RENISHAW
apply innovation™

Preliminary results 2020

Renishaw plc

13 August 2020

Preliminary announcement of unaudited results for the year ended 30 June 2020

Summary

- **Revenue was £510.2m, 11% lower than 2019 revenue of £574.0m.**
- **Revenue was lower in all regions, with the challenging global macroeconomic conditions throughout the year and the COVID-19 pandemic impacting most product lines.**
- **Metrology revenue was lower by 11% at £475.2m, largely as a result of trade tensions between the USA and China, weaker demand in the machine tool sector and the impact of the pandemic. However, we experienced good growth in our position encoder product line due to a recovery in the semiconductor market.**
- **Healthcare revenue decreased by 15% to £35.0m, with COVID-19 causing delays in orders, shipments, installations and postponements of elective surgery.**
- **Adjusted* profit before tax of £48.6m (2019: £103.9m), a reduction of 53%.**
- **Statutory profit was £3.2m compared with £109.9m last year.**
- **Actions taken in the year to protect the long-term health of the business by preserving cash, improving productivity and reducing the Group's cost base, including:**
    - **Reductions in direct manufacturing staff in the UK, Ireland and India;**
    - **Restructure of our additive manufacturing business;**
    - **Business resizing that led to a global headcount reduction;**
    - **Targeted reductions in other operating costs; and**
    - **Cancellation of the interim dividend and decision not to declare a final dividend.**
- **Strong balance sheet, with net cash and bank deposits of £120.4m at 30 June 2020, compared with £106.8m at 30 June 2019.**
- **Since January 2020 we have implemented a wide range of measures to protect against the spread of COVID-19 at our sites around the world and continue to monitor the impact of the pandemic.**

"It has been a particularly challenging year for the Group and we are extremely proud of the commitment our employees have shown during these exceptional times. Looking ahead, there are many exciting opportunities to grow our business, due to our new product pipeline, excellent manufacturing and commercial operations, and highly skilled people." Sir David McMurtry, Executive Chairman

	2020	2019	Change
Revenue (£m)	**510.2**	574.0	-11%
Adjusted* profit before tax (£m)	**48.6**	103.9	-53%
Adjusted* earnings per share (pence)	**51.0**	119.9	-57%
Dividend per share (pence)	**0**	60.0	
STATUTORY			
Profit before tax (£m)	**3.2**	109.9	-97%
Earnings per share (pence)	**0.4**	126.7	-100%

*Note 25, 'Alternative performance measures', defines how adjusted profit before tax, adjusted earnings per share, adjusted operating profit and revenue at constant exchange rates are calculated.

COMMENTARY BY THE CHAIRMAN

Introduction

I am pleased to report our 2020 results. Revenue for the year was £510.2m, 11% lower than the 2019 revenue of £574.0m (13% lower at constant exchange rates), against a backdrop of very challenging economic conditions. Adjusted profit before tax amounted to £48.6m (2019: £103.9m), a decrease of 53%.

We have taken some difficult decisions to preserve cash and protect the longer-term health of the business. These measures included cancelling the interim dividend, as well as deciding not to pay a final dividend. We also undertook a resizing programme, which has regrettably led to a number of redundancies across the Group.

In my role as Executive Chairman, I continue to focus on Group innovation and product strategy, supporting our talented engineering teams. The pandemic has required us all to develop new approaches and learn new skills. Since March I have enjoyed collaborating with our engineers and with other Board members via digital platforms.

During the year, we continued to invest in developing future technologies, with gross engineering costs of £82.4m amounting to 16% of total revenue.

Board changes

On 29 January 2020, John Deer, Deputy Chairman, informed the Board that he wished to step back from his executive responsibilities with immediate effect. He remains on the Board as Non-executive Deputy Chairman on the same or similar terms as the other Non-executive Directors. Although John is spending less time on day-to-day operational matters, I am delighted that, as the co-founder of Renishaw, he is continuing to help set the strategic direction of the Group and provide support and guidance for Will Lee and his leadership team, and I look forward to continuing to work with John to achieve further success for Renishaw. With this change, the Board now comprises two Executive and five Non-executive Directors in addition to my role as Executive Chairman.

People, culture and values

In such a challenging environment, our collaborative team of people has been key to helping the business remain resilient. The way that our employees around the world have risen to the challenge of maintaining supply and support to our customers despite the huge challenges faced has made me immensely proud. On behalf of the Board, I would like to thank them all for their professionalism, dedication and understanding during this most challenging year.

We have created a culture that aims to allow our employees to maximise their potential. We work hard to encourage open communication and innovative thinking, and believe everyone in our business should feel valued and be able to grow.

During the year we have reviewed our values and we are in the process of consulting with various stakeholders on a proposal to add to our existing core values of innovation and integrity. Integrity is key to the relationships that we have with our people, customers, suppliers, communities and other stakeholders. We strive at all times to be open, honest and consistent, and this has been especially important this year due to the number of changes that we have been required to make within the business and our response to the pandemic.

Innovation remains at the heart of everything that we do and has been fundamental to our success over the last 47 years. We believe our people are fundamental to our disruptive thinking and manufacturing excellence which helps our customers to increase their own innovation, improve quality, expand output and enhance efficiency.

We are committed to equality and diversity initiatives at all levels of the company. During the year, we established a diversity and inclusion group to help drive improvements within our business. Our educational outreach programmes continue to focus on encouraging more young people from diverse gender, ethnic and economic backgrounds into the sector.

Corporate governance

The Board is committed to high standards of corporate governance. It has further considered the 2018 UK Corporate Governance Code, which it started to implement last year, and has put in place a number of governance enhancements aimed at contributing to the Group's long-term sustainable success.

Investor communications

Due to the pandemic, our annual investor day, scheduled for 12 May 2020, was postponed until later in the year. We expect this to be an online event because of the ongoing requirement for social distancing, and the date will be communicated once confirmed. The event is one of four key touchpoints across the year where the investment community can learn more about Renishaw's business and strategy, along with the Annual General Meeting (AGM) in October, plus live half-year and full-year webcasts.

Dividend

In view of the ongoing macroeconomic uncertainty, the Board has decided that there will be no final dividend declared in respect of the year ending 30 June 2020. The Board will review its position on dividends during the 2021 fiscal year, with the intention of reinstating the dividend as soon as it is appropriate to do so. This means that there was no dividend paid for the year (2019: 60.0p).

