

# Renishaw plc – 2019 results

*1 August 2019*

# Summary

- Revenue of £574.0m (2018: £611.5m), a decrease at constant exchange rates of 7%.
- Growth in the Americas and EMEA regions; weakness in the APAC region (19% decrease at constant exchange rates).
- Metrology revenue decreased by 7% to £532.9m:
  - Strong growth in our additive manufacturing line. Good growth in our measurement and automation line (Equator gauging systems) and fixturing line.
  - Slowdown in demand for encoder and machine tool products in the APAC region.
- Healthcare revenue increased by 15% with strong growth in our spectroscopy and medical dental product lines.

# Group revenue analysis

## Changes in geographic area

	Change at actual fx %	Change at constant fx %
APAC	-17%	-19%
EMEA	1%	2%
Americas	5%	1%
UK	11%	11%
Total	-6%	-7%

## Revenue by major countries

	2019 £m	2018 £m
USA	113.2	108.1
China	111.0	150.2
Japan	63.7	60.9
Germany	60.9	64.4

## Average exchange rates

	2019	2018
GBP : USD	1.29	1.35
GBP : EUR	1.13	1.13
GBP : JPY	144	149

## Market conditions

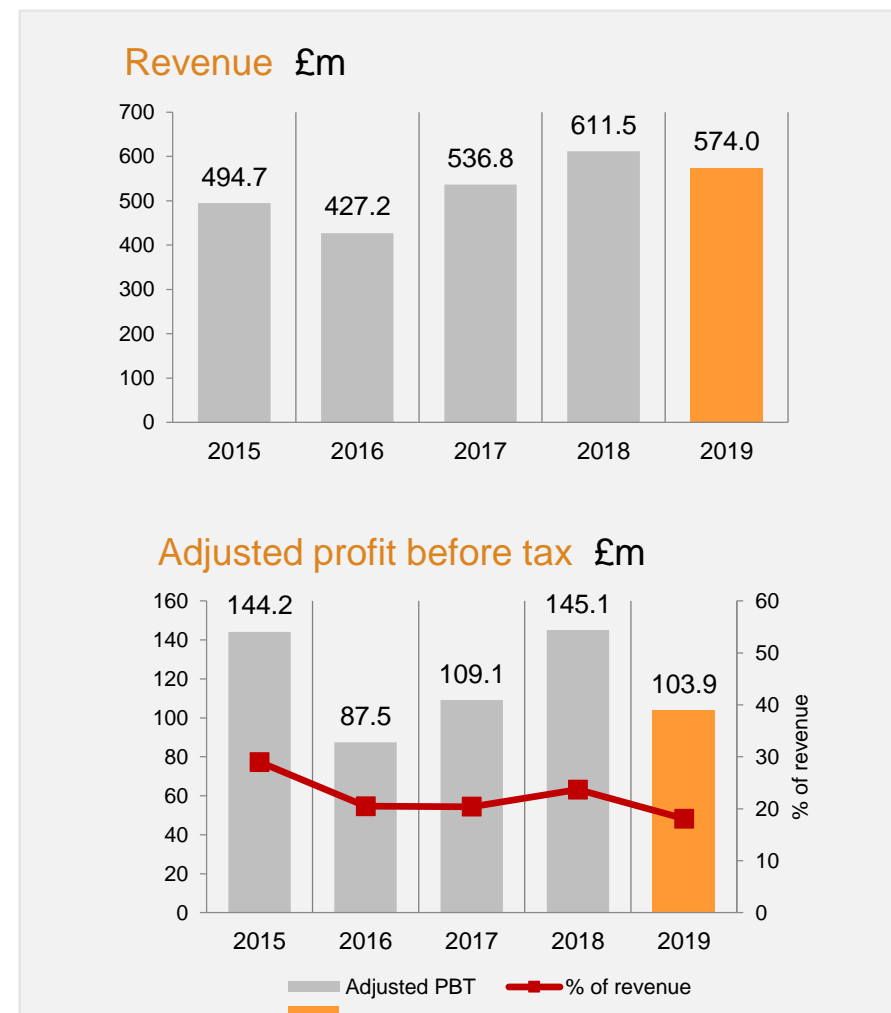
- APAC region impacted by slowdown in demand for encoder and machine tool products.
- Encoder product demand lower due to reduced investments in electronics production equipment and semiconductor manufacturing.
- Machine tool products affected by lower sales to large end-user manufacturers of consumer electronic products, with weaker smartphone demand leading to over-capacity in the supply chain.
- No erosion in our customer base.

# Summary (continued)

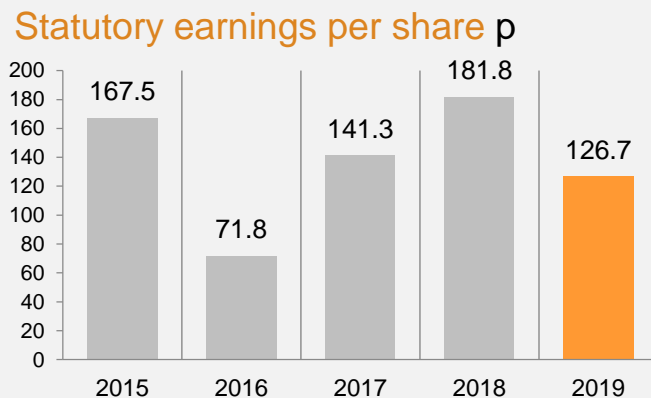
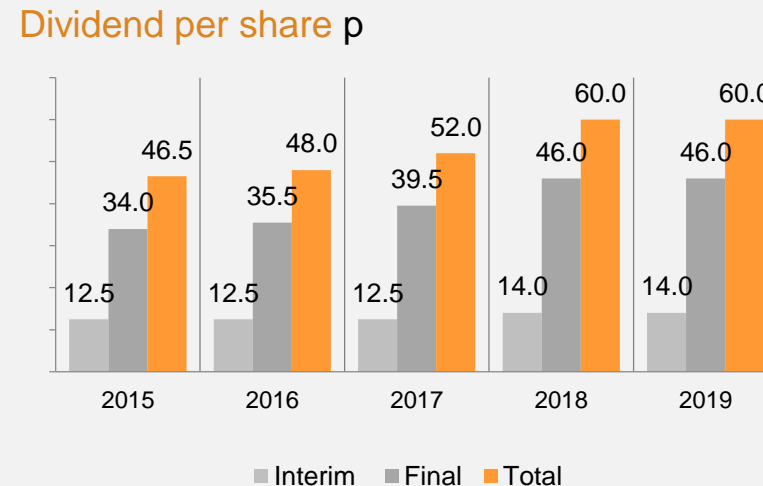
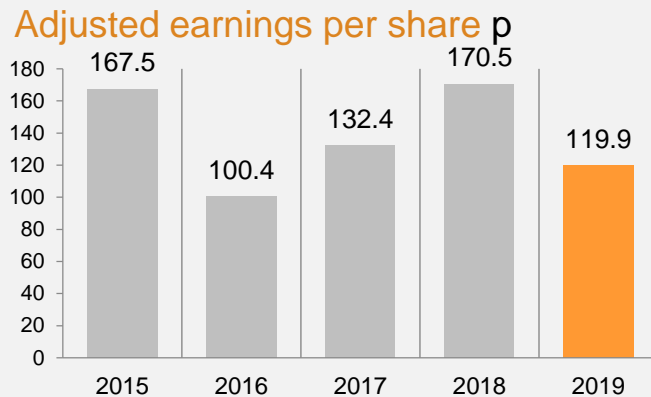
- Adjusted profit before tax of £103.9m (2018: £145.1m), a decrease of 28%
  - Substantial increase in adjusted operating profit for Healthcare to £3.1m.
- Statutory profit decreased 29% to £109.9m (2018: £155.2m)
- People key to delivery of our strategy; headcount increase of 179, with 119 graduates and apprentices joining during the year.
- Capital expenditure of £56.8m (2018: £34.9m), providing for future growth.
- Strategy of focusing more on end-user solutions continued to drive investment in new facilities for demonstration, training and service with overseas property investments in Brazil, Japan and The Netherlands.
- Strong balance sheet, with end of year cash of £106.8m, compared with £103.8m last year.
- Recommended final dividend of 46.0p per share; total dividend per share for the year unchanged over last year at 60.0p (2018: 60.0p).

