering sector, requiring increased investments in automation to offset the need for highly skilled machine operators and demanding user-interfaces and software that are easier to operate. Manufacturers are also faced with a relentless drive to reduce costs, shorten lead times, meet the need for increased complexity and closer tolerances in product design, and supply into markets where shorter product life-cycles are compressing times for process development. Renishaw technologies provide them with proven solutions to keep machines running reliably, maximise output from those machines, assist fast changeover between different products, and significantly reduce the time taken to inspect finished components.

A key sector for Renishaw continues to be the civil aviation sector. The 2015 Boeing Global Market Forecast sees the commercial fleet doubling by 2034, with 58% of the 38,000 new aircraft required to accommodate growth. Our products are used heavily in the aerospace sector and the drive towards "lightweight" components is generating strong interest in additive manufacturing.

A notable weakness during the year was the oil and gas sector, which has suffered from a lack of investment due to lower oil prices. The impact has been most notably felt by our spatial measurement products line, which has historically been highly reliant on the sector, although we continue to expand our range of surveying products which target alternative applications.

### Strategy for growth

A key focus is on developing technologies that provide patented products and methods which support our product strategies, with £60.1m (net of capitalised costs) expenditure on R&D and engineering during the year. The current technology focus includes user-friendly metrology software for CMMs, machine tool probing, calibration systems and gauging; miniaturised high-resolution position feedback systems that support the manufacture of high-precision electronics; and the development of AM systems with faster processing capability and improved process control for large-scale manufacturing.

We continue to position Renishaw as a "solutions provider" and reduce the risks of over-reliance on large customers who integrate our products. Our measurement and automation, calibration, additive manufacturing and spatial measurement products, plus accessory ranges, such as styli and fixtures, can be supplied direct to the end-user, whilst we continue to strengthen our portfolio of hardware and software for CMMs that can be used to upgrade machines that are already installed. For example, our new REVO® vision measurement probe (RVP) is compatible with the new REVO-2 five-axis measuring head and offers a solution for the inspection of parts with large numbers of holes that cannot be accurately measured with tactile probing or manual methods.

We also constantly evaluate new opportunities for existing or complementary technologies both to increase sales to our existing customer base and to expand upon that base. The new RenAM 500M system features a Z-axis fitted with a RESOLUTE absolute encoder for highly accurate positioning, and many of the opportunities for AM sales are to existing customers who

understand Renishaw's holistic approach to manufacturing and the complementary products that can assist their part production, such as machine tool probes, gauging or CMM inspection products.

### Key developments

During the year, we launched new spatial measurement products that will continue to reduce reliance on the oil and gas markets. Merlin is a dedicated time-tagged marine laser scanning system that will help cut the cost of vessel-based surveying. It supports safer, faster and more comprehensive data acquisition for coastal, offshore and inland waterway project management. Also introduced was Borettrak® Viewer software which can be used for safer and more efficient planning of drilling and blasting in quarries and mines.

Several new software products were also introduced, all designed to simplify and enhance the operation of our metrology products. For machine tool probe users, Inspection Plus with SupaTouch optimisation automatically optimises probe measurement cycles on CNC machine tools to minimise cycle times, whilst Set and Inspect is part of a developing family of on-machine apps that complements the new range of touchscreen CNC controllers, allowing interactive part set-up, inspection and tool setting using

Renishaw probes. Allowing time-based data capture with the QC20-W ballbar, the new Ballbar Trace software package opens up many new applications, including static monitoring and data capture for the ISO 10791-6 test.

There were also key new developments for the AM products line. The RenAM 500M is an additive manufacturing system designed specifically for the volume production of metal components on the factory floor. It features automated powder and waste handling systems that enable consistent process quality, reduce operator interaction and ensure high standards of system safety. Also introduced was the AM 400 machine which is a development of the existing AM 250 system, offering improved control software, revised gas flow and optical window protection system, and a new 400 W optical system that gives a reduced laser beam diameter.

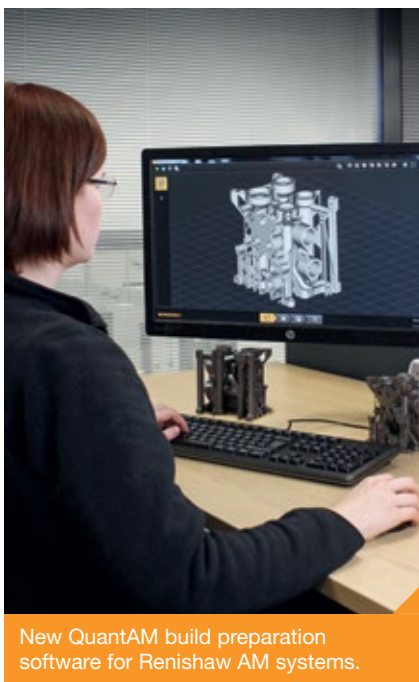
A further important development is the QuantAM build preparation software which prepares CAD models for production on Renishaw AM systems. The software allows tighter integration into the machine control software and the ability to accurately and rapidly review all build files for Renishaw AM systems, including those from third party packages. It can also be used as a tool to help guide a customer's Design for Additive

Manufacturing (DfAM) process, which is essential to gain the full benefits of AM.

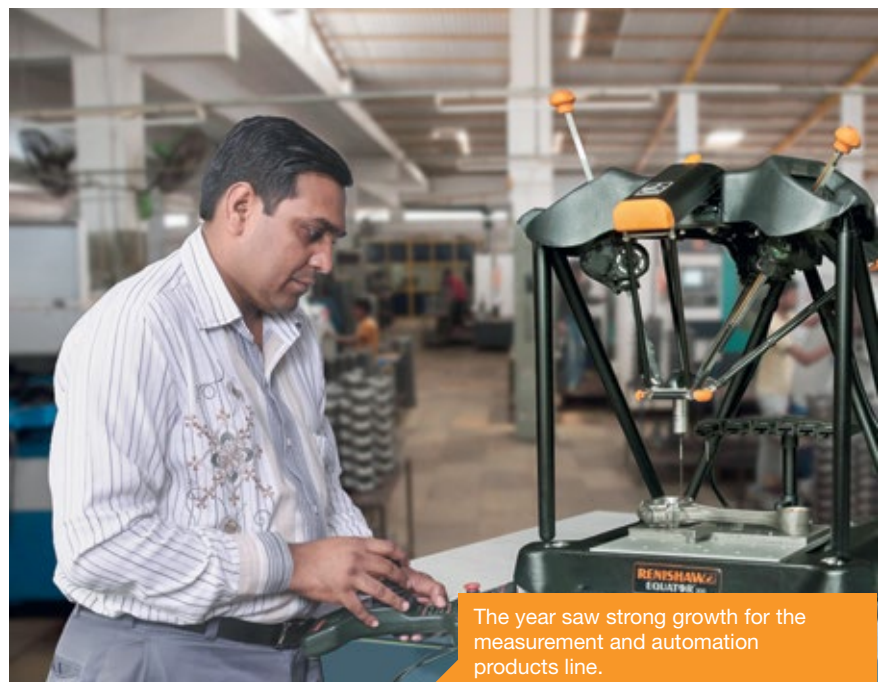
### Outlook

We continue to be confident that there will be increased adoption of AM technologies by many of our existing customer groups, whilst a continuing drive to automate manufacturing processes in many sectors, both to minimise labour costs and reduce the need for skilled labour, will benefit our position encoder, measurement and automation, and machine tool products lines.

Growth in the world's middle-classes, with increasing disposable income, is also forecast to drive demand in areas such as civil aviation, consumer products, agriculture, construction and power generation (including renewables and a recovery in oil and gas). These trends should all result in increased demand for our metrology products to help drive efficiencies, reduce waste, increase automation and aid product measurement traceability.



New QuantAM build preparation software for Renishaw AM systems.



The year saw strong growth for the measurement and automation products line.

## The consumer products market



## Improving manufacturing capabilities

Consumer products and electronics continue to change at a rapid pace, with ever shorter life cycles driven as much by fashion as functional requirements. Advances in technology, including more sophisticated hardware and sleeker physical design, call for rapid improvements in manufacturing capabilities.

### Focusing on fast and accurate positioning

Smartphone cameras have become indispensable tools. Lens quality is more important now than ever, due to the ever-increasing number of megapixels found in today's digital phone cameras. Taiwan's UMA Technology Inc (UMA) develops optical testing equipment for industry to provide accurate, rapid and reliable lens error detection schemes.

Lens testing equipment is used to ensure image quality. The optical quality of lenses is measured using a uniformly illuminated ISO 12233 chart standard projected

directly onto an imaging sensor by the lens. This test pattern is an image evaluation tool for determining the resolving power, limiting resolution and modulation transfer function (MTF) of electronic still-picture cameras. Different lenses project differing image qualities such that high-quality lenses closely reproduce the chart standard, whereas poor-quality lenses do not.

Renishaw has supplied the optical encoder components required by UMA's DSC-E1 series, designed for small lens mass production line testing. The general test process starts with the precise placement of a lens tray on the DSC-E1 series' mobile platform; the candidate lens is then lined up with the standard chart and the imaging sensor beneath. Each lens test examines 9 – 25 different image regions such that the total time taken for each lens is less than 3 seconds. The platform moves with high speed back and forth, in both X and Y directions, and accuracy depends on high-quality closed-loop feedback information provided by an optical encoder on each axis.

Speed is another important factor in the industry's assessment of equipment performance. UMA states, "There is a gap between the edge of the lens and the insert on the lens tray. The original system had to readjust position until the lens, light source and image sensor were aligned, which often took several attempts. Consequently, enhancing process efficiency was a big challenge for us. Renishaw's high-performance encoder allows our latest system to locate the correct position at once, reducing processing time significantly."

UMA adds, "Benefiting from the explosive growth in smartphones and mobile devices, our potential market has grown 20 times. We must enhance our equipment speed to maintain our leading position in order to seize these opportunities. Renishaw's encoders are well known in the market and, when compared with other brands, have the best cost-performance ratio. We have no reason to choose others".

UMA linear stage incorporates Renishaw RGH22 optical encoders.



The lens quality of smartphone cameras is constantly improving.



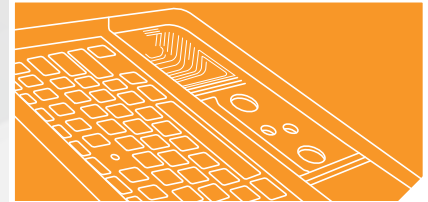


The fast-paced nature of the consumer products market demands flexible manufacturing systems that can adapt to shorter lifecycles, yet still meet the requirements for high-quality, high-volume components. This illustration of a typical household shows a few examples of how Renishaw products are allowing manufacturers to satisfy these demanding requirements.



**Digital display manufacture**

Large-scale manufacturing of flat panel displays requires accurate encoders for position and motion control of high-speed systems. Absolute encoders improve reliability and productivity.



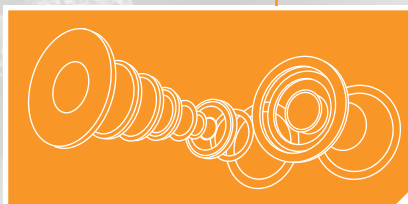
**Metal housings for computers**

High-volume production machining needs probing technology to automate part setting and control cutting tools to minimise scrap and maximise production capacity from each machine tool.



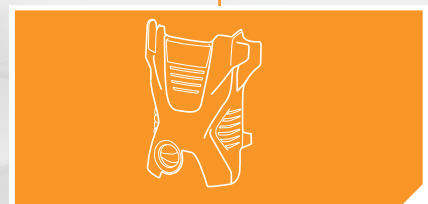
**High-quality look and feel**

Precision manufacturing using multiple process control techniques is used to produce the high standard of fit and finish required on casings and components for phones and tablets.



**Lens testing for digital cameras**

High-quality cameras incorporated into compact devices require good lenses. Position encoders are used to enable high-speed automated testing of optics at the production rates required by smartphone manufacturers.



**Plastic moulded casings**

Additive manufacturing and precision machining technology are used to produce injection mould tooling with optimised conformal cooling for leading consumer brands, enhancing product quality and production efficiency.

## The construction market



C-ALS® borehole-deployable laser scanner for concealed cavity and void scanning.

## Scanning for safety and accuracy

An important part of any construction, mining and quarrying project is surveying, and sites need to be rapidly assessed to aid in the efficient planning of operations, such as the re-routing of roads and positioning of heavy machinery. There is therefore an increasing use of laser scanning technology to map construction sites so as to gain accurate measurements in a fraction of the time of traditional methods.

### Out of sight, but top of mind

Fondasol is a firm of consulting engineers which advises constructors in the design of geotechnical structures. The company was contracted by Schiltigheim Town Council to conduct a survey on a brownfield site in the 9th century town which is located in north east France, where the site contained a series of subterranean man-made cellars below a demolished building.

The Council required verification that the section of underground cellars extending beneath public land had been made safe and that there was no risk of collapse. The entrance to the cellar network had been sealed and Fondasol required a solution that would enable them to survey the voids in detail, from a safe location without entering the cellars.

The solution was to use Renishaw's C-ALS® cavity monitoring system, a surface-operated laser scanner that is used to obtain the 3D geometry of underground cavities. The system is deployed down a borehole using lightweight rods with communication and power supplied from a dedicated surface unit.

An integrated nosecone camera provides forward-looking visibility during use. This means that operators can observe any obstructions, and judge when the C-ALS probe has entered the cavity. The sensors ensure the C-ALS probe's position can be tracked down the borehole so that the scan is automatically

georeferenced relative to the borehole collar position.

In conclusion, it was found that the cellar network beneath the public land had not been filled by the previous occupant. The C-ALS survey, however, also showed that the cellar network appeared to be in good condition and indicated no concerning structure dimensional deformation, meaning no risk of collapse. The Council now has a detailed record of the area, including cavity volumes, which can be consulted for future development of the site and should future infill be required.

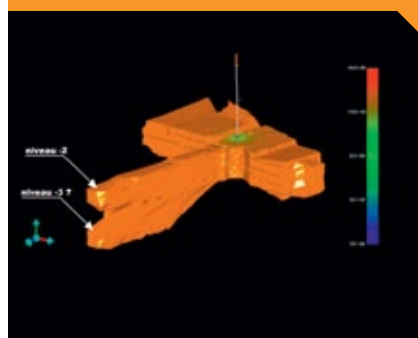
C-ALS proved to be the only non-destructive way of effectively and safely mapping and assessing the condition of the cellars while minimising time and disruption on site.

Fondasol trusted Renishaw for its C-ALS system, noting that "it is the most complete and practical tool that we tested" and that it "completely meets the expectations that we had on the issues related to subterranean cavities".

Deploying a C-ALS system for measuring underground voids.



Complete scan of the underground site in Schiltigheim performed by Fondasol.

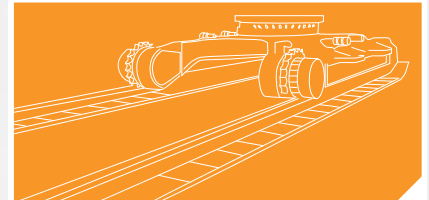


From heavy earthmoving equipment to surveying systems and mineral analysis, Renishaw's products are used in a diverse range of construction industry applications. This illustration of a typical quarry highlights just a few areas in which our products are helping to improve manufacturing and process efficiency.



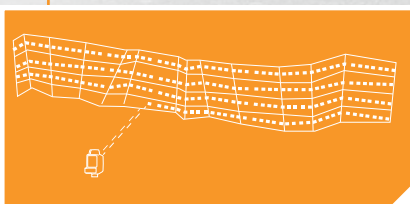
**Investigation of underground structures and cavities**

Borehole-deployable scanners are used from the surface to map voids and old or unrecorded workings, improving safety and project planning for mining, quarrying and construction activities.



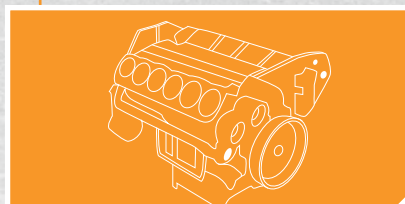
**Manufacture of large high-value components**

Wireless probing technology is used to control and automate the machining of chassis and other components for earthmoving plant where scrap is too costly to accept.



**Quarry surveying and stockpile monitoring**

Laser scanning systems are used to profile whole rock faces for blast optimisation, enabling improved safety and productivity in quarrying.



**Precision parts for power plants**

High-precision manufacturing uses advanced scanning probe systems to control quality, enabling power plants to deliver enhanced performance, higher reliability and reduced emissions.



**Materials identification**

Analysis of geological samples and identification or certification of gemstones are two of the many applications for Raman spectroscopy, sometimes combined with scanning electron microscopes.

## Performance – Healthcare

### Performance

During the year there was growth from our medical dental and neurological products lines.

The medical dental products line again achieved a record year for the annual production levels of additively manufactured metal dental structures created from cobalt chrome powder using Renishaw AM machines. This came from a mix of LaserPFM™ frameworks (crowns and bridges), new LaserRPD™ partial dentures (see page 43) and LaserAbutments™, which are implant-supported custom abutments that are made by Renishaw's hybrid manufacturing – additively manufactured to capture fine occlusal details and then precision machined to achieve precisely fitting interface geometry for screw-retained implants; porcelain is then applied directly to the abutment without the need for a separate crown. Sales of the latter have been boosted by a collaboration with global implant innovator, BioHorizons, which is allowing its customers to offer a custom AM abutment for the first time.

There has also been substantial progress in the supply of additively manufactured LaserImplants™ which were introduced at the end of the previous year. These custom-made craniomaxillofacial patient specific implants (PSIs) and associated cutting guides are supporting reconstructive surgery, typically resulting from head or neck trauma, birth defects or cancer treatment (see Centro Médico Teknon case study on page 20).

The majority of medical dental AM products manufacture now takes place in the new Healthcare Centre of Excellence which has been established at the Miskin site. The Centre operates under an ISO13485 quality management system for the design and manufacture of medical devices and will operate additive manufacturing processes to produce medical products. The manufacture of zirconia dental structures continues at our Stonehouse facility.

The medical dental products line also benefits from sales of Renishaw AM machines which are configured specifically for healthcare applications, which includes sales to world-leading dental company DENTSPLY Implants following an agreement reached last year.

There was good progress for the neurosurgical products line, with key strategic sales of the neuromate stereotactic robotic system achieved during the year. The second installation of a system in Spain was made in the renowned Sant Joan de Déu Barcelona Children's Hospital with the first surgery being a stereoelectroencephalography (SEEG) implantation case for epilepsy. Neuromate systems along with the neuroinspire surgical planning software were also installed in leading hospitals in the UK including Great Ormond Street Hospital for children in London, UK and these have been successfully used for SEEG cases as well as biopsies of tumours in delicate regions of the brain.

Whilst we are able to meet the high performance Raman instrumentation requirements for a wide range of research applications, including life sciences, graphene and other 2D materials, pharmaceuticals and advanced materials for the green energy market, there is an increasing use of our technology within medical research.

During the year, we highlighted several such applications for our inVia system: in Canada, The Irving K Barber School of Arts and Sciences at the University of British Columbia, is using our system to detect radiation damage in cells and tissues during cancer treatments, so that dosages can be adjusted to be more precise and targeted; The Children's Hospital of Michigan, USA, is analysing childhood diseases with the ultimate goal to have Raman technology available in the operating room for accurate, real-time diagnosis of tissue during operations; and, also in the USA, the University of Colorado Boulder is analysing the mechanical behaviour and underlying materials science of biological tissues and biomaterials, including those used in biological tissue replacement (e.g., for tissue repair and regeneration).

Hybrid systems, combining Raman chemical analysis with the high spatial resolution of either scanning electron microscopy or atomic force microscopy, continue to be in strong demand. Likewise, the growing life science market is showing renewed interest in Raman combined with laser scanning confocal microscopy.

### Market conditions

Life expectancy is increasing in both developed and developing markets, meaning that key drivers include the requirement for faster procedures to reduce waiting times, more economical treatments, more patient-specific treatments (e.g., implants and personalised medicines), and safer procedures with reduced human errors. All our healthcare products lines are well placed to deliver for these requirements.

Global economic conditions continue to limit the availability of academic research funding in certain markets, while remaining strong in others. We entered the first half in a very positive mood with strong first half growth for our spectroscopy line, but this has not been sustained into the second half where further delays to funding have been experienced. Key research areas including 2D and 3D materials, green energy and biomedical research continue to attract funding and our spectroscopy products are well placed to service these sectors, particularly with the launch of our new inVia Qontor with LiveTrack™ technology.

### Strategy for growth

We aim to develop innovative healthcare products that will significantly advance our customers' operational performance by maximising research capabilities, reducing process times and improving the efficacy of medical procedures. We are also increasingly addressing the requirement for personalised healthcare treatments.

As a key Renishaw focus is to develop technologies that provide patented products and methods, we invested £9.0m (net of capitalised costs) of expenditure on R&D and engineering during the year.

The regulatory requirements for healthcare products demand significant investment, but make barriers to entry high for competitive products.

Our metrology and healthcare businesses are interconnected and we employ core metrology technologies and manufacturing expertise to minimise technology risks. This is illustrated very clearly in our medical dental products line where we utilise our own AM machines in the manufacture of dental structures and medical implants, whilst also utilising our knowledge of subtractive machining in the hybrid manufacture of LaserAbutments. Our Raman systems are supplied with a high-speed encoded stage which incorporates our position encoders, whilst a key aspect of our offering is the ability to give customers the flexibility to rapidly change key components within our spectrometers, such as diffraction grating and Rayleigh filters – this is made possible by kinematic mounts which are also used extensively in our CMM and machine tool probing systems.

### Key developments

A key launch for the spectroscopy line was the inVia Qontor, our most advanced Raman microscope which builds on the market-leading inVia Reflex. The new system includes Renishaw's innovative LiveTrack™ focus tracking technology, which enables users to analyse samples with uneven, curved or rough surfaces. Optimum focus is maintained in real-time during data collection and white light video viewing, removing the need for time consuming manual focusing, pre-scanning or sample preparation.

During the year the medical dental products line introduced LaserRPD™ removable partial dentures which are additively manufactured from cobalt chrome powder. For patients, these offer a lower-cost alternative to implants and for people who are concerned about the invasive surgery required to place implants.

We have supplied an investigational drug delivery system for a clinician-led clinical trial for a therapy for the treatment of Parkinson's disease. The convection enhanced delivery (CED) system was manufactured for North Bristol NHS Trust and used to infuse glial cell line-derived neurotrophic factor (GDNF). The same system is also being used for the delivery of a chemotherapy drug for the treatment of childhood brain tumours.

### Outlook

In developing markets, levels of wealth are increasing at a national and individual level, which is driving demand for higher-quality medical treatments, often requiring more technologically advanced products.

Increased life expectancy on a global basis means greater incidences of degenerative neurological diseases, which will require surgical therapies. With appropriate regulatory approvals and increasing numbers of reference sites we are increasingly well-placed to supply neurosurgeons with the products and techniques to support such procedures.

The market for Raman spectroscopy continues to grow in fields such as nanotechnology, advanced materials, life sciences and medical research.



Installation of a neuromate system at Great Ormond Street Hospital in London.



Two LaserRPD removable partial dentures 3D-printed in cobalt chrome.

## Performance – Financial review



“ Group revenue for the year was £436.6m (2015: £494.7m) with a profit before tax of £80.0m. Last year’s substantial revenues arising from trading with Far East customers in the consumer electronics industry were not repeated to the same extent this year. Adjusting for last year’s exceptional Far East sales, we experienced underlying revenue growth of 6%. ”

Allen Roberts, Group Finance Director

### International Financial Reporting Standards (“IFRS”)

In accordance with EU law, the consolidated financial statements of the Company are prepared in accordance with IFRS adopted by the EU.

The Company has elected to prepare its parent company financial statements in accordance with FRS 101.

### Brexit

The 2016 financial year ended just one week after the UK’s referendum on whether to remain in the EU was held. The weakening of Sterling in that final week had no significant impact on the income statement but the balance sheet was affected substantially. The currency translation reserve now shows a gain of £6.4m (2015: £2.7m loss) reflecting the impact of year-end exchange rates on overseas third party net assets and currency overdrafts in the Company classified as hedging instruments.

Cash balances were reduced by £16.6m as a result of exchange rate fluctuations since the start of the year, £9m of which was subsequent to the referendum, with the loss being recorded directly in the currency translation reserve. The cash flow hedging reserve moved from a gain of £17.2m at 30th June 2015 to a loss of £56.5m at 30th June 2016, primarily reflecting the impact of exchange rate movements on currency forward contracts outstanding at the year-end.

Trading with other EU countries in the year amounted to £100.8m, representing 23% of group revenue. At the end of the year, the headcount located in EU countries outside the UK totalled 490, compared to the Group total headcount of 4,286. Given the recent volatility in exchange rates, we will closely monitor the Group’s cash flow hedging approach.

### Revenue

Group revenue for the year was £436.6m, compared with £494.7m last year. Last year, there were substantial revenues arising from trading with Far East customers in the consumer electronics industry, which were not repeated to the same extent this year. Revenue benefited by £6.9m compared to prior year exchange rates. Adjusting for the exceptional Far East sales last year, we experienced underlying revenue growth of 6% for the year and 4% at constant exchange rates.

Geographically, revenue in the Far East was down by 24% (26% at constant exchange rates), although there was underlying growth of 12% after adjusting for the sales to customers in the consumer electronics industry referred to above. We experienced growth of 9% in Europe (9% at constant exchange rates), but 4% lower sales in the Americas (6% at constant exchange rates) and a 9% reduction in the UK.

### Revenue by region

	2016 revenue at actual exchange rates £'000	Change from 2015 %	2016 revenue at 2015 exchange rates £'000	Change from 2015 %	2015 revenue at actual exchange rates £'000
Far East, including Australasia	<b>195,343</b>	-24%	189,671	-26%	257,665
Continental Europe	<b>112,075</b>	+9%	112,144	+9%	103,106
North, South and Central America	<b>92,198</b>	-4%	90,938	-6%	96,284
UK and Ireland	<b>23,208</b>	-9%	23,208	-9%	25,499
Other regions	<b>13,774</b>	+13%	13,772	+13%	12,166
Total group revenue	<b>436,598</b>	-12%	429,733	-13%	494,720

The Group hedges a proportion of its revenue by the use of forward contracts which had the effect of increasing reported revenue by £4.9m.

The table on page 44 shows the analysis of group revenue by geographical market.

In our metrology business segment, revenue was £408.2m, compared with £467.0m last year. Revenue in our healthcare business segment increased from £27.7m last year to £28.4m.

A geographical analysis of our metrology and healthcare businesses is shown in the Strategic report.

### Profit and tax

The Group profit before tax amounted to £80.0m (2015: £144.2m).

In our metrology business, operating profit was £85.9m, compared with £150.7m last year. In our healthcare business we recorded an operating loss of £6.4m, compared with a loss of £6.8m last year.

The overall effective rate of tax was 14.3% (2015: 15.8%). The Group operates in many countries around the world and the overall effective tax rate is a result of the combination of the varying tax rates applicable throughout these countries. In the UK, the tax charge for the current year benefited from a lower UK current corporation tax rate of 20% (2015: 20.75%), the research and development tax credit and patent box benefit, amounting to £2.4m, and a reduction in the deferred tax rate to 19%.

### Earnings per share and dividend

Earnings per share were 94.9p, compared with 167.5p last year.

In line with the Group's progressive dividend policy, a final dividend of 35.5p net per share (2015: 34.0p) results in a total dividend for the year of 48.0p, an increase of 3.2% over the 46.5p in 2015. Dividend cover is 2.0 times (2015: 3.6 times).

### Research and development

Gross expenditure on engineering costs, including research and development on new products, was £72.2m (2015: £66.1m). The capitalisation of development costs (net of amortisation charges) amounted to £3.1m (2015: £2.8m), giving a net charge in the Consolidated income statement of £69.1m (2015: £63.3m). The gross charge amounts to 17% of group revenue (2015: 13%).

Between the business segments, net of the capitalisation costs, £60.1m (2015: £55.0m) was spent in the metrology segment and £9.0m (2015: £8.3m) was spent in our healthcare segment.

New product research and development expenditure amounted to £46.0m, which compares with £42.3m spent last year. There have been a number of new product releases in both our metrology and healthcare business segments, and a number of new product introductions are anticipated during the 2017 financial year.

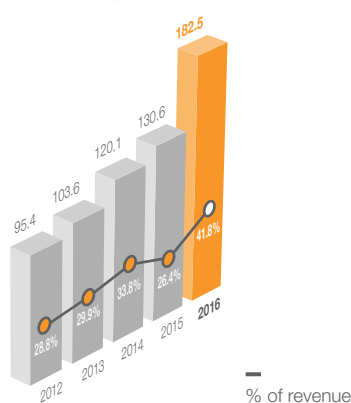
### Group headcount

Group headcount has increased from 4,112 at 30th June 2015 to 4,286 at 30th June 2016, with the average for the year of 4,192, compared with 3,811 last year. The increase during the year of 174 comprised 57 additional employees in the UK and 117 overseas. The increase in the UK included 42 apprentices and 64 graduates, and, in addition, we sponsor 43 students at universities across the UK.

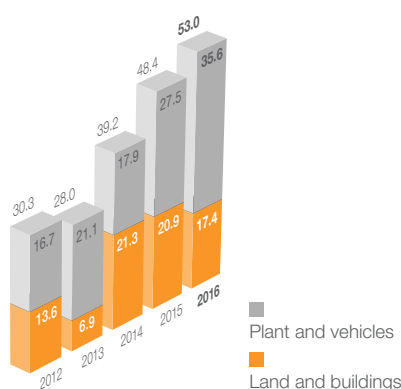
Labour costs, the most significant cost for the Group, increased by 6% to £183.8m (2015: £173.7m) reflecting an annual pay increase, the incremental cost of the employees recruited in both 2015 and 2016 and offset by a reduction in the staff bonus provision. There was no directors' bonus this year.

## Financial highlights

### Working capital (£m) (excluding cash and derivatives)



### Capital expenditure (£m)



## Performance – Financial review (continued)

### Consolidated balance sheet

The Group's shareholders' funds at the end of the year were £384.5m, compared with £431.2m at 30th June 2015.

Reserves increased from our trading results which gave an after tax profit of £68.6m but were reduced by movements relating to the remeasurement of defined benefit pension scheme liabilities of £17.4m, dividends paid of £33.8m and cash flow hedging. The cash flow hedging reserve, which accounts for the valuation of all outstanding forward contracts at the year-end which mature at some date in the future, moved from a gain of £17.2m at 30th June 2015 to a loss of £56.5m at 30th June 2016.

Additions to property, plant and equipment totalled £53.0m, of which £17.4m was spent on property and £35.6m on plant and machinery and IT equipment and infrastructure.

The main property additions were:

- at Miskin, South Wales, the refurbishment of the second half of our facility was completed; and
- in the USA, construction of a new facility near Chicago for the relocation of our USA subsidiary Renishaw, Inc. later this year.

Within working capital, inventories increased to £95.0m from £77.7m at the beginning of the year to support growth in revenue and our policy of holding finished stock to maintain delivery performance given our short order book of approximately five weeks and to support future growth and strategic stock holdings for certain of our products.

Trade debtors increased from £101.2m to £114.9m, including an increase of £15.7m arising from the weakening of Sterling during the year and particularly as a result of the EU referendum. There is a small increase in debtor days from 67 in 2015 to 70 in 2016.

Cash balances at 30th June 2016 were £21.3m (2015: £82.2m), in addition to which is the pension scheme escrow account of £15.3m (2015: £14.7m).

As noted below under Treasury policies, the Group uses forward contracts to hedge future foreign currency inflows. At the end of the year, these contracts, which mature over the next three and a half years, showed a loss of £56.5m, net of tax, when re-valued at the year-end, compared with a gain of £17.2m at the start of the year, with movements reported through the cash flow hedging reserve. A significant element of this loss was as a result of the weakening of Sterling at the end of June 2016 following the EU referendum.

### Defined benefit pension schemes

At the end of the year, the Group's defined benefit pension schemes, now closed for future accrual, showed a deficit of £67.8m, compared with a deficit of £48.1m at 30th June 2015. Defined benefit pension scheme assets

at 30th June 2016 increased to £149.2m from £140.5m at 30th June 2015, representing investment performance during the year. Pension scheme liabilities increased from £188.6m to £217.0m, reflecting the market rates at 30th June 2016 and the effect of applying IFRIC 14 to the liabilities arising from the new recovery plan provided by the Company in respect of the UK pension scheme deficit. The agreement supersedes all previous arrangements and the liabilities are calculated on the basis of funding to self-sufficiency. The obligations under the recovery plan are secured by charges over certain UK properties to the value of £62m and the escrow account. The application of IFRIC14 increased pension scheme liabilities by £15.4m (2015: £10.2m).

For the UK and Irish defined benefit pension schemes, a guide to the sensitivity of the value of the respective liabilities is as follows:

Valuation sensitivity	Variation	Approximate effect on liabilities
UK – discount rate	Increase/decrease by 0.5%	-£18.7m/+£21.5m
UK – future inflation	Increase/decrease by 0.5%	+£18.8m/-£16.8m
Ireland – discount rate	Increase/decrease by 0.5%	-£1.7m/+£1.9m
Ireland – future inflation	Increase/decrease by 0.5%	+£2.0m/-£1.7m
UK – mortality	Increased life by one year	+£6.8m
Ireland – mortality	Increased life by one year	+£0.6m
UK – early retirement	One year earlier than assumed	+£6.1m
Ireland – early retirement	One year earlier than assumed	£nil



## Treasury policies

The Group's treasury policies are designed to manage financial risks to the Group that arise from operating in a number of foreign currencies and to maximise interest income on cash deposits. As an international group, the main exposure is in respect of foreign currency risk on the trading transactions undertaken by group companies and on the translation of the net assets of overseas subsidiaries.