Sir David McMurtry
Executive Chairman

COMMENTARY BY THE CHIEF EXECUTIVE

Introduction

This has been a year unlike any that most of us will ever have encountered. We were facing challenging trading conditions prior to the pandemic and had already taken actions to improve productivity and reduce the Group's cost base. These included not replacing staff who had left the business, reductions in direct manufacturing staff in the UK, Ireland and India, the restructuring of our additive manufacturing (AM) business, and a business resizing that required the difficult decision to instigate redundancy programmes. The overall impact was a total headcount reduction of 578 during the year.

Since the pandemic started, our number one priority has been the health and welfare of our employees, their families and the wider communities in which we operate. It has also been critical to support our customers and manage the business impacts to ensure that we can survive this exceptional period and be well placed to benefit when global markets recover.

COVID-19 pandemic

From January onwards, we implemented a wide range of measures to protect against the spread of COVID-19 at our sites around the world and we continue to monitor the impact of the pandemic, with our response and mitigation committee meeting most days since February.

All our manufacturing facilities around the world are open, although most are operating at lower capacity due to reductions in staff numbers caused by a combination of COVID-secure working practices, school closures, shielding due to health conditions and local operating restrictions. At many of our other sites we have limited operations, with many employees continuing to work productively from home. At all sites we have implemented robust measures to protect the welfare of our employees and mitigate against business risk. We have been able to maintain supply to customers during this challenging period, but this is a constantly evolving situation and we continue to closely monitor all aspects of our supply chain and are taking mitigating actions where necessary.

To closely manage costs and to mitigate against the risk of redundancies, the majority of our non-manufacturing staff across the Group have worked reduced hours (in some cases supported by local Government support schemes). We have also utilised the UK Government's Coronavirus Job Retention Scheme. The members of the Renishaw Board and many staff across the Group also agreed to have their salaries reduced during the period that employees were working reduced hours.

Performance overview

As already outlined by Sir David, this was a very challenging year with reduced revenue and Adjusted operating profit for the Group. However, while all regions experienced a reduction in revenue, our position encoder product line did achieve good growth due to a recovery in the semiconductor market. Despite the challenges, we remain focused on the long term with a key priority being the development of technologies that provide patented products to support the strategies for our metrology and healthcare segments.

Revenue

We achieved revenue for the year ended 30 June 2020 of £510.2m, compared with £574.0m last year, against a backdrop of very challenging economic conditions including the COVID-19 pandemic, the ongoing uncertainty caused by the trade tensions between the USA and China, and weaker demand in the machine tool sector. We experienced revenue reductions in all regions as set out below. We continue to work closely with key customers to ensure we are in position to meet their requirements when economic conditions improve.

	2020 £m	2019 £m	Change %	Constant fx change %
APAC	**227.7**	240.1	-5	-7
EMEA	**167.3**	201.3	-17	-17
Americas	**115.2**	132.6	-13	-14
Total Group revenue	**510.2**	574.0	-11	-13

Profit and earnings per share

The Group's Adjusted profit before tax for the year was £48.6m compared with £103.9m last year. Adjusted earnings per share was 51.0p compared with 119.9p last year.

Statutory profit before tax for the year was £3.2m compared with £109.9m last year. Statutory earnings per share was 0.4p compared with 126.7p last year.

This year's tax charge amounts to £2.9m (2019: £17.7m) representing a tax rate of 91.0% (2019: 16.1%).

Metrology

Revenue from our metrology business for the year was £475.2m compared with £532.9m last year. It was a difficult trading year for most of our metrology lines. The important machine tool market was impacted by reduced global demand for new machines, particularly from China, with weakness in key sectors including aerospace, automotive, consumer electronics, and oil and gas. This affected many of our metrology product lines, including our machine tool probe systems that are primarily installed on new machines and our calibration products, which saw reduced demand due to lower sales and utilisation of production machinery.

The AM line continued to benefit from the adoption of our RenAM 500Q multi-laser system, but demand was impacted by the global macroeconomic environment. During the year we undertook a restructure of the AM business including the closure of our Staffordshire site, a rationalisation of the product range to focus on the successful RenAM 500Q platform and a restructure of our AM teams across the Group, including the simplification of reporting structures. As previously mentioned, there was, however, good growth in our position encoder product line, with sales of our optical and laser encoder products benefiting from a recovery in the semiconductor market.

The geographical analysis of metrology revenue is set out below.

	2020 £m	2019 £m	Change %
APAC	**213.6**	223.7	-5
EMEA	**152.5**	182.6	-16
Americas	**109.1**	126.6	-14
Total metrology revenue	**475.2**	532.9	-11

Adjusted operating profit for our metrology business was £50.3m (2019: £90.7m).

We continued to invest in R&D, with gross engineering costs of £75.9m compared with £90.7m in 2019.

We launched a range of new products during the year. The RFP fringe probe for our REVO® measuring head allows the inspection of freeform surfaces and complex geometry on co-ordinate measuring machines (CMMs), including delicate surfaces. Our machine tool product line introduced the NC4+ Blue system, which features industry-first, blue laser technology to deliver significant improvements in tool measurement accuracy, including for very small tools.
It was a busy year for new launches within our position encoder line, including the addition of new Functional Safety (FS) certified encoders for use in safety-critical applications, including medical robots and collaborative robots (cobots). We also added ATOM DX™, our smallest all-in-one digital incremental encoder which eliminates the need for bulky interfaces, new robust RKLC and RKLA stainless steel tape scales for linear and partial arc applications, and diagnostics tools (interfaces and software) to optimise set-up and analysis of position encoders.

Healthcare

Revenue from our healthcare business for the year was £35.0m, a decrease of 15% over the £41.0m last year. There were reductions in all our healthcare product lines – medical dental, neurological and spectroscopy.

The pandemic had a marked impact on our healthcare lines including the postponement of non-essential operations, which impacted orders for additively manufactured medical implants and dental structures. The neurological product line was most impacted, with orders for the neuromate stereotactic robot delayed and consumable sales reduced due to elective surgeries being put on hold. The spectroscopy product line saw some impact from the pandemic due to delayed shipments, primarily in China.

There was an Adjusted operating profit of £1.4m, compared with a profit of £3.1m last year, with three years of continuous profit now achieved.

Healthcare also saw continued investment in R&D, with gross engineering costs in this business segment of £6.5m compared with £7.2m in 2019.