# Financial summary (continuing operations)

	2019 £m	2018 £m	Change %
Revenue	<b>574.0</b>	611.5	-6%
Adjusted profit before tax	<b>103.9</b>	145.1	-28%
% return on revenue	<b>18%</b>	24%	
Statutory profit before tax	<b>109.9</b>	155.2	-29%
Tax	<b>(17.7)</b>	(22.9)	23%
Profit after tax	<b>92.2</b>	132.4	-30%
Adjusted earnings per share	<b>119.9p</b>	170.5p	-30%
Statutory earnings per share	<b>126.7p</b>	181.8p	-30%
Dividend per share	<b>60.0p</b>	60.0p	



# Adjusted earnings per share and Dividend per share



Full year dividend increase	+13%	+3%	+8%	+15%	+0%
Full year dividend cover	3.6	2.1	2.5	2.8	2.0

# Business sector performance

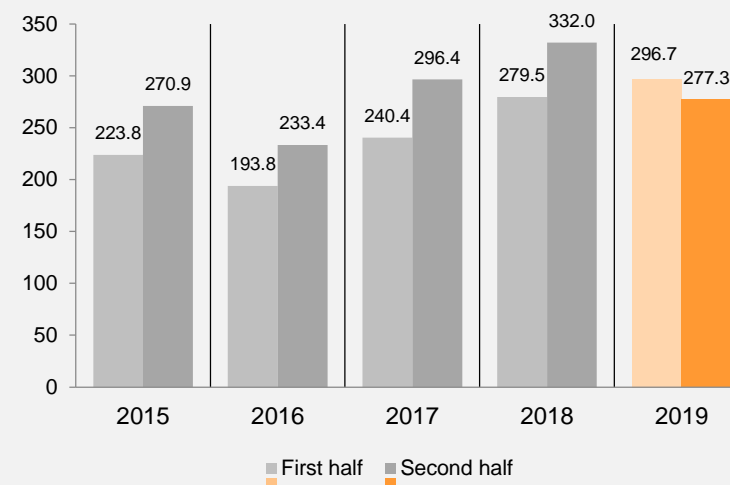
## Revenue

	2019 £m	2018 £m	Change %
Metrology	533.0	575.8	-7%
Healthcare	41.0	35.7	15%
<b>Total</b>	<b>574.0</b>	<b>611.5</b>	<b>-6.1%</b>

## Adjusted operating profit

	2019 £m	2018 £m	Change %
Metrology	90.6	142.8	-37%
Healthcare	3.1	0.3	933%
<b>Total</b>	<b>93.7</b>	<b>143.1</b>	<b>-35%</b>

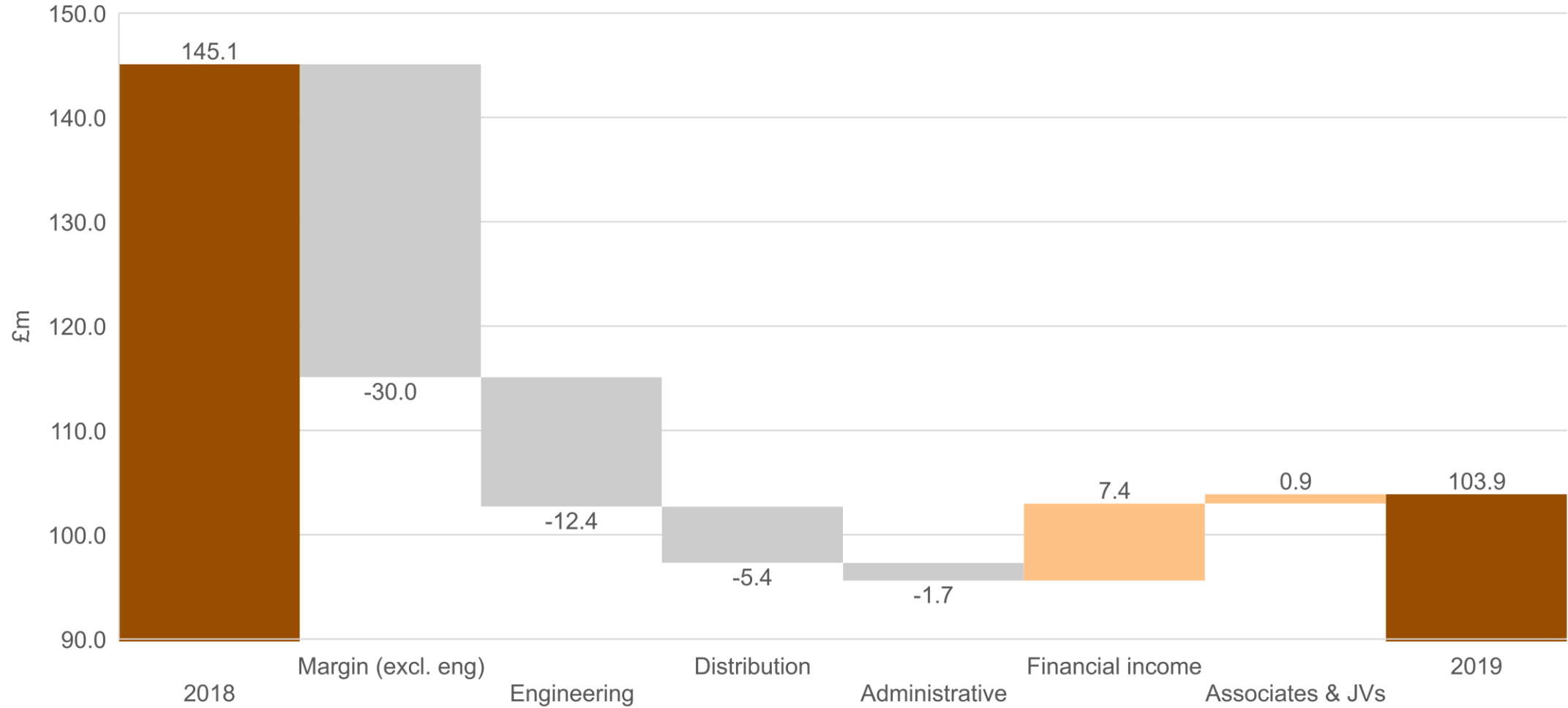
## Revenue – 1st & 2nd half £m



Year-on-year changes:

First half	-13%	24%	16%	6%
Second half	-14%	27%	12%	-16%

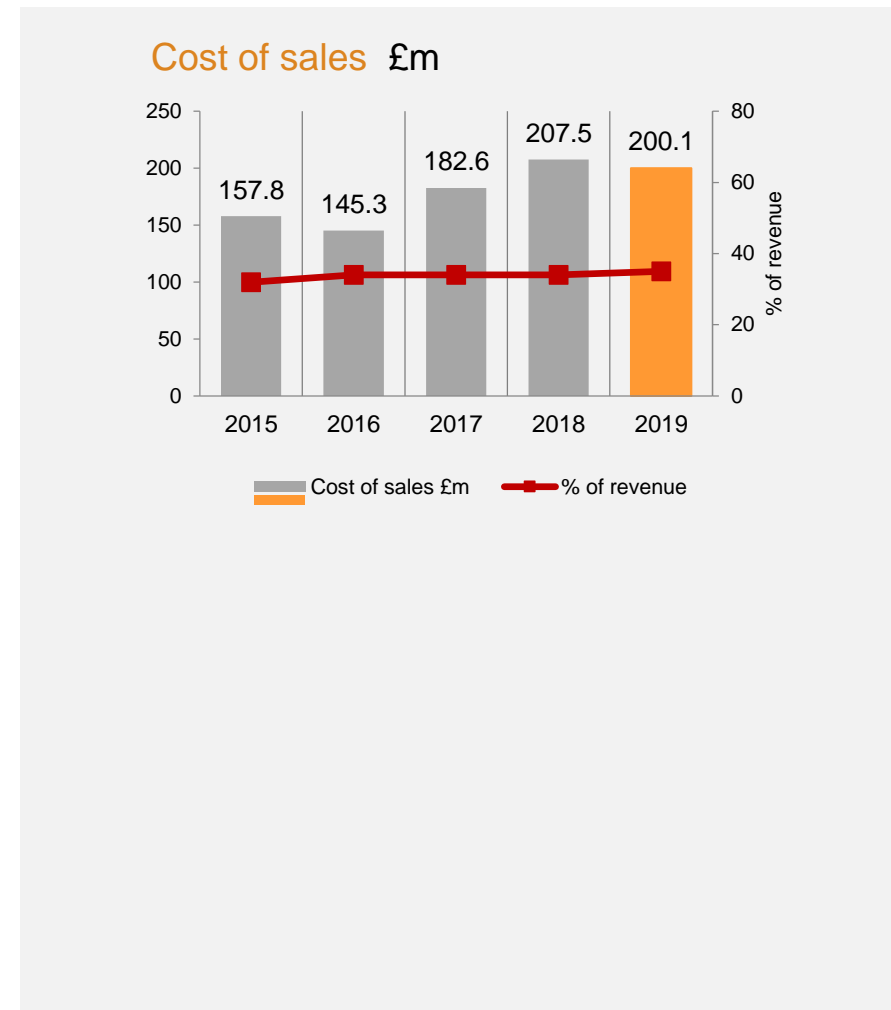
# Adjusted profit before tax bridge





# Income statement

	2019 £m	%	2018 £m	%	Change
Revenue	574.0	100	611.5	100	-6%
Cost of sales	(200.1)	35	(207.5)	34	-4%
Engineering (inc. R&D)	(89.8)	16	(77.4)	13	16%
Gross profit	284.1	49	326.6	53	-13%
Distribution costs	(126.8)	22	(121.4)	20	4%
Administrative costs	(58.6)	10	(56.9)	9	3%
Fair value gains/(losses) on financial instruments	1.1	-	4.8	1	-77%
Financial expense (net)	6.3	1	(0.9)	-	-800%
Share of profits of associates and joint ventures	3.8	1	3.0	1	27%
Statutory profit before tax	109.9	19	155.2	25	-29%
FV gains and losses on instruments not eligible for hedge accounting					
-reported in revenue	(5.0)	1	(5.3)	-1	-6%
-reporting in fair value gains/(losses) on financial instruments	(1.0)	-	(4.8)	-	-79%
Adjusted profit before tax	103.9	18	145.1	24	-28%



# Income statement – Engineering costs

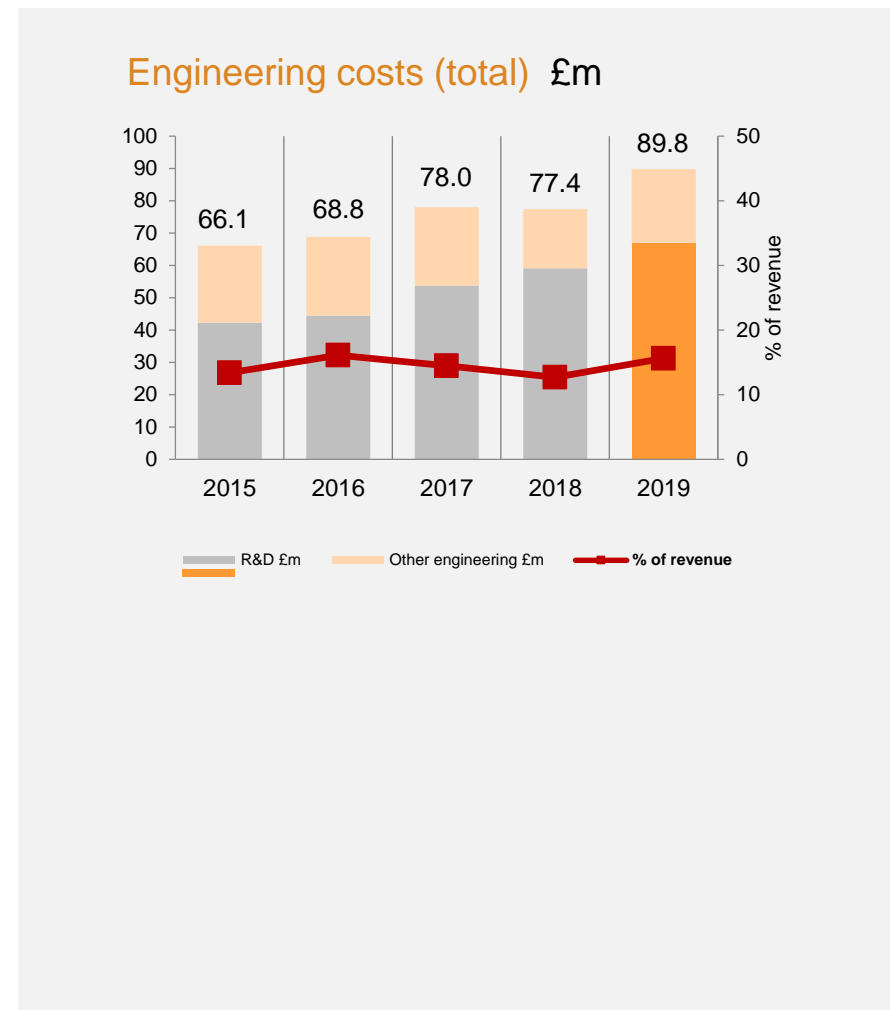
## Engineering costs

	2019 £m	2018 £m	Change %
Total spend	97.9	83.6	17%
Less capitalised net	3.0	2.1	43%
Less R&D tax credit	5.1	4.1	24%
Net R&D	89.8	77.4	16%

	2019 £m	2018 £m	Change %
Total spend segmental			
Metrology	90.7	77.1	18%
Healthcare	7.2	6.5	11%

	2019 £m	2018 £m	Change %
New product spend	67.0	59.1	13%

•Continued investment in R&D, with net increase of 107 R&D employees from June 2018

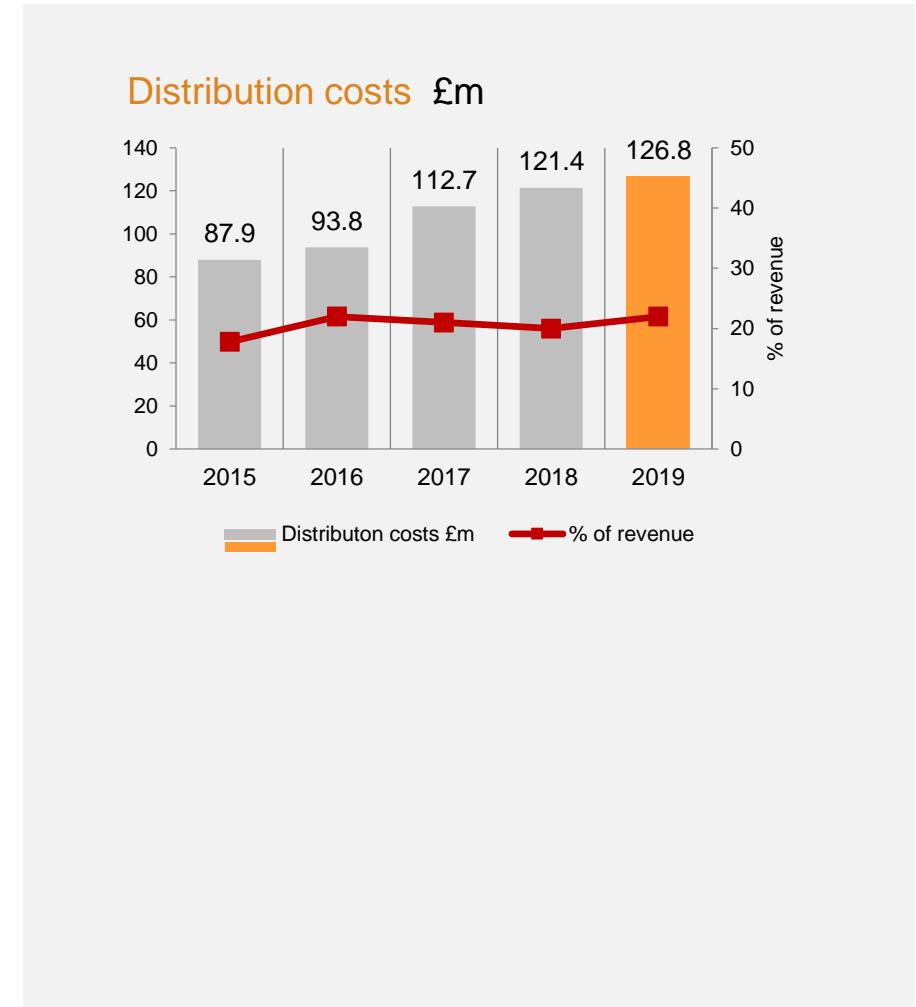


# Income statement – Distribution costs

## Distribution costs

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- Continued expansion of global marketing and distribution infrastructure to support new and existing products
- Distribution costs up 4% from last year, representing 22% of revenue (2018: 20%)
- Purchase of property in Japan and The Netherlands and purchase of land in Brazil