The information below includes disclosures which are required by IFRS and are an integral part of the financial statements. Weekly groupwide cash management reporting and forecasting is in place to facilitate management of this currency risk. The operations of group treasury, which is situated at head office, are governed by Board-approved policies.

All Sterling and foreign currency balances not immediately required for group operations are placed on short-term deposit with leading international highly-rated financial institutions.

The Group uses a number of financial instruments to manage foreign currency risk, such as foreign currency borrowings to hedge the exposure on the net assets of the overseas subsidiaries and forward exchange contracts to hedge a significant proportion of anticipated foreign currency cash inflows.

There are forward contracts in place to hedge against the Group's Euro, US Dollar and Japanese Yen cash inflows. Also, currency contracts are used to minimise the interest cost of maintaining the currency borrowings. The foreign currency borrowings are short-term with floating interest rates. The Group does not speculate with derivative financial instruments.

See note 20 to the group financial statements for an analysis of cash balances and currency borrowings at the year end.

## Investment for the future

We will continually look to the long-term growth of the Group and to invest in the research and development of new products, improving manufacturing and production processes to provide capacity for the future, and expanding our marketing and support presence around the world.

**Allen Roberts**  
Group Finance Director  
27th July 2016

## Risk and risk management

**Effective risk management is critical to the achievement of our strategic objectives. Risk management controls are integrated into all levels of our business and across all our operations. We continually assess our exposure to risk and seek to ensure that risks are appropriately mitigated.**

### Overview of risk management

The Board is responsible for the overall stewardship of our system of risk management and internal control. It has established the level of risk that is appropriate for our business and acceptable in the pursuit of our strategic objectives and has therefore set appropriate policies. It has also set delegated authority levels to provide the framework for assessing risks and ensuring that they are escalated to the appropriate levels of management, including up to the Board where appropriate, for consideration and approval. The roles and responsibilities of the Board, key committees and all levels of management from a risk management perspective are summarised in the

infographic on page 49. This process ensures that risks are not just the product of a bottom-up approach but are also examined from a top-down perspective via an integrated senior management approach, which is closely aligned with the Group's strategy. In order to enhance the Group's approach to risk generally in 2016, a new risk committee was formed creating greater linkage across our review and assessment of risk. The committee will also be monitoring mitigation of risk and in 2016 conducted a thorough review of our principal risks.

### Assessment of prospects and viability

Analysis for the new "viability statement" reporting requirement (included on page 73) has been based on our strategic plan. The tools and information we use for managing our risks have facilitated the quantification of potential downside scenarios and the analysis required to make this statement. The three-year period selected for the viability statement is covered by the Group's strategic plan and this has supported the analysis with the ability to use a consistent set of underlying assumptions.

These include the forecast growth and profitability of the Group and financial position reflecting current expectations as well as assessments of risk probabilities and risk impact over the three-year period.

The assessment of the Group's prospects considered stress testing of the strategic plan using key methodologies including consideration of the Group's principal risks and uncertainties and a simulation model to quantify the impact of combinations of risks, including an economic downturn.

The results of the stress test and simulation modelling were considered against the Group's financial position to determine that in these severe but plausible downside scenarios, the Group would have sufficient resources to continue to operate and meet its liabilities over the three-year assessment period.

The Group's resilient business model has proven strong and defensive in the long-term and has enabled consistent growth.

The increasing diversity of our markets and customers, broad product range, investment in new product development, plant and equipment and facilities, wide geographic spread and service capability and large base of installed equipment worldwide, enhances the viability of the Group in the face of adverse conditions, as does our ability to self-generate business through our skilled people identifying solutions to our customers' difficult process challenges.

### Key focus areas for 2016

- A robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity.
- On-going monitoring of the group risk management and internal control systems.
- Enhanced evaluation and integration of the Group's approach to risk management.
- Creation of an executive risk committee comprising key senior management to facilitate on-going monitoring activities.
- Creation of an executive anti-bribery monitoring working group.
- Creation of an executive information and cyber security working group.
- Creation of an executive data protection working group.

**i** **Going concern**  
for more information see page 73

**i** **Viability statement**  
for more information see pages 73–74

**i** For further explanation of our approach to **risk management and internal control** see page 74

Risk management framework – information and feedback flow

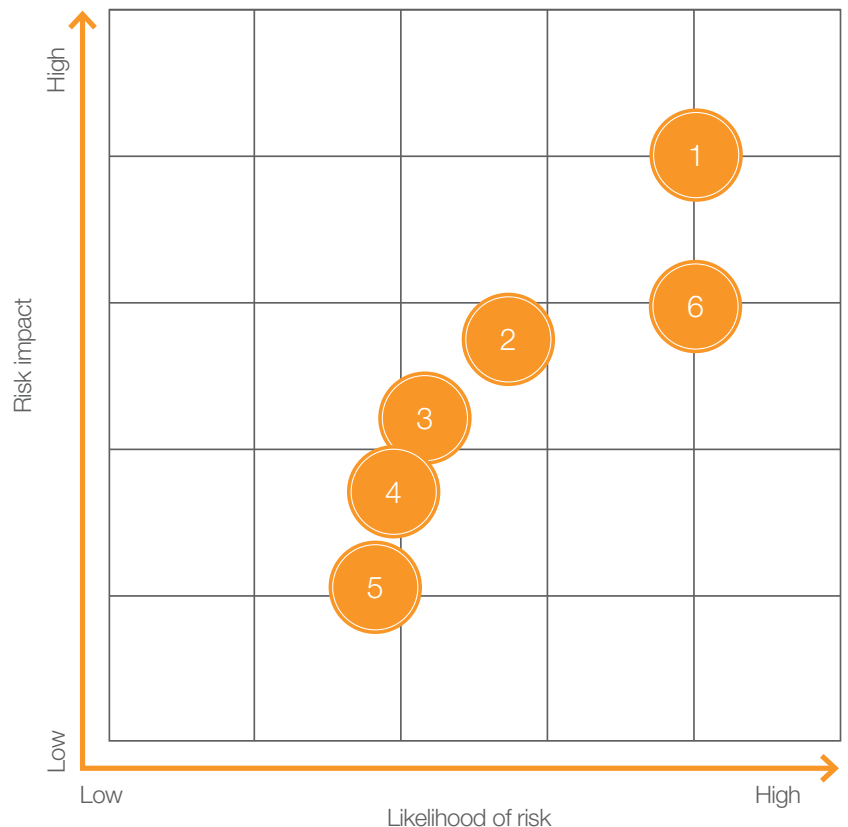


Risk likelihood and impact before mitigation

The diagram to the right shows the Board's analysis of the principal risks affecting the Group, before mitigation.

- 1 Current trading levels and order book
- 2 Research and development
- 3 Supply chain management
- 4 Regulatory legislation for healthcare products
- 5 Defined benefit pension schemes
- 6 Exchange rate fluctuations

*i* Further descriptions and associated mitigations are shown on pages 50–51.



## Principal risks and uncertainties

Our performance is subject to a number of risks, of which the principal risks and changes impacting on them are set out in the table below.

The Board has conducted a robust assessment of the principal risks facing the business. With the exception of the potential impacts of Brexit, no new principal risks have emerged during the financial year. As reported in the Chairman's statement on page 7 the full business implications of Brexit remain uncertain, which will be the case for some time, and any risks arising will be a key focus area for the risk committee in the next financial year. Currency fluctuations, trading arrangements, employment issues and other risks that become apparent over time will be monitored by the committee and mitigation put in place where possible.

### 1 Current trading levels and order book

Revenue growth is unpredictable and orders from customers generally involve short lead-times with the outstanding order book at any time being around one month's worth of revenue value.

Related strategic priorities:

2 4 5 6 8

\* No change.

#### Potential impact

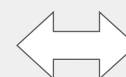
Global market conditions continue to highlight risks to growth and demand which can lead to fluctuating levels of revenue.

Whilst global investment in production systems and processes is expected to expand, future growth is difficult to predict, especially with such a short-term order book. This limited forward order visibility leaves the annual revenue forecasts uncertain.

#### Mitigation

- The Group is expanding and diversifying its product range in order to maintain a world-leading position in its sales of metrology products. Investment in sales and marketing resources continues in order to support the breadth of the product offerings.
- The Group is applying its measurement expertise to grow its healthcare and additive manufacturing business activities.
- The Group retains a strong balance sheet and has the ability to flex manufacturing resource levels and shift patterns.

#### Year-on-year change



### 2 Research and development

The development of new products and processes involves risk, such as development timescales, meeting the required technical specification and the impact of alternative technology developments.

Related strategic priorities:

2 5 7

\* No change.

#### Potential impact

Being at the leading edge of new technology in metrology and healthcare, there are uncertainties whether new developments will provide an economic return.

#### Mitigation

- Patent and intellectual property generation is core to new product developments.
- R&D programmes are regularly reviewed against milestones and, when necessary, projects are cancelled.
- Medium to long-term R&D strategies are monitored regularly by both the Board and Executive Board, including reviews of the allocation of R&D resource to key projects.
- Product development processes around the Group are reviewed and aligned where possible to provide consistency and efficiency.
- New products involve beta testing at customers to ensure they will meet the needs of the market.
- Market developments are closely monitored.

#### Year-on-year change



### 3 Supply chain management

Customer deliveries may be threatened by a failure in the supply chain.

Related strategic priorities:

3

\* Increased production capacity in multiple locations.

#### Potential impact

Inability to meet customer deliveries could result in loss of revenue and profit.

#### Mitigation

- Production facilities are maintained with fire and flood risk in mind.
- Critical production processes are replicated at different locations where practical.
- The Group is highly vertically integrated providing increased control over many aspects of the supply chain.
- Ability to flex manufacturing resource levels and shift patterns.
- Regular vendor reviews are performed for critical part suppliers.
- Stock policies are reviewed by the Board on a regular basis.
- Product quality is closely monitored.

#### Year-on-year change



#### 4 Regulatory legislation for healthcare products

The expansion of the Group's business into the healthcare markets involves a significantly increased requirement to obtain regulatory approval prior to the sale of these products.

**Related strategic priorities:**

- 2
- 5
- 6

\* No change.

**Potential impact**

Regulatory approval can be very expensive and time-consuming. This area is also very complex and there is a risk that the correct approvals are not obtained.

**Mitigation**

- Specialist legal and regulatory staff are in place to support the healthcare business.
- Experience of healthcare regulatory matters at board level.
- Healthcare operations in UK and France have ISO13485 certification for their quality management systems, with Ireland and other subsidiary healthcare operations falling under the UK quality management system.

**Year-on-year change**



#### 5 Defined benefit pension schemes

Investment returns and actuarial valuations of the defined benefit pension fund liabilities are subject to economic and social factors which are outside of the control of the Group.

**Related strategic priorities:**

- 1

\* Agreement of a recovery plan for the 2015 actuarial valuation.

**Potential impact**

Volatility in investment returns and actuarial assumptions can significantly affect the defined benefit pension scheme deficit, impacting on future funding requirements.

**Mitigation**

- The investment strategy is managed by the pension scheme trustees who operate in line with a statement of investment principles.
- A new recovery plan was agreed in June 2016 for the 2015 actuarial valuation based on funding to self-sufficiency.

**Year-on-year change**



#### 6 Exchange rate fluctuations

Fluctuating foreign exchange rates may affect the results of the Group.

**Related strategic priorities:**

- 6
- 7

\* Recent positive movements offset by future Brexit uncertainty.

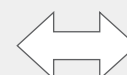
**Potential impact**

With 95% of revenue generated outside of the UK, there is an exposure to major currency fluctuations, mainly in respect of the US Dollar, Euro and Japanese Yen. Such fluctuations could adversely impact both the Group's income statement and balance sheet.

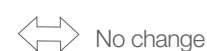
**Mitigation**

- The Group enters into forward contracts in order to hedge varying proportions of forecast US Dollar, Euro and Japanese Yen revenue.
- The Group uses currency borrowings to hedge the foreign currency denominated assets held in the Group's balance sheet.
- Monthly board review of currency rates and hedging position.

**Year-on-year change**



\* Explanation of change in risk.



**i Our business model**  
for more information see page 9

**i Our strategy**  
for more information see page 22 onwards

## Corporate social responsibility



“Our overarching goal in all of our CSR activities is to support the sustainable growth of our business and ensure its longevity and prosperity. To support this aim, our CSR strategy focuses on the material environmental impacts that we are best placed to influence and control.”

Allen Roberts, Group Finance Director

### Strategy update

At Renishaw we seek excellence in every aspect of our business and are committed to managing our business in a responsible manner. We recognise that we have a responsibility to our people, and the communities within which we operate. We are seeking to address the fact that our operations, products and sourcing have both direct and indirect environmental impacts. We believe that by minimising these impacts and operating in an ethical and sustainable manner, we are able to reduce risks in our supply chain and make a positive difference in these communities. We have focused our sustainability efforts on areas where we believe we are best placed to make improvements. These areas are resource and energy, education, community and innovation. We are proactively addressing issues such as rising energy costs, constraints on emissions, finite resources, increasing water scarcity, the need for greater transparency and skills shortages.

We have assessed our CSR impacts and have identified those most material to our business; these include waste management, energy consumption, GHG emissions and people.

### Human rights and slavery

A strict non-discrimination policy is embedded into our Group Business Code, which states the minimum standards expected within the Group and from our representatives. This Code sets out our position that our employees have the right to non-discriminatory treatment and equal opportunities, and to work in a safe and secure working environment, with a fair wage. Proper consideration is given to applications for employment from all genders, ethnic backgrounds and from those with disabilities. Opportunities are given to employees who become disabled to continue in their employment or to be trained for other positions.

This year, we have developed a new strategy to strengthen the level of due diligence applied to our supply chain. This policy has built upon the processes already developed to mitigate the risk of utilisation of conflict minerals within our supply chains, and applied these general principles tailored as required, to modern slavery and human rights risks. We have developed a risk-based approach to ensure that our efforts are focused on the “at risk” areas.

We continue to use our Group Business Code and other policies in order to set expectations with potential suppliers. The full Code can be found at [www.renishaw.com](http://www.renishaw.com).



Aerial view of the Misken site showing installation of solar panels.

## 2016 CSR targets and progress

### Targets

### Progress



#### Waste management:

5% reduction of waste to landfill from UK operations

For more information see page 61

- We have been re-certified to the Carbon Trust waste standard.
- Just over 2,478 tonnes of waste from our UK operations was diverted from landfill.

**73%**

reduction of waste to landfill from our UK operations.

**95%**

of all waste diverted from landfill.



#### Energy consumption:

Decrease reliance on fossil fuel derived energy

For more information see pages 59–60

- We commissioned two further solar arrays this year.
- We have added more low energy lighting systems, reducing our demand by a further 1.2m kWh.
- Over 600,000 kWh reduction of energy demand for space heating.

**816,000 kWh**

of electricity generated this year.

Solar arrays with an annual generating capacity in excess of

**1,308,000 kWh**

are now in operation.



#### GHG emissions:

3% reduction in GHG tCO<sub>2</sub>e per million pounds turnover compared to 2015.

For more information see page 60

- A further 12% (2015: 33%) reduction of GHG emissions from natural gas consumption.
- 8% reduction in Scope 3 GHG emissions.
- £2.7m invested in energy reduction projects.

**10%**

increase in GHG tCO<sub>2</sub>e emissions per £m turnover compared to 2015.

**3%**

decrease in absolute GHG emissions.



#### People:

5% of our employees as apprentices, graduates or sponsored students on structured programmes.

For more information see pages 54–55

- 4,286 people employed, an increase of 4.5% since last year.
- Over 238 people across the Group on structured apprenticeship and graduate programmes.
- Over £2m invested in training this year.

**5%**

of our people are on structured apprenticeship or graduate programmes.

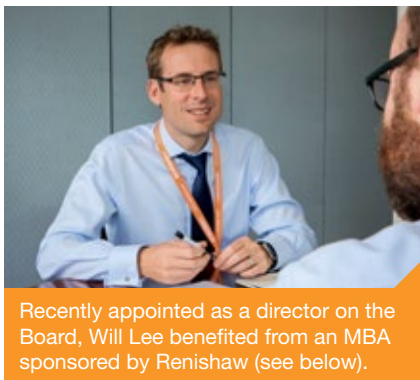


## Our strategy in action – People

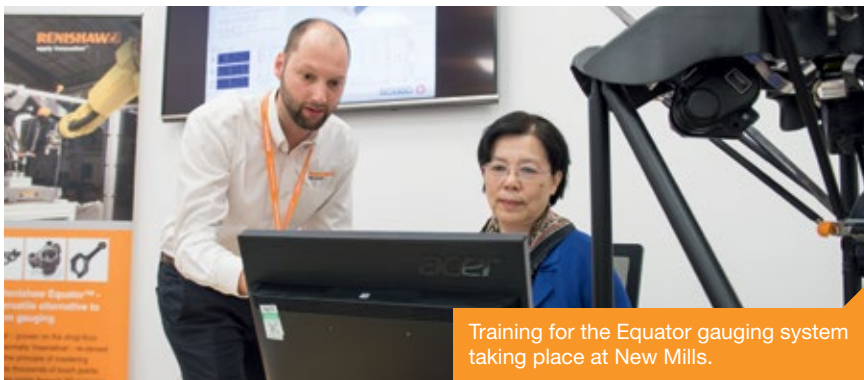
**Roxanne Pollard, Mechanical Design Engineer, started at Renishaw as an apprentice engineer and completed a 4-year apprenticeship, during which she obtained a NVQ level 3, VRQ, HNC and HND in engineering. She has since gone on to work with the Group Engineering team as a mechanical design engineer, whilst completing a Renishaw-funded part-time mechanical engineering degree.**







Recently appointed as a director on the Board, Will Lee benefited from an MBA sponsored by Renishaw (see below).



Training for the Equator gauging system taking place at New Mills.

## People

### Diversity

Renishaw enjoys the advantages of being a global company. With over 20 nationalities represented in our senior management group, we benefit from their understanding of different cultures, and acknowledge the advantages that these varied experiences bring to the business. On 30th June 2016, we employed 4,286 people across the Group, an increase of 4% since last year. Of these, 3,296 (77%) are male and 990 (23%) are female. There are nine directors on the Board, consisting of seven males and two females. The senior management group is made up of 60 people, of which 58 (97%) are male and 2 (3%) are female. Renishaw regards its senior management group to be the Executive Board, the heads of each products line, sales territory, and manufacturing organisation that report directly into the Executive Board, and the directors of Renishaw's subsidiary undertakings.

### Communication and participation

As a group that operates in a large number of territories across the globe, we recognise the need for clear and open communication between sites, functions and levels of management. Our flat structure encourages our people to voice their ideas or concerns and we have received many excellent ideas as a result. To facilitate the dissemination of top-down information, regular communication meetings are held with a Board member present. Presentations of the annual and half-year financial results are given to employees at our larger locations, supplemented by video-conference presentations for smaller, remote sites.

We also actively encourage upward communication through various other channels. Our suggestion scheme enables our people to submit ideas for consideration. The suitability for adoption is assessed, with awards given for the most successful implementations. There is also an inventors' award scheme for individuals who are named as inventors of granted patents.

### Training and development

We value our highly-skilled people and recognise that retaining them is essential to the future of our business; as such, we place a large emphasis on ensuring that our training programmes work effectively for our people and business needs. To illustrate this Will Lee, who joined Renishaw as a graduate in 1996, has progressed all the way to become a Board director in 2016. This year, we invested around £2m in training programmes. This investment has been used to develop 120 apprentices, 118 graduates on our graduate training programme, and career development for employees. We are currently funding the further education of 190 of our people across the business at HNC, HND and degree level, in engineering, software and commercial/business disciplines.

MySkills was launched in May 2015 and is a library of training that can be accessed by employees around the world. It has been designed to equip middle and senior managers with the necessary skills and behaviours to lead Renishaw to meet business challenges. Our people participate in the programmes and actively pursue their own development plans with the support of their line manager. Within the library we have a broad range of courses focused on equal opportunities and diversity, technical development,

leadership/management development, induction, soft skills, career development and health and safety.

The Academy was launched in 2010 with the aim to develop future application engineers to meet the growing demand of Renishaw's increasingly diverse range of products. Training is vital to maintain our reputation for excellent technical support, and since its inception, the Academy has provided a wide and varied range of training programmes from "Face-to-Face Communication" and "Report Writing", to "Fundamentals of Manufacturing" and "CNC Programming". In October 2015, the first bespoke Key Account Management (KAM) course was delivered to Renishaw Hong Kong employees with further courses scheduled throughout the coming year.

In order to expand this facility and maintain the quality of the courses being delivered to our people and customers, the Academy introduced a module management system to ensure that the content of all training documentation is kept up-to-date. This will be vitally important as we expand the Academy training material into other Renishaw subsidiaries.

This summer, some 100 (2015: 105) students join Renishaw for paid placements – 60 summer placements, and 40 one-year industrial placements. There are 120 craft and technical apprentices currently in training (2015: 114), with 4 in our German subsidiary, and the rest in the UK. We have a further 48 new apprentices confirmed for September 2016, (2015: 44) and 76 new graduates also start with Renishaw this summer (2015: 70).

## Corporate social responsibility (continued)



Renishaw is an official supplier to the Land Rover BAR America's Cup team.



Renishaw sponsors half-time tag rugby for local schools at Scarlets Rugby.

### Health and safety

We continue to further develop our health and safety management system and we are bringing more sites online with our health and safety strategy. Our management system has been designed to be in line with best practice and the requirements of the ISO18001 standard. We recognise the importance of dealing with any and all injuries, as anything, without the correct medical attention, could develop into something more serious. All injuries, from the smallest of paper cuts, are recorded, enabling us to manage treatment and investigate all incidents effectively.

The total number of accidents for the period was 296 (2015: 230) against a year-end headcount of 4,286 (2015: 4,112). This equates to an accident ratio of 0.069 accidents per person and is 23% up on the same period the year before. This is because we have extended our reporting programme to all sites across the Group and so have a much increased scope of data capture. Our online incident reporting system continues to be used effectively, encouraging employees to report all incidents regardless of severity, and is enabling us to record trends more effectively. We currently do not see any overall trends with the data we capture other than that the majority of our incidents are minor cuts.

There were four reportable accidents under the UK RIDDOR reporting requirements: one neck strain; two fractured fingers; and one deep cut, resulting in a total lost time of 714 hours, or 96.5 days.

No work-related ill health or disease was reported, but health monitoring in the form of lung function testing, hearing testing and eye testing, where appropriate for a job role, has been established for several years and is ongoing. Health support for employees is offered in the form of subsidised health monitoring (blood pressure, diabetes, cholesterol and BMI). To support the physical and mental welfare of our people we have regular onsite visits from two occupational physicians who are available for our employees to discuss any issues that they have. These doctors also act as senior advisors to our Group Health and Safety and HR functions to ensure that best practices in occupational health are observed.

A total of 113 (2015: 67) near-misses were recorded for the period. No significant repeating common causes have been established.

### Community

With an increasing global footprint, we recognise the positive contribution that can be made to our local communities through varied interactions with local residents, businesses, schools and not-for-profit organisations. This is especially true in the West of England and South Wales, where we are a significant employer.

In many of our markets, we communicate a positive story about the role played by science, engineering and manufacturing to enhance the lives of the general populace and the attractive nature of a career within these sectors. We see this as a vital step to overcome perceptions about career options in these areas and to ensure a strong pipeline of future talent, not just for our own needs, but also for our wider supply chain and customer base.

During the past year we have hosted four groups and given talks to a range of organisations including primary and secondary schools, universities and colleges, business clubs and societies. This is true on a global basis and includes events held by our subsidiaries in Mexico, Italy, Spain, the Czech Republic and Taiwan. With an increasing profile, we are also regularly asked to give interviews to international, national and local media, and contribute our knowledge through conferences and debates on a range of topics including skills, apprenticeships, additive manufacturing, IT systems, exports, education, human resource management, innovation and manufacturing.

We continue to actively support the business community regionally, nationally and internationally, through membership of trade and lobbying associations such as the European Society for Precision Engineering & Nanotechnology, the Confederation of British Industry, the Dental Laboratories Association (UK), the Association of British Healthcare Industries, the Additive Manufacturing Users Group (USA), Verein Deutscher Werkzeugmaschinenfabriken e.V. (Germany), UCIMU-SISTEMI PER PRODURRE (Italy) and the UK's Manufacturing Technologies Association, where two senior managers are board members. We also support local chambers of trade and business networking groups.

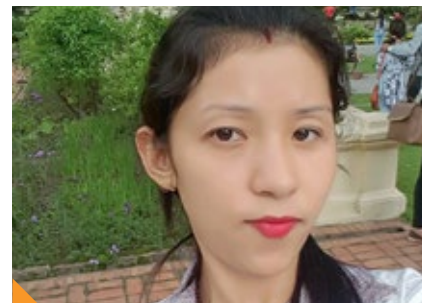
Renishaw is also a member of various industry research centres across the globe; some of these include The Manufacturing Technology Centre (UK), the Advanced Manufacturing Research Centre (UK), Canada Makes (Canada), PräziGen (Germany), Light Alliance (Germany) and BazMod (Germany).



Training school teachers at Scuola Camerana in Turin, Italy.



Indian child Poorva whose operation was financed by Renishaw employees.



Renishaw supported a facial implant operation in Nepal.

We continue to sponsor and judge a range of regional and national business award programmes that help encourage and recognise business and individual excellence. Ben Taylor was a judge for the West of England Business Awards in the period, whilst Head of Communications, Chris Pockett, helps to judge the main business and technology awards programmes in Bristol and Gloucestershire.

To further our aim of establishing awareness of Renishaw as a significant regional employer, we continue to sponsor a wide range of festivals, sports clubs and organisations in the West of England and South Wales. During the year, we sponsored the Bristol Post's "Super Science" schools competition which gave a prize of £10,000 to the winner to spend on science-related projects.

In South Wales, we have developed a relationship with Scarlets Rugby, one of the four professional Welsh regional rugby union teams, where we sponsor Welsh international Samson Lee and the Club's half-time tag rugby sessions for local schools. We also sponsor Swansea City footballer Ki Sung-Yeung, who plays internationally for South Korea, and Ben Morgan, the Gloucester and England rugby international. In Germany, we continue to sponsor Handball-Bundesliga team HBW Balingen-Weilstetten, which is based in an area where many of our major customers are located.

With significant ongoing public interest in 3D printing, we have collaborated with individuals and organisations on a range of projects, which this year included assistance to the Jet Age Museum in Gloucestershire which is restoring the cockpit of a 1936 Hawker Typhoon aircraft. We also joined Land Rover BAR's

Technical Innovation Group as an official supplier, providing expertise in additive manufacturing and position feedback encoding to assist the team in its attempt to win the America's Cup.

### Charity

In the UK, the Renishaw Charities Committee (RCC) was formed in the 1980s to distribute funds to charitable and voluntary organisations and support the individual fundraising efforts of UK employees. The RCC is made up of representatives from Renishaw's main Gloucestershire sites and has a particular focus on assisting organisations that help enrich the lives of children and adults, from toddler groups and sports clubs, through to organisations that support disabled people and the bereaved. Donations are also made to organisations located close to other UK sites. A separate international fund is administered by the RCC, that donates monies to aid the victims of natural and other disasters.

During the year, the RCC made donations to 260 diverse organisations totalling £102,000 (2015: £99,000). Beneficiaries included Cubs and Brownies groups, church restoration funds, disability support groups, primary and secondary schools, counselling and carers support groups, hospice care organisations, animal sanctuaries and senior citizen groups. The RCC also fully matches funds raised by employees for UK-wide organisations such as Children in Need and MacMillan Cancer Support.

Significant donations of £2,000 or more were made by the RCC to six organisations, including a 3D printer for the National Star College, support for a new centre for Cotswold Cats & Dogs, and support to the Dean Forest Railway.

Renishaw is also highly supportive of its local communities elsewhere in the world. In Turin, Renishaw S.p.A. is running a project with Scuola Camerana, a school supported by Turin's Industrial Union and Chamber of Commerce, which aims to train both employed and unemployed people using the most up-to-date industrial technologies. Renishaw is supplying metal 3D-printed parts, software, training, application engineers and access to Renishaw's demo area, to help educate the school's teachers about additive manufacturing and future technologies.

In India, Renishaw employees raised funds to support Poorva, a four-year-old girl, who contracted Guillain-Barré syndrome, a rare and serious condition of the peripheral nervous system which paralysed her from the neck down. Poorva's family was unable afford the necessary operation, but together with a contribution from Renishaw India's charities committee, they were able to pay for the operation. Today, Poorva has completely regained mobility and is able to talk, eat and move her hands.

As a result of Renishaw's work with the British Association of Oral and Maxillofacial Surgeons, we sponsored its sub-committee, the Norman Rowe International Educational Foundation, to help undertake a mission to Nepal to train local surgeons. Renishaw also donated an additively manufactured orbital floor implant. The implant patient was previously imaged using a CT scanner. The scan data then allowed a digital design to be created which was manufactured using Renishaw's metal 3D printing technology. The implant was successfully fitted to the patient during the mission.

## Corporate social responsibility (continued)



Pupils building a Greenpower Goblins car at the FDC in Miskin.



A "Technology Teardown" session in progress.

### Education

Five years ago, The Engineering UK report stated that 27% of 11–14 year-olds thought engineering was a desirable career, and 37% of 15–16 year-olds would consider a career in engineering. In 2015, the good news is that those figures had risen to 43% and 49% respectively. Clearly the work that the engineering community has been doing in schools is starting to have an impact but there is still lots of work to do in particular areas.

Lack of information about the realities of engineering is an obvious issue for schools. Few are exposed to engineering at school directly, and the applied maths modules of GCSE and A-Level only give a taste of engineering calculations. There is some exposure in physics, and maybe in the better-equipped design and technology workshops, but going from school to engineering, whether as a degree or apprenticeship, is going to be a step into the unknown for most young people.

Renishaw genuinely believes that participating in making things, and understanding how products are designed is important in influencing young people considering a career in engineering. With support from the Welsh Government, we have developed a Fabrication Development Centre (FDC) at our manufacturing site at Miskin, Wales, which we believe is unique in the UK.

Our aim is to become a key educational resource for hands-on learning of design, fabrication, manufacturing and engineering skills, through which process we will raise engineering's profile to encourage more students, especially girls, to choose STEM (science, technology, engineering and mathematics) subjects. This will encourage more young people

to take up apprenticeships, jobs or further education career pathways in high-value engineering.

Moreover, the FDC will aim to underpin and enhance students' contextual understanding of the school curriculum. We hope this will start to address the criticism raised in this year's Engineering UK report that pupils are not exposed to engineering, science or maths.

This year we recruited our first Education Liaison Officer for Wales, based at the Miskin site. This new role will aim to implement the successful model of schools engagement from Gloucestershire, and work with schools across South Wales to create our long-term talent pipeline.

One of the successful initiatives that we run is "Technology Teardowns". Everyday products such as printers, mobile phones and laptops are taken apart and with the help of experienced Renishaw engineers, pupils begin to understand how the item works and why it is designed in a particular way. Pupils from primary to sixth form, and both girls and boys, really gain from this experience.

We have now established good relationships with schools in Gloucestershire and North Bristol, but we wish to work harder with schools in the more populated Bristol region to get our name known by pupils as a potential company with whom they can have a great career. Renishaw and the Bristol Post newspaper teamed up to offer one Bristol school the chance to win £10,000 to fund anything in the name of science education. The winning school, Wicklea Academy, is intending to create an environmental area as part of an "outdoor classroom".

Another Bristol initiative is our sponsorship of the Bristol Aerospace Centre (BAC), where we are donating £180,000 over three years to create a museum and educational resource that will showcase the city's role in aviation history and highlight engineering innovation. Sitting alongside a new permanent hangar for the Concorde aircraft, the BAC aims to be a highly participative centre for education and skills training. Its proximity to our main operations and motorway networks means that the Centre will form a key part of our schools' engagement programmes, making resources accessible to our "special relationship" schools in Bristol, Gloucestershire and South Wales.

We have continued to train all our new graduates and second-year apprentices to be STEM ambassadors. We now have over 140 ambassadors who carry out at least one STEM-related activity each year, to sustain and grow our multiple initiatives with schools and universities, including talks and lectures, career fairs, after school clubs and STEM projects.

We are continuing to develop relationships with key universities that have been identified as having relevant courses for our business needs. This includes the sponsorship of engineering societies and Formula Student teams. We have a number of research projects, PhD and undergraduate projects with several universities, and often give lectures, employability talks and attend career fairs to raise the profile of engineering and Renishaw.

We continue to work with leading industry organisations and engineering peers to advise government on national policy that will benefit the sector in general. For example, we are a board member



Over 2,500 students have attended Miskin Education Days since 2012.



Renishaw has independent certification for its impact on CO<sub>2</sub> emissions.



Renishaw's waste reduction achievements have been independently recognised.

of the Royal Academy of Engineering's Diversity Leadership Group which has been set up to help to remove barriers and encourage more women and other under-represented groups into engineering.

This year through the Diversity Leadership Group Renishaw has made a major contribution to the Engineering Fast Track programme. This was a series of workshops delivered to students from ethnic minority backgrounds and women who were studying an engineering degree but were struggling to know how to get into the industry. Renishaw collaborated with other large engineering companies and Sponsors for Educational Opportunity (SEO) London to deliver a programme that helped them to apply for jobs and understand the career opportunities available.

## Environment

We recognise that improving the operational efficiencies of our locations across the world contributes to the sustainable growth of our business. We continue to work hard to ensure that the impact of our business activities is as low as practical. Through our assessments we have identified that the areas of our operations with the most significant impact are energy consumption and waste generation. We also recognise that our business travel and product shipments contribute heavily to our carbon footprint.