New Raman spectroscopy products launched during the year include: the Virsa™ Raman Analyser, a versatile, fibre-optic-coupled system designed for reliable, detailed analysis away from the confines of the laboratory and the inVia™ InSpect system, which is specifically targeted at the forensic crime laboratory.

In February the initial results were published of a joint Phase 1-2 clinical study with Herantis Pharma plc, for the investigation of cerebral dopamine neurotrophic factor (CDNF) as a treatment for Parkinson's disease. The initial results indicate predictable and accurate placement of our drug delivery device as well as its positive performance and safety, allowing us to build towards its CE marking.

Strategy and markets

Our strategy is fundamentally based on long-term investments in patented and innovative products and processes, and high-quality manufacturing in all markets around the globe (which has been a real strength during the pandemic). This strategy is consistent across all the product lines and market sectors in which we operate to deliver our purpose.

Renishaw has moved from primarily being a supplier of products to capital equipment manufacturers, to working closely with end users to solve their complex challenges and deliver solutions and systems that transform their manufacturing capabilities. This is helping to deepen brand loyalty and open up new revenue opportunities.

Despite the current challenges resulting from the macroeconomic environment and the pandemic, we continue to see external market growth drivers – including global skills shortages, digitisation, requirements for more capable products, near-shoring and reshoring, a focus on reducing emissions and waste, population growth and increasing life expectancy – that are creating positive opportunities for our business.

We continue to reduce risk through the diversification of applications for our products, our customer base and our routes to market.

Focused investment for long-term growth

The Group firmly believes in its long-term strategy of investing appropriately for the future, expanding our global marketing and distribution infrastructure, along with increasing manufacturing capacity and R&D activities. However, with the current global economic uncertainties, our focus for the short term is on maximising the benefits of the investment we have made over the past few years and clearly prioritising those projects that will either bring faster revenue benefits or are strategically important to the business.

We continue to invest in the global roll-out of a new human resources (HR) system and development programmes for our people, which we believe will ultimately boost our productivity.

Capital expenditure on property, plant and equipment and vehicles for the year was £38.7m (2019: £56.8m), of which £24.6m (2019: £25.4m) was spent on property and £14.1m (2019: £31.4m) on plant and equipment and vehicles.

This year we completed the 94,000 sq ft extension to the Innovation Centre at our New Mills site (although full occupation was delayed to save costs), purchased land in Pune to provide for future expansion of our Indian manufacturing operations, and completed the build of a new design, manufacturing and demonstration facility in Michigan, USA, for Renishaw Fixturing Solutions.

Working capital

Group inventory reduced from £129.0m at the start of the year to £105.5m, primarily reflecting the reduced demand we experienced during the year. We continue to focus on working capital management while remaining committed to our policy of holding sufficient finished inventory to ensure customer delivery performance, given our short order book. Trade receivables decreased from £123.2m to £111.9m, with debtor days of 76 days (2019: 67 days) at the end of the current year.

Net cash balances and bank deposits at 30 June 2020 were £120.4m, compared with £106.8m at 30 June 2019. Additionally, there is an escrow account of £10.6m (2019: £10.5m) relating to the provision of security to the UK defined benefit pension scheme.

Corporate social responsibility

As a socially responsible business, we recognise the importance of operating in a way that delivers long-term sustainable value for all stakeholders. This year we have: assisted local organisations through charitable donations; invested in developing the skills of our employees; recruited apprentices and graduates on our training schemes; reduced our absolute greenhouse gas (GHG) emissions by 8%; reduced our accident frequency rate to 15.55. We reached more than 20,000 children with our educational outreach programmes, as well as donating more than 10,000 hours of paid time to educational organisations during the 2018/19 academic year.

Our people

Our workforce at the end of June 2020 was 4,463 (2019: 5,041), a decrease of 11.5%. During the year, 96 apprentices and graduates were taken on as part of our ongoing commitment to train and develop skilled resource for the Group in the future. We also took on 74 industrial and summer placements in the year.

With the exceptional challenges that we faced this year, including: tough trading conditions, the first pandemic for 100 years, a Group-wide redundancy programme, plus reduced working hours and many UK employees being furloughed; it is testament to the skill, resilience and compassion of our employees that they still continue to introduce innovative new products, support our customers in very trying circumstances, and assist our communities at a time of crisis. We recognise the potential impacts of the pandemic on the health of our people and we have developed a COVID-19 Wellbeing Programme to add to our existing Employee Assistance Programme.

I am truly grateful for the understanding and commitment of our people during this exceptionally challenging year.

Brexit

The Board continues to oversee the work of the Brexit Steering Group in identifying the key risks and mitigation plans arising from a possible no-deal Brexit at the end of the transition period. This includes the following actions already taken in 2019: a new distribution warehouse in Ireland which will significantly reduce the number of direct shipments between the UK and the EU post Brexit (we are currently supplying a number of EU customers from this warehouse and this will increase during 2020); and a general increase in inventory of certain components and finished goods held at our various sites within the EU and the UK, which is being maintained dynamically in line with required demand.

The Steering Group will continue to carefully monitor ongoing developments in the Brexit process and consider their impact against our current plans as the situation becomes clearer through the remainder of 2020.

Outlook

As a result of the timely actions detailed above, despite a very challenging year, the Group is in a strong financial position. We continue to invest in the development of new products and applications, along with targeted investment in production, and sales and marketing facilities around the world. Given the uncertain macroeconomic backdrop, including the pandemic and the risks posed by reduced freedom of global trade, we expect very challenging market conditions, particularly in the automotive and aerospace sectors.

Your Directors 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.

Will Lee
Chief Executive

COMMENTARY BY THE GROUP FINANCE DIRECTOR

Overview

Revenue for the year amounted to £510.2m and Adjusted profit before tax of £48.6m with statutory profit before tax of £3.2m. Adjusted profit before tax is a key alternative performance measure by which the Board evaluates the Group's performance as it better represents the underlying trading of the Group, with restructuring costs and fair value gains and losses on financial instruments not eligible for hedge accounting excluded from this measure. Further details of alternative performance measures are provided in note 25. Cash preservation has always been a key focus for the Board, particularly this year due to the high level of uncertainty caused by the COVID-19 pandemic, with net cash and bank deposit balances at the year-end of £120.4m (2019: £106.8m). The balance sheet remains strong with total equity of £546.9m (2019: £583.3m).