# Income statement – Administrative costs and Group employees

## Administrative costs

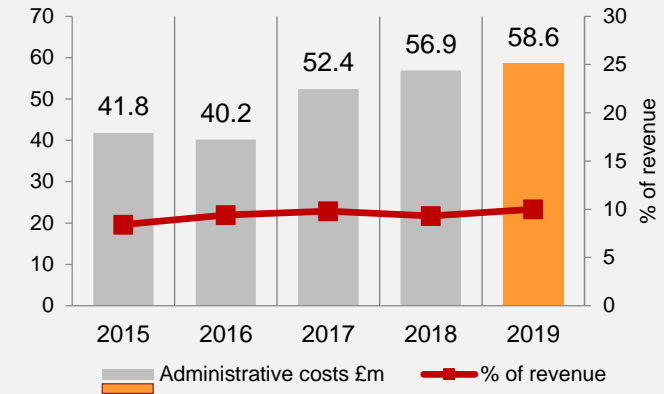
- Inflationary increases
- Headcount increase to support business growth and increasing complexity
- Offset arising from reduction in bonuses
- GMP equalisation cost of £0.8m

## Group headcount (at June)

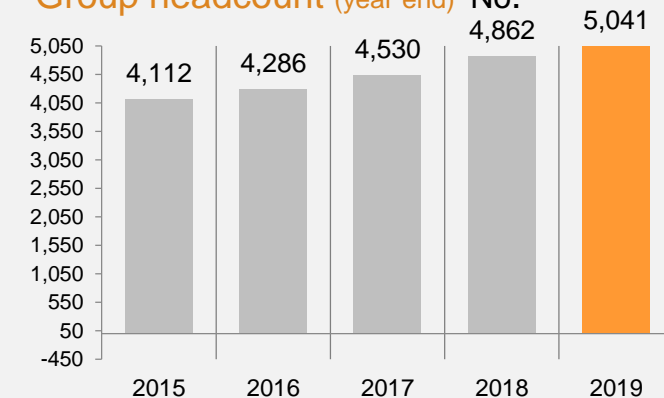
	2019 No.	2018 No.	Change No.
UK	3,167	3,045	122
Overseas	1,874	1,817	57
<b>Total</b>	<b>5,041</b>	<b>4,862</b>	<b>179</b>

- Total headcount up 179 from June 2018
- 119 apprentices and graduates have joined the business since June 2018
- Additionally we took on 73 paid industrial and summer placements

## Administrative costs £m



## Group headcount (year end) No.



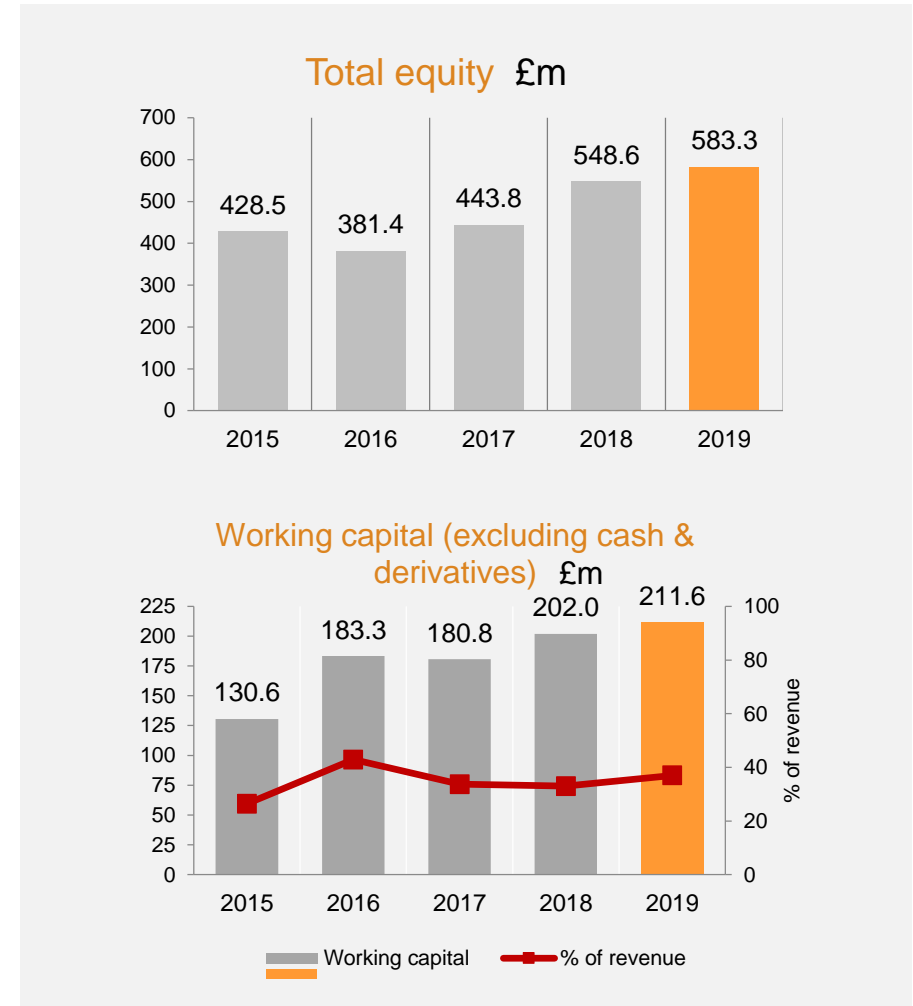
# Business systems

- In recent years, we have made significant progress in enhancing and simplifying financial reporting processes and systems, to further improve the analysis of business performance.
- With a focus on increasing productivity and efficiency, major systems developments are in progress in the following areas:
  - HR
  - engineering change management
  - marketing
- Recently committed to a new ERP system to replace our global finance, sales & marketing, CRM and overseas distribution systems.



# Balance sheet

£m	June 2019	June 2018	Change %
<b>Property, plant &amp; equipment</b>	<b>263.5</b>	232.6	13%
<b>Intangible assets &amp; investments</b>	<b>72.1</b>	64.3	12%
<b>Deferred tax assets</b>	<b>29.9</b>	27.3	10%
<b>Long-term loans to associates &amp; JVs</b>	<b>0.7</b>	4.2	-83%
<b>Derivatives</b>	<b>1.3</b>	9.6	-86%
<b>Total non-current assets</b>	<b>367.5</b>	338.0	9%
<b>Inventories</b>	<b>129.0</b>	110.6	17%
<b>Debtors</b>	<b>159.2</b>	177.3	-10%
<b>Pension scheme cash escrow account</b>	<b>10.5</b>	10.4	1%
<b>Cash</b>	<b>106.8</b>	103.8	3%
<b>Derivatives</b>	<b>(16.1)</b>	(21.1)	-24%
<b>Creditors (current)</b>	<b>(76.6)</b>	(86.0)	-11%
<b>Net current assets</b>	<b>312.8</b>	295.1	6%
<b>Borrowings</b>	<b>(9.4)</b>	-	
<b>Employee benefits</b>	<b>(51.9)</b>	(67.4)	-23%
<b>Derivatives</b>	<b>(35.7)</b>	(17.0)	110%
<b>Net assets, equal to Total equity</b>	<b>583.3</b>	548.6	6%



# Defined benefit pension schemes

## UK defined benefit pension scheme - new funding plan

### Previous funding plan

Company paid all monthly pension payments and lump sum payments, and transfer payments to a limit of £1.0m in each year, until the earlier of 30 June 2031 or reaching the self-sufficiency funding target, totalling circa £4.0m per annum.