Over the past 12 months, we have invested in additional onsite energy generation in the UK which has significantly increased our solar photovoltaics generating capacity. At the end of 2015 we had just over 250,000 kWh generating capacity at our New Mills site. We have added further generating potential of around 846,000 kWh at our Miskin site and 212,000 kWh at Stonehouse. This brings us to a total generating capacity of just over 1,308,000 kWh, which is 4.4% of our UK (3.5% global) electricity demand.

This year we have achieved an absolute reduction of our total GHG emissions of 3% but our normalised statutory emissions have increased by 10%.

At our sites across the globe we house over 4,286 people, with sites ranging in size from two people, to our UK headquarters, which houses 1,380 in eight buildings. Our buildings range from a 19th century Grade II listed cotton mill, to state-of-the-art, purpose-built modern buildings, and offices in large and small multipurpose properties around the world. Across our 14 UK sites we have undergone an extensive programme of refurbishment. As part of this process, we have changed our thinking with respect to financial payback periods for energy efficiency investment. Accepting significantly longer payback when considering investment in solar panels, triple glazing, LED lighting, insulation etc., has allowed us to create a much more sustainable building infrastructure. We have invested over £4.3m this year to increase the energy efficiency of our buildings. This work has allowed us to reduce our electricity demand for the future by around 2,220,000 kWh per annum. We are currently looking at the feasibility

of renewable energy at some of our overseas sites and further optimisations at our larger UK sites as a priority.

We have also recognised that an area in which we can reduce our environmental impact is our approach to the design of product packaging. We have established a packaging development team with the task of improving the design of packaging by using alternative materials, improving recyclability, reducing material costs, reducing labour costs, reducing volumetric weight during shipping and reducing the GHG impact of our shipments and the raw materials that we purchase. This initiative is considered strategically important for both current and new products, given that we export 95% of our goods and can therefore make improvements to our overall CO<sub>2</sub> impact associated with logistics activities, as well as those associated with the purchasing of raw materials. In addition, work is ongoing to reduce the polystyrene-based products used to transport goods within the business and to move towards more recyclable materials.

In the UK, Renishaw continues to participate in the Carbon Reduction Commitment (CRC) Energy Efficiency Scheme and the Carbon Disclosure Project (CDP). We use the CDP as a benchmarking tool and are working extensively to ensure that our efforts in GHG emission management are fully disclosed and are as transparent as is expected by our people, customers, and investors. We successfully completed our energy audits for the Energy Savings Opportunity Scheme and through this work, we have identified a number of opportunities to make further energy savings.

## Corporate social responsibility (continued)

Renishaw is legally obliged to report on Scope 1 and 2 emissions (as defined by the Greenhouse Gas Protocol). However, through analysis, it is evident that our Scope 3 emissions amount to a significant proportion of our carbon footprint. We will continue to disclose our Scope 1, 2, and significant Scope 3 emissions, and to put efforts into improving data quality, and expanding our Scope 3 data capture to present a more complete picture of our GHG emissions. During the year, our total GHG emissions for Scope 1 and 2 (statutory disclosure) was 21,192.39 (2015: 20,659.07) tCO<sub>2</sub>e. Our significant Scope 3 emissions (voluntary disclosure) was 20,684.59 (2015: 22,403.09) tCO<sub>2</sub>e.

To calculate our GHG emissions, we have used the GHG Protocol Corporate Accounting and Reporting Standard (revised addition), data gathered for our CRC submission and the UK Government's GHG reporting guidance as the basis of our methodology and the source of emissions factors. Our GHG emissions are based on actual data taken from bills, invoices, meter readings and expense claims wherever possible. For our Scope 1 and 2 emissions, less than 1% of the data is based on estimates from averaged data sets.

	2014	2015 <sup>1</sup>	2016 <sup>2</sup>
<b>Scope 1</b>			
Gas consumption	1,438.39	962.30	846.00
Owned transport	2,684.40	2,293.66	2,515.38
Generator diesel	24.74	124.31	32.61
Heating oil	43.57	41.09	253.91
Fugitive emissions	252.67	262.79	305.73
Electricity generated	–	5.98	52.02
Out of scope (bio fuel blend)	55.35	59.58	75.95
<b>Total Scope 1 (tCO<sub>2</sub>e)</b>	<b>4,443.76</b>	<b>3,690.13</b>	<b>4,005.65</b>
<b>Scope 2</b>			
Purchased heat	–	5.44	20.76
Electricity – Location Based	16,576.71	16,963.50	17,165.98
<b>Total Scope 2 (tCO<sub>2</sub>e) – Location Based</b>	<b>16,576.71</b>	<b>16,968.94</b>	<b>17,186.74</b>
Electricity – Market Based	17,416.00	19,619.00	20,104.00
<b>Total Scope 2 (tCO<sub>2</sub>e) – Market Based<sup>5</sup></b>	<b>17,416.00</b>	<b>19,624.44</b>	<b>20,124.76</b>
<b>Total statutory GHG emissions<sup>2</sup> (tCO<sub>2</sub>e)</b>	<b>21,020.47</b>	<b>20,659.07</b>	<b>21,192.39</b>
<b>Normalised statutory GHG emissions<sup>2</sup> by revenue (tCO<sub>2</sub>e/£m)</b>	<b>59.13</b>	<b>41.76</b>	<b>48.54</b>
<b>Scope 3</b>			
Business travel	6,916.31	4,030.00	5,226.99
Product distribution	5,292.98	11,482.33	9,179.69
Raw material purchase	799.72	1,088.41	277.66
Post and communications	557.85	598.66	774.00
WTT and T&D total <sup>6</sup>	4,766.80	5,203.68	5,226.25
Out of scope (bio fuel blend)	49.97	38.97	53.58
<b>Total significant Scope 3 (tCO<sub>2</sub>e)</b>	<b>18,333.66</b>	<b>22,403.09</b>	<b>20,684.59</b>
<b>Total GHG emissions (tCO<sub>2</sub>e)</b>	<b>39,354.13</b>	<b>43,062.16</b>	<b>41,876.99</b>
<b>Normalised total GHG emissions<sup>4</sup> by revenue (tCO<sub>2</sub>e/£m)</b>	<b>110.70</b>	<b>87.05</b>	<b>95.92</b>

<sup>1</sup> 2015 figures have been restated due to improvements in our methodology, updated GHG conversion factors and replacing the calculation used for the June 2015 data last year – see footnote 3.

<sup>2</sup> Statutory emissions are Scope 1 and 2 as required by the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013.

<sup>3</sup> To facilitate the timely capture of information, this disclosure uses internally reported data from July to May and the June data is given as an average of the previous three months. This will be restated next year if a significant difference is seen.

<sup>4</sup> Total GHG emissions include Scope 1 and 2 (statutory) and significant Scope 3 (voluntarily reported) emissions.

<sup>5</sup> Market Based electricity is used where it is available to us. This is currently only within the UK and Europe. Where Market Based factors are not available Location Based ones are used in their place. Currently 87% of our electricity consumed is covered by Market Based factors.

<sup>6</sup> Well To Tank and Transmission and Distribution losses total use Location Based conversion factors for calculations.



Recycling centres have been installed across Renishaw sites in the UK.

## Waste management

During the year, we have completed the UK roll-out of our segregation-at-source waste management strategy. This has involved removing personal under-desk bins and installing office floor recycling centres across the sites. This centralised methodology has been designed to ensure that as much waste as feasibly possible is diverted from landfill. This strategy, which was started in February 2014 and proved to be effective, has continued to drive our efforts throughout the year, resulting in a further 2,656.91 (2015: 2,246.27; 2014: 1,524.43) tonnes of waste being diverted from landfill. Approximately 90% of all waste generated this year originated from our UK sites which have been recertified to the Carbon Trust Waste Standard. These sites have been recognised by the Carbon Trust for their efforts in moving waste away from landfill as a disposal option, towards recovery, recycling and re-use.

Last year, we set a target of 5% for the reduction of waste to landfill in our UK operations. Despite a global rise of waste to landfill of 85% we have had a decrease from our UK operations of 73%. We are still re-using, recycling or recovering around 95% (2015: 96%; 2014: 92%) of our waste around the world.

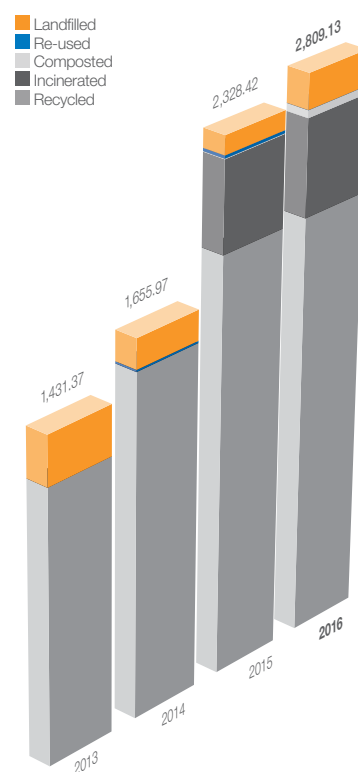
## Global waste totals (tonnes)

	2013	2014	2015	2016 <sup>1</sup>
<b>Landfilled</b>	220.40	131.54	82.15	<b>152.22</b>
Re-used		9.33	12.96	<b>0.96</b>
Composted			2.64	<b>32.62</b>
Incinerated			394.71	<b>418.87</b>
Recycled	1,210.97	1,515.10	1,835.96	<b>2,204.46</b>
<b>Total non-landfilled</b>	<b>1,210.97</b>	<b>1,524.43</b>	<b>2,246.27</b>	<b>2,656.91</b>
Percentage of waste sent to landfill	15.4%	7.94%	3.53%	<b>5.42%</b>
<b>Total waste</b>	<b>1,431.37</b>	<b>1,655.97</b>	<b>2,328.42</b>	<b>2,809.13</b>

<sup>1</sup> Includes US data for the first time which accounts for 87.2 tonnes of landfill waste in 2016.

## Product compliance

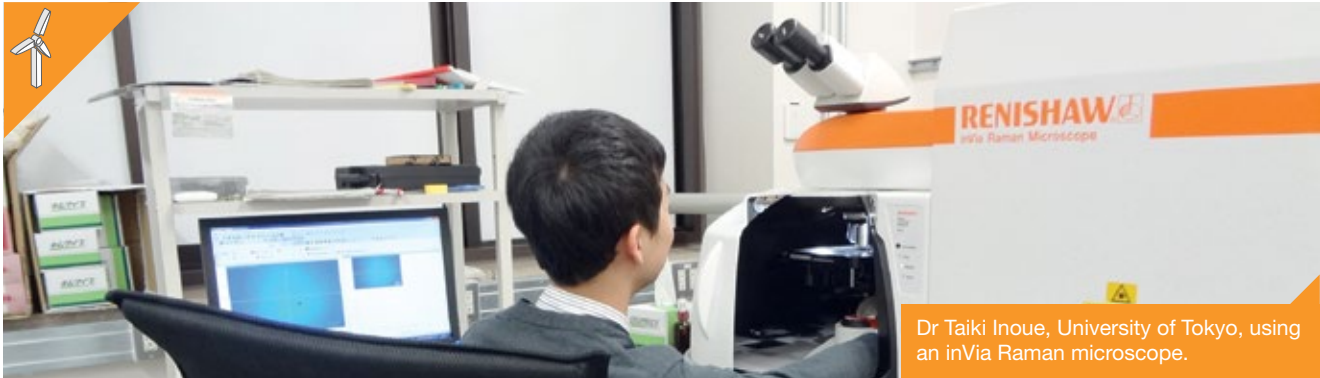
We continue to prepare for the Restriction of the use of Hazardous Substances Regulations (RoHS), which require the majority of our products to be compliant in 2017. Our encoder product range is RoHS compliant, with robust design procedures in place to ensure that all future products are compliant. We continue to monitor substances against those identified as "substances of very high concern" under the Registration, Evaluation, Authorisation and Restriction of Chemicals Directive. Whilst we do not fall within the remit of the USA's Dodd-Frank Wall Street Reform and Consumer Protection Act, we recognise that compliance with the conflict minerals assessment and disclosure aspects of such legislation is important to a number of our customers. We also recognise we should have a supply chain with minimum risk, that is free of unethical practices. As such, we have used our best efforts to mitigate against conflict minerals within our supply chain. Continual investigations in our supply chain are carried out to help ensure conflict minerals are not present; we are working with a number of key suppliers on this project. Any issues we consider to be against the spirit of our Group Business Code are monitored, and we work with suppliers where issues are identified.



The Strategic report was approved by the Board on 27th July 2016 and signed on its behalf by

**Sir David R McMurtry**  
Chairman and Chief Executive

## The power generation market



Dr Taiki Inoue, University of Tokyo, using an inVia Raman microscope.

## R&D support for energy generation and storage

Worldwide attention is continuing to focus on expanding our use of renewable energy. Whilst equipment such as solar panels and wind turbines are in increasing supply, and research continues into making this equipment as efficient as possible, the storage of energy generated is another area where significant R&D efforts are being applied.

### Researching battery life

The US Army Research Laboratory (ARL) in Maryland, USA, is studying electrochemical energy storage materials with a hybrid instrument consisting of a Renishaw inVia confocal Raman microscope and a Bruker Dimension Icon atomic force microscope (AFM).

Dr Collin Becker is a mechanical engineer at ARL and his group studies materials for advanced lithium ion batteries and future-generation energy storage systems, with a focus of developing high capacity

anode materials to improve overall energy density, rate of discharge and safety of electrochemical energy storage materials for electronics and vehicles.

Dr Becker investigates in situ changes in materials during battery charge and discharge with his Renishaw/Bruker combined Raman/AFM. This system - unlike scanning electron microscopes and x-ray photoelectron spectrometers - does not require samples to be in high vacuum. Therefore, he uses the Renishaw/Bruker system to study cells with standard electrolytes, in an inert environment provided by a glovebox. This provides the most realistic picture of the chemical and mechanical events taking place during battery cycling.

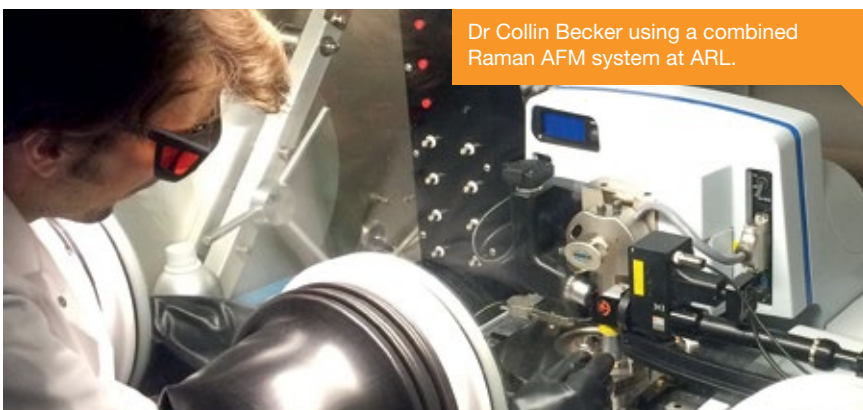
"The capability to use systems like the inVia in an argon-filled glovebox is critical for lithium ion battery materials since they are typically air and moisture sensitive," says Dr Becker. "The ability to do mapping experiments and still be able to have the system coupled with the electrochemical cell used for in situ AFM is very important."

### Studying advanced materials

The Mechanical Engineering Department at the University of Tokyo, Japan, uses a Renishaw inVia confocal Raman microscope to study graphene and other nano-materials in the development of energy-related devices such as solar cells.

The department's laboratory focuses its research on the synthesis and analysis of carbon nanotubes (CNT), graphene and other nano-materials. The laboratory uses scanning Raman spectroscopy as an important tool for the investigation of the synthesised materials and their structure.

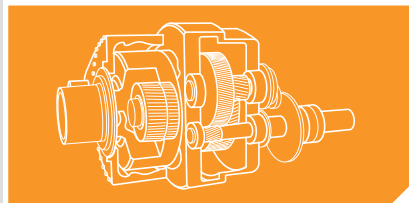
Lecturer Dr Shohei Chiashi says, "The Renishaw inVia is one of the most frequently used instruments in our university. Scanning Raman imaging spectroscopy is very useful for observing the structure of CNTs and graphene. It is one of the most important tools for our research. We find it possible to measure Raman images quickly and stably using inVia. Additionally, we find the software very useful for image analysis."



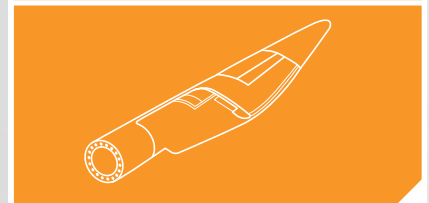
Dr Collin Becker using a combined Raman AFM system at ARL.



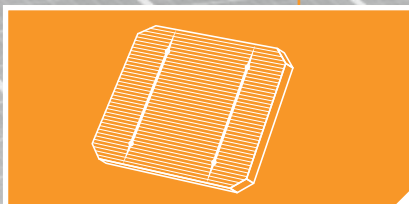
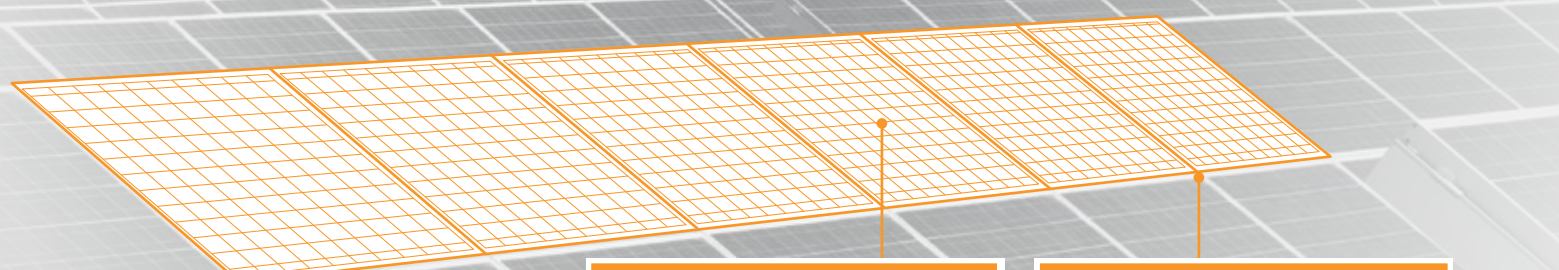
From fossil fuels to renewable energy, Renishaw products are at the heart of associated manufacturing processes. Whether in exploration and production in the oil and gas sector or solar panel manufacture, our products are used to control the production of key componentry. This illustration highlights just a few key applications within the renewables sector.



**Gearboxes and power transmission**  
 Equipment for inspection and quality control ensures power transmission systems meet the demanding specifications required for efficient service in power stations and hostile environments.



**Wind turbine blades**  
 Probing and other process control technologies enable precision manufacture of both large and small-scale components for high performance operation and reliability of turbines in service.



**Photovoltaic panel testing**  
 Analysis of chemical deposits on thin film layers using Raman spectroscopy enables quality control and assurance for solar panel production.



**Solar panel manufacturing**  
 Absolute position encoders provide smooth velocity control and high accuracy for automated operations in solar panel manufacturing and other high-tech industries.

## Corporate governance report – Introduction



“The Board is ultimately responsible to shareholders for all the Group’s activities, its strategy and financial performance, the efficient use of the Group’s resources and social, environmental and ethical matters.”

Sir David Grant, Senior Independent Director

With the assistance of the Audit Committee, the Board approves the Group’s governance framework and reviews its risk management and internal control processes with a view to maintaining high standards of corporate governance throughout the Group.

A key area of focus for 2016 was the tender of our external audit contract. The Audit Committee ran a rigorous process resulting in Ernst & Young being selected as the preferred new audit firm, subject to shareholder approval at the annual general meeting (AGM) in October 2016.

On behalf of the Board, I would like to thank Ben Taylor, who retires on 31st July 2016 for his huge commitment and contribution to Renishaw over 31 years. Will Lee is appointed to the Board as Group Sales and Marketing Director from 1st August 2016 and will be proposed for election as a director at the AGM.

I am delighted that Kath Durrant took on the role of Chair of our Remuneration Committee from May 2016 bringing a wealth of experience to this role.

In relation to our remuneration report on pages 80 to 86, the policy table from our three-year remuneration policy, which was approved by 86% of shareholder proxy votes at our annual general meeting in October 2014, is set out for information purposes only.

The Annual report on remuneration 2016 sets out the details of directors’ compensation throughout this financial year, which will be subject to the normal advisory vote at the AGM.

In the period, the Board reviewed its risk management and internal control framework, and has enhanced its operation, including setting up an executive risk committee which has, in turn, formed working groups to focus on anti-bribery, information and cyber security, and data protection. Further details are set out on pages 48 and 49.

The Board also considered the new viability statement requirement, and an explanation of our process is contained on page 48 and the viability statement is contained on page 73.

The Board takes seriously its responsibilities for making sure that all employees are aware of their obligations to act with openness, honesty and transparency. This strong anti-corruption culture is embedded in our Group Business Code and Anti-Bribery Policy which can be found at [www.renishaw.com/en/renishaw-group-business-code--14444](http://www.renishaw.com/en/renishaw-group-business-code--14444). In 2016, we have continued to closely monitor operational risks in key regions and are implementing additional compliance policies in certain areas.

Other appropriate steps were also taken in order to maintain adequate procedures. We have now trained 1,282 people worldwide via our anti-bribery E-Learning module, as well as other training initiatives.

### Scope of disclosures

This corporate governance report has been prepared in accordance with the UK Corporate Governance Code 2014 (Code). The Code can be viewed at [www.frc.org.uk](http://www.frc.org.uk). This report, which incorporates the reports of the Audit Committee and Nomination Committee, together with the Directors’ remuneration report, describes how we have applied the main principles of the Code.

We report on the operation of our business in the following ways:

A review of the Group’s business and likely future developments is given in the Chairman’s statement and the Strategic report. Segmental information by geographical market is given in note 2 to the financial statements.

The UK Listing Authority’s Disclosure Rules and Transparency Rules (DTR), require the Annual report to include a management report which can be found in the Strategic report.

The Directors’ corporate governance report and other statutory and regulatory disclosures set out on pages 64 to 75 and 87 to 89 form the Directors’ report (Directors’ report).

For the purposes of the DTR, which require a corporate governance statement to be included in the Directors' report, the Company's corporate governance practices are set out in the Directors' corporate governance report, which forms part of the Directors' report.

For the purposes of the UK Listing Authority's Listing Rules (LR), certain information required to be provided to the shareholders is also contained in the Directors' corporate governance report, the Directors' remuneration report and the Other statutory and regulatory disclosures, including certain information relating to arrangements with controlling shareholders.

For the purposes of the DTR, the information required by section 7 of such rules is referred to in the Directors' corporate governance report.

### Disclosure of information under Listing Rule 9.8.4R

The information that fulfils the reporting requirements under this rule can be found in the Directors' report, the Directors' remuneration report and on the pages identified below, as applicable.

Section	Topic	Location
(1)	Interest capitalised	Not applicable
(2)	Publication of unaudited financial information	Not applicable
(4)	Details of long-term incentive schemes	Not applicable
(5)	Waiver of emoluments by a director	Not applicable
(6)	Waiver of future emoluments by a director	Not applicable
(7)	Non pre-emptive issues of equity for cash	Not applicable
(8)	As item (7), in relation to major subsidiary undertakings	Not applicable
(9)	Parent participation in a placing by a listed subsidiary	Not applicable
(10)	Contracts of significance	Not applicable
(11)	Provision of services by a controlling shareholder	Directors' remuneration report pages 80–86
(12)	Shareholder waivers of dividends	Not applicable
(13)	Shareholder waivers of future dividends	Not applicable
(14)	Agreements with controlling shareholders	Other statutory and regulatory disclosures pages 88–89

*Cautionary note and safe harbour; this Annual report has been prepared for the purpose of assisting the Company's shareholders to assess the strategies adopted by the Company and the potential for those strategies to succeed and no-one, including the Company's shareholders, may rely on it for any other purpose. The directors owe their duties only to the Company as a whole and they undertake no duty of care to individual shareholders, other stakeholders or potential investors.*

*This Annual report has been prepared on the basis of the knowledge and information available to the directors at the time. Given the nature of some forward-looking information, which has been given in good faith, the Company's shareholders should treat this information with due caution.*

*Under the Companies Act 2006, a safe harbour limits the liability of directors in respect of statements in, and omissions from, the Strategic report contained on pages 1 to 61 and the Directors' report. Under English law the directors would be liable to the Company (but not to any third party) if the Strategic report and/or Directors' report contains errors as a result of recklessness or knowing misstatement or dishonest concealment of a material fact, but would not otherwise be liable.*

## Board of directors and Company Secretary



**Sir David McMurtry** N  
CBE, RDI, FRS, FEng, CEng, FIMechE  
Chairman and Chief Executive

- Formerly employed by Rolls-Royce plc, Bristol, for 17 years, holding the positions of Deputy Chief Designer and Assistant Chief of Engine Design for all Rolls-Royce engines manufactured at Filton, Bristol.
- Invented the original measuring probe in the early 1970s and co-founded Renishaw with John Deer in 1973.
- Responsible for group technology.



**John Deer**  
Deputy Chairman

- Trained as a mechanical engineer and worked for Rolls-Royce plc, Bristol, for 14 years.
- Co-founded Renishaw with Sir David McMurtry in 1973, serving as Managing Director from 1974 to 1989.
- Primarily involved in the commercial direction of the Group, with particular emphasis on marketing and the establishment of the Group's wholly-owned subsidiaries.
- Responsible for group manufacturing and Chair of the overseas marketing subsidiaries.



**Allen Roberts**  
FCA  
Group Finance Director

- Qualified as a chartered accountant in 1972 and is a Fellow of the Institute of Chartered Accountants in England and Wales.
- Joined Renishaw in 1979 and appointed to the Board of Renishaw plc in 1980.
- Heads group finance, business systems, human resources and Wotton Travel Ltd.
- Responsible for both metrology and healthcare regulatory and quality assurance functions.
- Reports to the Board on corporate social responsibility matters.



**Geoff McFarland**  
Group Engineering Director

- Graduated with a BEng in computer-aided mechanical engineering at Heriot-Watt University, and subsequently worked for several years as a research associate.
- After working briefly in the high-volume manufacturing electronic sector, joined Renishaw in 1994.
- Appointed to the Board of Renishaw plc in 2002.
- Responsible for group engineering, group IP and the neurological products line.



**Will Lee**  
Group Sales and Marketing Director

- Joined Renishaw in 1996.
- Became Director and General Manager for the laser and calibration products line in 2007 and subsequently Director and General Manager of the machine tool products line in 2014.
- Appointed to the new role of Director of Group Sales and Marketing in December 2015.
- Holds a degree in physics from Oxford University and an MBA from Bath University.
- Appointed to the Executive Board in 2015.
- Appointed to the Board with effect from 1st August 2016.



**Sir David Grant** A R N  
CBE, FEng, FLSW, CEng, FIET  
Senior Independent Director

- Appointed to the Board of Renishaw plc in April 2012.
- Currently senior independent director of IQE plc, non-executive director of the Defence Science and Technology Laboratory (Dstl), chair of STEMNET, and chair of the National Physical Laboratory (NPL).
- Vice-Chancellor of Cardiff University from 2001 to 2012.
- Previously held leadership positions at Dowty Group, GEC, the Royal Academy of Engineering and Innovate UK.
- Received a knighthood in the Queen's Birthday Honours 2016 for his contributions to engineering, technology and education.



**Carol Chesney**  
FCA

A\* R N

Non-executive director

- Appointed to the Board of Renishaw plc in October 2012.
- Chartered accountant who worked at Arthur Andersen for seven years in audit services.
- Worked for some time in the group accounts function at English China Clays plc.
- Currently Company Secretary of Halma plc, having also been Group Financial Controller.



**Kath Durrant**

R\* N

Non-executive director

- Appointed to the Board of Renishaw plc in January 2015.
- Currently Group HR Director for Wolseley plc and an Advisory Board member for the Lancaster University Management School.
- Was previously the Group HR Director at Rolls-Royce plc and held a variety of senior positions at AstraZeneca plc, including Vice President, HR and Communications for its research and development division.



**John Jeans**  
CBE, CEng

A R N

Non-executive director

- Appointed to the Board of Renishaw plc in April 2013.
- Currently chair of Imanova, UK Biocentre Ltd and Edinburgh Molecular Imaging.
- Non-executive director of ProMetic Pharma Small Molecule Therapeutics Ltd.
- Serves on several government bodies including the Ministerial Committee on Medical Technologies.
- Leads Innovate UK's Stratified Medicine Advisory Board and the KTN's Health Board.
- Appointed advisor to the Prime Minister at the Office of Life Sciences in June 2014.



**Norma Tang**

General Counsel and Company Secretary

- Joined Renishaw plc in 2001.
- Qualified as a solicitor in 1988 and since then has specialised in company and commercial legal matters, advising business clients and as an in-house counsel.
- Heads the group legal and company secretariat function, advising the Board on legal, compliance and governance matters.



**Ben Taylor** (retires 31st July 2016)  
CEng, FIMechE

Assistant Chief Executive

- Ben Taylor retires from the Board on 31st July 2016 following an outstanding contribution to the Group's performance over the last 31 years. Ben has helped to articulate the vision for Renishaw and has been a partner in developing longstanding relationships with customers worldwide. We wish him well in his retirement.

## Committees

- A Audit Committee
- R Remuneration Committee
- N Nomination Committee
- \* Denotes Chair of committee

## Executive Board

**Sir David McMurtry**  
**CBE, RDI, FRS, FEng, CEng,**  
**FIMechE**

Chairman and Chief Executive

⬅ See page 66 for biography

**John Deer**

Deputy Chairman

⬅ See page 66 for biography

**Allen Roberts**

Group Finance Director

⬅ See page 66 for biography

**Geoff McFarland**

Group Engineering Director

⬅ See page 66 for biography

**Will Lee**

Group Sales and  
 Marketing Director

⬅ See page 66 for biography

**Norma Tang**

General Counsel and  
 Company Secretary

⬅ See page 67 for biography



**Leo Somerville**

President, Renishaw  
 North America

- Joined Renishaw in 1984.
- Initially served as business manager for machine tool probing and calibration products at Renishaw, Inc.
- Became President of Renishaw, Inc. in 1993 and appointed to the Executive Board in 2004.
- Appointed as a member of the International Sales and Marketing Board in 2008.
- Became President, Renishaw North America upon a re-organisation of the management of the region in 2016.



**Dave Wallace**

Director and General  
 Manager, CMM, and Styli  
 and Fixturing Products

- Joined Renishaw in 1989 through Renishaw's sponsored student scheme.
- Worked in various functions of the business including a one-year secondment at Renishaw's German subsidiary, before being appointed Director and General Manager for the CMM products line in 2002.
- Appointed to the Executive Board in 2008.

## International Sales and Marketing Board



**Kevin Gani**

Director of Sales Development

- Joined Renishaw in 2011 and appointed Director of Sales Development in 2012.
- Responsible for the development of commercial teams, systems and processes.
- Manages and leads the development of the Renishaw Academy.
- Appointed as a member of the International Sales and Marketing Board in 2012.



**Sean Hymas**

President and Representative Director, Renishaw KK

- Joined Renishaw in 1989 following a year's sandwich placement between 1987 and 1988.
- Over 25 years' experience of marketing, international sales, and product management.
- Moved to Japan in 2008 to further drive sales and marketing at Renishaw KK.
- Appointed President of Renishaw KK and to the International Sales and Marketing Board in 2012.



**Stewart Lane**

General Manager, UK Sales and Group Business Development

- Joined Renishaw in 2000 working as both a design and business manager within the machine tool products line.
- Appointed as the Group's Business Development Manager in 2012 and General Manager for the UK sales organisation in 2013.
- On the boards of the West of England Aerospace Forum, the Manufacturing Technologies Association (MTA) and CECIMO, the European Machine Tool Association.



**Rainer Lotz**

Managing Director, Renishaw GmbH

- Joined Renishaw in 2006.
- Over 20 years' experience in related positions.
- Responsible for the operations in Germany and Austria.
- Appointed as a member of the International Sales and Marketing Board in 2008.



**Clive Martell**

Head of Global Additive Manufacturing

- Joined Renishaw in 2015.
- Responsible for the strategy and direction of additive manufacturing.
- Over 30 years' experience in advanced engineering and international sales.
- Progressed from graduate engineer to CEO of Delcam plc, and managed transition from AIM listed company to a division of Autodesk.
- Appointed as a member of the International Sales and Marketing Board in 2015.



**Jean-Marc Meffre**

Managing Director, Far East

- Joined Renishaw in 1988 as Managing Director of Renishaw France.
- Holds a master's degree in Economics and Marketing.
- Moved to Renishaw Hong Kong in 1997. Responsible for all the operations in the Far East and Australasia, except Japan.
- Appointed as a member of the International Sales and Marketing Board in 2008.



**Rhydian Pountney**

General Manager, ROW Sales

- Joined Renishaw in 1979.
- Appointed as a member of the International Sales and Marketing Board in 2008.
- Over 30 years' experience in sales and marketing. Responsible for 11 overseas operations, including India and Russia.
- UK Chair of the Technology Collaboration in Advanced Engineering working group of the UK-India joint economic and trade committee.