Revenue

Revenue for the year amounted to £510.2m, compared with £574.0m last year. It has been a very challenging trading year for the Group due to the global macroeconomic environment, initially due to the ongoing uncertainty caused by the trade tensions between the USA and China and weaker demand in the machine tool sector, compounded in the second half of the year by the impact of the COVID-19 pandemic. The previous year also benefited from a number of large orders from end-user manufacturers of consumer electronic products in the APAC region which have not been repeated to the same extent this year.

In our metrology business segment, revenue was £475.2m, compared with £532.9m last year. Revenue in our healthcare business segment was £35.0m, compared with £41.0m last year.

Revenue analysis by region

A geographical analysis of our metrology and healthcare businesses is shown below.

	2020 revenue at actual exchange rates £m	Change from 2019 %	2019 revenue at actual exchange rates £m	Underlying change at constant exchange rates %
APAC	**227.7**	-5	240.1	-7
EMEA	**167.3**	-17	201.3	-17
Americas	**115.2**	-13	132.6	-14
Total Group revenue	**510.2**	-11	574.0	-13

Operating costs

During the year we have taken a number of actions to improve productivity and reduce the Group's cost base in response to the challenging trading conditions we were facing which were compounded in the second half of the year by the pandemic. Group headcount has decreased from 5,041 at 30 June 2019 to 4,463 at 30 June 2020, with the average for the year of 4,797 compared with 4,968 last year. Headcount reductions were mostly attributable to the activities described in the restructuring costs section of this review and the non-replacement of staff who left the business. Labour costs were also mitigated by reduced working hours and many employees being furloughed.

The resultant labour costs for the year were down 7% to £221.3m (2019: £237.4m), including global job retention grant income totalling £4.5m this year (2019: nil).

The ongoing macroeconomic conditions have resulted in a higher level of uncertainty around the recoverability of certain assets including capitalised development costs and trade receivables. Excluding amounts included in restructuring costs, impairments of capitalised development costs totalled £9.9m (2019: nil) relating primarily to metrology products of a capital nature and where the high-volume growth previously anticipated is now less predictable. Movements in the provision for trade receivables resulted in a charge to the Consolidated income statement of £2.9m, mainly as a result of an increase in the expected credit loss allowance, and this year also included a £1.6m charge from the impairment of other intangible assets.

Actions were also put in place to significantly reduce discretionary spend such as travel and exhibitions which has also contributed to the decrease in operating costs.

Restructuring

Restructuring costs arose following the reorganisation and rationalisation of certain operating activities, particularly related to our additive manufacturing (AM) business including the closure of our Staffordshire site and a rationalisation of the AM product range to focus on our successful multi-laser platform.

The AM restructuring costs, including write-downs of tangible fixed assets, inventories and capitalised development costs, totalled £17.5m. Also included in restructuring costs are redundancy costs of £6.3m, mostly relating to the wider redundancy programme. Total restructuring costs for the year were £23.8m and have been reported separately in the Consolidated income statement. Further details are provided in note 26. The comparatives for each of these items in 2019 was nil.

Research and development

Gross expenditure on engineering costs, including R&D on new products, was £82.4m (2019: £97.9m). The gross charge amounts to 16% of Group revenue (2019: 17%). The R&D tax credit in 2020 amounted to £4.4m compared with £5.1m in 2019. Further details are provided in note 4.

Gross expenditure on engineering costs was £75.9m (2019: £90.7m) in our metrology segment and £6.5m (2019: £7.2m) in our healthcare segment.

New product R&D expenditure amounted to £66.6m, which compares with £75.0m 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 2021 financial year

Profit and tax

Adjusted profit before tax amounted to £48.6m compared with £103.9m in 2019. Statutory profit before tax was £3.2m compared with £109.9m in the previous year.

Last year benefited from a £6.0m currency gain, primarily in respect of intra-group balances, compared with a loss of £2.6m this year. This year also included a net gain of £2.3m arising from the fair value adjustment of a convertible loan, a partial disposal of shares and a subsequent partial impairment of the investment and loans, all relating to our associate company.

In our metrology business, Adjusted operating profit was £50.3m compared with £90.6m last year, while in our healthcare business, Adjusted operating profit was £1.4m compared with £3.1m last year.

The overall effective rate of tax was 91.0% (2019: 16.1%). 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. The year on year rate increase primarily arises from an increase in the deferred tax rate in the UK from 17% to 19% resulting in a charge of £1.1m, UK losses resulting in no patent box benefit this year (2019: £1.8m credit) and the partial derecognition of deferred tax assets for US tax losses and excess interest totalling £3.0m. Note 8 provides further analysis of the effective tax rate.

Consolidated balance sheet

Total equity at the end of the year was £546.9m, compared with £583.3m at 30 June 2019, primarily as a result of dividends paid of £33.5m and an increase in pension liabilities due to changes in the discount rate and inflation assumptions.

As a result of the high levels of uncertainty arising from the COVID-19 pandemic, the Board has focused on cash preservation, with capital expenditure significantly lower in the second half of the financial year, reduced inventory levels compared with December 2019 and the cancellation of the interim dividend.

Net cash and bank deposit balances at 30 June 2020 were £120.4m (2019: £106.8m). In line with our capital allocation strategy, the chart below summarises our sources and uses of cash for the year, reconciling opening to closing cash and bank deposits balances.

Additions to property, plant and equipment and vehicles totalled £38.7m, of which £24.6m was spent on property and £14.1m on plant and machinery, IT equipment and infrastructure, and vehicles. £28.4m of the additions were incurred in the first half of the year, with spend in the second half significantly lower at £10.3m.

The main additions were:

- in the UK, completion of the 94,000 sq ft extension to our Renishaw Innovation Centre;
- acquisition of property in Pune, India to provide capacity for future growth;
- refurbishment of the building purchased in Nagoya, Japan last year; and
- completion of the new facility for Renishaw Fixturing Solutions in Michigan, USA.

Within working capital, inventories decreased to £105.5m from £129.0m at the beginning of the year, primarily as a result of the lower trading levels. We continue to focus on inventory management while remaining committed to our policy of holding sufficient finished goods to ensure customer delivery performance, given our short order book. Trade receivables decreased from £116.9m to £105.1m, while debtor days were 76 at the end of the year, compared with 67 at the end of last year.

Pensions

At the end of the year, the Group's defined benefit pension schemes, now closed for future accrual, showed a deficit of £64.9.m, compared with a deficit of £51.9m at 30 June 2019. Defined benefit pension schemes' assets at 30 June 2020 increased to £188.6m from £181.6m at 30 June 2019, primarily reflecting funding of £11.8m less benefits paid of £6.9m.