### New funding plan

£8.7m per annum for five years effective from 1 October 2018. At 30 June 2031 the Company is obliged to pay any remaining deficit, unless self-sufficiency funding target is achieved before this date. Payments may reduce in the event of the funding target being achieved before 30 September 2023.

### Contingent assets

The scheme continues to have charge over a number of UK properties and the pension scheme escrow account.

### IFRIC 14

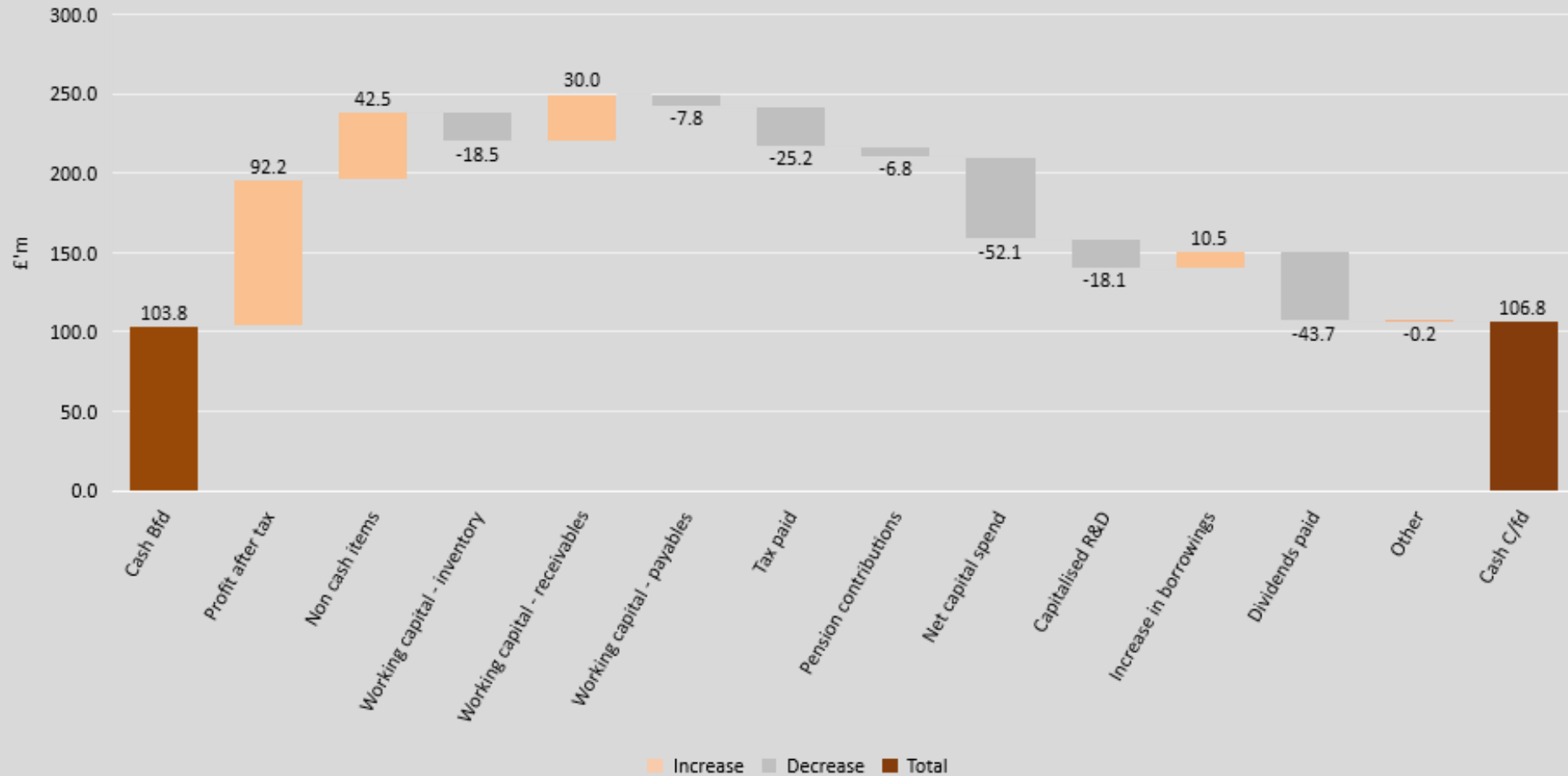
The present value of guaranteed payments under the new plan is lower than the IAS 19 pension scheme deficit at 30 June 2019, such that no adjustment to the scheme's liabilities are required in accordance with IFRIC 14.

	Year ended 30 June 2019 £'000
Balance at the beginning of the period	(67,378)
Contributions paid	6,831
Interest on pension schemes <sup>1</sup>	(845)
Remeasurement loss from GMP equalisation <sup>2</sup>	(751)
Remeasurement loss under IAS 19 <sup>3</sup>	(21,227)
Change in remeasurement gain under IFRIC 14 <sup>3</sup>	31,500
Balance at the end of the period	(51,870)

<sup>1</sup>Reported in Financial expenses. <sup>2</sup>Reported in Administrative expenses.

<sup>3</sup>Reported in Other Comprehensive income and expense.

# Cash flow





# Capital expenditure

	2019 £m	2018 £m
<b>Capital expenditure</b>	<b>56.8</b>	<b>34.9</b>

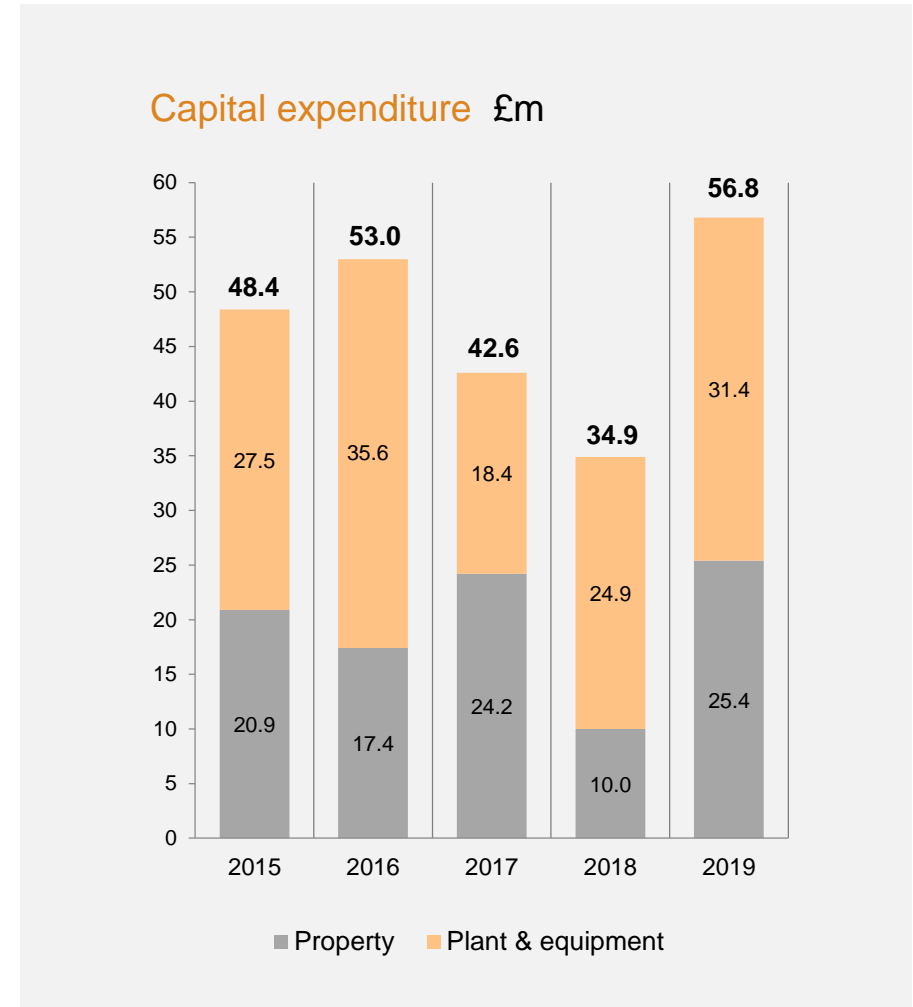
- Property

The main property additions were

- in the UK, construction in progress for a 94,000 sq ft extension to our Renishaw Innovation Centre due for completion in December 2019
- in The Netherlands, the purchase of our existing facility
- in Brazil the purchase of land for the future development of a new distribution facility
- in Japan, the purchase of property in Nagoya to support the expansion of our distribution function, funded by local third-party borrowing