**John Deer**

Deputy Chairman

↻ See page 66 for biography

**Allen Roberts**

Group Finance Director

↻ See page 66 for biography

**Will Lee**

Group Sales and Marketing Director

↻ See page 66 for biography

**Leo Somerville**

President, Renishaw North America

↻ See page 68 for biography

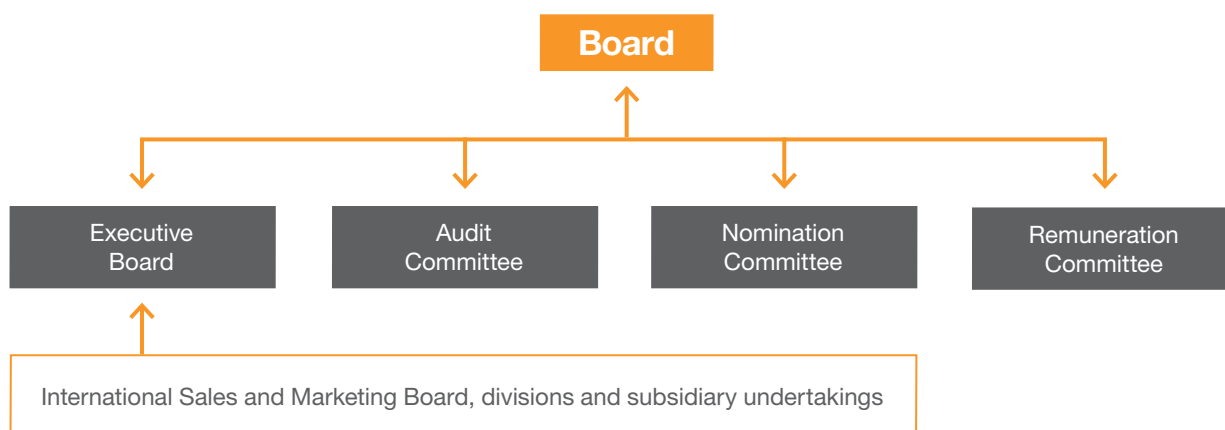
**Norma Tang**

General Counsel and Company Secretary

↻ See page 67 for biography

## Directors' corporate governance report

### Board structure



#### A. Leadership

##### The role of the Board

The Board comprises four executive and four independent non-executive directors in addition to the executive Chairman. The directors holding office at the date of this report and short biographical details are given on pages 66 to 67 (Ben Taylor retired on 31 July 2016 and is not offering himself for re-election at the AGM). Full biographical details are available at [www.renishaw.com](http://www.renishaw.com). Will Lee was appointed by the Board as a director with effect from 1st August 2016, and along with all other directors, will be retiring and putting himself up for election at the AGM. Will's biography is set out on page 66. The Company maintains liability insurance for its directors and officers, as disclosed in the Other statutory and regulatory disclosures.

There is a formal schedule of matters specifically reserved for its decision. These include the approval of annual and half-year results and trading statements, company and business acquisitions and disposals, major capital expenditure, borrowings, material agreements, director and company secretary appointments and removals, patent-related disputes and other material litigation, forecasts and major product development projects.

The Board meets as often as is necessary to discharge its duties effectively. In the financial year ended 30th June 2016, the Board met for 10 scheduled and two short notice meetings and the directors' attendance record at board and committee meetings is set out at the end of this report. In addition, the non-executive directors met a number of times without executive directors present.

A high-level summary of subject areas discussed during the year are set out on page 71.

The Board has three formally constituted committees, the Audit Committee, the Remuneration Committee and the Nomination Committee.

There is an executive management committee known as the Executive Board that is responsible for the executive management of the Group's businesses. It is chaired by the Chairman and includes the executive directors and senior managers as noted on page 68. The Executive Board usually meets for two days on a monthly basis and considers the performance and strategic direction of the metrology and healthcare businesses and other matters of general importance to the Group. In addition, there is an executive sales and marketing committee known as the International Sales and Marketing Board which meets quarterly to determine the Group's sales and marketing policies and strategies and review its sales and marketing activities.

This committee is chaired by the Deputy Chairman and includes the Group Finance Director, the Group Sales and Marketing Director, the directors of the five largest sales regions, the Director of Sales Development and the Head of Global Additive Manufacturing.

A framework of delegated authorities is in place that maps out the structure of delegation below the Board and includes the matters reserved to the Executive Board and the level of authorities given to management below the Executive Board.

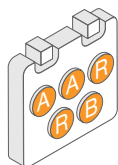
An executive risk committee meets regularly to review risks which may impact on the Group's business and to implement mitigation actions. The framework for managing risk is set out on pages 48 and 49.

The Board has adopted a conflict of interests policy, putting in place procedures for the disclosure and review of any conflicts and potential conflicts, and authorisation by the Board (if felt appropriate). Authorisations granted and the terms of such are reviewed on an annual basis. New disclosures are made where applicable.

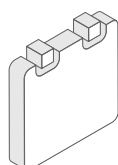


## Scheduled Board and committee meetings in the period

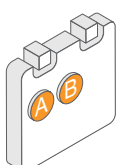
July 2015



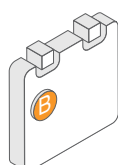
August 2015



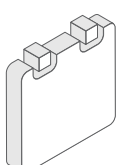
September 2015



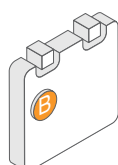
October 2015



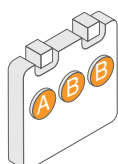
November 2015



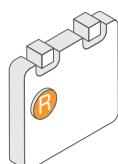
December 2015



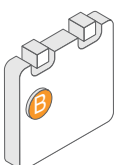
January 2016



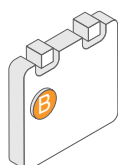
February 2016



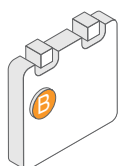
March 2016



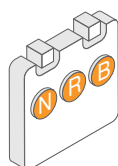
April 2016



May 2016



June 2016



### Key

- Audit Committee (4)
- Remuneration Committee (4)
- Nomination Committee (1)
- Board (10)

## High-level summary of subjects discussed by the Board during the year:

### Strategy

- Business strategy
- Reviewing potential acquisitions/disposals
- New subsidiaries
- Products and technology
- Key business relationships
- Brexit

### Risk

- Group's risk analysis
- Patent litigation
- Tax risk register and updates

### Governance

- Legal updates
- Market Abuse Regulation
- Modern Slavery Act
- Board evaluation
- Committee terms of reference
- Controlling shareholder agreement
- Export control

### Finance

- Forecasts and targets
- Oversight of the preparation and management of the financial statements
- Dividend policy
- Trading statements

### Stakeholder engagement

- AGM and other shareholder feedback
- Investor day

### HR

- Succession planning/executive management structure
- Pensions
- Remuneration policy
- Salary reviews
- Bonus
- Health and safety system and updates

## Directors' corporate governance report (continued)

### Division of responsibilities/ the Chairman

The role of Chairman and Chief Executive is a combined role and thus contrary to the recommendations of the Code. Sir David McMurtry has held this position since the Company listed in 1983 and he and John Deer hold the majority of the voting interests in the Company.

There has been a voting agreement in place between Sir David and John Deer since 1983, further details of which are set out in the Other statutory and regulatory disclosures on page 87. The Board considers that there is still a clear division of responsibilities at board level to ensure an appropriate balance of power and authority so that there is no one person with unfettered powers of decision. The Board and Executive Board meet on a sufficiently regular basis to make decisions of significance to the metrology and healthcare business segments and review management actions. It is intended that this combined role will continue for so long as Sir David McMurtry remains on the Board and he and John Deer hold a majority of the voting interests in the Company.

The Chairman has no other significant commitments as regards employment or directorships of other companies.

### Non-executive directors

Sir David Grant is the Senior Independent Director and is available to discuss material concerns with shareholders should the normal channels of the Chairman and Chief Executive or the Group Finance Director fail to resolve such concerns. The non-executive directors meet without the executive directors present to discuss performance and other matters.

### B. Effectiveness

#### Composition of the Board

All the non-executive directors are considered by the Board to be independent in character and judgement and there are no relationships or circumstances that are likely to affect a non-executive director's judgement.

Sir David Grant is currently the senior independent director of IQE plc (having been appointed in September 2012), chair of STEMNET (appointed in December 2011), chair of the National Physical Laboratory (appointed in May 2015) and on the board of the Defence Science and Technology Laboratory (Dstl) (appointed in June 2012). He was previously Vice-Chancellor of Cardiff University from October 2001 to August 2012. The Company has dealings with these organisations from time to time, such as grant-funded research projects, or research, collaboration or supply agreements. The Company confirms that Sir David Grant has taken no part in decisions relating to any of the dealings between the Company and these organisations.

John Jeans was chair of the Council of Cardiff University from December 2011 until December 2015, is chair of Innovate UK's Stratified Medicine Steering Group (having been appointed in February 2014) and was chair of MRC Technology from December 2008 until November 2014. John has also been since March 2016 interim Chair of the Scottish Medical Device Hub at Strathclyde University. The Company has dealings with these organisations from time to time, such as grant-funded research projects, or research, collaboration or supply agreements. The Company confirms that John Jeans has taken no part in decisions relating to any of the dealings between the Company and these organisations.

The dealings referred to above are not material (i.e., in aggregate they are less than 0.5% of the Company's revenue for the financial year ended 30th June 2016).

The Code recommends that at least half the Board, excluding the Chairman, should comprise independent non-executive directors. The Board has complied with this requirement during the period.

#### Appointments to the Board

A description of the structure and activities of the Nomination Committee are set out in the Nomination Committee report on page 76.

#### Commitment

The terms of appointment of the non-executive directors, which includes the expected time commitment and requirement to discuss any changes to other significant commitments with the Chairman and Chief Executive in advance, are available for inspection at the AGM and the registered office upon written request.

None of the executive directors hold a directorship in a FTSE 100 company.

#### Development

Directors are offered the opportunity to attend formal training courses to update their knowledge of their duties as directors. Guidance notes, papers and presentations on changes to law and regulations are provided as appropriate. Non-executive directors are invited to attend internal conferences, which provide information to the Group on new product development and marketing initiatives, as well as our investor days. Business presentations are given at board meetings to provide updates on, and opportunities to discuss, products and business strategies.

An induction pack is provided to new appointees to the Board, and the induction programme (together with the continuing development programme) includes site visits and briefings by senior managers, attendance at internal senior management conferences and external trade shows, as well as foreign subsidiary visits, as applicable. For example, this year, non-executive directors visited Renishaw's Miskin facility for the annual investor day and attended strategy days, as well as a board meeting at Renishaw's Stone premises. This has facilitated a deeper understanding of the Group, leadership team and Renishaw's products and markets.

## Information and support

The Board receives appropriate documentation, management accounts, forecasts and commentaries thereon in advance of each board meeting to enable its members to review the financial performance of the Group, current trading and key business initiatives. Regular financial updates are also provided between meetings. The Company Secretary advises the Board on all governance matters. All directors have access to the Company Secretary and to independent professional advice at the Company's expense where necessary to discharge their responsibilities as directors. The appointment and removal of the Company Secretary is a matter reserved for the Board.

## Evaluation

The Board and its committees undertake an annual evaluation of their performance. The format of the evaluation varies each year.

The 2015 evaluation focused on improving the rolling forward agenda process and succession planning, including overseas senior management. For 2016, Equity Communications Limited (which assisted with the last externally facilitated evaluation in 2013) undertook interviews with the directors, discussing a list of subjects agreed by the Board. The results of this evaluation will be discussed early in the new financial year. Equity Communications Limited has no other connection with the Company.

## Re-election

In accordance with the Code all the directors will retire from the Board at the next AGM and will offer themselves up for re-election or election (as the case may be) at the AGM.

## C. Accountability

### Financial and business reporting

The respective responsibilities of the directors and auditor in connection with the financial statements are explained in Directors' responsibilities on page 90 and the Independent auditor's report on pages 91 to 93.

### Fair, balanced and understandable

The directors consider that the Annual report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's performance, business model and strategy.

### Going concern

The Group's strategy for delivering its objectives and business model, together with the factors likely to affect its future development and performance are set out in the Strategic report, where details of the financial and liquidity positions are also given. In addition, note 20 to the financial statements includes the Group's objectives and policies for managing its capital, details of its financial instruments and hedging activities and its exposures to credit risk and liquidity risk.

The Group has considerable financial resources at its disposal and the directors have considered the current financial projections. As a consequence, the directors believe that the Group is well placed to manage its business risks successfully.

After making enquiries, the directors have a reasonable expectation that both the Company and the Group have adequate resources to continue in operation for the next twelve months. Accordingly, they continue to adopt the going concern basis in preparing the Annual report and accounts.

### Viability statement

The Board undertakes an annual review of the corporate strategy, which includes medium term financial forecasts and an assessment of the major risks facing the business. In addition, current financial year forecasts are reviewed regularly by the Board, underpinned by regular briefings from its business sectors and subsidiaries on progress. The corporate strategy provides the foundations for monitoring of performance, budgets, risk and strategic actions by the Board.

The Board confirms that its assessment during the year of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency and/or liquidity, and which are set out in the Group's Principal risks and uncertainties on pages 50 to 51, was robust. In making the assessment, severe but plausible scenarios have been considered that estimate the potential impact of the principal risks on the financial forecasts over the assessment period.

In accordance with provision C.2.2 of the Code, whilst the Board has no reason to believe the Group will not be viable over a longer period, the period over which the Board considers it possible to form a reasonable expectation as to the Group's longer-term viability, based on the risk and sensitivity analysis undertaken, is the three-year period to 30th June 2019, taking account of the Group's current position, financial forecasts, future prospects and the potential impact of the Principal risks and uncertainties documented in the Strategic report. The Board believes that a three-year viability assessment period is appropriate as the timeframe is covered by the Group's corporate strategy, takes account of the Group's short order book and together with the planning process set out above, it gives management and the Board sufficient, realistic visibility on the future in the context of the industry and world economic environment.

## Directors' corporate governance report (continued)

On the basis of the above and other matters considered and reviewed by the Board during the year, the Board has a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period to 30th June 2019. In assessing the Group's viability over the next three years, it is recognised that all future assessments are subject to a level of uncertainty that increases for the later part of the assessment period and that future outcomes cannot be guaranteed or predicted with any certainty.

### Risk management and internal control

The Board is responsible for the Company's systems of risk management and internal control, and for reviewing their effectiveness. Any system of internal control is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss.

There are defined lines of responsibility and delegation of authorities. Established and centrally documented control procedures also exist, including, for example, capital and other expenditure, information and technology security and legal and regulatory compliance. These are applied throughout the Group.

The Group internal audit function provides independent and objective assurance that the control procedures are appropriate and effectively applied. The Group Audit Manager attends Audit Committee meetings to present annual internal audit plans and the results of such internal audits. Actions are monitored by the Audit Committee on an ongoing basis.

There is an established process for the review of business risks throughout the Group which has been enhanced in 2016 by the formation of an executive risk committee as explained on page 48.

The Board ensures that there are effective internal controls over the financial reporting and consolidation processes. Monthly accounts and forecasts are presented to the Board for review. The Group internal audit function undertakes a review of subsidiaries' accounting processes and performance to provide assurance to the Board on the integrity of the information supplied by each company forming part of the Group's consolidated results.

The Board undertakes an annual formal review of the effectiveness of the Group's system of internal controls and an updated risk and controls analysis. The review covers all material controls, including financial, operational and compliance controls and risk management systems.

The Board has conducted a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity. The Board is satisfied that there is an ongoing process for identifying, evaluating and managing the significant risks facing the Group, that it has been in place during the year, is regularly reviewed and accords with the FRC guidance on risk management and control. The Board confirms that necessary action has been or is being taken to remedy any significant failings or weaknesses identified from its review.

### Audit Committee and auditor

A description of the structure and activities of the Audit Committee are set out in the Audit Committee report on pages 77 to 79.

### D. Remuneration

The Directors' remuneration report explains how the Company applies the Code principles relating to remuneration.

### E. Relations with shareholders

#### Dialogue with shareholders

The Board announced a new policy in the 2013 Annual report. No private meetings will be held other than shareholder meetings with the Chairman, Senior Independent Director and/or any other non-executive director where a shareholder has material issues, concerns or questions. The director attending such a meeting will communicate the shareholder's issues, concerns or questions to the Board. The Board's response will be published on the Renishaw website for the benefit of all shareholders where appropriate. The interim and annual results and presentations are posted on the website promptly after announcement of the results to the UK Listing Authority via an RIS.

Open webcasts of presentations on annual and half-year results are held and recordings of the presentations and the subsequent question and answer sessions made available after the webcast on the Company's website. Analysts' and brokers' reports will be circulated to the Board. The Board intends to hold open discussions with any shareholder who wishes to share views with the directors at the AGM or the annual investor day at which presentations on group strategy, business segments and product lines will be given by members of the Board and senior management, as well as tours covering the Group's activities. This year, 72 visitors attended the Company's investor day, which included various Q&A sessions with the Board during the day as well as an opportunity to ask questions during tours, lunch and refreshment breaks.

### Constructive use of the AGM

The AGM takes place at the Company's headquarters or one of the Company's other sites and formal notification is sent to the shareholders at least 20 working days before the meeting. A business presentation is given and all directors are available for questions during and after the meeting, including the chairs of the Audit, Remuneration and Nomination Committees. Tours of the Company's facilities are offered.

Separate resolutions are proposed for each substantially separate issue, and all resolutions will be taken on a poll. The Company reports on the number of votes lodged on each resolution, the balance for and against each resolution and the number of votes withheld. This information is published via an RIS and on the Company's website following the meeting.

### Disclosure rule DTR 7.2.6 R

The information regarding share capital required to be disclosed by this rule is contained in the Other statutory and regulatory disclosures.

### Board and committee meeting attendance record

Shown against each director's name in the table below is the number of scheduled meetings of the Board and its committees at which the director was present, and, in brackets, the number of meetings that the director was eligible to attend during the year.

### Compliance statement

The Board considers that it has complied with the requirements of the Code throughout the year except in relation to the following matter (the reasons for non-compliance are stated in the report above):

- the combined role of Chairman and Chief Executive (Code provision A.2.1).

### Sir David Grant

Senior Independent Director  
27th July 2016

## Board attendance record

### Meetings

The following table sets out attendance at the scheduled meetings of the Board and committees during the year. There were two ad hoc Board meetings which were called on short notice, which are not included in this table.

Director	Board	Audit Committee	Remuneration Committee	Nomination Committee
Sir David McMurtry	10 (10)	–	–	1 (1)
D J Deer	10 (10)	–	–	–
B R Taylor	10 (10)	–	–	–
A C G Roberts	10 (10)	–	–	–
G McFarland	10 (10)	–	–	–
C T Chesney	10 (10)	4 (4)	4 (4)	1 (1)
K L Durrant	9 (10) <sup>1</sup>	–	4 (4)	1 (1)
Sir David Grant	10 (10)	4 (4)	3 (4) <sup>2</sup>	1 (1)
D J Jeans	10 (10)	4 (4)	4 (4)	1 (1)

<sup>1</sup> One of the Board meetings was postponed on short notice due to a family bereavement but it was not possible for Kath Durrant to change prior arrangements to attend the re-scheduled meeting.

<sup>2</sup> As Sir David Grant had prior commitments elsewhere, he was unable to attend this committee meeting due to a delayed close to the Board meeting that immediately preceded it.

## Nomination Committee report



“The Nomination Committee has an important role in leading the process for Board appointments and ensuring that the Board has the correct balance of experience, diversity and skills to support our business model and strategy.”

Sir David R McMurtry, Chairman and Chief Executive  
Chair of the Nomination Committee

### Nomination Committee role and composition

The Nomination Committee, which meets on an ad hoc basis as required, is responsible for reviewing the size, structure and composition of the Board, including its balance of skills, knowledge and experience and for nominating candidates for appointment to the Board.

The members of the Nomination Committee are Sir David McMurtry (Chair), Carol Chesney, Kath Durrant, Sir David Grant and John Jeans. The majority of the members of this committee are independent non-executive directors. The terms of reference of this committee are published on the Company's website.

### Activities during the year

The committee met once during the year to consider and propose the appointment of Will Lee to the Board as Group Sales and Marketing Director. Will has been a long-standing member of the senior leadership team in a number of roles at Renishaw and was appointed Director of Group Sales and Marketing during the year, working with Ben Taylor to take over Ben's sales and marketing duties in his transition to retirement on 31st July 2016. The appointment was confirmed on 27th July 2016 and takes effect on 1st August 2016. The committee believes that Will has the required skills and experience to provide an invaluable contribution to the Board.

In relation to non-executive positions, the four non-executive directors were all appointed within the last four years and the Board considers that they are working effectively together in order to support the Board and the Company. Consequently there were no further appointments or changes considered necessary during the year other than to appoint Kath Durrant as Chair of the Remuneration Committee.

### Boardroom diversity

The Board has considered the recommendations of the "Women on Boards" report issued by Lord Davies of Abersoch, and his subsequent annual reviews, as regards setting out aspirations for the appointment of women to boards, and has decided that it is inappropriate to set out any levels that may require positive discrimination in this respect, as the overriding requirement is to appoint directors with the necessary skills and experience for the role.

However, as an international company, the Board acknowledges that diversity of all types is a benefit and should be borne in mind when recruiting to all roles within the Company, and has a policy to provide equal opportunities to all. The Board's policy is to request, where recruitment consultants are appointed for board appointment, that a proportion of female candidates are included in their shortlist.

Sir David R McMurtry  
Chair of the Nomination Committee  
27th July 2016

## Audit Committee report



“The Audit Committee has a vital role to play in ensuring the integrity of our financial statements, the effectiveness of our risk management processes and internal controls, and in evaluating the performance of the external audit process. During 2016 we also monitored the various changes to the Code, agreed the content of the viability statement and recommended to the Board that Ernst & Young LLP be appointed as the external auditor for the 2017 financial year, subject to shareholder approval at the AGM.”

Carol Chesney, Non-executive director  
Chair of the Audit Committee

### Audit Committee role and composition

The Audit Committee is appointed by the Board from the non-executive directors of the Company. The Audit Committee's terms of reference include all matters indicated by Disclosure and Transparency Rule 7.1 and the Code. The terms of reference are considered annually by the Audit Committee and any changes are recommended to the Board for approval.

The Audit Committee reviews the Group's accounting policies and procedures, its annual and interim financial statements before submission to the Board and its compliance with statutory requirements. The committee monitors the integrity of the Group's financial statements and announcements relating to financial performance and reviews the significant reporting judgements contained therein. It also reviews the scope, remit and effectiveness of the internal control systems and internal audit function.

The Audit Committee comprises three non-executive directors; Carol Chesney (Chair), Sir David Grant and John Jeans. The Board is satisfied that at least one member of the committee has recent and relevant financial experience, being Carol Chesney. The terms of reference are available on the Company's website.

### Meetings

The committee meets at least three times a year with the Group Finance Director, the Group Financial Controller, the Group Audit Manager, the Company Secretary and the external auditor in attendance. At least one meeting, or part thereof, is held with the external auditor without executive directors present. This year the committee met four times; further details are on page 78.

Member	Financial experience	Sector experience	
		Company and position	Sector
Carol Chesney	Chartered accountant	Company Secretary at Halma plc	Technology
	Worked at Arthur Anderson for 7 years Previously Group Financial Controller at Halma plc		
Sir David Grant		Senior Independent Director of IQE plc	Technology
		Director of Dstl	Technology
		Chair of NPL	Metrology
		Previously worked for Dowty Group	Manufacturing
		Previously Group Technical Director of GEC plc	Engineering
		Previously Vice-President of the Royal Academy of Engineering	Engineering
John Jeans		Chair of Imanova	Imaging services
		Chair of UK Biocentre	Healthcare
		Chair of Edinburgh Molecular Imaging	Biotechnology
		Non-executive director of ProMetic SMT	Biopharmaceuticals
		Member of the Ministerial Committee on Medical Technologies	Biotechnology
		Advisor to the Prime Minister at the Office of Life Sciences	Medical technology
		Previously worked for Smith & Nephew	Medical equipment
		Previously President of Dravon Medical (Smith & Nephew)	Medical equipment
		Previously Senior Vice President of Zimmer (Bristol-Myers Squibb)	Healthcare
		Previously President at Ortho Clinical Diagnostics International (Johnson & Johnson)	Medical diagnostics
	Previously Chairman at GE Healthcare Ltd	Healthcare	

### Key issues and activities

In addition to reviewing the financial reporting of the Company, the committee also spends a significant amount of time

reviewing the effectiveness of the Group's internal control processes and its internal and external audit activities.

## Audit Committee report (continued)

### The principal activities in the year:

Financial statements and reports	Risk management	Internal audit	External auditor and non-audit work
<ul style="list-style-type: none"> <li>Reviewed the effectiveness of the Group's risk management and internal controls and disclosures made in the 2016 Annual report;</li> <li>reviewed the 2016 Annual report, the 2016 Interim report and all other trading updates issued during the year. The committee received a report from the external auditor on the audit of the 2016 Annual report;</li> <li>reviewed areas of the accounts requiring judgement including the carrying value of goodwill, the carrying value of inventory, capitalisation of internally generated development costs, amortisation of intangible assets, debtor provisions, warranty provisions and taxation provisions;</li> <li>reviewed the accounting and disclosures in relation to the Group's defined benefit pension schemes; and</li> <li>reviewed the content of the viability statement (see below).</li> </ul>	<ul style="list-style-type: none"> <li>Reviewed the output from the Group's risk review process to identify, evaluate and mitigate risks and considered whether changes in risk profile were adequately addressed;</li> <li>received updates on compliance with the Group's anti-bribery and corruption policy;</li> <li>reviewed proposals to enhance the Group's whistleblowing policy and process which will include an external reporting facility for employees; and</li> <li>reviewed the Group's proposed approach to compliance with the requirements of the Modern Slavery Act.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluated the scope of work to be undertaken by the internal audit function;</li> <li>reviewed progress on recommendations brought forward and considered during the year; and</li> <li>considered the resource levels available to the internal audit function.</li> </ul>	<ul style="list-style-type: none"> <li>Undertook a tender for the 2017 group external audit service;</li> <li>reviewed, considered and agreed the scope and methodology of the 2016 audit work to be undertaken by the external auditor;</li> <li>evaluated the independence and objectivity of the external auditor;</li> <li>agreed the terms of engagement and the fees to be paid to the external auditor for the audit of the 2016 financial statements;</li> <li>reviewed the level and nature of non-audit services provided by the external auditor;</li> <li>undertook an effectiveness review of the external audit process; and</li> <li>reviewed and approved updates to the non-audit services policy.</li> </ul>

The committee agreed the content of the viability statement following a thorough review process which included an assessment of the potential downside impact of the Group's principal risks. The viability statement is set out on page 73.

### Risk management and internal controls

The committee monitors the effectiveness of the Group's internal controls and risk management processes which allows it to maintain a good understanding of the business performance and key areas of judgement and decision making within the Group.

Details of risk management and internal controls are set out on page 48 and 49 and page 74.

### Fair, balanced and understandable report and accounts

One of the key governance requirements is for the Annual report to be fair, balanced and understandable. Ensuring that this standard is met requires continuous assessment of the financial reporting issues affecting the Group on a year-round basis in addition to a number of focused exercises that take place during the accounts production process within a strict timeframe.

An extensive verification exercise was undertaken to ensure the factual accuracy of the Annual report by the Board and senior management. An advanced draft of the Annual report was considered by the committee at its meeting on 6th July 2016 with a final draft being reviewed on 22nd July 2016, prior to it being presented to the Board. Following those discussions, the committee advised the Board that the Annual report, taken as a whole, is fair, balanced and understandable.

The directors' statement on a fair, balanced and understandable Annual report is set out on page 73.

### Significant issues in relation to the financial statements

As part of the reporting and review process, the committee has regular discussions with management and the external auditor relating to significant issues. During the year the committee considered the significant issues set out below in relation to the financial statements. Also contained below is

a commentary on how these issues were addressed:

#### i) The carrying value of goodwill

The committee focused on the impairment testing by the Company of the carrying value of goodwill. By applying knowledge and making enquiries of the relevant cash-generating units, reviewing the forecasts and the sensitivity analysis, the committee agreed with the conclusion reached that no impairments were required.

#### ii) The carrying value of inventory

Provisions are made to write down slow-moving and obsolete inventory items to net realisable value, based on an assessment of technological and market developments and on an analysis of historic and projected demand. The assessment used to calculate the provisions needed requires the application of judgement by management.

The committee received confirmation from management that the approach used to determine the provision was consistent with the previous year and made enquiries



of management to gain an understanding of how business developments, both technological and market-driven, had impacted the provision during the year.

The external auditor explained to the committee the work they had performed in respect of the carrying value of goodwill and inventory provisions during the year. The committee was satisfied that management judgements were appropriate and that the carrying value of goodwill and the inventory provision were appropriately stated at the year end.

### Approach to auditor appointment and audit quality

The committee has primary responsibility for making the recommendation on the appointment, reappointment and removal of the external auditor, which the Board puts to shareholders for approval at the AGM. KPMG LLP and its predecessor firms have been auditor since 1974 and the lead audit partner has changed in line with their internal rotation requirements. During the year the external audit contract for 2017 was put out to tender. KPMG LLP was not invited to tender which will allow the group to use KPMG LLP for non-audit services which are prohibited under the latest EU audit regulation. Additionally the tender coincided with the mandatory rotation of the KPMG LLP lead partner.

The committee agreed the tender process and approved a Request for Proposal (RFP) document which was sent to selected firms. Services, such as tax compliance and advice, were not within the scope of the RFP.

The committee, together with the Group Finance Director, the Group Audit Manager and the Group Financial Controller, reviewed the proposals which culminated in presentations by each firm. The committee considered the following aspects in arriving at its recommendation to the Board:

- skills and knowledge of the team proposed to do the work;
- independence of the audit firm from the Company;
- audit partner rotation and succession planning;

- global coverage for the Company's subsidiaries;
- value for money;
- audit approach and methodology including the use of data analytic techniques;
- internal governance processes;
- transition plan;
- verbal references for senior members of the proposed audit teams;
- technical capabilities of the firm as a whole; and
- ethical behaviour and fair dealing.

Following the review, the committee made a recommendation to the Board that Ernst & Young LLP be appointed as the external auditor for the 2017 financial year, subject to shareholder approval at the AGM in October this year.

When the committee assesses the effectiveness of the external audit process and the quality of the audit work throughout the year it considers:

- any issues arising from the prior year audit;
- the proposed audit plan including the identification of risks specific to the Group, audit scope and materiality thresholds;
- feedback from executive management, including the review of a report presented by the Group Finance Director, Group Financial Controller and the Group Audit Manager on the effectiveness of the external audit process;
- the delivery of the audit in line with the plan;
- the communication of matters arising during the audit to the committee;
- private meetings with the auditor without management being present; and
- the independence and objectivity of the auditor.

### Independence of external auditor

In order to safeguard the independence and objectivity of the external auditor, the committee reviews the nature and extent of the non-audit services supplied, receiving reports on the balance of audit to non-audit fees. For 2016, the committee regarded it most cost efficient to use the external auditor for tax advice and compliance since this requires an in-depth knowledge and understanding of the Company's business, products, customer base and markets.

Beyond 2016, tax advice and compliance will not be undertaken by the external auditor. The non-audit services policy has been updated in the year to reflect the extended list of prohibited services as set out in the latest EU audit regulation. There are also specified services which require the prior approval of the Group Finance Director and Chair of the Audit Committee before the auditor may be appointed to provide such services. In addition, there are specified levels of authorisation to be obtained before the auditor may be permitted to tender for non-audit services.

An analysis of fees paid to KPMG LLP, including the split between audit and non-audit services, is included in note 5 to the group financial statements.

### Other matters

The committee reviews the policy by which employees of the Company may, in confidence, raise matters of concern, including possible improprieties in financial reporting or other matters. It was recommended to the Board that this policy is enhanced in the early part of next financial year by the implementation of an external reporting line. It also monitors the effectiveness of the Company's procedures to avoid any bribery related to the activities of the Group.

Carol Chesney  
Chair of the Audit Committee  
27th July 2016

## Directors' remuneration report



“ I am pleased to have taken over as Chair of this committee as we continue to further develop senior management talent, performance management processes and executive director remuneration policies and governance. ”

Kath Durrant, Chair of the Remuneration committee

### Remuneration Committee role and composition

The Remuneration Committee is responsible for deciding the Company's framework of executive director remuneration and setting remuneration packages for each of the executive directors. The committee's policy is to motivate and retain executive directors by rewarding them with competitive salary, benefit packages and incentives. These are linked to the overall performance of the Group and, in turn, to the interests of the shareholders.

The committee reviews annually the executive directors' remuneration in the context of the Group's performance during the year.

The committee also reviews the remuneration structure and packages for the next level of senior leaders across the business to ensure appropriate competitiveness, equity and progression for those identified as potential successors to the Board and senior executive team.

All the members of the committee are non-executive directors, comprising Kath Durrant (Chair), Sir David Grant, Carol Chesney and John Jeans. The terms of reference of the committee are published on the Company's website. Executive directors only attend meetings of the committee by invitation for parts of the agenda as appropriate. Independent advisors are used as required.

On behalf of the Board, I am pleased to present the Directors' remuneration report for 2016.

The report continues to comply with the requirements for reporting on directors' pay introduced in October 2013 and is split into the following three sections:

1. A statement from the Chair of the Remuneration Committee;
2. The remuneration policy table (pages 82 and 83) which was approved at the AGM on 16th October 2014 for a three-year period; and
3. An annual report on remuneration, setting out information on directors' remuneration paid during the year.

### Remuneration Committee activities during the year

During 2016 Sir David Grant stepped down from the role of Remuneration Committee Chair, and I was pleased to step into the role. 2016 was a more challenging year for the Company when compared to the exceptional performance of 2015, where the Company benefited from large orders from the Far East. Nevertheless, underlying growth of 5.6% in core businesses demonstrates the resilience of Renishaw, and should be noted positively.