Pension scheme liabilities increased from £233.5m to £253.5m, primarily reflecting the net impact of decreases in the discount rate, RPI and CPI for the UK defined benefit scheme since 30 June 2019. According to the terms of the deficit funding plan agreed with The Pensions Regulator, the Company will pay £8.7m per annum into the scheme for five years, effective from 1 October 2018. In line with the previous agreement, the new agreement will continue until 30 June 2031 and any outstanding deficit will be paid at that time. The agreement will end sooner if the actuarial deficit (calculated on a self-sufficiency basis) is eliminated in the meantime.

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, to maximise interest income on cash deposits and to ensure appropriate funding arrangements are available for each Group company.

The Group uses forward exchange contracts to hedge a proportion of anticipated foreign currency cash inflows and the translation of foreign currency denominated intercompany balances. There are forward contracts in place to hedge against the Group's Euro, US Dollar and Japanese Yen cash inflows and to offset movements on Renishaw plc's Euro, US Dollar and Japanese Yen intercompany balances. The Group does not speculate with derivative financial instruments.

Most of these forward contracts are subject to hedge accounting under IFRS 9 Financial Instruments. The hedged item in these contracts is the revenue forecasts of Renishaw plc and Renishaw UK Sales Limited, and during the year these forecasts were reduced due to the global macroeconomic uncertainty. This has resulted in proportions of forward contracts failing hedge effectiveness testing according to IFRS 9.

Gains and losses which recycle through the Consolidated income statement as a result of ineffectiveness are excluded from adjusted profit measures. See note 20 for further details on financial instruments and note 25 on alternative performance measures.

Earnings per share and dividend

Adjusted earnings per share is 51.0p compared with 119.9p last year. Statutory earnings per share is 0.4p compared with 126.7p last year.

In light of the increased global macroeconomic uncertainty experienced in the first half of the year, and with redundancy programmes in progress, the Directors elected to waive their right to the interim dividend. Following the outbreak of the COVID-19 pandemic, and according to the Board's priority of conserving cash and managing the Group in a prudent manner through this period of uncertainty, the interim dividend for the year was then cancelled, and no final dividend is declared in respect of the year.

The Board will review its position on dividends during the next financial year with the intention of reinstating its long-term progressive dividend policy as soon as it is appropriate to do so. While we have confirmed eligibility to participate in the Coronavirus Corporate Finance Facility (CCFF), we do not anticipate issuing commercial paper under the scheme. If commercial paper were to be issued with a maturity date on or after 19 May 2021, no dividends could be declared until all related financing was repaid.

Capital allocation strategy

The Board regularly reviews the capital requirements of the Group, in order to maintain a strong financial position to protect the business and provide flexibility to fund future growth.

Our capital allocation approach has been consistently applied for many years. We are committed to investment in the research and development of new products, manufacturing processes and global support infrastructure in order to generate growth in future returns, and to improve productivity, while managing expenditure appropriate to trading conditions. This is evidenced in the year with investments in capital and R&D. Actual and forecast returns, along with our strong financial position, then support our progressive dividend policy, which aims to increase the dividend per share, while maintaining a prudent level of dividend cover. In exceptional circumstances the Board may deem it appropriate to not issue a dividend.

Allen Roberts
Group Finance Director

PRINCIPAL RISKS AND UNCERTAINTIES

Our performance is subject to a number of risks – the principal risks, factors impacting on them and mitigations are ranked in the table below. The Board has conducted a robust assessment of the principal risks facing the business.

Risk description	Risk ranking	Risk owner	Potential impact	COVID-19 impact	Mitigation
Supply chain dependencies We are exposed to the risk that some components we source are provided by a single-source supplier and we are vulnerable to an interruption in supply. We also manufacture components at some sites (such as cables) for use in a wide range of our products, so our ability to supply products to customers could be impacted by a significant disruption at any of these sites.	1	Group Manufacturing Directors	Inability to fulfil customer orders leading to a reduction in sales. Failure to meet contractual requirements. Increased costs of alternative sourcing. Loss of market share. Damage to reputation.	Manufacture of cables in India was adversely impacted by the shutdown in that market. Contingency plans were implemented in Ireland and with a third-party supplier to ensure ongoing supply. Longer term, dual sourcing will be fully implemented	Continued focus on, and review of, sourcing of key components. Maintenance of buffer inventory. Cost-effective alternative sources of supply actively sought to reduce dependency on single-source suppliers. Specifications may need to be reviewed and updated to facilitate alternative sourcing.
Industry fluctuations We are exposed to the cyclical nature of demand from aerospace, automotive and consumer electronics industries, which may be more severe if the downcycles of these key industries coincide.	2	Chief Executive	Volatility in profitability. Reduced sales and cash flow. Loss of market share. Increased competition on prices.	COVID-19 has had a severe impact on many industries, but particularly the aerospace and automotive industries. It is not yet clear whether this impact will be short or long term.	Closely monitoring market developments. Expanding and diversifying the Group's product range in order to meet the demands of a number of different industry sectors. Identifying and meeting the needs of emerging markets, for example in robotic automation. Maintaining a strong balance sheet with the ability to flex manufacturing resource levels.
Capital allocation Failure to properly allocate budget between core and emerging activities.	3	Group Finance Director	Investing in declining or less profitable areas at the expense of more profitable and strategically important areas. Reduced profits and increased operating costs. Loss of market share.	COVID-19 has meant that we have continued to ensure all capital expenditure across the Group is kept to a minimum.	Defining and prioritising core and emerging areas of the business. Identifying the return on investment across core and emerging areas of the business. Developing strategies for all core and emerging areas, including whether to increase, decrease or maintain the previous levels of investment in these areas. Greater scrutiny of all capital expenditure.
People Our people drive the success of our business. Inability to attract, retain and develop key talent at all levels of the organisation could mean we fail to successfully deliver on our strategic goals.	4	Group Head of HR	Loss of expertise, skills and specialist talent could impact our ability to deliver on objectives. Poor retention and engagement could slow the delivery of our strategic objectives, product delivery and slow our change agenda. Failure to develop future leaders through insufficient talent progression. Loss of market share, reduced sales, poor customer service and reduced profitability.	The pandemic is one of the most significant external risks currently facing the business and has a significant impact on our people. Lockdown, and furloughing specifically, has affected employee availability, attendance and engagement. Sometimes this has had an adverse impact, including where significant time was spent away from the business, in other cases it has had	Continued communication with our employees and taking of steps to safeguard their wellbeing during the COVID-19 pandemic. Robustness of our business continuity plans to enable rapid adaptation to changing circumstances. Ensure that robust talent planning and people development processes are established across the Group. Investment in direct employee engagement; exit interviews,