- Plant & equipment

- £31.4m expenditure on plant, equipment and IT systems in 2019 (2018: £24.9m)



# Property



Nagoya, Japan, distribution facility



Renishaw Innovation Centre extension (artist's impression)

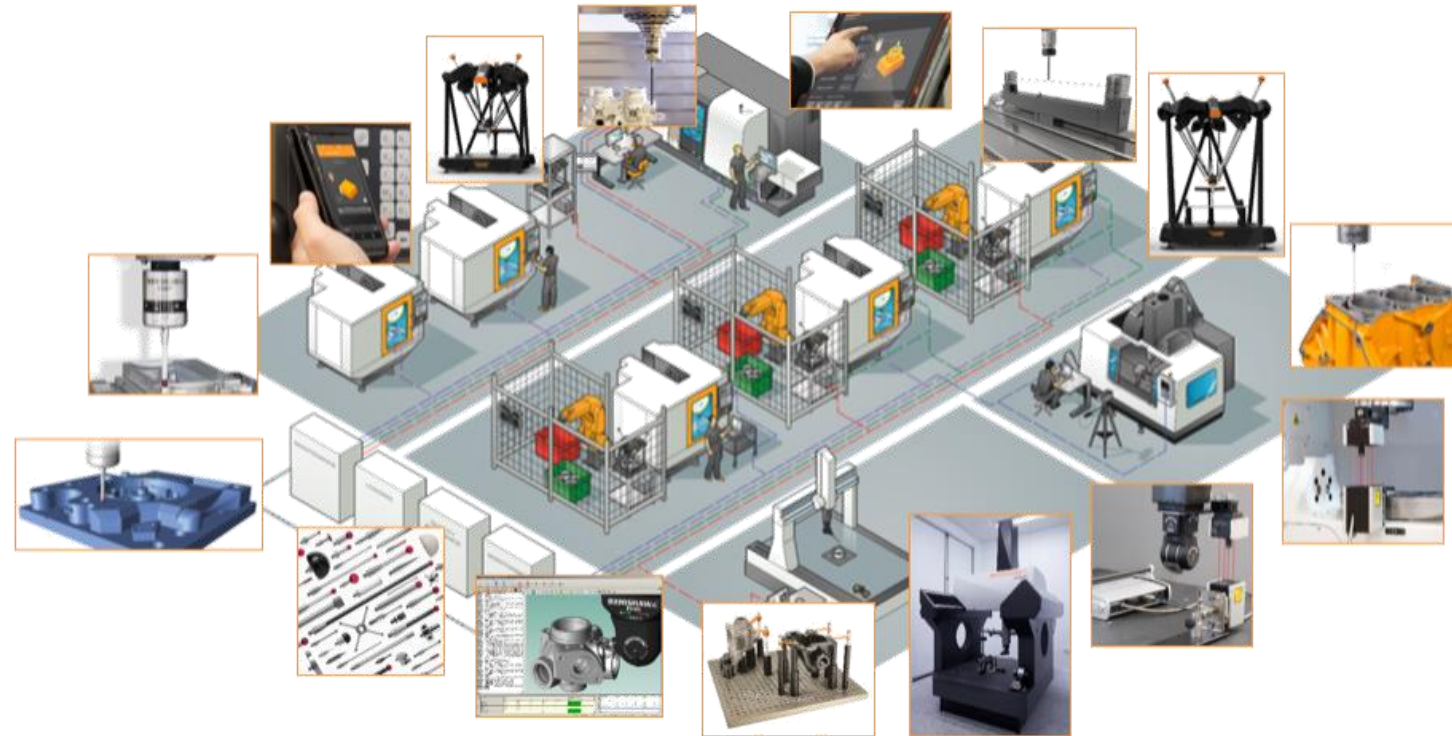
# Industrial metrology - market drivers

**Increasing component complexity and closer tolerances**

**Global skills shortages require:**

- Easier to use solutions
- More automation and robotics

**Weaker smartphone demand/over-capacity in the supply chain**



Renishaw's strength is breadth of products and applications knowledge

# Industrial metrology

## Shopfloor measurement

### On-machine measurement

Cutting tools and components remain in situ on the machine tool and automatically checked using a tool setting probe (e.g. new **APCA-45**) or inspection probe (e.g. new **RMP400**). Data is used to automatically update the manufacturing process.

### In-process measurement

Components removed from the machine tool and inspected on standalone measurement device e.g. Equator™ 500 gauging system. Data is used to update the manufacturing process.

- Have expanded range of machine tool controllers that support direct IPC (intelligent process control) connections for automated closed-loop feedback.



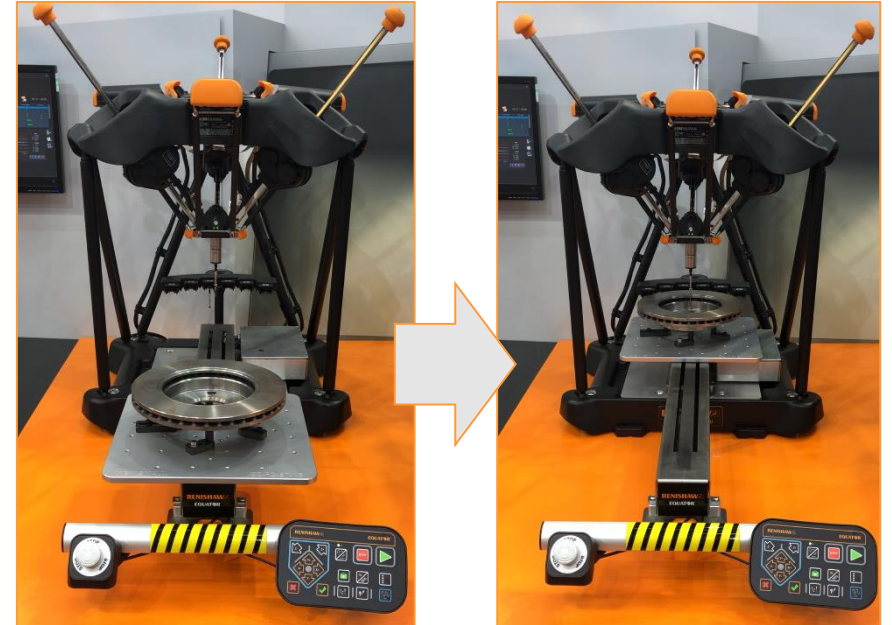
# Industrial metrology

## Automation

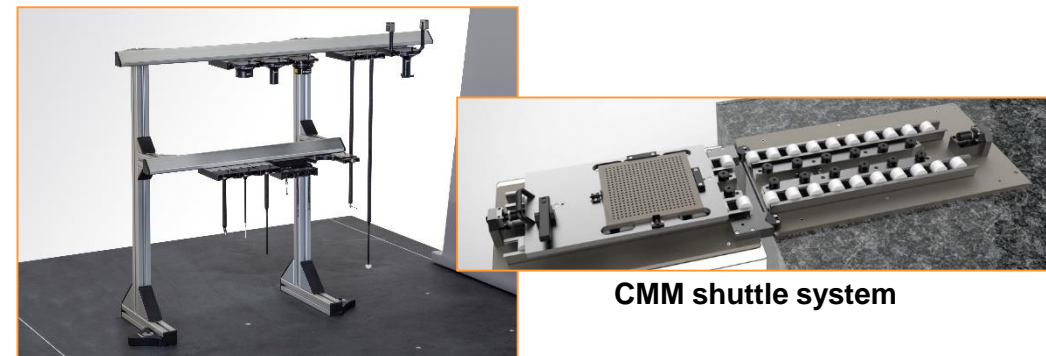
Increasing use of Equator gauging systems within automated manufacturing processes. Parts transferred from machine tools using robots or automatic transfer systems.

