

Welcome to the Renishaw plc Investor's Day

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Please ensure that mobile phones are switched off



Housekeeping

- Mobile phones
- Fire Alarms
- First aiders
- Refreshments
- No photos during tours/demos
- Copies of presentations
- Groups New Mills/Charfield & New Mills tours
- Timings/Questions



Agenda

- Opening address
- Corporate overview
- Financial overview
- Metrology, Healthcare & Additive overviews
- Q&A

------Split to 2 large groups------

-----LUNCH-----

• Healthcare incl. demos (Charfield).....Metrology/Additive (New Mills)

-----Split to small groups-----

- Metrology/Additive demos (New Mills)
- Q&A



Welcome !

Dr David Grant John Jeans Non-executive **Allen Roberts Geoff McFarland** Non-executive director **Norma Tang Group Engineering** Group director **Ben Taylor** Finance Director Director Head of Legal **John Deer** Assistant Chief and **Carol Chesney** Executive **Deputy Chairman Company Secretary** Sir David McMurtry Non-executive director Chairman and Chief Executive



Corporate Overview



Ben Taylor

Assistant Chief Executive Renishaw plc





The Renishaw Vision

"Over the years, John Deer and I have tried to build a company that is different to most others. 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 treat our customers as partners."



Sir David McMurtry Chairman & Chief Executive



The Renishaw Corporate Mission



Renishaw fundamentally believes that success comes from innovative and patented products, efficient, high-quality manufacturing, and the ability to provide local customer support in our expanding Global markets.

Our business is the *application of metrology* (the science of measurement) to *a broad range of industrial and healthcare sectors worldwide*.



Our business is founded on innovation



Patents and Intellectual property
Research & development
Process know-how



Corporate services supporting R&D divisions



Manufacturing
Group sales & marketing
Finance, Legal, HR and Business Systems



Diverse business sectors







We identify *customer needs*, create patented *engineering solutions* and deliver *successful outcomes*.



Innovation

- Our businesses and employees 'apply innovation' in the decisions we take, the processes we make, the products we invent and the solutions we deliver.
- We continue to innovate and protect our established core businesses whilst acquiring a diverse but complementary range of innovative investments for our future growth targets
- We recognise the value of our people and develop and reward our workforce for their successes.



Customer needs

- All areas of our organisation work in partnership with their customers to understand and solve their current real-life problems.
- We solve them by looking beyond what they believe they want, to identify what they need.
- Our organisation is also forward looking, in that we look beyond the immediate. We predict future trends and seek to solve problems before they appear to be happening.



Engineering solutions

- Renishaw is proudly an engineering company.
- Design or process ideas are formulated and thoroughly verified to deliver robust, high-quality products.
- Renishaw's consistent commitment to investment in R&D enables us to take a longer term view of the viability of new technologies, setting us apart from our competition.



Successful outcomes

- We are a highly vertically integrated company to assure success for our customers. We undertake not only design activities, but also critical other activities such as our in-house manufacturing and wholly-owned sales organisations.
- We ensure that the products we deliver are successful in the expected applications by offering local support, training and/or full solutions to our global customer base.
- Our game-changing products and solutions are robust and easy to use, ensuring customers achieve a positive return on their investment .



The Renishaw Corporate Business Model





Financial Overview



Allen Roberts

Group Finance Director Renishaw plc





Highlights – 3rd quarter IMS

- Third quarter growth in revenue and profit at constant exchange rates
- Revenue growth in the Americas, the Far East and the UK
- Good growth in our additive manufacturing, encoders and measurement automation product lines
- New product releases during the period include the ultra-compact ATOM[™] readhead
- FDA regulatory approval for the Neuromate® robot (US & Saudi Arabia)
- Sale of Delcam shareholding for £32m with resultant profit on disposal of £26.3m
- New premises acquired in Shanghai and construction of new building at New Mills continues
- Acquisition of Advanced Consulting and Engineering in USA
- Strong Balance sheet with cash of £50.8m



Group Revenue and Profit before tax (PBT) (Adjusted and restated)