				a positive impact with an opportunity to engage and interact in new and different ways. Increased visibility of senior leaders actively being seen to manage a crisis. Given employees greater confidence in the ability of our systems and processes to support home working.	feedback mechanisms and adherence to our inclusion strategy to ensure we provide equal opportunities for growth and development of all our people. Continued investment in our graduate and apprentice programmes. Commitment to executive-level succession planning. Attracting, rewarding and retaining people with the right skills globally in a planned and targeted way. Developing and enhancing organisational, leadership, technical and functional capability to deliver global programmes.
Innovation strategy Failure to innovate to create new cutting-edge, high-quality products, or failing to protect the intellectual property that underpins these products, which allows us to differentiate ourselves from our competitors. As a business driven by leading-edge innovation, there is a higher risk with new ventures outside of our traditional field of expertise where the science and engineering is less proven.	5	Executive Chairman/Director of Group Technology	Failing to meet customer needs for high-quality and complex products – leading to a loss of market share. Reduced profitability and cash flow. Failing to recover investment in R&D.	The furloughing of some staff and reduction in hours for other employees has meant that some of the flagship projects have been slightly delayed.	R&D projects are better prioritised and rationalised and regularly reviewed against milestones. Flagship projects are now receiving greater focus from management and the plc Board. Medium- to long-term R&D strategies are monitored regularly by the Board and the Executive Committee to ensure they remain aligned with the Company's strategy. Developing products based on input from customers to ensure we develop solutions to meet their needs. New products involve beta testing with customers to ensure as far as possible that they meet the needs of the market. Market developments are closely monitored. Patent and intellectual property protection are core to new product development. Recruiting, training and developing talented engineers with the appropriate skills.
Economic and political uncertainty As a global business, we may be affected by political, economic or regulatory developments in one or more countries in which we operate. This could include a global recession, Brexit, and US/China trade relations.	6	Chief Executive	Reduced sales, profitability and cash balances. Increased competition on prices. Loss of assets in a region.	As a pandemic, COVID-19 has had severe health and economic consequences, and is potentially the driver for a global recession.	Monitoring external economic and commercial environments and identifying relevant headwinds. Maintaining sufficient headroom in our cash flow.
Route to market/customer satisfaction model Inherent complexity in the move to systems integration and the sale of capital goods.	7	Chief Executive	Low capital efficiency. High people costs and low productivity. High R&D and distribution costs. Lower return on capital employed than proposed target.	COVID-19 has provided an opportunity for the Group to review and refine our business model for how we are vertically integrated regarding the sale of capital goods.	Closely monitoring customer feedback. Reviewing our business model and global strategy for this area of the business. Analysing our return on capital employed figures.

			Adversely affects customer satisfaction levels, sales and profitability.		
Competitive activity Failure to adapt to market and/or technological changes.	8	Chief Executive	Reduced sales, profitability and cash flow. Loss of market share. Erosion on prices.	The impact of COVID-19 will accelerate business change in many areas and therefore technology requirements are likely to develop more quickly.	The Group is diversified across a number of core products, industries and geographies. Closely monitoring market developments, particularly across our core product areas. Having local sales and engineering support which can quickly respond to a crisis and cope with changing local needs. Strong historic and ongoing commitment to R&D investment to continue to build our product portfolio.
Exchange rate fluctuations Due to the global nature of our operations, in which over 90% of the revenue is generated outside of the UK, we are exposed to volatility in exchange rates which could have a significant impact on the reported results of the Group. The Group is exposed to a number of exchange rate risks, including currency cash flow, currency translation risk and the currency risk on intercompany balances.	9	Group Finance Director	Significant variations in the Group's income statement and balance sheet. Reduced cash flow and profitability.	Impacts are likely to increase during periods of market uncertainty such as during the pandemic in which some countries will be more affected by exchange rate fluctuations than others.	Rolling forward contracts for cash flow hedges. We only enter contracts if the rate is below the plc Board approved caps Currency pricing reviews with some large customers. Tracking of overseas net assets value compared to the market capitalisation. One-month forward contracts to manage currency risks on inter-company balances
Fit for the future strategy Failure to deliver on our new Fit for the future strategy may mean that our operating costs are not aligned with our trading levels, potentially inhibiting our growth and investment in key strategic areas.	10	Chief Executive/Group Finance Director	Cost savings not realised, leading to reduced profits. Reduced capacity to invest in strategic areas. Inefficient and inflexible operating model.	Additional cost-saving measures have been implemented in response to the pandemic, such as furloughing staff and reducing working hours and salaries for some staff.	Regular tracking and reporting of cost-control measures across the Group. Greater focus on managing the highest spend areas, such as labour and capital expenditure. Identifying the return on investment across a number of areas of the business. Reducing overheads such as travel and exhibition costs.
IT transformation failure The upgrade to our IT systems to Dynamic 365 to remove legacy systems and ensure our business is better integrated and Fit for the future could impact our business if there are major technical issues, or it is poorly integrated, or there are significant delays to the programme, or it runs significantly over budget.	11	Group Business Systems Manager	Major disruption to our systems (including our financial and HR systems) causing delay to our operations such as our ability to process or issue invoices and customer orders, or to procure goods and services. Increased costs, including to fix any technical issues and restore or upgrade other impacted systems.	Having to progress the transformation programme remotely without physical access to the central site made it more difficult to meet milestones and undertake appropriate testing.	Risk assessments undertaken of all key systems likely to be impacted by the upgrade. A clear roadmap with measurable milestones. Assigning project managers who have clear oversight of the project and any potential or actual issues. Promptly identifying and dealing with any red flags.
Cyber External and internal threat which could result in a loss of data including intellectual	12	Group Business Systems Manager	Loss of intellectual property/commercially sensitive data leading to reputational damage, claims or fines. Inability to access, or disruption	Increased vigilance and awareness of the risks associated with remote working were required to help manage this risk during the pandemic.	Substantial resilience and back-up built into the Group systems. Cyber risk and security is regularly discussed at plc