Increasing use of our transfer systems for Equator systems and CMMs. These allow parts to be loaded on to a fixture plate and transferred in and out of the measuring volume under automatic program control. They can be loaded manually or robot loaded in an automated cell.

There is increasing use of automated changing between different sensor types for the REVO® measuring head (contact, optical and surface finish).



Equator transfer system



REVO changing rack

CMM shuttle system

# Position measurement – market drivers

Market drivers are size, accuracy, speed, ease of use.

Reduced investments in electronics production and semiconductors.

Opportunities due to increased utilisation of our encoders and new application areas. Positive trends include new flat panel display technology, the demand for 5G mobile products, more automation/robotics and increasing requirement for more real-time data on machine performance.



# Position measurement

## Multi-axis periscope (RMAP)

- Designed to enable accurate six degrees of freedom measurements in XY stage applications, utilising the performance from Renishaw's RLD10-X3-DI interferometer head.
- Higher machine performance requires multiple interferometer feedback axes

## QUANTiC™ rotary encoder system

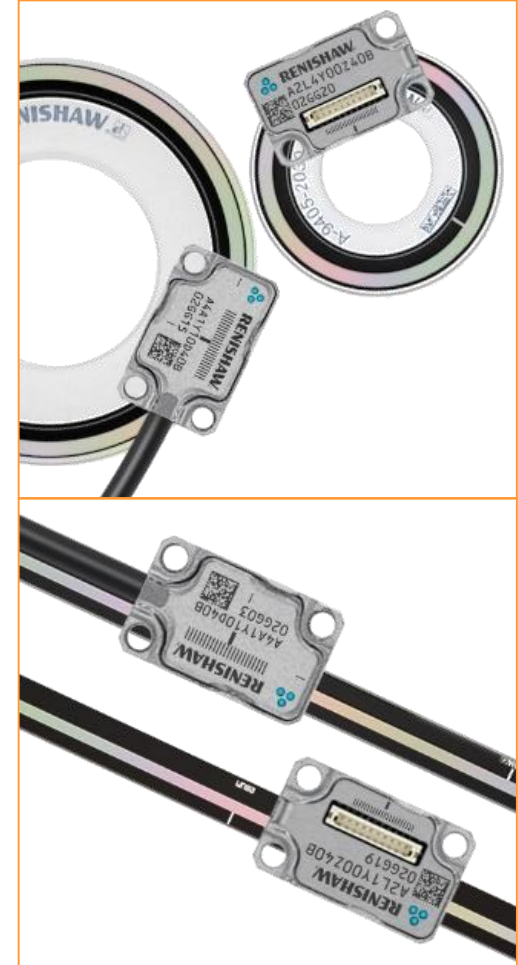
- New rotary version of the QUANTiC encoder system family - a high performance, super-compact, digital all-in-one incremental open optical encoder.
- Offers machine builders ease-of-use for machine set-up due to exceptionally wide installation and operating tolerances – potentially significant time and cost savings for high-volume production lines.



# Position measurement

## ATOM DX™ encoder series

- Our smallest incremental encoder, with digital output direct from the readhead, eliminating the need for bulky interfaces.
- A high-performance encoder that features resolutions down to 2.5 nm, low Sub-Divisional Error (SDE) and low jitter.
- Can be used with a wide range of linear and rotary scales to meet most application requirements.
- Launched at SEMICON West, California in July 2019.

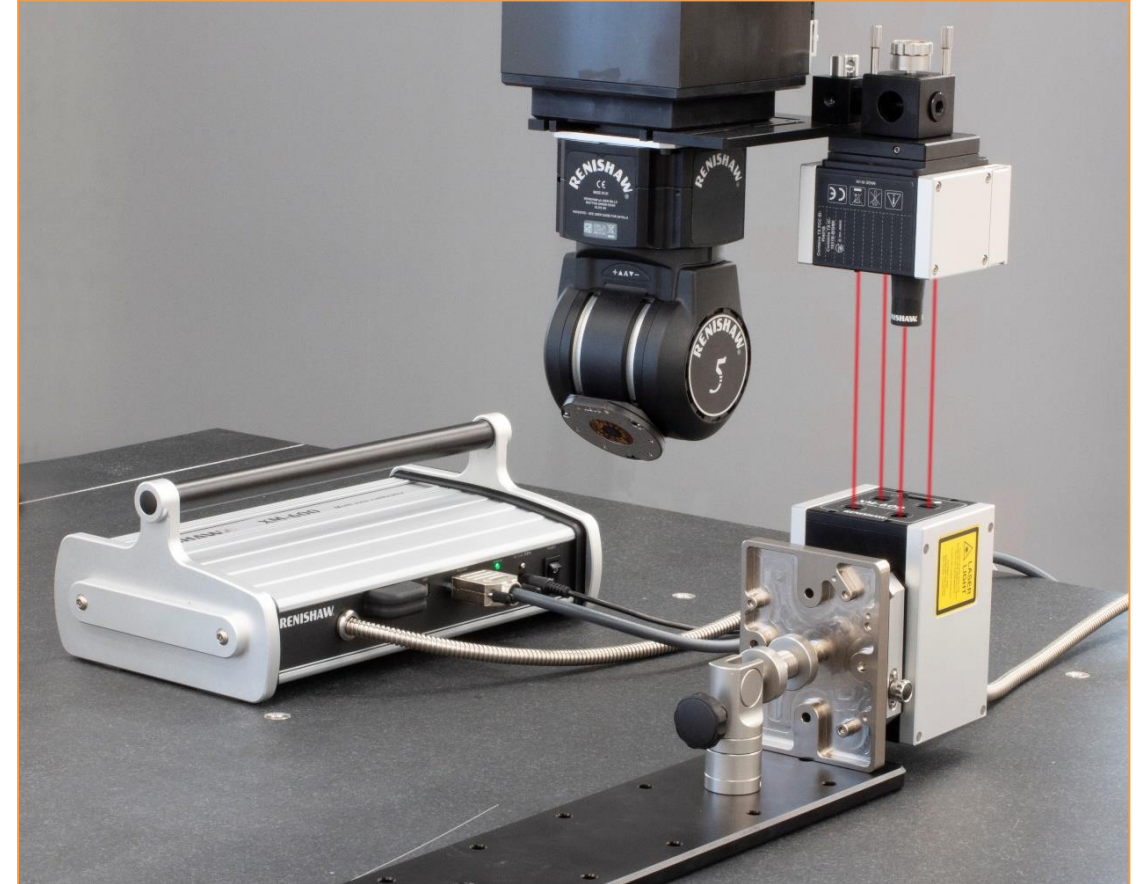




# Position measurement

## **XM-600 laser measurement system for co-ordinate measuring machines (CMMs)**

- Uses technology developed for the Renishaw XM-60 multi-axis calibrator to enable faster and easier error mapping of a CMM.
- Measures all six degrees of freedom from a single set-up, in any orientation for linear axes.
- Connects directly with Renishaw's range of UCC CMM controllers and easily communicates with the UCC software during the calibration routine to quickly build a complete error map of the CMM.
- Enables the complete error map of a CMM within half a day.

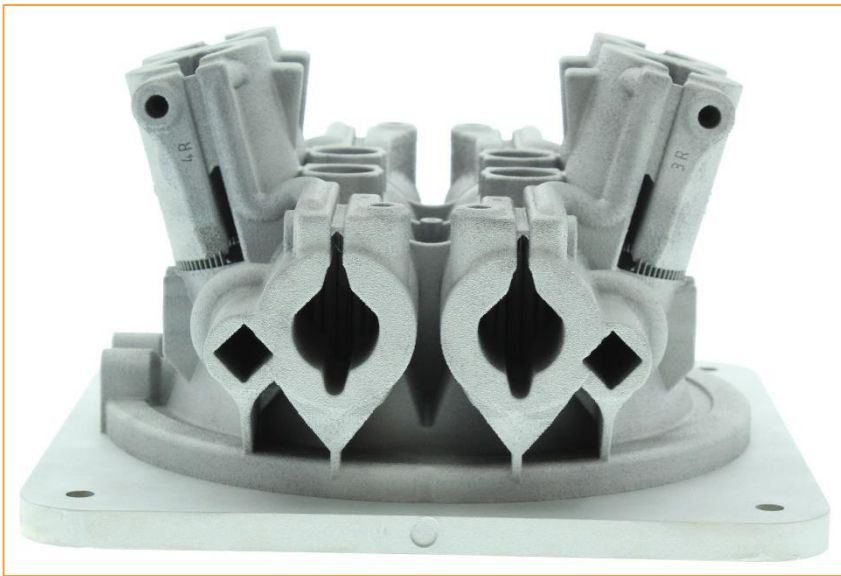


# Additive manufacturing – market drivers

Our systems are based on laser powder bed fusion technology for high-value metal part production.