The Remuneration Committee's approach continues to be to align executive director remuneration with the Group's performance, using clear and simple remuneration structures.

During the year, the committee approved executive directors' base salaries for 2016, which rose in line with increases typical for UK staff; no bonus was payable to executive directors in 2016, the thresholds for payment not having been met. The committee approved a new remuneration package for Will Lee in respect of his appointment to the Board as Group Sales and Marketing Director.

The committee also reviewed and approved the Chairman and Chief Executive's expenses.

As indicated in last year's report, the committee commenced a review of executive remuneration and this year, worked with Kepler, who advised on remuneration governance and conducted a benchmarking of remuneration for the senior leadership group, including executive directors. The committee have made the benchmarking available to management within the Company, with guidelines for its ongoing use. The committee has also reviewed the quality of performance management processes with the Company and made recommendations on strengthening that process further.

In relation to setting remuneration for the next financial year, the committee has taken into account the cyclical nature of the market, the performance of the Company over time, the present uncertain economic environment and the remuneration conditions within the Board and the overseas markets in which we operate. With respect to executive director bonus targets, the committee has agreed with the Company the long-term strategic profitable growth ambitions for Renishaw, which in turn underpin bonus arrangements. In addition to the usual measure of profit before tax, the committee has decided to introduce an additional measure related to prudent management of cash.

Renishaw's executive directors do not participate in a long-term incentive plan (LTIP). The Remuneration Committee recognises that this is unusual compared with many other companies, and we therefore question annually whether Renishaw's performance would be enhanced through the introduction of such a scheme. At present there are no proposals to introduce such a scheme.

The committee considers it essential that the Group can assure its ability to attract and retain talent, in different markets and in both established and emerging businesses. As a result, the committee will carefully consider the potential changes to the remuneration policy of the Company (including, but not confined to long-term incentive proposals) in readiness for policy re-approval in October 2017, to ensure it remains able to attract and retain talent of the right calibre over the coming years.

**Kath Durrant**

Chair of the Remuneration Committee  
27th July 2016

## Directors' remuneration report (continued)

### REMUNERATION POLICY

The Company's remuneration policy for executive and non-executive directors was approved by shareholders at the AGM on 16th October 2014 for a three-year period. No change will be proposed at the AGM on 13th October 2016.

Key extracts of the policy are provided below for information purposes only. The full policy can be found on our investor relations website (downloads and video section) within the 2014 Directors' remuneration report, contained in the 2014 Annual report.

### Executive directors' policy table

Set out below is a table describing each component of the remuneration package applicable to the executive directors.

\* The page reference change below under the maximum column was updated in the table for information only in order to be factually correct, since the table has been reproduced from the 2014 Annual report (as explained above).

Element of remuneration	Purpose and relevance to strategy	Operation	Maximum	Performance measures
Base salary	To provide a competitive fixed salary to motivate and retain executive directors of the required quality to meet the Group's objectives.	<p>Renishaw aims to pay the base rate salary at least at the current median market rate or above, as compared to the equivalent job position/ level in the relevant industrial sector(s) applicable to Renishaw, as defined in the appropriate benchmarking pay surveys, statistics and peer comparisons (such peer selection to include factors such as size and location).</p> <p>Base salary is reviewed annually taking into account the award for the UK workforce.</p>	<p>110% of median salaries in a comparator group as decided by the committee. Renishaw has historically paid base salaries that are higher than median, reflecting the lack of an LTIP (see Statement on page 81).*</p> <p>The committee retains the discretion to make adjustments at the annual review to take into account matters affecting an individual director such as changes in responsibility and anomalies discovered during benchmarking.</p>	To reflect the director's role, performance and experience.
Benefits	To provide market-competitive benefits to motivate and retain executive directors of the required quality to meet the Group's objectives and to support them to give maximum attention to their role.	<p>Benefits provided on an ongoing basis include the following principal benefits:</p> <ul style="list-style-type: none"> <li>• a car or car allowance;</li> <li>• private medical insurance;</li> <li>• life assurance;</li> <li>• long-term disability cover; and</li> <li>• home telephone costs.</li> </ul> <p>If, on the recruitment of a new executive director, relocation is required to the director's place of work, relocation support which is regarded by the committee to be necessary to provide appropriate support to the director will be provided to cover items such as transaction and legal fees, removals and temporary accommodation and subsistence costs.</p>	Excluding accommodation and relocation costs, not to exceed £50k p/a.	Not applicable.
Bonus	To incentivise and reward execution of the Group's objectives.	<p>The committee sets group performance targets, including a baseline below which no bonus is earned, with a bonus payable from that point, increasing on a straight-line basis to a target at which 75% of salary would be earned and a cap at which a maximum 100% of salary would be earned.</p> <p>Part or all of any bonus paid may be subject to repayment in the case of any financial misstatement, errors in calculation or gross misconduct.</p>	100% of salary.	Based on group performance, primarily financial, but the committee may introduce non-financial metrics or make adjustments to reflect appropriate performance or competitive factors, provided that the bonus will always be subject to achievement of the baseline financial targets and such non-financial metrics shall not form more than 25% of the bonus opportunity.

## Executive directors' policy table continued

Element of remuneration	Purpose and relevance to strategy	Operation	Maximum	Performance measures
Pension	To provide a competitive pension as appropriate to motivate and retain executive directors of the required quality to meet the Group's objectives.	<p>Each of Allen Roberts, Ben Taylor and Geoff McFarland receive an additional payment of 15% of base salary, being the amount that would otherwise be contributed to a pension scheme on their behalf.</p> <p>For any new executive director, annual contributions based on a percentage of base salary will be made to the Company's defined contribution scheme or additional salary may be paid in lieu, as agreed by the committee.</p> <p>Geoff McFarland is a deferred member of the Company's defined benefit scheme which closed for future accruals on 5th April 2007.</p>	The maximum contribution to the defined contribution scheme, or, where applicable, additional salary payment in lieu of contributions will be 15% of base salary.	Not applicable.

## Non-executive directors' policy table

The remuneration of the non-executive directors is determined by the executive directors and consists of a fee only. There is no entitlement to any benefits, bonus, incentive plans or pension. Set out below is a table showing the fees for the non-executive directors of the Company:

Element of remuneration	Purpose and relevance to strategy	Operation	Maximum	Performance measures
Fee	To provide a competitive fee to motivate and retain non-executive directors of the required quality to meet the Group's objectives.	<p>The non-executive directors are paid the same fee, irrespective of membership of or acting as a Chair of a committee.</p> <p>The fees are reviewed annually with reference to fees payable to non-executive directors of companies of a similar size and complexity.</p> <p>Reasonable expenses incurred in undertaking duties as a director are reimbursed.</p>	The maximum fees payable will be set by the Company's Articles of Association, currently an aggregate of £300,000 per annum.	Not applicable.

## Directors' remuneration report (continued)

### ANNUAL REMUNERATION REPORT

This section of the report sets out the remuneration of the directors in the year ended 30th June 2016.

#### Single total figure table (audited)

	Salary/fees		Benefits		Bonus		Pension		Total	
	2016 £'000	2015 £'000	2016 £'000	2015 £'000	2016 £'000	2015 £'000	2016 £'000	2015 £'000	2016 £'000	2015 £'000
Sir David McMurtry	666	648	2	2	0	648	n/a	n/a	668	1,298
D J Deer	402	392	20	19	0	392	n/a	n/a	422	803
B R Taylor	463	451	22	20	0	451	70	68	555	990
A C G Roberts	377	367	19	20	0	367	57	55	453	809
G McFarland	377	367	18	18	0	367	57	55	452	807
C T Chesney	44	43	n/a	n/a	n/a	n/a	n/a	n/a	44	43
K L Durrant <sup>1</sup>	44	22	n/a	n/a	n/a	n/a	n/a	n/a	44	22
Sir David Grant	44	43	n/a	n/a	n/a	n/a	n/a	n/a	44	43
D J Jeans	44	43	n/a	n/a	n/a	n/a	n/a	n/a	44	43

<sup>1</sup> K L Durrant was appointed a director with effect from 1st January 2015.

#### Benefits

	Car allowance £'000	Private medical cover applies to all executive directors and home telephone costs, insurance on personal cars, M4 bridge toll fees, US tax return advice is provided to certain directors £'000
Sir David McMurtry	n/a	2
D J Deer	18	2
B R Taylor	18	4
A C G Roberts	18	1
G McFarland	18	0

#### Bonus

For the year in question, the bonus was determined by group performance targets for the year, based on an adjusted profit before tax set at levels above the previous year's profit before tax and with a threshold below which no bonus is earned. A target profit before tax set for the year in question enabled 75% of salary to be earned as a bonus. A further bonus could be earned based on performance subject to a maximum 100% of salary. No other performance measures were set.

#### Total pension entitlements

G McFarland is a member of the Company's closed defined benefit scheme. At 30th June 2016, the value of the defined benefit pension entitlement was £28,641 per annum. The normal retirement age for G McFarland is 65. On death, pension benefits would pass to dependants.

Current year pension scheme contributions payable by the Company have been taken as cash.

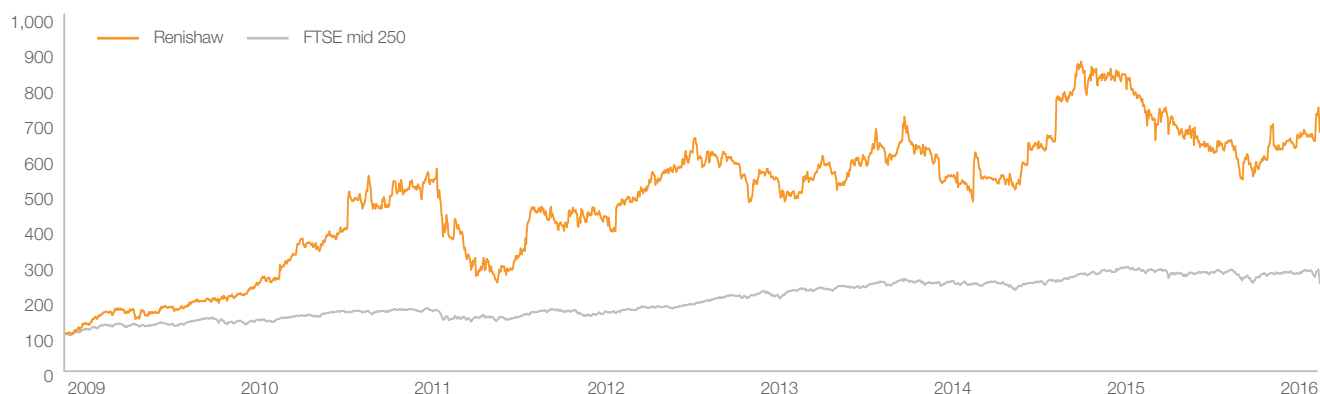
The value of G McFarland's defined contribution scheme at 30th June 2016 was £425,277.

#### Payments to past directors

No payments were made to past directors during the year.

#### Loss of office payments

There was no termination of employment of directors during the year.



### Performance graph

The graph above shows the Company's total shareholder return (TSR) performance, compared with the FTSE mid 250 index, which the directors believe is the most appropriate broad index for comparison.

The share price and the FTSE mid 250 index have been rebased to 100 at 1st July 2009.

### Executive directors serving as non-executive directors of other companies

During the year none of the executive directors served as a non-executive director of any other company in respect of which any remuneration was received.

### Statement of directors' shareholding and share interests

None of the directors are required to own shares in the Company. The interests of the directors who have served during the year in shares (including connected persons) are:

	Number of ordinary shares of 20p each
Sir David McMurtry	26,377,291
D J Deer	12,233,040
B R Taylor	10,147
A G Roberts	5,165
G McFarland	2,000
C T Chesney	500
K L Durrant	–
Sir David Grant	–
D J Jeans	–

There were no share-based payments made or share schemes in place during the year.

### Chief Executive total remuneration

The table below sets out information relating to Sir David McMurtry, who was the Chief Executive for each of the years in question:

Year	Single figure of total remuneration (£'000)	Annual bonus payout against maximum opportunity %	Long-term incentive vesting rates against maximum opportunity %
2016	668	0%	n/a
2015	1,298	100%	n/a
2014	632	0%	n/a
2013	663	10%	n/a
2012	969	69%	n/a
2011	1,066	100%	n/a

### Percentage change in remuneration of the Chief Executive

The following table sets out a comparison of the percentage change in the Chief Executive's remuneration to the percentage change in average remuneration of UK employees from 2015 to 2016.

	2016 £'000	2015 £'000	Chief Executive % change	UK employees (average) % change
Salary	666	648	+2.7%	+4.0%
Benefits	2	2	0%	-2%
Annual bonus	0	648	-100%	-51%

UK employees have been chosen as a comparator group in order to avoid the impact of exchange rate movements over the year. UK employees make up 65% of the total number of group employees.

### Relative importance of spend on pay

The following table sets out the total amount spent in the current financial year and the previous year on remuneration to all group employees and on dividends to shareholders:

	2016 £'000	2015 £'000	change %
Employee remuneration	183,769	173,744	+6%
Shareholder dividends paid	33,847	30,841	+10%

Except as shown above, no other distributions have been made to shareholders or other payments or uses of profit or cash flow which impact on the understanding of the relative importance of spend on pay.

### Statement of implementation of remuneration policy in the next year

The executive directors' salaries will be increased by 2.2% for the 2017 financial year, which is in line with the UK workforce salary review. The bonus scheme targets have been set based on the policy as set out in the policy table.

## Directors' remuneration report (continued)

### Consideration by directors of matters relating to directors' remuneration

During the year, the Remuneration Committee considered the amount of the executive directors' salary and the framework for the annual bonus. The members of the Remuneration Committee for this purpose were:

Sir David Grant (Chair until 10th May 2016)

C T Chesney

D J Jeans

K L Durrant (Chair from 11th May 2016)

Kepler (a brand name and the executive remuneration advisory division of Mercer Limited) assisted the committee in reviewing and benchmarking the director and senior management remuneration arrangements. Total fees paid to Kepler during the year were £33,000. The committee is of the opinion that the advice received was objective and independent. Kepler were appointed by the committee as they were known to members of the committee. They have not advised the Company on any other matters. However, during the year, Mercer Limited's actuarial advisory division provided advice to the trustees of the Company's UK defined benefit pension scheme and in relation to the defined contribution scheme.

The Company Secretary acts as secretary to the committee.

### Statement of voting at general meeting

At the annual general meeting held on 15th October 2015, votes cast in respect of the Directors' remuneration report were as follows:

Resolution	Votes for	% for	Votes against	% against	Total votes cast	Votes withheld
Approval of remuneration report	58,907,567	97.54%	1,487,278	2.46%	60,394,845	760,571

At the annual general meeting on 16th October 2014, votes cast by proxy in respect of the remuneration policy were as follows:

Resolution	Votes for	% for	Votes against	% against	Total votes cast	Votes withheld
Approval of remuneration policy	52,998,077	86.42%	8,323,776	13.57%	61,321,853	623,285

As the Company deems that a significant percentage of votes against as being more than 20%, as a result of which the Company would be required to provide in this report any reasons known to it for such a vote and any actions taken, no commentary is necessary in respect of the voting in respect of either of the above resolutions.

The report was approved by the Board of directors and has been signed on its behalf by:

**Kath Durrant**  
Chair of the Remuneration Committee  
27th July 2016



## Other statutory and regulatory disclosures

### Review of the business

A review of the business and likely future developments is given in the Chairman's statement and the Strategic report. Segmental information by geographical market is given in note 2 to the financial statements.

The Group has established and acquired overseas manufacturing, marketing and distribution subsidiaries to manufacture some of the Group's products and to provide support to customers in our major markets in the following regions outside the UK:

- Europe: Denmark, Finland, Germany, Hungary, France, Italy, Spain, Switzerland, Netherlands, Czech Republic, Poland, Russia, Sweden and Austria;
- Americas: USA, Mexico, Brazil and Canada;
- Far East: Japan, Hong Kong, Australia, South Korea, People's Republic of China, Singapore and Taiwan; and
- other regions: India and Israel.

There are also representative offices in Turkey, Malaysia, Vietnam, Indonesia and Thailand and an associate company in Slovenia, RLS, which is 50%-owned.

Also part of the Group is a subsidiary in Slovenia which designs and arranges the procurement of application-specific integrated circuits for the Group and RLS.

Further information is available on the Company's website: [www.renishaw.com](http://www.renishaw.com).

### Dividends

The directors propose a final dividend of £25,839,932 or 35.5p per share (2015: £24,748,105 or 34.0p per share) which, together with the interim dividend of £9,098,568 or 12.5p per share (2015: £9,098,568 or 12.5p) makes a total amount of dividends for the year of £34,938,500 or 48.0p per share, compared to £33,846,673 or 46.5p per share for the previous year.

### Directors and their interests

The directors at the end of the year are listed on page 85 together with their interests in the share capital of the Company (with the equivalent number of voting rights), as notified to the Company.

All the interests were beneficially held with the exception of 2,434,411 shares (2015: 2,434,411 shares) which were non-beneficially held by D J Deer but in respect of which he has voting rights.

There has been no change in the holdings shown on page 85 in the period 1st July 2016 to 27th July 2016. In accordance with the provisions of the Code all directors will retire and, being eligible, offer themselves for re-election at the annual general meeting (AGM) to be held on 13th October 2016. Details of directors who offer themselves up for re-election or election, as the case may be, are shown on pages 66 and 67 and full biographical details are available at [www.renishaw.com](http://www.renishaw.com).

Sir David McMurtry, as one party, and D J Deer and Mrs M E Deer, as the other party, have entered into an agreement relating to the way each party would vote in respect of his or her shares if requested by the other party to do so. Under this agreement Sir David McMurtry, John Deer and Mrs Deer agree that (i) Mr and Mrs Deer will vote their shares in favour of any ordinary resolution if requested to do so by Sir David McMurtry and (ii) Sir David McMurtry will vote his shares against any special or extraordinary resolution if requested to do so by John Deer.

The voting arrangement was renewed in 2013 for a further period of five years and will terminate on the earlier of 25th May 2018 and the deaths of both of Sir David McMurtry and John Deer.

The rules on appointment, reappointment and retirement by rotation of the directors and their powers are set out in the Company's Articles of Association. There are no powers given to the directors that are regarded as unusual.

### Directors' and officers' indemnity insurance

Subject to the provisions of the Companies Act 2006, the Company's Articles of Association provide for the directors and officers of the Company to be appropriately indemnified. The Company maintains insurance for its directors and officers in respect of their acts and omissions during the performance of their duties.

### Share capital and change of control

Details of the Company's share capital, including rights and obligations, is given in note 19 to the financial statements. The Company is not a party to any significant agreements that might terminate upon a change of control of the Company.

A shareholder's authority for the purchase by the Company of a maximum of 10% of its own shares was in existence during the 2016 financial year. However, the Company did not purchase any of its own shares during that time.

### Auditor

Following selection by the Audit Committee as a result of a tender process, a resolution to appoint Ernst & Young LLP as the new auditor of the Company will be proposed at the forthcoming AGM.

### Disclosure of information to auditor

The directors who held office at the date of approval of this statement 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 or she ought to have taken as a director to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

### Annual general meeting

The notice convening the AGM and an explanation of the resolutions sought are set out in a separate circular. At the meeting, the Company will be seeking shareholder approval for, amongst other things, the ability to make market purchases of its own ordinary shares, up to a total of 10% of the issued share capital as well as the appointment of a new auditor.

The directors consider that all the resolutions proposed are in the best interests of the Company and its shareholders as a whole and unanimously recommend that shareholders vote in favour of the resolutions, as they intend to do in respect of their own holdings.

## Other statutory and regulatory disclosures (continued)

### Substantial shareholdings

Apart from the shareholdings (and corresponding voting rights) of Sir David McMurtry and John Deer (36.23% and 16.80% respectively), the table below discloses the voting rights that have been notified to the directors under the requirements of the UK Listing Authority's Disclosure Rules and Transparency Rules DTR 5, which represent 3% or more of the voting rights attached to issued shares in the Company, as at 30th June 2016.

Substantial shareholdings	% of issued share capital	Number of shares
Baillie Gifford & Co	5.25%	3,846,993
BlackRock Inc.	4.92%	3,578,133
Capital Research and Management Company	4.76%	3,465,730
Standard Life Investments Limited	4.99%	3,631,612

### Research and development

The Group has a continuing commitment to a high level of research and development. The expenditure involved is directed towards the research and development of new products relating to metrology, including computer-aided design and manufacturing systems, and relating to healthcare products, including Raman spectroscopy systems, dental and craniomaxillofacial implants and certain areas in the medical devices field. Further information on the expenditure on research and development is contained in the financial review section of the Strategic report and the interview with Geoff McFarland on page 33.

### Employees

The retention of highly-skilled employees is essential to the future of the business, and the directors place great emphasis on the continuation of the Company's approved training policy. Health and safety matters are given special attention by the directors and well established systems of safety management are in place throughout the Group to safeguard employees, customers and visitors.

Employment policies are designed to provide equal opportunities irrespective of race, colour, religion, sex, age, disability or sexual orientation. Proper consideration is given to applications for employment from disabled people where suitable for appropriate vacancies. Employees who become disabled whilst with the Company will be given every opportunity to continue their employment through reasonable adjustment to their working conditions, equipment, or where this is not possible, re-training for other positions. They will also be afforded opportunities to continue training and gain promotion on the same basis as any other employee.

Details on information provided to employees on the performance of the business, consultation with employees and performance incentives are contained in the description of corporate social responsibility activities set out on pages 52 to 61.

There are no agreements with employees providing for compensation for any loss of employment that occurs because of a takeover bid.

### Donations

No political donations were made during the year.

### Controlling shareholders' arrangements

The Listing Rules require that premium listed companies with "controlling shareholders" (defined as a shareholder who individually or with any of their concert parties exercises or controls 30% or more of the votes able to be cast on all or substantially all the matters at the Company's general meeting) must enter into a relationship agreement containing specific independence provisions.

The independence provisions required by the Listing Rules are that:

- (i) transactions and arrangements with the controlling shareholder (and/or any of its associates) will be conducted at arm's length and on normal commercial terms;
- (ii) neither the controlling shareholder nor any of its associates will take any action that would have the effect of preventing the Company from complying with its obligations under the Listing Rules; and
- (iii) neither the controlling shareholder nor any of its associates will propose or procure the proposal of a shareholder resolution which is intended or appears to be intended to circumvent the proper application of the Listing Rules.

By virtue of his shareholding in the Company, Sir David McMurtry (Chairman and Chief Executive 36.2% shareholder) is a controlling shareholder. John Deer (Deputy Chairman, together with his wife, 16.8%) is also a controlling shareholder by virtue of a long-standing voting agreement between John Deer (and his wife) with Sir David McMurtry. The Board confirms that the Company has not been able to enter into a relationship agreement with its controlling shareholders, containing the independence provisions required by the Listing Rules. The Financial Conduct Authority (FCA) has been notified of this, as required by the Listing Rules. The controlling shareholders have informed the Board that they are not willing to enter into a relationship agreement because they are of the view that the requirement to enter into the relationship agreement infringes upon their rights as shareholders and their track record demonstrates that they act in the best interests of the Company.

As a result of there being no relationship agreement in place, the Listing Rules provide that certain enhanced oversight measures will apply to the Company.

This means that, unless and to the extent that the FCA agrees otherwise, all transactions with the controlling shareholders must be approved by the Company's shareholders (excluding the controlling shareholders) in accordance with the related party transaction requirements of the Listing Rules, and none of the normal exemptions apply.

Guidance has been received from the FCA about the application of the enhanced oversight measures to the remuneration and benefits received by the controlling shareholders in their capacity as executive directors (in accordance with the Company's approved remuneration policy) as well other ordinary course corporate matters, such as the payment of dividends by the Company to all shareholders. The FCA confirmed that either these are not transactions or arrangements that fall within the enhanced oversight measures or that the FCA will permit a modification of the enhanced oversight measures so that they will not apply provided that the arrangements remain in the ordinary course of business and, in the case of salary reviews and bonuses, provided that they fall within the small transaction exemption in the Annex to LR 11.

### Greenhouse gas emissions

The disclosures concerning greenhouse gas emissions required by law are set out in the Corporate social responsibility report on page 60.

**Norma Tang**  
Company Secretary  
27th July 2016

Renishaw plc  
Registered number 1106260  
England and Wales

## Directors' responsibilities

The directors are responsible for preparing the Annual report and the group and parent company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare group and parent company financial statements for each financial year. Under that law they are required to prepare the group financial statements in accordance with IFRSs as adopted by the EU and applicable law and have elected to prepare the parent company financial statements in accordance with UK Accounting Standards, 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 group and parent company and of their profit or loss for that period. In preparing each of the group and parent company 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;
- for the group financial statements, state whether they have been prepared in accordance with IFRSs as adopted by the EU;
- for the parent company financial statements, state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the parent company financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the group and the parent company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and enable them to ensure that its financial statements comply with the Companies Act 2006. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a strategic report, directors' report, directors' remuneration report and corporate governance statement that complies with that law and those regulations.

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

### Responsibility statement of the directors in respect of the annual financial report

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole; and
- the Strategic report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

We consider the Annual report and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the group's position and performance, business model and strategy.

Signed on behalf of the Board

**Allen Roberts**  
Group Finance Director  
27th July 2016

## Independent auditor's report to the members of Renishaw plc only

### Opinions and conclusions arising from our audit

#### 1. Our opinion on the financial statements is unmodified

We have audited the financial statements of Renishaw plc for the year ended 30th June 2016 set out on pages 94 to 133. In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent company's affairs as at 30th June 2016 and of the Group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU);
- the parent company financial statements have been properly prepared in accordance with UK Accounting Standards, including FRS 101 Reduced Disclosure Framework; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the group financial statements, Article 4 of the IAS Regulation.

#### 2. Our assessment of risks of material misstatement

In arriving at our audit opinion above on the financial statements the risks of material misstatement that had the greatest effect on our audit were as follows.

- (a) Carrying value of Goodwill £21.3 million (2015: £19.7 million) Risk vs 2015: ◀▶

*Refer to pages 78 and 79 (Audit Committee report), page 101 (accounting policy) and pages 109 and 110 (financial disclosures).*

- **The risk** – The Group has engaged in a number of business combinations in recent years; a number of acquisitions are still in the research and development phase and have not yet started trading; this makes forecasting inherently more judgemental.

Adverse changes in assumptions, particularly relating to forecast cash flows and discount rates, could reduce the recoverable amount below the carrying amount, and give rise to an

impairment charge. The forecasting of cash flows and the selection of an appropriate discount rate are therefore key judgemental areas.

- **Our response** – Our audit procedures included evaluating the Group's budgeting procedures upon which the forecast cash flows are based by performing an assessment of the historical accuracy of budgets for trading entities by comparing previously budgeted figures to actual results. We also critically assessed the ongoing forecasts for companies in the research and development phase, by considering the assumptions adopted by the directors and taking into account the experience of the Group at maturing past research and development companies into profitable trading entities.

We challenged the Group's selection of the discount rates used by considering the assumptions underlying the calculation of each discount rate; using external data (including competitor analysis) to determine an appropriate range for each type of business and comparing the actual rate used to that range. For the period beyond the financial budgets and forecasts, we assessed whether the growth rate used was consistent with both historical performance and future business strategies.

Where the forecasts utilised were inconsistent with historical performance, we challenged these assumptions with the key decision makers within divisional management to assess whether these forecasts were, in our view, achievable with reference to the historical accuracy of budgeting.

We evaluated the Group's sensitivity analysis, by performing our own analysis to assess the sensitivity of the impairment reviews to changes in the key assumptions of the discount rate, the forecast cash flows and growth rate beyond the financial budgets.

We assessed the adequacy of the Group's disclosures in respect of the impairment testing of goodwill and whether disclosures about the sensitivity of the outcome of the impairment assessment to changes in key assumptions properly reflected the risks inherent in it.

- (b) Carrying value of Work in progress (£26.2 million (2015: £20.1 million)) and Finished goods (£32.8 million (2015: £29.2 million)) Risk vs 2015: ◀▶

*Refer to pages 78 and 79 (Audit Committee report), page 101 (accounting policy) and page 114 (financial disclosures).*

- **The risk** – The Group trades globally and holds significant levels of inventory in the key manufacturing centres in the UK, Ireland and India and sales offices around the world. There is an ongoing risk of product obsolescence on Finished goods and Work in progress due to the fast-paced nature of the industry.

The Group maintains an inventory provision for potential product obsolescence to the extent that the cost of inventory is not deemed to be recoverable through future sales. The inventory provision is calculated at a disaggregated level. For each individual stock item, a provision is initially calculated based on historic and budgeted sales and standard selling prices. The results of these initial calculations are then assessed by group management and adjusted as deemed necessary, based on management's expectation of future demand and selling prices. The assumptions underlying the provision calculations are judgemental and changes could have a material impact on the carrying value of Work in progress and Finished goods.

- **Our response** – In this area our audit procedures included challenging the Group's key assumptions, being the future demand and selling pricing, in respect of the provision calculation. We assessed the historical accuracy of the inventory provision and, based on our own knowledge of the industry, we challenged material adjustments made by group management to the initial provision calculations. We also identified slow moving line items, considering whether appropriate levels of provision were held against these items by comparison to the most recent sales invoices. In addition, for a sample of inventory items we compared the carrying amount to recent sales invoices to assess whether these items have been written down to net realisable value.

We assessed the adequacy of the Group's disclosures in this area.

## Independent auditor's report to the members of Renishaw plc only (continued)

### 3. Our application of materiality and an overview of the scope of our audit

The materiality for the financial statements as a whole was set at £4.0 million (2015: £7.0 million), determined with reference to a benchmark of group profit before taxation (of which it represents 5.0% (2015: 4.9%).

We report to the Audit Committee any corrected or uncorrected identified misstatements exceeding £0.2 million, in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 48 (2015: 42) reporting components, we subjected 7 (2015: 7) to audits for group reporting purposes.

The components within the scope of our work accounted for the following percentages of the Group's results:

The components for which we performed work other than audits for group reporting purposes were not individually significant but were included in the scope of our group reporting work in order to provide further coverage over the Group's results.

For the remaining components, we performed analysis at an aggregated group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The Group audit team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back.

The Group audit team approved component materiality, which was set at £2.0 million, having regard to the mix of size and risk profile of the Group across the components.

The work on five of the audits for group reporting purposes was performed by component auditors and the rest by the Group audit team.

Telephone conference meetings were held with the component auditors to assess the audit risk, strategy and audit findings. During these meetings, the findings reported to the Group audit team were discussed in more detail.

### 4. Our opinion on other matters prescribed by the Companies Act 2006 is unmodified

In our opinion:

- the part of the Directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006; and
- 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.

	Number of components	Revenue (%)	Profit before tax (%)	Total assets (%)
Audits for group reporting purposes	7	83%	90%	78%
Reviews of financial information (including enquiry)	13	15%	10%	11%
<b>Coverage</b>	<b>20</b>	<b>98%</b>	<b>100%</b>	<b>89%</b>

## 5. We have nothing to report on the disclosures of principal risks

Based on the knowledge we acquired during our audit, we have nothing material to add or draw attention to in relation to:

- the directors' statement of principal risks and uncertainties on pages 50 and 51, concerning the principal risks, their management, and, based on that, the directors' assessment and expectations of the Group's continuing in operation over the three years to 30th June 2019; or
- the disclosures in note 1 of the financial statements concerning the use of the going concern basis of accounting.

## 6. We have nothing to report in respect of the matters on which we are required to report by exception

Under ISAs (UK and Ireland) we are required to report to you if, based on the knowledge we acquired during our audit, we have identified other information in the annual report that contains a material inconsistency with either that knowledge or the financial statements, a material misstatement of fact, or that is otherwise misleading.

In particular, we are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our audit and the directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's performance, business model and strategy; or
- the Audit Committee report does not appropriately address matters communicated by us to the Audit Committee.

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements and the part of the Directors' remuneration report to be audited 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.

Under the Listing Rules we are required to review:

- the directors' statements, set out on pages 73 and 74, in relation to going concern and longer-term viability; and
- the part of the corporate governance statement on page 75 relating to the Company's compliance with the eleven provisions of the 2014 UK Corporate Governance Code specified for our review.

We have nothing to report in respect of the above responsibilities.

## Scope of report and responsibilities

As explained more fully in the Directors' responsibilities statement set out on page 90, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at [www.frc.org.uk/auditscopeukprivate](http://www.frc.org.uk/auditscopeukprivate). This report is made solely to the Company's members as a body and is subject to important explanations and disclaimers regarding our responsibilities, published on our website at [www.kpmg.com/uk/auditscopeukco2014a](http://www.kpmg.com/uk/auditscopeukco2014a), which are incorporated into this report as if set out in full and should be read to provide an understanding of the purpose of this report, the work we have undertaken and the basis of our opinions.