Revenue – 3rd quarter 2014

- Revenue of £84.5m, +3% compared with last year at actual fx rates
- Revenue of £88.4m, +8% compared with last year at constant fx rates
- Growth experienced in:
 - •Americas •Far Fast
 - •FarEa
- Adjusted and restated PBT 3rd quarter 2014
- Profit of £14.4m compared with £15.9m last year at actual fx rates
- Profit of £16.3m at constant fx rates
- Currency adverse effect of £1.9m for the quarter and £2.2m for the year-to-date

Note on Adjusted and restated profit before tax

Last year's results for the first 9 months have been restated from £59.8m to £58.1m to reflect the amendment to the At constant fx rates

accounting standard IAS 19 relating to pension accounting. Also, adjusted figures exclude the exceptional profit of £26.3m on the disposal of the shareholding in Delcam plc for the current year and exclude an exceptional gain of

£2.9m relating to an early settlement of a deferred consideration for the previous year.







Group Metrology and Healthcare revenue

Metrology

- 9 months to 31st March 2014, £229.5m compared to £237.3m last year, a reduction of 3%
 Tough comparators due to exceptionally high
- Tough comparators due to exceptionally high revenue from Far East customers in the first quarter last year
- Good growth in:
 - Additive manufacturing (AM)
 - Encoder
 - Measurement automation

Healthcare

- •High value products where timings of deliveries can move
- •FDA approval for neuromate® robotic system in the USA and Saudi Arabia





Group developments and group cash

- Sale of shareholding in Delcam plc realised £32.0m with a resultant profit of £26.3m.
 - It is our intention that the proceeds arising will be used to support ongoing and future investments in the business
- Acquisition of Advance Consulting and Engineering Inc (US)
 - Specialist programming capabilities
 - Will support sales of co-ordinate measuring machine probing systems and Equator gauges
- Headcount group headcount at the end of March 2014 was 3,370, an increase of 135 from the 3,235 at the start of the financial year principally in marketing and engineering
- Group cash of £50.8m at 31st March 2014 (31st March 2013 £35.1m)



Capital Expenditure

• Property

- Nearing completion of 153,000sq ft building at New Mills providing for relocation of a number of activities in Gloucestershire
- Purchase of adjoining premises at Renishaw GmbH, Germany giving an additional 116,000sq ft.
- Purchase of property in Shanghai required to accommodate growth in the Chinese market and headquarters for Chinese region.
- Planning application submitted for the development of our Miskin site.

• Plant and equipment

- Continuing expansion of manufacturing and Global IT infrastructure



Renishaw New Mills





Renishaw GmbH





Renishaw Shanghai





Miskin

- Renishaw has submitted a planning application for 1.74 million sq ft of development in South Wales, on a 77 hectare site.
- Renishaw completed the purchase of the 461,000 sq ft facility in September 2011 and has refurbished 135,000 sq ft of space.







Metrology Overview



Ben Taylor Assistant Chief Executive Renishaw plc





Our metrology customers



Aerospace



Agriculture



Automotive



Consumer products



Construction



Medical



Power generation



Quarrying and mining



Our expertise – Manufacturing process control





Our expertise – Industrial metrology



Additive manufacturing



Motion control



Large scale metrology and surveying



Styli for probe systems

6



Our service, our customer's solution





Helping our customers succeed



MTU Friedrichshafen GmbH (Germany)

<u>"We looked at the whole "</u>

RENISHAW REVO

-480+



Helping our customers succeed





"Throughout our use of CNC machines we have had a close relationship with Renishaw – the flexibility and willingness to assist has always been outstanding."

Castle Precision (UK)



Awards



Callendar Medal Institute of Measurement and Control "...significant contribution to the art of instruments or measurement"



Decade of Business Excellence

The Daily Telegraph "...recognises the business personality who best represents achievement and longevity and is synonymous with their business sector"

Queens's Award for Enterprise : Innovation Renishaw's inVia

17th Renishaw Queen's Award





MWP Awards Sir David McMurtry "Lifetime Achievement Award"

Renishaw Fixtures

"Best Workholding and Fixturing"

Renishaw's SPRINT™ scanning system "Highly commended Best Quality Control Equipment"

MSP, Renishaw Associate Company

"Best Production Management Software/system category"