Market drivers include machine productivity, lower cost-per-part, process stability and part quality.

Opportunities in multiple markets, with greater maturity in aerospace, healthcare and tooling.



# Additive manufacturing

## RenAM 500Q additive manufacturing (AM) system

- Four high-power 500 W lasers, with each able to access the whole powder bed surface simultaneously.
- Offers a substantial reduction in cost per part whilst maintaining the quality and precision offered by standard single laser systems.
- New 'S' version of the RenAM 500 production series platform available with single laser.

## InfiniAM Spectral

- Works with Renishaw's LaserVIEW and MeltVIEW hardware, to provide feedback on energy input and emissions from the AM build process.
- Process feedback is essential in understanding component quality throughout the build process, monitoring laser and melt-pool characteristics in high-temporal resolution to provide a 2D and 3D view of the build.



# Additive manufacturing

## Recent AM customers

- As well as investing in RenAM 500Q systems, Sweden-based **Sandvik Additive Manufacturing** is also collaborating with Renishaw in areas such as materials development, AM process technologies and post-processing.
- In the USA, **Knust-Godwin**, a supplier to the oil and gas sector, has purchased four RenAM 500Q systems. Mike Corliss, VP, Technology, says, “A project which previously required a 24 month wait from concept to commercialisation can now be reduced to eight months.”
- **Siemens** has invested in RenAM 500Q technology as part of a £27 million investment for its UK subsidiary Material Solutions.
- **PrinterPrezz** (USA) has invested in a RenAM 500M system as part of a one-stop 3D printing facility for the medical sector, including the manufacture of medical devices, surgical aids, and prosthetics.

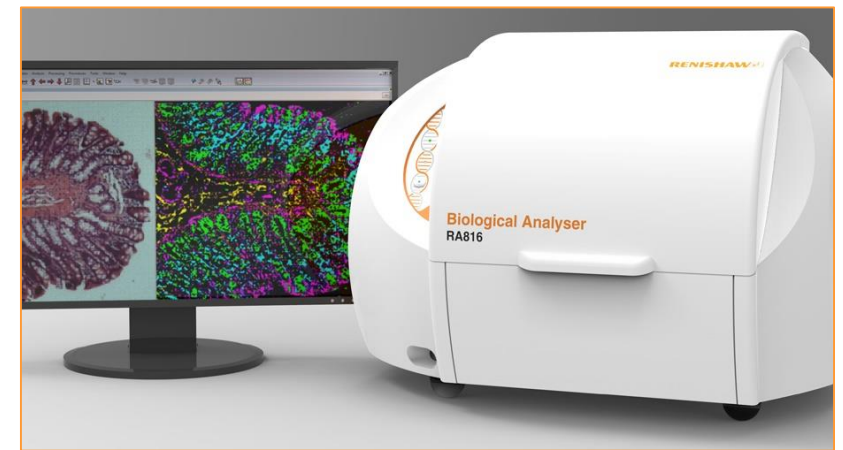


# Healthcare – market drivers

Requirement for faster procedures to reduce waiting times, more economical treatments, more patient-specific treatments (e.g. implants), and safer procedures with reduced human errors.

Increased life expectancy on a global basis means greater incidences of degenerative diseases.

Growth in research in key areas such as biomedical, nanomaterials and green energy.



# Raman spectroscopy

## Market applications

Focus on new application areas to address in existing and new markets for our Raman systems. Current focus in the areas of healthcare (cancer diagnosis) and the environment (microplastics).

Several inVia Raman microscope systems supplied for research by academics and water companies into the identification of microplastics. Includes the Danish Technological Institute which is working with private companies and the Danish Environmental Protection Agency on technologies to remove plastic particles from the aqueous environment.

The new **RA816 Biological Analyser** is a compact benchtop Raman imaging system, designed exclusively for biological and clinical research. At the John Ratcliffe Hospital in Oxford, UK, a system is being used for brain tumour research.



inVia system at the Danish Technological Institute



RA816 Biological Analyser

# Neurosurgery

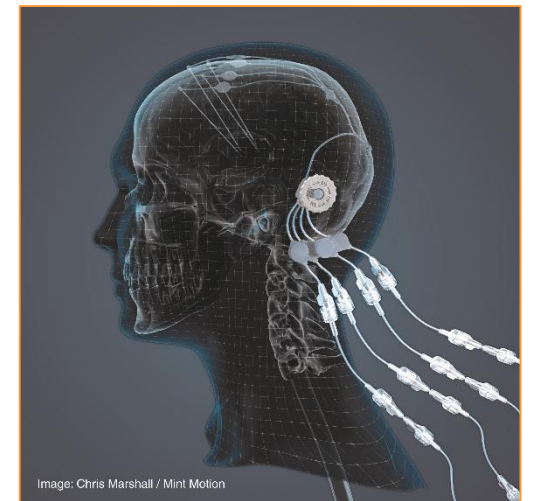
## New 2D patient registration module

The new neurolocate™ 2D module, has obtained a CE mark and can be offered to hospitals across Europe. It allows the surgeon to accurately determine the position of the patient relative to the neuromate robot.

The 2D module requires just two X-rays to register patient position, and is supported within the new neuroinspire™ version 6 planning software.

## Clinical studies

Results released of a pioneering clinical trial for the treatment of Parkinson's using the drug GDNF, for which Renishaw manufactured a drug delivery device on behalf of North Bristol NHS Trust. The drug delivery system was shown to have performed effectively and reliably. Our products are also being used in another Parkinson's clinical trial (using the drug CDNF) in Scandinavia, and we are seeing significant interest in the use of our technologies for the treatment of brain tumours and neurodegenerative diseases.



# Brexit

The Board continues to oversee the work of the Brexit steering group in identifying the key risks arising from a no-deal Brexit and implementing mitigation plans, being:

- the establishment of a new distribution warehouse in Ireland which, if required, would significantly reduce the number of direct shipments between the UK and the EU post Brexit;
- an increase in inventory of certain components and finished goods held at our various sites within the EU and the UK; and
- continued ongoing assessment and updating of other key issues arising from Brexit and the mitigation against any possible negative impacts.

The steering group will continue to carefully monitor the ongoing developments in the Brexit process and consider the impact of these against our current plans as the situation develops in the coming months.



# Outlook - summary

- Challenging business environment expected to continue during this year.
- Our vision remains unchanged: long-term investments in patented and innovative products and processes, high-quality manufacturing, and the provision of excellent local support to customers in all our markets around the globe.
- Short term focus is on continuing to improve productivity and drawing maximum benefit from the investments that we have made in people, innovation and infrastructure over the last few years.
- We remain confident in the long-term prospects for the Group due to the high quality of our people, our innovative product pipeline, extensive global sales and marketing presence and relevance to high-value manufacturing.

# Disclaimer

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These forward-looking statements are not guarantees of future performance. They have not been reviewed by the auditors of Renishaw plc. They involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of any such person to be materially different from any results, performance or achievements expressed or implied by such statements. They are based on numerous assumptions regarding the present and future business strategies of such persons and the environment in which each will operate in the future. All subsequent oral or written forward-looking statements attributable to Renishaw plc or any of its shareholders or any persons acting on its behalf are expressly qualified in their entirety by the cautionary statement above. All forward-looking statements included in this document speak only as of the date they were made and are based on information then available to Renishaw plc. Investors should not place undue reliance on such forward-looking statements, and Renishaw plc does not undertake any obligation to update publicly or revise any forward-looking statements.

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