**Virginia Stevens**  
(Senior Statutory Auditor)  
for and on behalf of KPMG LLP,  
Statutory Auditor

Chartered Accountants  
100 Temple Street  
Bristol  
BS1 6AG

27th July 2016

## Consolidated income statement

for the year ended 30th June 2016

	notes	2016 £'000	2015 £'000
<b>from continuing operations</b>			
<b>Revenue</b>	2	<b>436,598</b>	494,720
Cost of sales		<b>(218,308)</b>	(221,089)
<b>Gross profit</b>		<b>218,290</b>	273,631
Distribution costs		<b>(97,808)</b>	(87,879)
Administrative expenses		<b>(40,969)</b>	(41,828)
<b>Operating profit</b>		<b>79,513</b>	143,924
Financial income	4	<b>872</b>	884
Financial expenses	4	<b>(1,800)</b>	(1,492)
Share of profits of associates	10	<b>1,451</b>	880
<b>Profit before tax</b>	5	<b>80,036</b>	144,196
Income tax expense	6	<b>(11,465)</b>	(22,850)
<b>Profit for the year from continuing operations</b>		<b>68,571</b>	121,346
<b>Profit attributable to:</b>			
Equity shareholders of the parent company		<b>69,095</b>	121,908
Non-controlling interest	19	<b>(524)</b>	(562)
<b>Profit for the year from continuing operations</b>		<b>68,571</b>	121,346
		<b>pence</b>	pence
<b>Dividend per share arising in respect of the year</b>	19	<b>48.0</b>	46.5
<b>Dividend per share paid in the year</b>		<b>46.5</b>	42.4
<b>Earnings per share (basic and diluted)</b>	7	<b>94.9</b>	167.5



## Consolidated statement of comprehensive income and expense

for the year ended 30th June 2016

	notes	2016 £'000	2015 £'000
<b>Profit for the year</b>		<b>68,571</b>	121,346
<b>Other items recognised directly in equity:</b>			
<b>Items that will not be reclassified to the Consolidated income statement:</b>			
Remeasurement of defined benefit liabilities	13	(20,868)	(6,032)
Deferred tax on remeasurement of defined benefit scheme liabilities		3,480	1,580
<b>Total for items that will not be reclassified</b>		<b>(17,388)</b>	(4,452)
<b>Items that may be reclassified to the Consolidated income statement:</b>			
Foreign exchange translation differences		8,409	111
Comprehensive income and expense of associates		753	–
Effective portion of changes in fair value of cash flow hedges, net of recycling	19	(91,168)	(10,511)
Deferred tax on effective portion of changes in fair value of cash flow hedges	19	17,537	2,102
<b>Total for items that may be reclassified</b>		<b>(64,469)</b>	(8,298)
<b>Total other comprehensive income and expense, net of tax</b>		<b>(81,857)</b>	(12,750)
<b>Total comprehensive income and expense for the year</b>		<b>(13,286)</b>	108,596
<b>Attributable to:</b>			
Equity shareholders of the parent company		(12,762)	109,158
Non-controlling interest	19	(524)	(562)
<b>Total comprehensive income and expense for the year</b>		<b>(13,286)</b>	108,596

## Consolidated balance sheet

at 30th June 2016

	notes	2016 £'000	2015 £'000
<b>Assets</b>			
Property, plant and equipment	8	213,917	169,592
Intangible assets	9	61,255	57,664
Investments in associates	10	5,658	3,480
Deferred tax assets	11	40,996	19,536
Derivatives	12	76	10,504
<b>Total non-current assets</b>		<b>321,902</b>	260,776
<b>Current assets</b>			
Inventories	14	94,959	77,673
Trade receivables	20	114,945	101,213
Current tax		1,166	1,064
Other receivables		18,090	12,809
Derivatives	12	859	14,889
Pension scheme cash escrow account	13	15,279	14,731
Cash and cash equivalents	15, 20	31,278	82,171
<b>Total current assets</b>		<b>276,576</b>	304,550
<b>Current liabilities</b>			
Trade payables		22,379	21,154
Overdraft	15, 20	9,975	–
Current tax		3,558	10,775
Provisions	16	2,375	1,715
Derivatives	12	19,987	764
Other payables	17	18,345	28,561
<b>Total current liabilities</b>		<b>76,619</b>	62,969
<b>Net current assets</b>		<b>199,957</b>	241,581
<b>Non-current liabilities</b>			
Employee benefits	13	67,823	48,094
Deferred tax liabilities	11	21,999	21,991
Derivatives	12	50,652	3,165
Other payables	18	–	589
<b>Total non-current liabilities</b>		<b>140,474</b>	73,839
<b>Total assets less total liabilities</b>		<b>381,385</b>	428,518
<b>Equity</b>			
Share capital	19	14,558	14,558
Share premium		42	42
Currency translation reserve	19	6,448	(2,714)
Cash flow hedging reserve	19	(56,460)	17,171
Retained earnings		420,419	402,559
Other reserve		(460)	(460)
<b>Equity attributable to the shareholders of the parent company</b>		<b>384,547</b>	431,156
Non-controlling interest		(3,162)	(2,638)
<b>Total equity</b>		<b>381,385</b>	428,518

These financial statements were approved by the Board of directors on 27th July 2016 and were signed on its behalf by:

Sir David R McMurtry      A C G Roberts  
Directors

## Consolidated statement of changes in equity

for the year ended 30th June 2016

	Share capital £'000	Share premium £'000	Currency translation reserve £'000	Cash flow hedging reserve £'000	Retained earnings £'000	Other reserve £'000	Non-controlling interest £'000	Total £'000
<b>Year ended 30th June 2015</b>								
Balance at 1st July 2014	14,558	42	(2,825)	25,580	315,944	(460)	(2,076)	350,763
Profit/(loss) for the year	–	–	–	–	121,908	–	(562)	121,346
<b>Other comprehensive income and expense (net of tax)</b>								
Remeasurement of defined benefit pension liabilities	–	–	–	–	(4,452)	–	–	(4,452)
Foreign exchange translation differences	–	–	111	–	–	–	–	111
Changes in fair value of cash flow hedges	–	–	–	(8,409)	–	–	–	(8,409)
<b>Total other comprehensive income</b>	–	–	111	(8,409)	(4,452)	–	–	(12,750)
<b>Total comprehensive income</b>	–	–	111	(8,409)	117,456	–	(562)	108,596
Dividends paid	–	–	–	–	(30,841)	–	–	(30,841)
<b>Balance at 30th June 2015</b>	14,558	42	(2,714)	17,171	402,559	(460)	(2,638)	428,518
<b>Year ended 30th June 2016</b>								
Profit/(loss) for the year	–	–	–	–	69,095	–	(524)	68,571
<b>Other comprehensive income and expense (net of tax)</b>								
Remeasurement of defined benefit pension liabilities	–	–	–	–	(17,388)	–	–	(17,388)
Foreign exchange translation differences	–	–	8,409	–	–	–	–	8,409
Relating to associates	–	–	753	–	–	–	–	753
Changes in fair value of cash flow hedges	–	–	–	(73,631)	–	–	–	(73,631)
<b>Total other comprehensive income</b>	–	–	9,162	(73,631)	(17,388)	–	–	(81,857)
<b>Total comprehensive income</b>	–	–	9,162	(73,631)	51,707	–	(524)	(13,286)
Dividends paid	–	–	–	–	(33,847)	–	–	(33,847)
<b>Balance at 30th June 2016</b>	<b>14,558</b>	<b>42</b>	<b>6,448</b>	<b>(56,460)</b>	<b>420,419</b>	<b>(460)</b>	<b>(3,162)</b>	<b>381,385</b>

More details of share capital and reserves are given in note 19.

## Consolidated statement of cash flow

for the year ended 30th June 2016

	notes	2016 £'000	2015 £'000
<b>Cash flows from operating activities</b>			
Profit for the year		68,571	121,346
Adjustments for:			
Amortisation of development costs	9	9,116	10,141
Amortisation of other intangibles	9	2,313	2,990
Depreciation	8	18,258	14,925
Profit on sale of property, plant and equipment		166	(99)
Share of profits from associates	10	(1,451)	(880)
Financial income	4	(872)	(884)
Financial expenses	4	1,800	1,492
Tax expense	6	11,465	22,850
		40,795	50,535
Increase in inventories		(17,286)	(14,694)
Increase in trade and other receivables		(2,951)	(21,712)
(Decrease)/increase in trade and other payables		(12,439)	15,204
Increase in provisions	16	660	421
		(32,016)	(20,781)
Defined benefit pension contributions		(2,708)	(2,427)
Income taxes paid		(19,463)	(16,410)
<b>Cash flows from operating activities</b>		<b>55,179</b>	<b>132,263</b>
<b>Investing activities</b>			
Purchase of property, plant and equipment		(52,996)	(48,387)
Development costs capitalised	9	(12,246)	(12,975)
Purchase of other intangibles		(1,294)	(1,207)
Investment in subsidiaries and associates		(284)	(480)
Sale of property, plant and equipment		826	2,408
Interest received	4	872	884
Dividends received from associates	10	310	110
Payments to pension scheme escrow account (net)		(548)	(5,190)
<b>Cash flows from investing activities</b>		<b>(65,360)</b>	<b>(64,837)</b>
<b>Financing activities</b>			
Interest paid	4	(231)	(43)
Dividends paid	19	(33,847)	(30,841)
<b>Cash flows from financing activities</b>		<b>(34,078)</b>	<b>(30,884)</b>
<b>Net (decrease)/increase in cash and cash equivalents</b>		<b>(44,259)</b>	<b>36,542</b>
Cash and cash equivalents at the beginning of the year		82,171	43,634
Effect of exchange rate fluctuations on cash held		(16,609)	1,995
<b>Cash and cash equivalents at the end of the year</b>	15	<b>21,303</b>	<b>82,171</b>

## Notes (forming part of the financial statements)

### 1. Accounting policies

#### Basis of preparation

Renishaw plc (the Company) is a company incorporated in the UK.

The group financial statements consolidate those of the Company and its subsidiaries (together referred to as the Group) and equity account the Group's interest in associates. The parent company financial statements present information about the Company as a separate entity and not about the Group.

The group financial statements have been prepared and approved by the directors in accordance with International Financial Reporting Standards as adopted by the EU (adopted IFRS). The parent company financial statements have been prepared in accordance with Financial Reporting Standard 101 "Reduced Disclosure Framework".

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these group financial statements. Judgements made by the directors, in the application of these accounting policies, that have a significant effect on the financial statements and estimates with a significant risk of material adjustment in the next year are noted below.

#### Basis of accounting

The financial statements have been prepared under the historical cost convention, subject to items referred to in the derivative financial instruments note below. The accounting policies set out below have been consistently applied in preparing both the 2015 and 2016 financial statements.

#### Critical accounting judgements

The preparation of financial statements in conformity with adopted IFRS requires management 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 estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities in the next financial year are listed below:

##### (i) Inventory

Determining the value of inventory requires judgement, especially in respect of provisioning for slow moving and potentially obsolete inventory. Management consider historic and future forecast sales patterns of individual stock items when calculating inventory provisions.

##### (ii) Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of cash-generating units (CGUs) to which goodwill has been allocated. The value in use calculation involves an estimation of the future cash flows of CGUs and also the selection of appropriate discount rates, which involves judgement, to calculate present values (see note 9).

Other estimates and judgements that have been made in these financial statements are as follows:

##### (i) Defined benefit pension scheme liabilities

Determining the value of the future defined benefit obligation requires judgement in respect of the assumptions used to calculate present values. These include future mortality, discount rate, inflation and salary increases. Management makes these judgements in consultation with an independent actuary. Details of the estimates and judgements in respect of the current year are given in note 13.

##### (ii) Amortisation of intangibles and impairment

The periods of amortisation of intangible assets require judgements to be made on the estimated useful lives of the intangible assets to determine an appropriate rate of amortisation. Future assessments of impairment may lead to the writing off of certain amounts of intangible assets and the consequent charge in the Consolidated income statement for the accelerated amortisation.

##### (iii) Capitalisation of development costs

Product development costs are capitalised once a project has reached a certain stage of development and these costs are subsequently amortised over a five-year period. Judgements are required to assess whether the new product development has reached the appropriate point for capitalisation of costs to begin. Should a product be subsequently obsoleted, the accumulated capitalised development costs would need to be immediately written off in the Consolidated income statement.

## Notes (continued)

### 1. Accounting policies (continued)

#### Revenue

Revenue from the sale of goods is recognised in the Consolidated income statement when the significant risks and rewards of ownership have been transferred to the buyer, which is normally the time of despatch. Where certain products require installation, part of the revenue may be deferred until the installation is complete. No revenue is recognised if there are significant uncertainties regarding recovery of the consideration due, or the possible return of goods.

Revenue from the sale of services is recognised over the period to which the service relates. Where goods and services are sold as a bundle, the fair value of services is deferred and recognised over the period to which the service relates with the remaining revenue recognised on despatch.

#### New, revised or changes to existing accounting standards

The following accounting standards have been issued but are not yet effective and have not been applied by the Group:

IFRS 15 Revenue from contracts with customers – This is effective for accounting periods beginning on or after 1st January 2018. The new standard requires the separation of performance obligations within contracts with customers and the contractual value to be allocated to each of the performance obligations. Revenue is then recognised as each performance obligation is satisfied. The introduction of this standard is not expected to have a material impact on the results of the Group due to the relatively straightforward contractual terms and conditions with customers.

IFRS 9 Financial instruments – This is effective for accounting periods beginning on or after 1st January 2018. The introduction of this standard is not expected to have a material impact on the net assets or results of the Group, but may result in additional disclosures.

IFRS 16 Leases – This has a mandatory effective date of 1st January 2019. The new standard will eliminate the classification of leases as either operating or finance leases and result in operating leases being treated as finance leases. This will result in previously recognised operating leases being treated as property, plant and equipment along with a finance leases creditor. The introduction of this standard will increase the value of property, plant and equipment and the finance lease liability on the balance sheet but it is unlikely to have a material effect on the profit in any year.

#### Basis of consolidation

Subsidiaries – Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. In assessing control, the Group takes into consideration potential voting rights that are exercisable. The acquisition date is the date on which control is transferred to the acquirer. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so causes the non-controlling interests to have a deficit balance.

Associates – Associates are those entities in which the Group has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Group holds between 20% and 50% of the voting power of another entity.

Application of the equity method to associates – Associates are accounted for using the equity method (equity accounted investees) and are initially recognised at cost. The Group's investment includes goodwill identified on acquisition, net of any accumulated impairment losses. The consolidated financial statements include the Group's share of the total comprehensive income and equity movements of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases. When the Group's share of losses exceeds its interest in an equity accounted investee, the Group's carrying amount is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal obligations or made payments on behalf of an investee.

Transactions eliminated on consolidation – Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

## 1. Accounting policies (continued)

### Foreign currencies

Foreign subsidiaries' results are translated into Sterling at weighted average exchange rates for the year, which is effected by translating each foreign subsidiary's monthly results at exchange rates applicable to each of the respective months. Assets and liabilities denominated in foreign currencies at the balance sheet date are translated into Sterling at the foreign exchange rates ruling at that date. Differences on exchange resulting from the translation of overseas assets and liabilities are recognised directly in equity. Gains and losses arising on currency borrowings used to hedge the foreign currency exposure on the net assets of the foreign operations are accounted for directly in equity, to the extent that hedge accounting criteria are met and are included in the Consolidated statement of comprehensive income and expense. See the note on derivative financial instruments below, for the accounting policies for forward exchange contracts and currency borrowings.

### Derivative financial instruments

Derivative financial instruments are recognised at fair value. The gain or loss on remeasurement to fair value is recognised immediately in the Consolidated income statement. However, where derivatives qualify for hedge accounting, recognition of any resultant gain or loss depends on the nature of the item being hedged (see below).

### Hedge of net investment in foreign operation

The portion of the gain or loss on an instrument used to hedge a net investment in a foreign operation that is determined to be an effective hedge is recognised directly in equity. Any ineffective portion is recognised immediately in the Consolidated income statement. The effectiveness of the hedging is tested monthly.

### Inventory and work in progress

Inventory and work in progress is valued at the lower of cost and net realisable value. In respect of work in progress and finished goods, cost includes all production overheads and the attributable proportion of indirect overhead expenses which are required to bring inventories to their present location and condition. Overheads are absorbed into inventories on the basis of normal capacity or on actual hours if higher.

### Pension scheme cash escrow account

The Company holds a pension scheme escrow account as part of the security given for the UK defined benefit pension scheme. This account is shown within current assets in the Consolidated balance sheet as it may be used to settle pension scheme liabilities immediately upon enforcement of the charge over the account.

### Goodwill and other intangible assets

Costs related to the acquisition, other than those associated with the issue of debt or equity securities, are expensed as incurred. Deferred consideration relating to acquisitions is subject to discounting to the date of acquisition and subsequently unwound to the date of the final payment. Goodwill arising on acquisition represents the difference between the cost of the acquisition and the fair value of the net identifiable assets acquired, net of deferred tax. Identifiable intangibles are those which can be sold separately or which arise from legal rights regardless of whether those rights are separable.

Where there exists an option to purchase the non-controlling interest of a subsidiary and the option is deemed to have been exercised, the Group has adopted the anticipated-acquisition method. Any changes to the carrying amount of the liability are recognised in the Consolidated income statement.

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

Goodwill is stated at cost less any accumulated impairment losses. It is not amortised but is tested annually for impairment or earlier if there are any indications of impairment. The annual impairment review involves comparing the carrying amount to the estimated recoverable amount and recognising an impairment loss if the recoverable amount is lower. Impairment losses are recognised through the Consolidated income statement.

Intangible assets such as customer lists, patents, trade marks, know-how and intellectual property that are acquired by the Group are stated at cost less amortisation and impairment losses. Amortisation is charged to the Consolidated income statement on a straight-line basis over the estimated useful lives of the intangible assets. The estimated useful lives of the intangible assets included in the Consolidated balance sheet reflect the benefit derived by the Group and vary from five to ten years.

On a transaction by transaction basis, the Group elects to measure non-controlling interests, which have both present ownership interests and are entitled to a proportionate share of net assets of the acquiree in the event of liquidation, either at its fair value or at its proportionate interest in the recognised amount of the identifiable net assets of the acquiree at the acquisition date. All other non-controlling interests are measured at their fair value at the acquisition date. Where there are changes to the Company's interests in subsidiaries while retaining control, any differences between the amount by which non-controlling interests are adjusted and fair value of consideration paid or received is recognised directly in equity in the "other reserve".

## Notes (continued)

### 1. Accounting policies (continued)

#### Intangible assets – research and development costs

Expenditure on research activities is recognised in the Consolidated income statement as an expense as incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group intends and has the technical ability and sufficient resources to complete development, future economic benefits are probable and the Group can measure reliably the expenditure attributable to the intangible asset during its development.

Development activities involve a plan or design for the production of new or substantially improved products or processes. The expenditure capitalised includes the cost of materials, direct labour and an appropriate proportion of overheads. Other development expenditure is recognised in the Consolidated income statement as an expense as incurred.

Capitalised development expenditure is amortised over five years and is stated at cost less accumulated amortisation and less accumulated impairment losses. Capitalised development expenditure is removed from the balance sheet ten years after being fully amortised.

#### Intangible assets – software licences

Intangible assets, comprising software licences that are acquired by the Group, are stated at cost less accumulated amortisation and impairment losses. Amortisation is charged on a straight-line basis over the estimated useful life of the assets. The useful life of each of these assets is assessed on an individual basis and they range from two to 10 years.

#### Property, plant and equipment

Freehold land is not depreciated. Other assets are stated at cost less accumulated depreciation. Depreciation is provided to write off the cost of assets less their estimated residual value on a straight-line basis over their estimated useful economic lives as follows:

Freehold buildings	50 years
Plant and equipment	3 to 25 years
Vehicles	3 to 4 years

#### Warranty provisions

The Group provides a warranty from the date of purchase, except for those products that we install where the warranty starts from the date of completion of the installation. This is typically for a 12-month period, although up to three years is given for a small number of products. A warranty provision is included in the financial statements, which is calculated on the basis of historical returns and internal quality reports.

#### Employee benefits

The Group operates contributory pension schemes, largely for UK, Ireland and USA employees, which were of the defined benefit type up to 5th April 2007, 31st December 2007 and 30th June 2012 respectively, at which time they ceased any future accrual for existing members and were closed to new members.

The schemes are administered by trustees who are independent of the group finances. Pension scheme assets of the defined benefit schemes are measured using market value. Pension scheme liabilities are measured using a projected unit method and discounted at the current rate of return on a high-quality corporate bond of equivalent term and currency to the liability. Remeasurements arising from defined benefit schemes comprise actuarial gains and losses, the return on scheme assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Company recognises them immediately in other comprehensive income and all other expenses related to defined benefit schemes are included in the Consolidated income statement.

The pension schemes' surpluses, to the extent that they are considered recoverable, or deficits are recognised in full and presented on the face of the Consolidated balance sheet under employee benefits. Where a guarantee is in place in relation to a pension scheme deficit, liabilities are reported in accordance with IFRIC 14. Foreign-based employees are covered by state, defined benefit and private pension schemes in their countries of residence. Actuarial valuations of foreign pension schemes were not obtained, apart from Ireland and USA, because of the limited number of foreign employees. For defined contribution schemes, the amount charged to the Consolidated income statement represents the contributions payable to the schemes in respect of the accounting period.

Accruals are made for holiday pay, based on a calculation of the number of days holiday earned during the year, but not yet taken.



## 1. Accounting policies (continued)

### Cash and cash equivalents

Cash and cash equivalents comprise cash balances and short-term (with an original maturity of less than three months) deposits. Bank overdrafts that are repayable on demand form part of cash and cash equivalents for the purpose of the Consolidated statement of cash flow.

### Exceptional items

Exceptional items are items which due to their size, incidence and non-recurring nature have been classified separately in order to draw them to the attention of the reader of the accounts and, in management's judgement, to show more accurately the underlying results of the Group. Such items are included within the Consolidated income statement caption to which they relate and are disclosed separately on the face of the Consolidated income statement.

### Going concern

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Strategic report, where also given are details of the financial and liquidity positions. In addition, note 20 in the financial statements includes the Group's objectives and policies for managing its capital, details of its financial instruments and hedging activities and its exposures to credit risk and liquidity risk. The Group has considerable financial resources at its disposal and the directors have considered the current financial projections. As a consequence, the directors believe that the Group is well placed to manage its business risks successfully.

After making enquiries, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the next 12 months. Accordingly, they continue to adopt the going concern basis in preparing the Annual report and accounts.

### Cash flow hedges

Forward exchange contracts are recognised at fair value. Where a forward contract is designated as a hedge of the variability in future cash inflows, the effective part of any gain or loss on the forward contract is recognised directly in equity. Any effective cumulative gain or loss is removed from equity and recognised in the Consolidated income statement at the same time as the hedged transaction. The ineffective part of any gain or loss is recognised in the Consolidated income statement immediately. If the hedged transaction is no longer expected to take place, the cumulative unrealised gain or loss held in equity is recognised in the Consolidated income statement immediately. The effectiveness of cash flow hedges is tested on a monthly basis by comparing the cash inflows with the hedging amounts.

### Taxation

Tax on the profit for the year comprises current and deferred tax. Tax is recognised in the Consolidated income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in the Consolidated statement of comprehensive income and expense. Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date, and any adjustment to tax payable in 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 asset can be utilised.

## Notes (continued)

## 2. Segmental analysis

Renishaw manages its operations in two segments, comprising metrology and healthcare products. The results of these segments are regularly reviewed by the Board to allocate resources to segments and to assess their performance. The Group evaluates performance of the segments on the basis of revenue and profits. Within metrology, there are multiple operating segments that are aggregated into a reporting segment for reportable purposes, where they have similar economic characteristics, and where the nature of the products and production processes and their customer base are similar. The revenue, depreciation and amortisation, and operating profit for each reportable segment were:

Year ended 30th June 2016	Metrology £'000	Healthcare £'000	Total £'000
Revenue	408,184	28,414	436,598
Depreciation and amortisation	26,334	3,353	29,687
Operating profit/(loss)	85,895	(6,382)	79,513
Share of profits from associates	1,451	–	1,451
Net financial expense	–	–	(928)
Profit before tax	–	–	80,036
Year ended 30th June 2015	Metrology £'000	Healthcare £'000	Total £'000
Revenue	467,001	27,719	494,720
Depreciation and amortisation	24,055	4,001	28,056
Operating profit/(loss)	150,770	(6,846)	143,924
Share of profits from associates	880	–	880
Net financial expense	–	–	(608)
Profit before tax	–	–	144,196

There is no allocation of assets and liabilities to operating segments. Depreciation is included within certain other overhead expenditure which is allocated to segments on the basis of the level of activity.

The analysis of revenue by geographical market was:

	2016 £'000	2015 £'000
Far East, including Australasia	195,343	257,665
Continental Europe	112,075	103,106
North, South and Central America	92,198	96,284
UK and Ireland	23,208	25,499
Other regions	13,774	12,166
Total group revenue	436,598	494,720

Revenue in the previous table has been allocated to regions based on the geographical location of the customer. Countries with individually material revenue figures in the context of the Group were:

	2016 £'000	2015 £'000
China	107,628	119,551
USA	79,984	82,350
Japan	49,328	43,946
Germany	48,509	44,658
South Korea	13,245	73,113

## 2. Segmental analysis (continued)

For the current financial year, there was no revenue from transactions with a single external customer which amounted to more than 10% of the Group's total revenue. In the previous financial year there was revenue from transactions with one external customer which amounted to more than 10% of the Group's total revenue. This was in the metrology segment and amounted to £62,607,000.

The following table shows the analysis of non-current assets by geographical region:

	2016 £'000	2015 £'000
United Kingdom	190,396	166,468
Overseas	90,434	64,268
Total non-current assets	280,830	230,736

No overseas country had non-current assets amounting to 10% or more of the Group's total non-current assets.

## 3. Personnel expenses

The aggregate payroll costs for the year were:

	2016 £'000	2015 £'000
Wages and salaries	148,852	141,392
Compulsory social security contributions	16,856	16,005
Contributions to defined contribution schemes	18,061	16,347
Total payroll costs	183,769	173,744

The average number of persons employed by the Group during the year was:

	2016 Number	2015 Number
UK	2,755	2,529
Overseas	1,437	1,282
Average number of employees	4,192	3,811

The total remuneration of the directors was:

	2016 £'000	2015 £'000
Salary and fees	2,461	2,376
Bonus	–	2,225
Benefits	81	79
Pension contributions	184	178
Total remuneration of the directors	2,726	4,858

Full details of directors' remuneration are given in the Directors' remuneration report.

## 4. Financial income and expenses

	2016 £'000	2015 £'000
<b>Financial income</b>		
Interest receivable	872	884
<b>Financial expenses</b>		
Net interest on pension schemes' liabilities (note 13)	1,569	1,421
Bank interest payable	231	43
Unwinding of discount on deferred consideration	–	28
Total financial expenses	1,800	1,492

## Notes (continued)

## 5. Profit before tax

Included in the profit before tax are the following costs/(income):

	notes	2016 £'000	2015 £'000
Depreciation of property, plant and equipment	(a)	18,258	14,925
Amortisation of intangibles	(a)	11,429	13,131
Research and development expenditure	(b)	46,026	42,260
Loss/(profit) on sale of property, plant and equipment	(c)	166	(99)
Foreign currency (gains)/losses	(c)	(642)	339
Auditor:			
Audit of these financial statements	(c)	169	121
Audit of subsidiary undertakings pursuant to legislation	(c)	195	181
Audit assurance	(c)	13	22
Tax compliance	(c)	30	88
Tax advisory	(c)	103	167
Audit of pension schemes	(c)	20	20
Other services in relation to pension schemes	(c)	264	125
All other non-audit fees	(c)	46	48

These costs/(income) can be found under the following headings in the Consolidated income statement: (a) within cost of sales, distribution costs and administrative expenses; (b) within cost of sales; and (c) within administrative expenses.

## 6. Income tax expense

	2016 £'000	2015 £'000
<b>Current tax:</b>		
UK corporation tax on profits for the year	3,389	11,526
UK corporation tax – prior year adjustments	860	327
Overseas tax on profits for the year	7,651	12,131
Total current tax	11,900	23,984
<b>Deferred tax:</b>		
Origination and reversal of other temporary differences	494	(1,134)
Effect on deferred tax for change in UK tax rate to 19% (2015: 20%)	(929)	–
	(435)	(1,134)
Tax charge on profit	11,465	22,850
Effective tax rate (based on profit before tax)	14.3%	15.8%

## 6. Income tax expense (continued)

The tax for the year is lower (2015: lower) than the weighted average of the UK standard rate of corporation tax of 20% (2015: 20.75%).

The differences are explained as follows:

	2016 £'000	2015 £'000
Profit before tax	80,036	144,196
Tax at 20% (2015: 20.75%)	16,007	29,921
Effects of:		
Different tax rates applicable in overseas subsidiaries	(2,594)	(2,723)
Research and development tax credit and patent box	(2,359)	(5,745)
Expenses not deductible for tax purposes	266	324
Companies with unrelieved tax losses	461	749
Items with no tax effect	(290)	(183)
Prior year adjustments	860	327
Effect on deferred tax for change in UK tax rate to 19%	(929)	–
Other differences	43	180
Tax charge on profit	11,465	22,850

On 26th October 2015, the reduction in the UK rate of corporation tax to 19% from 1st April 2017 and 18% from 1st April 2020 was substantively enacted. Deferred tax assets and liabilities have been calculated based on the rate of 19%.

## 7. Earnings per share

Basic and diluted earnings per share are calculated on earnings after tax of £69,095,000 (2015: £121,908,000) and on 72,788,543 shares, being the number of shares in issue during both years. There is no difference between the weighted average earnings per share and the basic and diluted earnings per share.

## 8. Property, plant and equipment

Year ended 30th June 2016	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
<b>Cost</b>					
At 1st July 2015	127,097	145,642	8,575	7,875	289,189
Additions	4,462	23,865	1,475	23,194	52,996
Transfers	2,141	14,042	–	(16,183)	–
Disposals	(1,020)	(2,162)	(1,190)	–	(4,372)
Currency adjustment	9,985	5,661	740	–	16,386
<b>At 30th June 2016</b>	<b>142,665</b>	<b>187,048</b>	<b>9,600</b>	<b>14,886</b>	<b>354,199</b>
<b>Depreciation</b>					
At 1st July 2015	22,608	91,393	5,596	–	119,597
Charge for the year	2,915	14,283	1,060	–	18,258
Released on disposals	(621)	(1,831)	(1,129)	–	(3,581)
Currency adjustment	2,339	3,200	469	–	6,008
<b>At 30th June 2016</b>	<b>27,241</b>	<b>107,045</b>	<b>5,996</b>	<b>–</b>	<b>140,282</b>
<b>Net book value</b>					
<b>At 30th June 2016</b>	<b>115,424</b>	<b>80,003</b>	<b>3,604</b>	<b>14,886</b>	<b>213,917</b>
At 30th June 2015	104,489	54,249	2,979	7,875	169,592

## Notes (continued)

### 8. Property, plant and equipment (continued)

At 30th June 2016, properties with a net book value of £66,485,000 (2015: £45,033,000) were subject to a fixed charge to secure the UK defined benefit pension scheme liabilities.

Additions to assets in the course of construction of £23,194,000 (2015: £27,286,000) comprise £12,938,000 (2015: £13,556,000) for freehold land and buildings and £10,256,000 (2015: £13,730,000) for plant and equipment.

Year ended 30th June 2015	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
<b>Cost</b>					
At 1st July 2014	98,056	131,134	8,049	13,930	251,169
Additions	7,329	12,222	1,550	27,286	48,387
Transfers	25,495	7,846	–	(33,341)	–
Disposals	(1,381)	(4,120)	(695)	–	(6,196)
Currency adjustment	(2,402)	(1,440)	(329)	–	(4,171)
At 30th June 2015	127,097	145,642	8,575	7,875	289,189
<b>Depreciation</b>					
At 1st July 2014	21,114	83,952	5,181	–	110,247
Charge for the year	2,292	11,444	1,189	–	14,925
Released on disposals	(303)	(2,985)	(599)	–	(3,887)
Currency adjustment	(495)	(1,018)	(175)	–	(1,688)
At 30th June 2015	22,608	91,393	5,596	–	119,597
<b>Net book value</b>					
At 30th June 2015	104,489	54,249	2,979	7,875	169,592
At 30th June 2014	76,942	47,182	2,868	13,930	140,922

### 9. Intangible assets

Year ended 30th June 2016	Goodwill on consolidation £'000	Other intangible assets £'000	Internally generated development costs £'000	Software licences		Total £'000
				In use £'000	In the course of acquisition £'000	
<b>Cost</b>						
At 1st July 2015	19,736	10,655	89,475	21,490	25	141,381
Additions	–	44	12,246	1,201	49	13,540
Transfers	–	–	–	74	(74)	–
Disposals	–	–	(258)	(249)	–	(507)
Currency adjustment	1,532	550	–	71	–	2,153
At 30th June 2016	21,268	11,249	101,463	22,587	–	156,567
<b>Amortisation</b>						
At 1st July 2015	–	9,914	58,824	14,979	–	83,717
Charge for the year	–	617	9,116	1,696	–	11,429
Released on disposal	–	–	(258)	(48)	–	(306)
Currency adjustment	–	408	–	64	–	472
At 30th June 2016	–	10,939	67,682	16,691	–	95,312
<b>Net book value</b>						
At 30th June 2016	21,268	310	33,781	5,896	–	61,255
At 30th June 2015	19,736	741	30,651	6,511	25	57,664

## 9. Intangible assets (continued)

Year ended 30th June 2015	Goodwill on consolidation £'000	Other intangible assets £'000	Internally generated development costs £'000	Software licences		Total £'000
				In use £'000	In the course of acquisition £'000	
<b>Cost</b>						
At 1st July 2014	19,873	10,644	78,188	20,509	36	129,250
Additions	–	36	12,975	994	177	14,182
Transfers	–	–	–	188	(188)	–
Disposals	(198)	–	(1,688)	(189)	–	(2,075)
Currency adjustment	61	(25)	–	(12)	–	24
At 30th June 2015	19,736	10,655	89,475	21,490	25	141,381
<b>Amortisation</b>						
At 1st July 2014	198	8,631	50,371	13,479	–	72,679
Charge for the year	–	1,293	10,141	1,697	–	13,131
Released on disposal	(198)	–	(1,688)	(189)	–	(2,075)
Currency adjustment	–	(10)	–	(8)	–	(18)
At 30th June 2015	–	9,914	58,824	14,979	–	83,717
<b>Net book value</b>						
At 30th June 2015	19,736	741	30,651	6,511	25	57,664
At 30th June 2014	19,675	2,013	27,817	7,030	36	56,571

Goodwill acquired has arisen on the acquisition of a number of businesses and has an indeterminable useful life. Therefore it is not amortised but is tested for impairment annually and at any point during the year when an indicator of impairment exists. Goodwill is allocated to the CGUs, which are mainly the statutory entities acquired. This is the lowest level in the Group at which goodwill is monitored for impairment and is at a lower level than the Group's operating segments. In the table below, only the goodwill relating to the acquisition of R&R Fixtures, LLC is expected to be subject to tax relief.