Visits





Healthcare Overview



Geoff McFarland

Group Engineering Director Renishaw plc




Our expertise – Healthcare and additive manufacturing



Dental scanners, CAD software, milling machines and structures



Raman microscopes and analysis



Neurosurgical planning software, implantables and robotics



Diagnostic systems for clinical research





Leveraging our core technologies and expertise

- Our metrology and healthcare businesses are interconnected
- We employ core metrology technologies and manufacturing expertise which minimises technology risks e.g.
 - dental CAD/CAM products utilise proven measurement sensors, encoders and software
 - Equator gauge uses proven mechanical elements of dental systems
 - Additive manufacturing used to manufacture healthcare products
- Our core engineering skills allow the accurate identification of target positions and the delivery of medical devices deep within the brain for stereotactic neurosurgery.
- We also find new markets for existing healthcare technologies
 - Utilise Raman spectroscopy for molecular diagnostics business







Our expertise – Healthcare and additive manufacturing



Dental scanners, CAD software, milling machines and structures



Raman microscopes and analysis



Neurosurgical planning software, implantables and robotics



Diagnostic systems for clinical research





What is additive manufacturing (metal 3D printing)?



Renishaw laser melting system demonstration



Why additive manufacturing for Renishaw?

- We understand metal-based AM technology its strengths and weaknesses
- We are a long-term user of the technology product development and dental manufacture
- It's an emerging manufacturing technology in sectors where we are already a trusted supplier
- There is significant potential to develop a healthy global business in many different industries – enables complex, lightweight parts not possible with subtractive machining
- AM systems are in their infancy; a step change is needed for acceptance in large scale manufacturing – we have the fundamental capability to make this happen







Progress in additive manufacturing

- Purchased MTT, in April 2011 with 35 employees
- Now fully integrated as the Additive Manufacturing Products Division
- Further staff in manufacturing, engineering & subsidiaries working on the AM product line
- Significant re-engineering of the original machine to 'productionise' to Renishaw standards
- Manufacturing of the machine moved to Miskin in January 2013 in a dedicated 1,200 m² area
- Investment in multiple machines at the Stone R&D facility for applications support and process development, plus new machines for demonstration facilities in major markets







Progress in additive manufacturing





Progress in additive manufacturing

- In May 2013 acquired the business assets of German company LBC
- Experts in the design of **conformal cooling channels** for mould tools and tool inserts for injection moulding and die-casting applications
- Channels follow the geometry of the part, maintaining an optimal distance from the part surface reduces cooling times and scrap rates



Simulation of complex cooling channels



Actual example of tool combining standard blank and AM insert



Healthcare applications for additive manufacturing

Dental structures

Renishaw has produced additively manufactured crowns and bridges for several years.

We now sell and utilise our own AM machines for dental market applications.

New developments include implant supported crowns and bridges where precision mating locations are machined conventionally.







Healthcare applications for additive manufacturing

Maxillofacial reconstruction

Renishaw is leading a Technology Strategy Board funded project ('ADEPT') to develop facial implants for patients who have suffered head trauma









Healthcare applications for additive manufacturing



'3D printer helped rebuild my face' (BBC – March 2013)



Our expertise – Healthcare and additive manufacturing



Dental scanners, CAD software, milling machines and structures



Raman microscopes and analysis



Neurosurgical planning software, implantables and robotics



Diagnostic systems for clinical research



Additive manufacturing



Neurosurgery: Renishaw systems approach





Neurosurgery

- We have continued to invest in our Neurological products and have seen significant progress in this area over the last year
 - Last week FDA gave clearance to market neuromate in USA
- Sales success with our neuromate® robot and neuroinspire® software which assist surgeons with a variety of neurological procedures
- Also supplying devices (in accordance with hospital specifications) to deliver therapies directly into the brain and expanding our product range by pursuing development work on devices capable of delivering an expanded range of therapies for treatment of neuro degenerative conditions.







Neurosurgery: oncology intra-parenchymal delivery trials

Delivery system



Transcutaneous port Combination of additive and subtractive manufacture



Drug administration set



Neurosurgery: oncology intra-parenchymal delivery trials





Transcutaneous port Combination of additive and subtractive manufacture



Neurosurgery



'Parkinson's new treatment tried at Frenchay Hospital' (BBC – 9th October 2013)



Questions for the Board

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