property, or our ability to operate our systems which could severely impact our business.			to, our systems leading to reduced service to customers and therefore financial and reputational damage. Delay or impact on decision-making due to lack of availability of sound data or disruption in the denial of service.		Board meetings. External penetration testing is conducted as appropriate. Operating systems are continuously updated and refreshed in line with current threats. A number of physical, logical and control measures are deployed to protect our information and systems. Regular security awareness training is conducted, including in relation to the specific risks associated with remote working.
Pensions Investment returns and actuarial variations of the Group's defined benefit scheme are subject to economic and social factors outside of the Group's control.	13	Group Finance Director	Any deficit may require additional funding or security.	Reduced returns on investment assets.	Recovery plan was implemented in June 2019 with the aim of funding to self-sufficiency. Active engagement with the Trustees. The Trustees operate in line with a statement of investment principles and take appropriate independent professional advice when necessary.
Non-compliance with laws and regulations We operate in a large number of territories, and in some highly regulated sectors, and are subject to a wide variety of laws and regulations, including those relating to anti-bribery, anti-money laundering, sanctions, competition law, privacy, health and safety, product safety and medical devices. There is a risk that somewhere in the Group we may not be fully compliant with these laws and regulations.	14	Group General Counsel and Company Secretary/Director of Renishaw Neuro Solutions	Damage to reputation. Potential penalties and fines. Cost of investigations. Management time and attention in dealing with reports of non-compliance. Inability to attract and retain talent.	No specific impact due to COVID-19.	Whistleblowing hotline − available for use by all employees, with a new global provider appointed in 2020. Regular compliance training for all employees. Controls in place to mitigate some of the risks, and audits conducted to review some of these controls. Implementation of a global GDPR programme (and its equivalent in non-EU countries). Insurance cover for some of the risks.
Loss of manufacturing output Manufacturing output can be adversely affected by a number of factors including environmental hazards, technical delays or outages, plant or equipment failure, inadequate resourcing levels, or factors affecting the workforce such as a pandemic.	15	Group Manufacturing Directors	Inability to fulfil customer orders leading to a reduction in sales. Failure to meet contractual requirements. Increased costs of alternative sourcing. Maintenance of buffer inventory. Loss of market share. Damage to reputation.	Manufacture of cables in India was adversely impacted by the shutdown in that market. Contingency plans were implemented in Ireland and with a third-party supplier to ensure ongoing supply. Longer term, dual sourcing will be fully implemented.	Duplication of high-dependency processes such as component manufacturing and finishing, electronic PCB assembly, and microelectronics assembly across more than one manufacturing location. Ensuring we have flexible manufacturing capacity in various sites across numerous territories, and sufficient resilience across these sites. Capacity planning. Standardised approaches to product assembly. Annual risk assessments and business continuity planning. Reviewing and maintaining business interruption and other insurance cover.

CONSOLIDATED INCOME STATEMENT

for the year ended 30 June 2020

from continuing operations	Notes	2020 £'000	2019 £'000
Revenue	2	**510,215**	573,959
Cost of sales	4	**(271,633)**	(289,832)
Gross profit		**238,582**	284,127
Distribution costs		**(123,276)**	(126,822)
Administrative expenses		**(58,584)**	(58,593)
Restructuring costs	26	**(23,797)**	-
Gains/(losses) from the fair value of financial instruments	20	**(26,631)**	1,081
Operating profit		**6,294**	99,793
Financial income	5	**913**	7,238
Financial expenses	5	**(4,840)**	(902)
Share of profits of associates and joint ventures	12	**841**	3,815
Profit before tax	6	**3,208**	109,944
Income tax expense	8	**(2,920)**	(17,712)
Profit for the year		**288**	92,232
Profit attributable to:			
Equity shareholders of the parent company		**288**	92,232
Non-controlling interest	21	**-**	-
Profit for the year		**288**	92,232

	Notes	Pence	pence
Dividend per share arising in respect of the year	21	**0.0**	60.0
Dividend per share paid in the year		**46.0**	60.0
Earnings per share (basic and diluted)	7	**0.4**	126.7

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME AND EXPENSE

for the year ended 30 June 2020

	Notes	2020 £'000	2019 £'000
Profit for the year		**288**	92,232
Other items recognised directly in equity:			
Items that will not be reclassified to the Consolidated income statement:			
Remeasurement of defined benefit pension scheme liabilities	13	**(23,978)**	10,273
Deferred tax on remeasurement of defined benefit pension scheme liabilities		**5,484**	(1,534)
Total for items that will not be reclassified		**(18,494)**	8,739
Items that may be reclassified to the Consolidated income statement:			
Exchange differences in translation of overseas operations	21	**3,369**	2,045
Exchange differences in translation of overseas joint venture	21	**186**	72
Current tax on translation of net investments in foreign operations	21	**-**	(205)
Deferred tax on translation of net investments in foreign operations	21	**(403)**	-
Effective portion of changes in fair value of cash flow hedges, net of recycling	21	**13,924**	(27,573)
Deferred tax on effective portion of changes in fair value of cash flow hedges	21	**(1,978)**	4,561
Total for items that may be reclassified		**15,098**	(21,100)
Total other comprehensive income and expense, net of tax		**(3,396)**	(12,361)
Total comprehensive income and expense for the year		**(3,108)**	79,871
Attributable to:			
Equity shareholders of the parent company		**(3,108)**	79,871
Non-controlling interest	21	**-**	-
Total comprehensive income and expense for the year		**(3,108)**	79,871