The analysis of acquired goodwill on consolidation is:

	2016 £'000	2015 £'000
itp GmbH	2,886	2,456
Renishaw Diagnostics Limited (92.4%)	1,784	1,784
Renishaw Mayfield S.A. (75%)	1,738	1,537
Measurement Devices Limited	6,661	6,661
Renishaw Software Limited	1,559	1,559
R&R Fixtures, LLC	5,168	4,411
Other smaller acquisitions	1,472	1,328
Total acquired goodwill	21,268	19,736

The recoverable amounts of acquired goodwill are based on value in use calculations. These calculations use cash flow projections based on either the financial business plans approved by management for next five financial years, or estimated growth rates, which are set out below. The cash flows beyond this forecast are extrapolated to perpetuity using a nil growth rate on a prudent basis, to reflect the uncertainties over forecasting further than five years.

### Key assumptions

The key assumptions utilised in the value in use calculations are:

### Discount rate

The following pre-tax discount rates have been used in discounting the projected cash flows:

## Notes (continued)

### 9. Intangible assets (continued)

	2016 Discount rate	2015 Discount rate
itp GmbH	12%	12%
Renishaw Software Limited	12%	12%
Measurement Devices Limited	12%	12%
R&R Fixtures, LLC	12%	12%
Renishaw Diagnostics Limited	15%	15%
Renishaw Mayfield S.A.	15%	15%

#### Forecast cash flows and future growth rates

	2016 Basis of forecast	2015 Basis of forecast
itp GmbH	5% growth rate	5% growth rate
Renishaw Software Limited	5% growth rate	5% growth rate
Measurement Devices Limited	5 year business plan	5 year business plan
R&R Fixtures, LLC	5 year business plan	5 year business plan
Renishaw Diagnostics Limited	5 year business plan	5 year business plan
Renishaw Mayfield S.A.	5 year business plan	5 year business plan

These forecast cash flows are considered prudent estimates based on management's view of the future and experience of past performance of the individual CGUs and are calculated at a disaggregated level. The key judgement within these business plans is the forecasting of revenue growth.

The average growth rates included in the significant CGUs' business plans are as follows:

	2016 Average revenue growth	2015 Average revenue growth
Measurement Devices Limited	15%	11%
R&R Fixtures, LLC	13%	30%

These business plans are recognised as key inputs to the impairment calculation. They are monitored by management regularly and updated for expected variances in future performance.

#### Sensitivity to key assumptions

Management have performed sensitivity analysis on the key assumptions detailed above.

#### Discount rate

An increase of 5% in the discount rate would not result in an impairment on any of the CGUs. Management believe any increase in discount rates above 5% to be remote.

#### Forecast cash flows and future growth rates

Given the average revenue growth assumptions included in the five-year business plans, management's sensitivity analysis involves a reduction of 10% in the forecast cash flows utilised in those business plans and therefore into perpetuity. For there to be an impairment there would need to be a reduction of 33% in the forecast cash flows for Measurement Devices Limited and a reduction of 42% for R&R Fixtures, LLC. Management deem the likelihood of these reductions to be remote.

### 10. Investments in associates

The Group's investments in associates (all investments being in the ordinary share capital of the associate), whose accounting years end on 30th June, except where noted otherwise, were:

	Country of incorporation	Ownership 2016 %	Ownership 2015 %
RLS merilna tehnika d.o.o.	Slovenia	50.0	50.0
Metrology Software Products Limited	England & Wales	50.0	50.0
HiETA Technologies Limited (31st December)	England & Wales	24.9	20.0



## 10. Investments in associates (continued)

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	3,480	2,230
Dividends received	(310)	(110)
Share of profits of associates	1,451	880
Other comprehensive income and expense	753	–
Additions	284	480
Balance at the end of the year	5,658	3,480

Summarised aggregated financial information for associates:

	2016 £'000	2015 £'000
Revenue	6,282	5,713
Share of profits for the year	1,451	880
Assets	6,953	4,978
Liabilities	2,495	2,393

## 11. Deferred tax assets and liabilities

Balances at the end of the year were:

	2016			2015		
	Assets £'000	Liabilities £'000	Net £'000	Assets £'000	Liabilities £'000	Net £'000
Property, plant and equipment	–	(6,969)	(6,969)	–	(5,589)	(5,589)
Intangible assets	–	(8,061)	(8,061)	–	(8,017)	(8,017)
Intragroup trading (inventory)	13,454	–	13,454	9,237	–	9,237
Pension schemes	12,529	–	12,529	9,398	–	9,398
Other	15,013	(6,969)	8,044	901	(8,385)	(7,484)
Balance at the end of the year	40,996	(21,999)	18,997	19,536	(21,991)	(2,455)

The movements in the deferred tax balance during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	(2,455)	(7,271)
Movements in the Consolidated income statement	435	1,134
Movement in relation to the cash flow hedging reserve	17,537	2,102
Movement in relation to the pension schemes	3,480	1,580
Total movement in the Consolidated statement of comprehensive income and expense	21,017	3,682
Balance at the end of the year	18,997	(2,455)

The deferred tax movement in the Consolidated income statement is analysed as:

	2016 £'000	2015 £'000
Property, plant and equipment	(1,380)	(1,150)
Intangible assets	(44)	(293)
Intragroup trading (inventory)	4,217	2,013
Pension schemes	(349)	(323)
Other	(2,009)	887
Total movement for the year	435	1,134

No deferred tax asset has been recognised in respect of tax losses carried forward of £16,393,000 (2015: £13,045,000) due to the uncertainty over their recoverability, as a significant proportion held in overseas subsidiaries may only be carried forward for a limited period of time.

## Notes (continued)

### 12. Derivatives

For both the Group and the Company:

Derivatives comprising the fair value of outstanding forward contracts with positive fair values are shown within:

	2016 £'000	2015 £'000
Non-current assets	76	10,504
Current assets	859	14,889
Total of derivatives with positive fair values	935	25,393

Derivatives comprising the fair value of outstanding forward contracts with negative fair values are shown within:

	2016 £'000	2015 £'000
Non-current liabilities	50,652	3,165
Current liabilities	19,987	764
Total of derivatives with negative fair values	70,639	3,929

### 13. Employee benefits

The Group operates a number of pension schemes throughout the world. As noted in the accounting policies, actuarial valuations of foreign pension schemes are not obtained for the most part because of the limited number of foreign employees. The major scheme, which covers the UK-based employees, was of the defined benefit type. This scheme, along with the Ireland and USA defined benefit schemes, has ceased any future accrual for current members and these schemes are closed to new members. UK, Ireland and USA employees are now covered by defined contribution schemes.

The total pension cost of the Group for the year was £18,061,000 (2015: £16,347,000), of which £184,000 (2015: £178,000) related to directors and £4,854,000 (2015: £5,035,000) related to overseas schemes.

The latest full actuarial valuation of the UK defined benefit scheme was carried out as at September 2015 and updated to 30th June 2016 by a qualified independent actuary. The mortality assumption used for 2016 is S2PMA and S2PFA tables, CMI (core) 2014 model with long-term improvements of 0.2% per annum.

The major assumptions used by the actuary for the UK and Ireland schemes were:

	30th June 2016		30th June 2015		30th June 2014	
	UK scheme	Ireland scheme	UK scheme	Ireland scheme	UK scheme	Ireland scheme
Rate of increase in pension payments	3.2%	1.5%	3.4%	1.6%	3.5%	1.9%
Discount rate	3.2%	2.0%	4.0%	3.0%	4.4%	2.7%
Inflation rate (RPI)	3.3%	1.5%	3.6%	1.6%	3.7%	1.9%
Inflation rate (CPI)	2.3%	–	2.6%	–	2.7%	–
Retirement age	64	65	64	65	64	65

The assets and liabilities in the defined benefit schemes were:

	30th June 2016 £'000	% of total assets	30th June 2015 £'000	% of total assets	30th June 2014 £'000	% of total assets	30th June 2013 £'000	% of total assets	30th June 2012 £'000	% of total assets
Market value of assets:										
Equities	145,914	98	138,174	98	127,805	98	117,114	99	93,827	99
Bonds and cash	3,313	2	2,325	2	1,950	2	1,653	1	1,409	1
	149,227	100	140,499	100	129,755	100	118,767	100	95,236	100
Actuarial value of liabilities	(217,050)	–	(188,593)	–	(172,823)	–	(160,485)	–	(137,224)	–
Deficit in the schemes	(67,823)	–	(48,094)	–	(43,068)	–	(41,718)	–	(41,988)	–
Deferred tax thereon	12,528	–	9,398	–	8,141	–	8,973	–	9,519	–

All equities have quoted prices in active markets in the UK, North America, Europe, Asia-Pacific, Japan and emerging markets.

Note C.35 gives the analysis of the UK defined benefit pension scheme. For the other schemes, the market value of assets at the end of the year was £17,646,000 (2015: £14,410,000) and the actuarial value of liabilities was £23,348,000 (2015: £16,644,000).

### 13. Employee benefits (continued)

The weighted average duration of the defined benefit obligation is around 24 years.

For a sensitivity analysis of certain elements of the UK defined benefit pension scheme, see the Financial review section of the Strategic report. It is expected that contributions to defined benefit schemes for the next financial year will be at a similar level to the current year.

The movements in the schemes' assets and liabilities were:

Year ended 30th June 2016	Assets £'000	Liabilities £'000	Total £'000
Balance at the beginning of the year	140,499	(188,593)	(48,094)
Contributions paid	2,708	–	2,708
Interest on pension schemes	5,552	(7,121)	(1,569)
Remeasurement gain/(loss)	3,166	(24,034)	(20,868)
Benefits paid	(2,698)	2,698	–
Balance at the end of the year	149,227	(217,050)	(67,823)

Year ended 30th June 2015	Assets £'000	Liabilities £'000	Total £'000
Balance at the beginning of the year	129,755	(172,823)	(43,068)
Contributions paid	2,427	–	2,427
Interest on pension schemes	5,547	(6,968)	(1,421)
Remeasurement gain/(loss)	5,028	(11,060)	(6,032)
Benefits paid	(2,258)	2,258	–
Balance at the end of the year	140,499	(188,593)	(48,094)

The analysis of the amount recognised in the Consolidated statement of comprehensive income and expense was:

	2016 £'000	2015 £'000
Actuarial (loss)/gain arising from:		
– Changes in demographic assumptions	1,523	358
– Changes in financial assumptions	(24,828)	(10,095)
– Experience adjustment	6,968	672
Return on plan assets excluding interest income	669	5,233
Adjustment to liabilities for IFRIC 14	(5,200)	(2,200)
Total amount recognised in the Consolidated statement of comprehensive income and expense	(20,868)	(6,032)

The history of experience gains and losses is:

	Year ended 30th June 2016	Year ended 30th June 2015	Year ended 30th June 2014	Year ended 30th June 2013	Year ended 30th June 2012
<b>Experience gains and losses on scheme liabilities</b>					
amount (£'000)	6,968	672	2,828	1,089	–
percentage of present value of scheme liabilities	3%	0%	2%	1%	–
<b>Total amount recognised in the Consolidated statement of comprehensive income and expense</b>					
amount (£'000)	(20,868)	(6,032)	(2,233)	(860)	(7,781)
percentage of present value of scheme liabilities	(10%)	(3%)	(1%)	(1%)	(6%)

The cumulative amount of actuarial gains and losses recognised in the Consolidated statement of comprehensive income and expense was a loss of £105,656,000 (2015: loss of £84,788,000).

## Notes (continued)

### 13. Employee benefits (continued)

The assumptions used for mortality rates for members, medium cohort at the expected retirement age of 65 years are:

	2016 years	2015 years
Male currently aged 65	21.9	22.3
Female currently aged 65	23.9	24.4
Male currently aged 45	23.2	23.6
Female currently aged 45	25.2	25.7

An agreement has been entered into with the trustees of the UK defined benefit pension scheme in relation to deficit funding plans which supersede the previous arrangements. The Company has agreed to pay all monthly pensions payments and lump sum payments, and transfer payments up to a limit of £1,000,000 in each year (Benefits in Payment).

A number of UK properties owned by the Company are subject to fixed charges. One or more of the properties may be released from the fixed charge if on a subsequent valuation, the value of all properties under charge exceed 120% of the deficit.

The Company has also established an escrow bank account, which is subject to a floating charge. The balance of this account was £15,279,000 at the end of the year (2015: £14,731,000). The funds will be released back to the Company from the escrow account over a period of 6 years.

The agreement continues until 30th June 2031, but may end sooner if the deficit (calculated on a self sufficiency basis as defined in the agreement) is eliminated in the meantime. At 30th June 2031 the Company is obliged to pay any deficit at that time. All properties will be released from charge when the deficit no longer exists. The charges may be enforced by the trustees if one of the following occurs: (a) the Company does not pay any Benefits in Payment; (b) an insolvency event occurs in relation to the Company; or (c) the Company does not pay any deficit at 30th June 2031.

Under the Ireland defined benefit pension scheme deficit funding plan, a property owned by Renishaw (Ireland) Limited is subject to a registered fixed charge to secure the Ireland defined benefit pension scheme's deficit.

No scheme assets are invested in the Group's own equity.

The present value of projected future contributions under the new agreement relating to the UK defined benefit scheme exceeds the value of the deficit at the year-end, therefore, under IFRIC 14, the UK defined benefit pension scheme's liabilities have been increased by £15,400,000, to represent the maximum discounted liability as at 30th June 2016 (2015: £10,200,000).

### 14. Inventories

An analysis of inventories at the end of the year was:

	2016 £'000	2015 £'000
Raw materials	35,932	28,344
Work in progress	26,225	20,087
Finished goods	32,802	29,242
Balance at the end of the year	94,959	77,673

During the year, the amount of inventories recognised as an expense in the Consolidated income statement was £135,718,000 (2015: £144,547,000) and the amount of write-down of inventories recognised as an expense in the Consolidated income statement was £2,454,000 (2015: £1,254,000). At the end of the year, the gross cost of inventories which had provisions held against them totalled £10,134,000 (2015: £8,960,000).

### 15. Cash and cash equivalents

An analysis of cash and cash equivalents at the end of the year was:

	2016 £'000	2015 £'000
Bank balances and cash in hand	26,416	77,282
Short-term deposits	4,862	4,889
Overdraft	(9,975)	–
Balance at the end of the year	21,303	82,171

The UK defined benefit pension scheme cash escrow account is shown separately within current assets. Overdrafts are shown separately within current liabilities.

## 16. Provisions

### Warranty provision

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	1,715	1,294
Created during the year	1,878	1,518
Utilised in the year	(1,218)	(1,097)
	660	421
Balance at the end of the year	2,375	1,715

The warranty provision has been calculated on the basis of historical return-in-warranty information and other internal reports. It is expected that most of this expenditure will be incurred in the next financial year and all expenditure will be incurred within three years of the balance sheet date.

## 17. Other payables (current)

Balances at the end of the year were:

	2016 £'000	2015 £'000
Payroll taxes and social security	6,304	5,097
Other creditors and accruals	12,041	23,464
Total other payables	18,345	28,561

The Group's exposure to currency and liquidity risk related to trade and other payables is disclosed in note 20.

## 18. Other payables (non-current)

The deferred consideration in the previous year of £589,000 was in respect of investments in subsidiaries, which was payable between one and two years. All outstanding deferred consideration is now shown within other payables (current).

## 19. Capital and reserves

### Share capital

	2016 £'000	2015 £'000
Allotted, called-up and fully paid 72,788,543 ordinary shares of 20p each	14,558	14,558

The ordinary shares are the only class of share in the Company. Holders of ordinary shares are entitled to vote at general meetings of the Company and receive dividends as declared. The Articles of Association of the Company do not contain any restrictions on the transfer of shares nor on voting rights.

### Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the financial statements of the foreign operations, offset by foreign exchange differences on bank liabilities which have been accounted for directly in equity on account of them being classified as hedging instruments.

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	(2,714)	(2,825)
Gain/(loss) on net assets of foreign currency operations	28,778	(2,390)
(Loss)/gain on foreign currency overdrafts held for the purpose of net investment hedging	(20,369)	2,501
Gain in the year relating to subsidiaries	8,409	111
Currency exchange differences relating to associates	753	–
Balance at the end of the year	6,448	(2,714)

## Notes (continued)

### 19. Capital and reserves (continued)

#### Cash flow hedging reserve

The cash flow hedging reserve, for both the Group and the Company, comprises all foreign exchange differences arising from the valuation of forward exchange contracts which are effective hedges and mature after the year end. These are valued on a mark-to-market basis, are accounted for directly in equity and are recycled through the Consolidated income statement and Company income statement when the hedged item affects the income statement. The forward contracts mature over the next three and a half years.

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	17,171	25,580
Amounts transferred to the income statement (within revenue)	(14,125)	(13,348)
Revaluations during the year	(77,043)	2,837
Deferred tax movement	17,537	2,102
Balance at the end of the year	(56,460)	17,171

#### Dividends paid

Dividends paid comprised:

	2016 £'000	2015 £'000
2015 final dividend paid of 34.0p per share (2014: 29.87p)	24,748	21,742
Interim dividend paid of 12.5p per share (2015: 12.5p)	9,099	9,099
Total dividends paid	33,847	30,841

A final dividend in respect of the current financial year of £25,839,932 (2015: £24,748,105) at the rate of 35.5p net per share (2015: 34.0p) is proposed to be paid on 17th October 2016 to shareholders on the register on 16th September 2016, with an ex-dividend date of 15th September 2016.

#### Non-controlling interest

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	(2,638)	(2,076)
Share of loss for the year	(524)	(562)
Balance at the end of the year	(3,162)	(2,638)

The non-controlling interest represents the minority shareholdings in Renishaw Diagnostics Limited – 7.6%, Renishaw Mayfield SARL – 25% and Renishaw Mayfield S.A. – 25%.

### 20. Financial instruments

The Group has exposure to credit risk, liquidity risk and market risk arising from its use of financial instruments. This note presents information about the Group's exposure to these risks, along with the Group's objectives, policies and processes for measuring and managing the risks.

#### Fair value

There is no significant difference between the fair value of financial assets and financial liabilities and their carrying value in the Consolidated balance sheet. All financial assets and liabilities are held at amortised cost, apart from the forward exchange contracts, which are held at fair value, with changes going through the Consolidated income statement unless subject to hedge accounting.

The fair values of the forward exchange contracts have been calculated by a third party expert, discounting estimated future cash flows on the basis of market expectations of future exchange rates, representing level 2 in the IFRS 13 fair value hierarchy. The IFRS 13 level categorisation relates to the extent the fair value can be determined by reference to comparable market values. The classifications range from level 1 where instruments are quoted on an active market through to level 3 where the assumptions used to arrive at fair value do not have comparable market data.

## 20. Financial instruments (continued)

### Credit risk

The Group carries a credit risk, being the risk of non-payment of trade receivables by its customers. Credit evaluations are carried out on all new customers before credit is given above certain thresholds. There is a spread of risks among a large number of customers with no significant concentration with one customer or in any one geographical area. The Group establishes an allowance for impairment in respect of trade receivables where recoverability is considered doubtful.

An analysis by currency of the Group's financial assets at the year end is as follows:

Currency	Trade receivables		Other receivables		Cash (including overdraft)	
	2016 £'000	2015 £'000	2016 £'000	2015 £'000	2016 £'000	2015 £'000
Pound Sterling	6,520	8,029	12,819	8,541	102,149	146,603
US Dollar	37,183	32,400	667	3,882	(34,733)	(31,752)
Euro	20,757	18,701	2,504	14,720	(37,823)	(31,959)
Japanese Yen	15,195	10,660	391	9,388	(17,946)	(11,431)
Other	35,290	31,423	2,606	1,671	9,656	10,710
	114,945	101,213	18,987	38,202	21,303	82,171

The above trade receivables, other receivables and cash are predominately held in the functional currency of the relevant entity, with the exception of £2,702,000 of Euro-denominated trade receivables being held in the Company, along with some foreign currency cash balances which are of a short-term nature. Also, see note below on net assets and associated borrowings, regarding the holding of foreign currency borrowings by the Company in respect of its hedging activity.

The ageing of trade receivables past due, but not impaired, at the end of the year was:

	2016 £'000	2015 £'000
Past due 0–1 month	16,033	16,636
Past due 1–2 months	5,345	5,163
Past due more than 2 months	6,998	2,372
Balance at the end of the year	28,376	24,171

Movements in the provision for impairment of trade receivables during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	2,964	2,979
Changes in amounts provided	919	509
Amounts utilised	(962)	(524)
Balance at the end of the year	2,921	2,964

### Liquidity risk

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, without incurring unacceptable losses or risking damage to the Group's reputation. The Group uses monthly cash flow forecasts to monitor cash requirements.

In respect of net cash, the carrying value approximates to fair value because of the short maturity of the deposits and borrowings. Interest rates are floating and based on libor/libid, which can change over time, affecting the Group's interest income. An increase of 1% in interest rates would result in an increase in interest income of approximately £160,000.

The market value of forward exchange contracts is determined by reference to market data.

## Notes (continued)

### 20. Financial instruments (continued)

The contractual maturities of financial liabilities at the year end were:

Year ended 30th June 2016	Contractual cash flows			
	Carrying amount £'000	Up to 1 year £'000	1-2 years £'000	2-5 years £'000
Trade payables	22,379	22,379	–	–
Other payables	18,345	18,345	–	–
Provisions	2,375	2,375	–	–
Forward exchange contracts	70,639	19,987	22,801	27,851
	<b>113,738</b>	<b>63,086</b>	<b>22,801</b>	<b>27,851</b>

Year ended 30th June 2015	Carrying amount £'000	Up to 1 year £'000	1-2 years £'000	2-5 years £'000
Trade payables	21,154	21,154	–	–
Overdraft	9,975	9,975	–	–
Other payables	28,561	27,972	589	–
Provisions	1,715	1,715	–	–
Forward exchange contracts	3,929	764	863	2,302
	65,334	61,580	1,452	2,302

The maturities of non-current other receivables at the year end were:

	2016 £'000	2015 £'000
Receivable between 1 and 2 years	76	6,295
Receivable between 2 and 5 years	–	4,209
	<b>76</b>	<b>10,504</b>

#### Market risk

As noted in the Strategic report under Principal risks and uncertainties, the Group operates in a number of foreign currencies with the majority of sales being made in these currencies but with most manufacturing being undertaken in the UK, Ireland and India.

#### Exchange rates and sensitivity analysis

The Group has hedged a significant proportion of its forecasted US Dollar, Euro and Japanese Yen revenues and hence the impact on the Group's results resulting from fluctuations in these exchange rates against Sterling is lessened.

The following are the exchange rates which have been applicable during the financial year. Also noted is the increase in profit that a one US Dollar cent change, a one Euro cent change and a one Japanese Yen change in exchange rate, where the foreign currency is strengthening against Sterling, might have on the Group's results. The method of estimation involves assessing the impact of this currency on the Group's transactions assuming all other variables are unchanged.

Currency	2016			2015	
	Year end exchange rate	Average exchange rate	Increase in group profit for one cent or one Yen movement £'000	Year end exchange rate	Average exchange rate
US Dollar	1.34	1.47	350	1.57	1.57
Euro	1.20	1.33	60	1.41	1.32
Japanese Yen	137	171	110	192	182
Average US Dollar forward contract rates		1.58			1.54
Average Euro forward contract rates		1.23			1.17
Average Japanese Yen forward contract rates		125			121



## 20. Financial instruments (continued)

The Company has US Dollar, Japanese Yen and Euro forward contracts which mature after the balance sheet date. The fair value of these contracts at the year end resulted in a loss carried forward of £56,460,000 (2015: profit £17,171,000) (see note 19).

The nominal amounts of foreign currencies relating to these forward contracts are, in Sterling terms:

	2016 £'000	2015 £'000
US Dollar	<b>354,416</b>	353,044
Euro	<b>132,013</b>	107,904
Japanese Yen	<b>81,581</b>	26,042

The Group classifies these forward contracts as cash flow hedges and states them at fair value. The forward contracts cover monthly revenues over the next three and a half years. Further details are noted in the treasury policies in the Financial review section of the Strategic report.

### Net assets and associated borrowings

The Group maintains foreign currency borrowings as a method of providing hedging against the currency translation risk of the net assets of its overseas subsidiaries. The level of hedging in place at the year end for the major currencies and their relative base borrowing interest rates, were:

Currency	Net assets of subsidiary £'000	Currency borrowing £'000	Base borrowing interest rate %
US Dollar	64,187	43,187	0.7%
Euro	53,029	42,606	-0.3%
Japanese Yen	23,669	22,159	0.0%

The currency borrowings are short-term, with floating interest rates.

For the net assets of the overseas subsidiaries not hedged, a 1% change in exchange rates will affect reserves by approximately £950,000.

### Capital management

The Group defines capital as being the equity attributable to the owners of the Company, which is captioned on the Consolidated balance sheet.

The Board's policy is to maintain a strong capital base and to maintain a balance between significant returns to shareholders, with a progressive dividend policy, whilst ensuring the security of the Group supported by a sound capital position. The Group may adjust dividend payments due to changes in economic and market conditions which affect, or are anticipated to affect, group results.

## 21. Operating leases

The total of future minimum lease payments under non-cancellable operating leases (all of which relate to land and buildings in subsidiaries) were:

	2016 £'000	2015 £'000
Due in less than one year	<b>3,165</b>	2,309
Due between one and five years	<b>6,239</b>	4,913
Total future minimum lease payments	<b>9,404</b>	7,222

Lease payments recognised as an expense during the year were:

	2016 £'000	2015 £'000
Total lease payments for the financial year	<b>2,651</b>	2,363

## Notes (continued)

### 22. Capital commitments

Capital commitments at the end of the year, for which no provision has been made in the financial statements, were:

	2016 £'000	2015 £'000
Authorised and committed	<b>17,783</b>	7,381

### 23. Contingencies

The UK banking arrangements are subject to cross-guarantees between the Company and its UK subsidiaries. These accounts are subject to a right of set-off.

### 24. Related parties

Associates and other related parties had the following transactions and balances with the Group:

	2016 £'000	2015 £'000
Purchased goods and services from the Group during the year	<b>640</b>	1,288
Sold goods and services to the Group during the year	<b>8,573</b>	8,648
Paid dividends to the Group during the year	<b>310</b>	110
Amounts owed to the Group at the year end	<b>264</b>	525
Amounts owed by the Group at the year end	<b>411</b>	499
Loans owed to the Group at the year end	<b>4,366</b>	3,048

There were no bad debts written off during the year (2015: £nil).

## Company balance sheet

at 30th June 2016

	notes	2016 £'000	2015 £'000
<b>Assets</b>			
Property, plant and equipment	C.26	137,677	117,459
Intangible assets	C.27	46,786	33,684
Investments in subsidiaries	C.28	309,023	319,257
Investments in associates	C.29	1,468	1,184
Deferred tax assets	C.30	25,102	9,172
Derivatives	12	76	10,504
<b>Total non-current assets</b>		<b>520,132</b>	491,260
<b>Current assets</b>			
Inventories	C.31	60,051	49,740
Trade receivables	C.32	146,994	116,702
Other receivables		8,053	5,465
Derivatives	12	859	14,889
Pension scheme cash escrow account	13	15,279	14,731
Cash and cash equivalents		1,921	57,395
<b>Total current assets</b>		<b>233,157</b>	258,922
<b>Current liabilities</b>			
Trade payables		16,955	14,623
Overdraft		10,735	–
Current tax		762	5,337
Provisions	C.33	1,787	1,294
Derivatives	12	19,987	764
Other payables	C.34	86,072	58,556
<b>Total current liabilities</b>		<b>136,298</b>	80,574
<b>Net current assets</b>		<b>96,859</b>	178,348
<b>Non-current liabilities</b>			
Employee benefits	C.35	62,121	45,860
Deferred tax liabilities	C.30	12,051	15,011
Derivatives	12	50,652	3,165
Other payables	C.36	–	589
<b>Total non-current liabilities</b>		<b>124,824</b>	64,625
<b>Total assets less total liabilities</b>		<b>492,167</b>	604,983
<b>Equity</b>			
Share capital	C.37	14,558	14,558
Share premium		42	42
Cash flow hedging reserve	19	(56,460)	17,171
Retained earnings		534,027	573,212
<b>Total equity</b>		<b>492,167</b>	604,983

These financial statements were approved by the Board of directors on 27th July 2016 and were signed on its behalf by:

Sir David R McMurtry      A C G Roberts  
Directors

## Company statement of changes in equity for the year ended 30th June 2016

	Share capital £'000	Share premium £'000	Cash flow hedging reserve £'000	Retained earnings £'000	Total £'000
<b>Year ended 30th June 2015</b>					
Balance at 1st July 2014	14,558	42	25,580	449,290	489,470
Profit for the year	–	–	–	161,945	161,945
<b>Other comprehensive income and expense (net of tax)</b>					
Remeasurement of defined benefit pension scheme liabilities	–	–	–	(7,182)	(7,182)
Changes in fair value of cash flow hedges	–	–	(8,409)	–	(8,409)
<b>Total other comprehensive income and expense</b>	–	–	(8,409)	(7,182)	(15,591)
<b>Total comprehensive income and expense</b>	–	–	(8,409)	154,763	146,354
Dividends paid	–	–	–	(30,841)	(30,841)
<b>Balance at 30th June 2015</b>	14,558	42	17,171	573,212	604,983
<b>Year ended 30th June 2016</b>					
Profit for the year	–	–	–	8,616	8,616
<b>Other comprehensive income and expense (net of tax)</b>					
Remeasurement of defined benefit pension scheme liabilities	–	–	–	(13,954)	(13,954)
Changes in fair value of cash flow hedges	–	–	(73,631)	–	(73,631)
<b>Total other comprehensive income and expense</b>	–	–	(73,631)	(13,954)	(87,585)
<b>Total comprehensive income and expense</b>	–	–	(73,631)	(5,338)	(78,969)
Dividends paid	–	–	–	(33,847)	(33,847)
<b>Balance at 30th June 2016</b>	<b>14,558</b>	<b>42</b>	<b>(56,460)</b>	<b>534,027</b>	<b>492,167</b>

## Notes to the Company financial statements

### C.25. Accounting policies

The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the financial statements of the Company.

#### Basis of preparation

The financial statements were prepared in accordance with Financial Reporting Standard 101 “Reduced Disclosure Framework” (FRS 101). The Company’s shareholders were notified of, and did not object to, the use of the EU-adopted IFRS disclosure exemptions.

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 IFRS), but makes amendments where necessary in order to comply with the Companies Act 2006 and has set out below where advantage of the FRS 101 disclosure exemptions has been taken.

In the transition to FRS 101, the Company has applied IFRS 1 whilst ensuring that its assets and liabilities are measured in compliance with FRS 101. An explanation of how the transition to FRS 101 has affected the reported financial position and financial performance of the Company is provided in note C.40.

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 fixed assets.
- Disclosures in respect of transactions with wholly-owned subsidiaries.
- Disclosures in respect of capital management.
- The effects of new but not yet effective IFRS.
- An additional balance sheet for the beginning of the earliest comparative period, following the reclassification of items in the financial statements (see note C.40).
- Disclosures in respect of the compensation of key management personnel.

As the consolidated financial statements of Renishaw plc include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of certain disclosures required by IFRS 13 “Fair value measurement” and the disclosures required by IFRS 7 “Financial instruments disclosures”.

The financial statements have been prepared on the historical cost basis, except for the revaluation of financial instruments. Historical cost is generally based on the fair value of the consideration given in exchange for the assets. The principal accounting policies are set out below.

Under section 408 of the Companies Act 2006 the Company is exempt from the requirement to present its own profit and loss account.

#### Investments

Investments in subsidiary and associated undertakings are stated at cost less any provision for permanent impairment losses.

#### Property, plant and equipment, and depreciation

Property, plant and equipment assets are stated at cost less accumulated depreciation. Depreciation is provided to write off the cost of assets less their estimated residual value on a straight-line basis over their estimated useful economic lives as follows:

Freehold buildings – 50 years

Plant and equipment – 3 to 25 years

Motor vehicles – 3 to 4 years

No depreciation is provided on freehold land.

#### Inventories

Inventories are valued at the lower of cost and net realisable value. Cost comprises direct materials and labour plus overheads applicable to the stage of manufacture reached.

#### Research and development

Expenditure on research activities is recognised in the income statement as an expense as incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Company intends and has the technical ability and sufficient resources to complete development, future economic benefits are probable and the Company can measure reliably the expenditure attributable to the intangible asset during its development.

## Notes to the Company financial statements (continued)

### C.25. Accounting policies (continued)

#### Taxation

The charge for taxation is based on the Company's profit for the year. 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.

Deferred tax assets are recognised to the extent that it is regarded as more likely than not that they will be recovered.

#### Employee benefits

The Company operated a contributory pension scheme, of the defined benefit type up to 5th April 2007, after which this scheme was closed for future accruals to existing members and was closed to new members. Since 5th April 2007, the Company has operated a defined contribution scheme.

The scheme is administered by trustees who are independent of the Company finances.

Pension scheme assets in the defined benefit scheme are measured using market value. Pension scheme liabilities are measured using a projected unit method and discounted at the current rate of return on a high-quality corporate bond of equivalent term and currency to the liability. The expected return on the scheme's assets and the interest on the scheme's liabilities arising from the passage of time are included in other finance income.

The pension scheme's surplus, to the extent that it is considered recoverable, or deficit is recognised in full and presented on the face of the balance sheet, along with the related deferred tax.

Accruals are made for holiday pay, based on a calculation of the number of days holiday earned during the year, but not yet taken and also for the annual performance bonus.

#### Warranty on the sale of products

The Company provides a warranty from the date of purchase, except for those products that we install where the warranty starts from the date of completion of the installation. This is typically for a 12-month period, although up to three years is given for a small number of products. A warranty provision is included in the accounts, which is calculated on the basis of historical returns and internal quality reports.

#### Derivative financial instruments

In accordance with its treasury policy, the Company does not hold or issue derivative financial instruments for trading purposes.

The Company uses forward exchange contracts to hedge its exposure to foreign exchange risk arising from operational and financing activities. Forward exchange contracts are recognised initially at cost and then subsequently remeasured at fair value. Where a forward contract is designated as a hedge of the variability in future cash inflows, the effective part of any gain or loss on the forward contract is recognised directly in equity. Any effective cumulative gain or loss is removed from equity and recognised in the income statement at the same time as the hedged transaction. The ineffective part of any gain or loss is recognised in the income statement immediately.

#### Foreign currencies

Transactions in foreign currencies are translated at the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated into Sterling at the foreign exchange rate ruling at that date. Foreign exchange differences arising on such translation are recognised in the income statement.

#### Going concern

The Company's business activities, together with the factors likely to affect its future development, performance and position are set out in the Strategic report, where also given are details of the financial and liquidity positions. In addition, note 20 in the financial statements includes the Company's objectives and policies for managing its capital, details of its financial instruments and hedging activities and its exposures to credit risk and liquidity risk.

The Company has considerable financial resources at its disposal and the directors have considered the current financial projections. As a consequence, the directors believe that the Company is well placed to manage its business risks successfully.

After making enquiries, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the next 12 months. Accordingly, they continue to adopt the going concern basis in preparing the Annual report and accounts.

## C.26. Property, plant and equipment

Year ended 30th June 2016	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
<b>Cost</b>					
At 1st July 2015	78,975	118,379	3,698	7,900	208,952
Additions	1,061	16,868	1,123	14,703	33,755
Transfers	2,141	14,116	–	(16,257)	–
Disposals	–	(684)	(389)	–	(1,073)
<b>At 30th June 2016</b>	<b>82,177</b>	<b>148,679</b>	<b>4,432</b>	<b>6,346</b>	<b>241,634</b>
<b>Depreciation</b>					
At 1st July 2015	12,291	76,702	2,500	–	91,493
Charge for the year	1,431	11,311	642	–	13,384
Released on disposals	–	(531)	(389)	–	(920)
<b>At 30th June 2016</b>	<b>13,722</b>	<b>87,482</b>	<b>2,753</b>	<b>–</b>	<b>103,957</b>
<b>Net book value</b>					
<b>At 30th June 2016</b>	<b>68,455</b>	<b>61,197</b>	<b>1,679</b>	<b>6,346</b>	<b>137,677</b>
At 30th June 2015	66,684	41,677	1,198	7,900	117,459

At 30th June 2016, properties with a net book value of £66,485,000 (2015: £45,033,000) were subject to a fixed charge to secure the UK defined benefit pension scheme liabilities. See note 13 for additional information.

Additions to assets in the course of construction comprise:

	2016 £'000	2015 £'000
Freehold land and buildings	4,398	13,556
Plant and equipment	10,305	13,907
	<b>14,703</b>	<b>27,463</b>

## C.27. Intangible assets

Year ended 30th June 2016	Goodwill £'000	Internally generated development costs £'000	Software licences and intellectual property £'000	Total £'000
<b>Cost</b>				
At 1st July 2015	–	89,475	15,215	104,690
Additions	–	12,246	1,954	14,200
Re-allocation on transfer of business	9,305	–	–	9,305
Disposals	–	(258)	(249)	(507)
<b>At 30th June 2016</b>	<b>9,305</b>	<b>101,463</b>	<b>16,920</b>	<b>127,688</b>
<b>Depreciation</b>				
At 1st July 2015	–	58,824	12,182	71,006
Charge for the year	–	9,116	1,086	10,202
Released on disposals	–	(258)	(48)	(306)
<b>At 30th June 2016</b>	<b>–</b>	<b>67,682</b>	<b>13,220</b>	<b>80,902</b>
<b>Net book value</b>				
<b>At 30th June 2016</b>	<b>9,305</b>	<b>33,781</b>	<b>3,700</b>	<b>46,786</b>
At 30th June 2015	–	30,651	3,033	33,684

In 2013 the trade and net assets of a subsidiary undertaking were transferred to the Company at their book value which was less than their fair value. The cost of the Company's investment in that subsidiary undertaking reflected the underlying fair value of its net assets and goodwill at the time of acquisition.

## Notes to the Company financial statements (continued)

### C.27. Intangible assets (continued)

As a result of this transfer, the value of the Company's investment in that subsidiary undertaking fell below the amount at which it was stated in the Company's accounting records. Schedule 1 to the Companies Act 2006 The Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (SI 2008 No. 410) requires that the investment be written down accordingly and that the amount be charged as a loss in the Company's profit and loss account. However, the directors considered that, as there was no overall loss to the Company, it failed to give a true and fair view to charge that diminution to the Company's profit and loss account for the year and was instead re-allocated to goodwill and the identifiable net assets transferred. The resultant goodwill recorded in the Company balance sheet was £9,305,000.

### C.28. Investments in subsidiaries

	2016 £'000	2015 £'000
Balance at the beginning of the year	319,257	316,772
Impairment	(929)	–
Re-allocation on transfer of business (see note C.27)	(9,305)	–
Investments made during the year	–	2,485
Balance at the end of the year	309,023	319,257

During the year, management reviewed the carrying value of certain investments in subsidiaries and, as a result, included an impairment write-off of £929,000 in the current year income statement.

The following are the subsidiary undertakings of Renishaw plc as at 30th June 2016, all of which are wholly-owned, unless otherwise stated. The country of incorporation and registration is England and Wales unless otherwise stated. The country of incorporation is also the country of operation. The accounting year end for each subsidiary undertaking is 30th June unless otherwise stated. The shareholdings in all the subsidiary undertakings are in the ordinary share capital of those undertakings.

#### Company

Renishaw International Limited

Renishaw (Ireland) Limited (Republic of Ireland)\*

Renishaw S.A.S. (France)\*

itp GmbH (Germany)\*

Wotton Travel Limited

Renishaw Diagnostics Limited (92.4%) (Scotland)

Renishaw Mayfield S.A. (75%) (Switzerland)\*

Renishaw Mayfield SARL (75%) (France)\*

Renishaw Metrology Systems Limited (India)\* (31st March)

MTT Technologies Limited

Renishaw Software Limited

R&R Fixtures, LLC (USA)\* (31st December)

Renishaw Advanced Consulting & Engineering, Inc. (USA)\* (31st December)

Renishaw Tehnicni Inženiring d.o.o. (Slovenia)

#### Principal activities

Overseas holding and investment company.

Manufacture and sale of advanced precision metrology and inspection equipment.

Service, distribution, research and development of group products.

Manufacture and sale of advanced precision metrology and inspection equipment.

Travel agency.

Design, manufacture and sale of molecular diagnostics and surface-enhanced Raman spectroscopy products.

Marketing of surgical robots for neurosurgical applications.

Manufacture and sale of surgical robots for neurosurgical applications.

Design, manufacture and sale of advanced precision metrology and inspection equipment.

Design, manufacture and sale of additive manufacturing and rapid prototyping systems.

Development and sale of software solutions.

Manufacture and sale of fixturing products.

Supply of dimensional measurement products and services.

Design and procurement of application-specific integrated circuits (ASICs).



## C.28. Investments in subsidiaries (continued)

### Company – principal activity is the service and distribution of group products

Renishaw, Inc. (USA)*	Renishaw KK (Japan)*
Renishaw GmbH (Germany)*	Renishaw S.p.A. (Italy)*
Renishaw Ibérica S.A.U. (Spain)*	Renishaw AG (Switzerland)*
Renishaw (Hong Kong) Limited (Hong Kong)*	Renishaw Latino Americana Ltda. (Brazil)* (31st December)
Renishaw Benelux BV (Netherlands)*	Renishaw Oceania Pty Limited (Australia)*
Renishaw s.r.o. (Czech Republic)*	Renishaw Healthcare Inc. (USA)*
Renishaw Sp. z.o.o. (Poland)*	OOO Renishaw (Russia)* (31st December)
Renishaw AB (Sweden)*	Renishaw (Austria) GmbH (Austria)*
Renishaw (Korea) Limited (South Korea)*	Renishaw (Canada) Limited (Canada)*
Renishaw (Israel) Limited (Israel)*	Renishaw (Shanghai) Trading Company Limited (People's Republic of China)* (31st December)
Renishaw (Singapore) Pte Limited (Singapore)*	Renishaw (Shanghai) Management Company Limited (People's Republic of China)* (31st December)
Renishaw (Taiwan) Inc. (Taiwan)*	Renishaw México, S. de R.L. de C.V. (Mexico)*
Renishaw ApS (Denmark)*	Renishaw Oy (Finland)*
Renishaw Hungary Kft (Hungary)*	

### Company – non-trading (holding or dormant companies)

MTT Investments Limited	MTT Technologies Inc. (USA)*
MTT Technologies srl (Italy)*	Measurement Devices Limited (Scotland)
Measurement Devices US LLC (USA)*	Renishaw R&R Inc. (USA)*
Renishaw Metrology Limited	Renishaw Transducer Systems Limited
Renishaw PT Limited	Renishaw Advanced Materials Limited
Measurement Devices (Australia) Pty Limited (Australia)*	Thomas Engineering and Construction Limited (Canada)* (31st December)

\* Equity held by a subsidiary undertaking.

## C.29. Investments in associates

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	1,184	704
Additions	284	480
Balance at the end of the year	1,468	1,184

The following are the associated undertakings of Renishaw plc at 30th June 2016. The country of incorporation and registration is England and Wales unless otherwise stated. The country of incorporation is also the country of operation. The accounting year end for each associate undertaking is 30th June unless otherwise stated. The shareholdings in all the associated undertakings are in the ordinary share capital of those undertakings unless otherwise stated.

## Notes to the Company financial statements (continued)

### C.29. Investments in associates (continued)

#### Company

RLS merilna tehnika d.o.o. (50%) (Slovenia)\*

Metrology Software Products Limited (50%)

HiETA Technologies Limited (24.9%, Ordinary-A shares)  
(31st December)

\* Equity held by a subsidiary undertaking.

#### Principal activities

Manufacture and sale of angular magnetic encoder ICs, rotary and linear encoders, interpolator ICs, and photodiode arrays.

Design and sale of precision software and part manufacturing solutions.

Design and provision of additive manufacturing solutions and heat exchangers.

### C.30. Deferred tax

Balances at the end of the year were:

	2016			2015		
	Assets £'000	Liabilities £'000	Net £'000	Assets £'000	Liabilities £'000	Net £'000
Property, plant and equipment	–	(5,633)	(5,633)	–	(4,607)	(4,607)
Intangible assets	–	(6,418)	(6,418)	–	(6,130)	(6,130)
Pension scheme	11,803	–	11,803	9,172	–	9,172
Other	13,299	–	13,299	–	(4,274)	(4,274)
Balance at the end of the year	25,102	(12,051)	13,051	9,172	(15,011)	(5,839)

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	(5,839)	(8,089)
Movements during the year	18,890	2,250
Balance at the end of the year	13,051	(5,839)

### C.31. Inventory

An analysis of inventory at the end of the year was:

	2016 £'000	2015 £'000
Raw materials	24,079	19,124
Work in progress	21,801	19,122
Finished goods	14,171	11,494
Balance at the end of the year	60,051	49,740

### C.32. Trade receivables

An analysis of trade receivables at the end of the year was:

	2016 £'000	2015 £'000
Trade receivables	10,959	11,908
Amounts owed by group undertakings	131,405	101,221
Amounts owed by associated undertakings	4,630	3,573
Balance at the end of the year	146,994	116,702

### C.33. Provisions

Provisions comprised:

	2016 £'000	2015 £'000
Warranty provision	<b>1,787</b>	1,294

Movements during the year were:

	2016 £'000	2015 £'000
Balance at the beginning of the year	<b>1,294</b>	948
Created in the year	<b>1,338</b>	1,202
Utilised in the year	<b>(845)</b>	(856)
	<b>493</b>	346
Balance at the end of the year	<b>1,787</b>	1,294

The warranty provision has been calculated on the basis of historical return-in-warranty information and other quality reports. It is expected that most of this expenditure will be incurred in the next financial year and all expenditure will be incurred within three years of the balance sheet date.

### C.34. Other payables (current)

An analysis of other payables due within one year at the end of the year was:

	2016 £'000	2015 £'000
Amounts owed to group undertakings	<b>82,291</b>	43,138
Amounts owed to associated undertakings	<b>209</b>	297
Other taxes and social security	<b>2,736</b>	2,639
Other creditors	<b>836</b>	12,482
Balance at the end of the year	<b>86,072</b>	58,556

### C.35. Pension scheme

The Company operated a defined benefit pension scheme, which, in April 2007, ceased any future accrual for current members and was closed to new members. Employees of the Company are now covered by a defined contribution scheme. See note 13 regarding details of charges relating to the UK defined benefit pension scheme liabilities.

The total pension cost of the Company for the year was £12,915,000 (2015: £11,146,000), of which £184,000 (2015: £178,000) related to directors. The latest full actuarial valuation of the scheme was carried out at September 2015 and updated to 30th June 2016 by a qualified independent actuary.

The major assumptions used by the actuary for the scheme were:

	30th June 2016	30th June 2015	30th June 2014
Rate of increase in pension payments	<b>3.2%</b>	3.4%	3.5%
Discount rate	<b>3.2%</b>	4.0%	4.4%
Inflation rate (RPI)	<b>3.3%</b>	3.6%	3.7%
Inflation rate (CPI)	<b>2.3%</b>	2.6%	2.7%
Retirement age	<b>64</b>	64	64

The mortality assumption adopted for 2016 is S2PMA and S2PFA tables, CMI (core) 2014 model with long-term improvements of 0.2% per annum.

## Notes to the Company financial statements (continued)

## C.35. Pension scheme (continued)

The assets and liabilities in the scheme were:

	30th June 2016 £'000	% of total assets	30th June 2015 £'000	% of total assets	30th June 2014 £'000	% of total assets	30th June 2013 £'000	% of total assets	30th June 2012 £'000	% of total assets
Market value of assets:										
Equities	131,107	100	125,769	100	116,805	100	106,117	100	89,653	100
Bonds and cash	474	–	320	–	198	–	301	–	154	–
	131,581	100	126,089	100	117,003	100	106,418	100	89,807	100
Actuarial value of liabilities	(193,702)	–	(171,949)	–	(154,279)	–	(132,685)	–	(126,946)	–
Deficit in the scheme	(62,121)	–	(45,860)	–	(37,276)	–	(26,267)	–	(37,139)	–
Deferred tax thereon	11,803	–	9,172	–	7,455	–	6,041	–	8,913	–

The history of experience gains and losses is:

	Year ended 30th June 2016	Year ended 30th June 2015	Year ended 30th June 2014	Year ended 30th June 2013	Year ended 30th June 2012
<b>Experience gains and losses on scheme liabilities</b>					
amount (£'000)	6,609	–	2,828	–	–
percentage of present value of scheme liabilities	3%	–	2%	–	–
<b>Total amount recognised in the statement of comprehensive income and expense</b>					
amount (£'000)	(16,666)	(8,981)	(997)	(1,230)	(5,836)
percentage of present value of scheme liabilities	(9%)	(5%)	(1%)	(1%)	(5%)

The movements in the scheme were:

	Assets £'000	Liabilities £'000	Total £'000
<b>Year ended 30th June 2016</b>			
Deficit in scheme at the beginning of the year	126,089	(171,949)	(45,860)
Contributions	1,796	–	1,796
Interest on pension scheme	5,030	(6,421)	(1,391)
Remeasurement gain/(loss)	1,137	(17,803)	(16,666)
Benefits paid	(2,471)	2,471	–
<b>Deficit in scheme at the end of the year</b>	<b>131,581</b>	<b>(193,702)</b>	<b>(62,121)</b>
	Assets £'000	Liabilities £'000	Total £'000
<b>Year ended 30th June 2015</b>			
Deficit in scheme at the beginning of the year	117,003	(154,279)	(37,276)
Contributions	1,649	–	1,649
Interest on pension scheme	5,140	(6,392)	(1,252)
Remeasurement gain/(loss)	4,327	(13,308)	(8,981)
Benefits paid	(2,030)	2,030	–
Deficit in scheme at the end of the year	126,089	(171,949)	(45,860)

All equities have quoted prices in active markets in the UK, North America, Europe, Asia-Pacific, Japan and emerging markets.

The weighted average duration of the defined benefit scheme obligation is around 24 years.

### C.35. Pension scheme (continued)

The analysis of the amount recognised in the statement of comprehensive income and expense was:

	2016 £'000	2015 £'000
Actuarial (loss)/gain arising from:		
– Changes in demographic assumptions	1,411	242
– Changes in financial assumptions	(20,623)	(11,350)
– Experience adjustment	6,609	–
Return on plan assets excluding interest income	1,137	4,327
Adjustment to liabilities for IFRIC 14	(5,200)	(2,200)
Total recognised in the statement of comprehensive income and expense	<b>(16,666)</b>	(8,981)

### C.36. Other payables (non-current)

The deferred consideration in the previous year of £589,000 was in respect of investments in subsidiaries, which was payable between one and two years. All outstanding deferred consideration is now shown within other payables (current).

### C.37. Share capital

	2016 £'000	2015 £'000
Allotted, called-up and fully paid 72,788,543 ordinary shares of 20p each	<b>14,558</b>	14,558

The ordinary shares are the only class of share in the Company. Holders of ordinary shares are entitled to vote at general meetings of the Company and receive dividends as declared. The Articles of Association of the Company do not contain any restrictions on the transfer of shares nor on voting rights.

### C.38. Related parties

During the year, related parties, these being Renishaw Diagnostics Limited, Renishaw Mayfield SARL, Renishaw Mayfield S.A. and the Group's associates (see note 10), had the following transactions and balances with the Company:

	2016 £'000	2015 £'000
Purchased goods and services from the Company during the year	<b>1,049</b>	1,513
Sold goods and services to the Company during the year	<b>3,963</b>	3,145
Paid dividends to the Company during the year	<b>160</b>	110
Amounts owed to the Company at the year end	<b>264</b>	525
Amounts owed by the Company at the year end	<b>689</b>	297
Loans owed to the Company at the year end	<b>16,932</b>	12,653

All transactions were on an arm's length basis. There were no bad debts written off during the year (2015: £nil).

### C.39. Capital commitments

Capital commitments at the end of the year, for which no provision has been made in the financial statements, were:

	2016 £'000	2015 £'000
Authorised and committed	<b>1,620</b>	6,328

### C.40. Explanation of transition to FRS 101

As stated in note C.25, these are the Company's first financial statements prepared in accordance with FRS 101.

The accounting policies set out in note C.25 have been applied in preparing the financial statements for the year ended 30th June 2016, the comparative information presented in these financial statements for the year ended 30th June 2015 and in the preparation of an opening FRS 101 balance sheet at 1st July 2014.

In preparing its FRS 101 balance sheet, the Company has adjusted amounts reported previously in financial statements prepared in accordance with its previous basis of accounting (UK GAAP). An explanation of how the transition from UK GAAP to FRS 101 has affected the Company's financial position and financial performance is set out in the following table and the accompanying notes:

## Notes to the Company financial statements (continued)

## C.40. Explanation of transition to FRS 101 (continued)

		At 1st July 2014			At 30th June 2015		
	notes	UK GAAP £'000	Effect of transition to FRS 101 £'000	FRS 101 £'000	UK GAAP £'000	Effect of transition to FRS 101 £'000	FRS 101 £'000
<b>Assets</b>							
Property, plant and equipment	(i)	98,567	(2,988)	95,579	120,492	(3,033)	117,459
Intangible assets	(ii)	–	30,805	30,805	–	33,684	33,684
Investments in subsidiaries		316,772	–	316,772	319,257	–	319,257
Investments in associates		704	–	704	1,184	–	1,184
Deferred tax assets	(iii)	–	7,455	7,455	–	9,172	9,172
Derivatives	(iv)	–	18,644	18,644	–	10,504	10,504
<b>Total non-current assets</b>		416,043	53,916	469,959	440,933	50,327	491,260
<b>Current assets</b>							
Inventories		37,567	–	37,567	49,740	–	49,740
Trade receivables	(iv)	139,111	(31,992)	107,119	142,095	(25,393)	116,702
Other receivables		5,250	–	5,250	5,465	–	5,465
Derivatives	(iv)	–	13,348	13,348	–	14,889	14,889
Pension scheme cash escrow account		9,541	–	9,541	14,731	–	14,731
Cash and cash equivalents		27,706	–	27,706	57,395	–	57,395
<b>Total current assets</b>		219,175	(18,644)	200,531	269,426	(10,504)	258,922
<b>Current liabilities</b>							
Trade payables		13,938	–	13,938	14,623	–	14,623
Current tax		2,100	–	2,100	5,337	–	5,337
Provisions		948	–	948	1,294	–	1,294
Derivatives	(iv)	–	–	–	–	764	764
Other payables	(iv)	110,314	–	110,314	59,320	(764)	58,556
<b>Total current liabilities</b>		127,300	–	127,300	80,574	–	80,574
<b>Net current assets</b>		91,875	(18,644)	73,231	188,852	(10,504)	178,348
<b>Non-current liabilities</b>							
Employee benefits	(v)	23,421	13,855	37,276	28,528	17,332	45,860
Deferred tax liabilities	(vi)	8,169	7,375	15,544	7,247	7,764	15,011
Derivatives	(iv)	–	17	17	–	3,165	3,165
Other payables	(iv)	900	(17)	883	3,754	(3,165)	589
<b>Total non-current liabilities</b>		32,490	21,230	53,720	39,529	25,096	64,625
<b>Total assets less total liabilities</b>		475,428	14,042	489,470	590,256	14,727	604,983
<b>Equity</b>							
Share capital		14,558	–	14,558	14,558	–	14,558
Share premium		42	–	42	42	–	42
Cash flow hedging reserve		25,580	–	25,580	17,171	–	17,171
Retained earnings	(vii)	435,248	14,042	449,290	558,485	14,727	573,212
<b>Total equity</b>		475,428	14,042	489,470	590,256	14,727	604,983

## C.40. Explanation of transition to FRS 101 (continued)

Notes to the table of adjustments:

### (i) Property, plant and equipment

Under IFRS, software assets, with a net book value of £2,988,000 at 1st July 2014 and £3,033,000 at 30th June 2015, which were classified as tangible fixed assets under UK GAAP, have been re-classified as intangible assets.

### (ii) Intangible assets

Under UK GAAP, all research and development costs were charged to the profit and loss account in the year in which they were incurred. Under IFRS, certain expenditure on development activities has been capitalised as intangible assets. The amount capitalised, net of accumulated amortisation, was £27,817,000 at 1st July 2014 and £30,651,000 at 30th June 2015.

### (iii) Deferred tax asset

The deferred tax asset under IFRS comprises deferred tax on the defined pension scheme liability of £7,455,000 at 1st July 2014 and £9,172,000 at 30th June 2015.

### (iv) Derivatives

Under UK GAAP, derivatives, comprising the fair value of outstanding forward contracts, were included in debtors and creditors, either within one year or due after more than one year (see also note 12). Under IFRS these amounts have been re-classified into separate lines on the face of the balance sheet.

### (v) Employee benefits

Under UK GAAP, the deficit on the Company's defined benefit pension scheme was shown net of deferred tax. Under IFRS, the net amount of £23,421,000 has been increased by £5,855,000 at 1st July 2014 to be shown gross, as required by IFRS. At 30th June 2015, the net amount of £28,528,000 was increased by £7,132,000. Also, under IFRIC 14, the pension scheme liability was increased by £8,000,000, with a deferred tax asset of £1,600,000, at 1st July 2014 and increased by £10,200,000, with a deferred tax asset of £2,040,000, at 30th June 2015 (see note 13).

### (vi) Deferred tax liability

The adjustments to the deferred tax liability under IFRS comprise:

(a) £5,565,000 at 1st July 2014 and £6,130,000 at 30th June 2015, in respect of the capitalised development costs noted in (ii) above; and

(b) £1,810,000 at 1st July 2014 and £1,634,000 at 30th June 2015 in respect of property on which industrial buildings allowances were previously claimed, which was excluded under UK GAAP.

Also, the deferred tax liability has been adjusted for the re-allocation of a deferred tax asset as noted in (iii) above.

### (vii) Retained earnings

Under IFRS, retained earnings have been adjusted as follows:

	1st July 2014 £'000	30th June 2015 £'000
Capitalised development costs, net of deferred tax	22,252	24,521
Inclusion of deferred tax for industrial buildings allowance	(1,810)	(1,634)
IFRIC 14 adjustment to pension scheme deficit	(6,400)	(8,160)
Total adjustment to retained earnings	14,042	14,727

## 10 year financial record

<b>Results</b>	<b>2016</b>	2015	note	note	2012	note	note	note	note	note
	<b>£'000</b>	£'000	2014	2013	£'000	2011	2010	2009	2008	2007
			£'000	£'000		£'000	£'000	£'000	£'000	£'000
Overseas revenue	<b>413,390</b>	469,221	331,682	326,213	313,007	273,989	170,957	159,988	189,137	169,094
UK and Ireland revenue	<b>23,208</b>	25,499	23,816	20,668	18,885	14,761	10,650	11,259	12,020	11,789
<b>Total revenue</b>	<b>436,598</b>	494,720	355,498	346,881	331,892	288,750	181,607	171,247	201,157	180,883
Operating profit	<b>79,513</b>	143,924	70,388	79,071	83,188	79,286	28,095	5,991	37,335	29,729
Profit before tax	<b>80,036</b>	144,196	70,106	79,193	86,046	80,410	28,725	8,843	41,715	32,672
Taxation	<b>11,465</b>	22,850	10,720	15,046	17,008	16,345	5,745	2,105	8,309	6,532
<b>Profit for the year</b>	<b>68,571</b>	121,346	59,386	64,147	69,038	64,065	22,980	6,738	33,406	26,140
<b>Capital employed</b>	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008	2007
	<b>£'000</b>	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Share capital	<b>14,558</b>	14,558	14,558	14,558	14,558	14,558	14,558	14,558	14,558	14,558
Share premium	<b>42</b>	42	42	42	42	42	42	42	42	42
Reserves	<b>366,785</b>	413,918	336,163	262,119	227,799	187,118	144,021	129,162	151,725	153,400
<b>Total equity</b>	<b>381,385</b>	428,518	350,763	276,719	242,399	201,718	158,621	143,762	166,325	168,000
<b>Statistics</b>	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008	2007
Overseas revenue as a percentage of total revenue	<b>94.7%</b>	94.8%	93.3%	94.0%	94.3%	94.9%	94.1%	93.4%	94.0%	93.5%
Adjusted earnings per share	<b>94.9p</b>	167.5p	82.3p	88.9p	95.6p	88.5p	32.3p	9.6p	45.9p	35.9p
Proposed dividend	<b>48.0p</b>	46.5p	41.2p	40.0p	38.5p	35.0p	17.6p	7.76p	25.39p	22.87p

Note

The results and adjusted earnings per share for the years 2007 to 2011, 2013 and 2014 exclude the exceptional items. These were: 2007 and 2008 – pension curtailment credits (2007: £19.5m; 2008: £1.3m); 2009 – redundancy costs (£4.1m); 2010 – impairment write-down (£1.7m); 2011 – reversal of impairment write-down (£1.7m); 2013 – gain on deferred consideration settlement (£2.9m); and 2014 – profit on disposal of shareholding in Delcam plc (£26.3m).



## Shareholder information

### Ordinary shares

The Company has one class of ordinary 20p shares listed on the London Stock Exchange under code RSW, ISIN number GB0007323586.

### Registrars

For all enquiries about shareholders' holdings, transfer and registration of shares and changes of name and address, contact the Company's registrars, Equiniti Limited, or use [www.shareview.co.uk](http://www.shareview.co.uk):

#### Registrars and transfer office

Equiniti Limited  
Aspect House  
Spencer Road  
Lancing  
West Sussex  
BN99 6DA

Telephone: 0371 384 2169 (UK callers)  
+44 121 415 7047 (international callers)

Website: [www.shareview.co.uk](http://www.shareview.co.uk)

Calls are charged at the standard geographic rate. Calls outside the UK will be charged at the applicable international rate. Lines open 8:30am to 5:30pm (UK time), Monday to Friday (excluding English and Welsh public holidays).

### AGM

The AGM is held at the Company's offices and is open for attendance by all shareholders. The 2016 AGM will be held on Thursday 13th October at the Company's headquarters at New Mills, Wotton-under-Edge, Gloucestershire GL12 8JR at 12 noon. The Notice of meeting is set out in a separate circular to shareholders. Shareholders holding shares in the Company through a nominee service should arrange to be appointed as a corporate representative or a proxy in respect of their shareholding in order to attend and vote at the meeting.

### Financial reports

The Annual report, together with copies of previous financial reports, is available at [www.renishaw.com](http://www.renishaw.com). The interim results and the preliminary announcement of the full year's results are published on our website promptly after they have been released through a Regulatory Information Service.

### Financial calendar

#### Annual general meeting

13th October 2016

#### Half year

31st December 2016

#### Half year results

January 2017

#### Trading update

May 2017

#### Final dividend

Ex-div date 15th September 2016

Record date 16th September 2016

Payment date 17th October 2016

#### Interim dividend (provisional)

Ex-div date 9th March 2017

Record date 10th March 2017

Payment date 10th April 2017

## Shareholder notes

### Registration details and Company Secretary

#### Company Secretary and registered office

Norma Tang  
New Mills  
Wotton-under-Edge  
Gloucestershire  
GL12 8JR

Registered number: 1106260  
England and Wales

Telephone: +44 (0)1453 524524  
Facsimile: +44 (0)1453 524401  
email: [companysecretary@renishaw.com](mailto:companysecretary@renishaw.com)

For the latest investor information and news, visit [www.renishaw.com/investor](http://www.renishaw.com/investor)

### Auditor and corporate advisors

#### Auditor

KPMG LLP

#### Solicitors

Norton Rose Fulbright LLP  
Burgess Salmon LLP

#### Stockbrokers

UBS

#### Principal bankers

Lloyds Bank plc

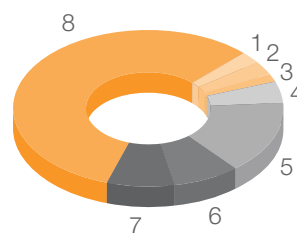
### Share fraud

Renishaw has received reports that our shareholders have received unsolicited calls from overseas firms offering to purchase their shares for a price in excess of the current market price in order to mount a hostile takeover bid. Please be aware that this is likely to be a scam, with the intention of obtaining payment from shareholders of a bond or legal fee in order to secure the share transaction, which never materialises, or obtaining an option to purchase shares with no fixed transfer date. There are other types of share fraud or “boiler room scams” and therefore if you receive any unsolicited investment advice the Financial Conduct Authority (FCA) advises the following:

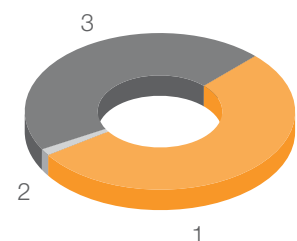
- make sure you get the correct name of the person and organisation and make a record of any other information they give;
- check that they are properly authorised by the FCA before getting involved by visiting [www.fca.org.uk/register](http://www.fca.org.uk/register) and contacting the firm using the details on the register;
- the FCA also maintains a list of unauthorised overseas firms who are targeting or have targeted UK investors and any approach from such firms should be reported to the FCA so that the information can be kept updated;
- report the matter to the FCA on their consumer helpline 0800 111 6768 or using the share fraud reporting form available at [www.the-fca.org.uk/consumers/report-scam-unauthorised-firm](http://www.the-fca.org.uk/consumers/report-scam-unauthorised-firm); and
- you could also contact the police via the national fraud reporting centre Action Fraud on 0300 123 2040 or [email@actionfraud.org.uk](mailto:email@actionfraud.org.uk). Action Fraud will be particularly interested if you sent money to a bank account or other type of money transfer.

### Shareholder profile

Shareholdings		%
1	1 – 5,000	2.5
2	5,001 – 25,000	2.9
3	25,001 – 50,000	1.7
4	50,001 – 100,000	4.5
5	100,001 – 500,000	14.8
6	500,001 – 1,000,000	8.3
7	1,000,001 – 3,000,000	7.9
8	more than 3,000,000	57.4



Shareholdings	%
1 Directors	53.1
2 Individuals	1.6
3 Institutions	45.3



---

Design and production by Radley Yeldar | ry.com

Printed on FSC certified, 100% post-consumer content paper using fully sustainable, vegetable oil-based inks.

Print production system registered to ISO 14001-2004, ISO 9001-2008 and EMAS standards.





**Renishaw plc**

New Mills, Wotton-under-Edge,  
Gloucestershire GL12 8JR  
United Kingdom  
T +44 (0) 1453 524524  
F +44 (0) 1453 524401  
E [uk@renishaw.com](mailto:uk@renishaw.com)

For more information visit:

[www.renishaw.com](http://www.renishaw.com)