CONSOLIDATED BALANCE SHEET

at 30 June 2020

	Notes	2020 £'000	Restated* 2019 £'000
Assets			
Property, plant and equipment	10	**270,049**	263,477
Intangible assets	11	**43,364**	59,056
Right of use assets	2,22	**12,672**	-
Investments in associates and joint ventures	12	**16,604**	13,095
Long-term loans to associates and joint ventures	12	**2,818**	750
Finance lease receivables	22	**4,801**	4,992
Deferred tax assets	9	**39,641**	29,855
Derivatives	20	**1,242**	1,311
Total non-current assets		**391,191**	372,536
Current assets			
Inventories	16	**105,497**	129,026
Trade receivables	20	**105,077**	116,929
Finance lease receivables	22	**1,982**	1,230
Contract assets		**606**	352
Short-term loans to associates and joint ventures		**318**	6,644
Current tax		**3,878**	4,553
Other receivables	20	**23,196**	24,461
Derivatives	20	**3,758**	2,778
Pension scheme cash escrow account	13	**10,568**	10,490
Bank deposits	15	**10,000**	52,500
Cash and cash equivalents	15,20	**110,386**	54,326
Total current assets		**375,266**	403,289
Current liabilities			
Trade payables	20	**16,998**	21,513
Contract liabilities	20	**5,976**	5,631
Current tax		**2,905**	4,538
Provisions	17	**5,591**	2,846
Derivatives	20	**22,546**	18,920
Lease liabilities	2,22	**4,241**	-
Borrowings	19	**1,061**	1,043
Other payables	18	**34,372**	41,065
Total current liabilities		**93,690**	95,556
Net current assets		**281,576**	307,733
Non-current liabilities			
Borrowings	19	**10,482**	9,356
Lease liabilities	2,22	**8,925**	-
Employee benefits	13	**64,895**	51,870
Deferred tax liabilities	9	**499**	539
Derivatives	20	**41,102**	35,227
Total non-current liabilities		**125,903**	96,992
Total assets less total liabilities		**546,864**	583,277
Equity			
Share capital	21	**14,558**	14,558
Share premium		**42**	42
Own shares held	21	**(404)**	(404)
Currency translation reserve	21	**17,729**	14,577
Cash flow hedging reserve	21	**(30,455)**	(42,401)
Retained earnings		**546,100**	597,784
Other reserve	21	**(129)**	(302)
Equity attributable to the shareholders of the parent company		**547,441**	583,854
Non-controlling interest	21	**(577)**	(577)
Total equity		**546,864**	583,277

*2019 cash and cash equivalents and bank deposits have been restated following a change in accounting policy, see note 1, and trade receivables have been reclassified, with finance lease receivables reported as separate line items, see note 22.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 30 June 2020

Year ended 30 June 2019	Share capital £'000	Share premium £'000	Own Shares Held £'000	Currency translation reserve £'000	Cash flow hedging reserve £'000	Retained earnings £'000	Other reserve £'000	Non-controlling interest £'000	Total £'000
Balance at 1 July 2018	14,558	42	-	12,665	(19,389)	540,485	(460)	(577)	547,324
Profit for the year	-	-	-	-	-	92,232	-	-	92,232
Other comprehensive income and expense (net of tax)									
Remeasurement of defined benefit pension scheme liabilities	-	-	-	-	-	8,739	-	-	8,739
Foreign exchange translation differences	-	-	-	1,840	-	-	-	-	1,840
Relating to associates and joint ventures	-	-	-	72	-	-	-	-	72
Changes in fair value of cash flow hedges	-	-	-	-	(23,012)	-	-	-	(23,012)
Total other comprehensive income and expense	-	-	-	1,912	(23,012)	8,739	-	-	(12,361)
Total comprehensive income and expense	-	-	-	1,912	(23,012)	100,971	-	-	79,871
Share-based payments charge	-	-	-	-	-	-	158	-	158
Purchase of own shares	-	-	(404)	-	-	-	-	-	(404)
Dividends paid	-	-	-	-	-	(43,672)	-	-	(43,672)
Balance at 30 June 2019	**14,558**	**42**	**(404)**	**14,577**	**(42,401)**	**597,784**	**(302)**	**(577)**	**583,277**
Year ended 30 June 2020									
Profit for the year	-	-	-	-	-	288	-	-	288
Other comprehensive income and expense (net of tax)									
Remeasurement of defined benefit pension scheme liabilities	-	-	-	-	-	(18,494)	-	-	(18,494)
Foreign exchange translation differences	-	-	-	2,965	-	-	-	-	2,965
Relating to associates and joint ventures	-	-	-	187	-	-	-	-	187
Changes in fair value of cash flow hedges	-	-	-	-	11,946	-	-	-	11,946
Total other comprehensive income and expenses	-	-	-	3,152	11,946	(18,494)	-	-	(3,396)
Total comprehensive income and expenses	-	-	-	3,152	11,946	(18,206)	-	-	(3,108)
Share-based payments charge	-	-	-	-	-	-	173	-	173
Dividends paid	-	-	-	-	-	(33,478)	-	-	(33,478)
Balance at 30 June 2020	**14,558**	**42**	**(404)**	**17,729**	**(30,455)**	**546,100**	**(129)**	**(577)**	**546,864**

More details of share capital and reserves are given in note 21.

CONSOLIDATED STATEMENT OF CASH FLOW

for the year ended 30 June 2020

	Notes	2020 £'000	Restated* 2019 £'000
Cash flows from operating activities			
Profit for the year		**288**	92,232
Adjustments for:			
Depreciation of property, plant and equipment and right of use assets	10	**30,578**	22,597
Loss on sale of property, plant and equipment		**22**	148
Impairment of property, plant and equipment	10	**2,590**	1,155
Amortisation of development costs	11	**16,861**	15,144
Impairment of development costs	11	**15,881**	-
Amortisation of other intangibles	11	**1,566**	1,518
Loss/(profit) on disposal of other intangibles		**53**	(455)
Impairment of other intangibles	11	**1,600**	-
Impairment of goodwill	11	**808**	-
Share of profits from associates and joint ventures	12	**(841)**	(3,815)
Profit on disposal of investment in associate	12	**(1,053)**	-
Fair value gain on revaluation of investment in associate	12	**(2,775)**	-
Impairment of investment in associate	12	**257**	-
Remeasurement of defined benefit pension scheme liabilities from GMP equalisation	13	**-**	751
Financial income	5	**(913)**	(7,238)
Financial expenses	5	**4,840**	902
Losses/(gains) from the fair value of financial instruments	25	**21,609**	(6,081)
Share-based payment expense	14	**173**	158
Tax expense	8	**2,920**	17,712
		94,176	42,496
Decrease/(increase) in inventories		**23,529**	(18,463)
Decrease in trade and other receivables		**17,639**	30,028
Decrease in trade and other payables		**(11,297)**	(7,183)
Increase/(decrease) in provisions	17	**2,745**	(607)
		32,616	3,775
Defined benefit pension contributions	13	**(11,814)**	(6,831)
Income taxes paid		**(10,607)**	(25,183)
Cash flows from operating activities		**104,659**	106,489
Investing activities			
Purchase of property, plant and equipment	10	**(38,657)**	(56,792)
Sale of property, plant and equipment		**3,633**	4,713
Development costs capitalised	11	**(17,405)**	(18,091)
Purchase of other intangibles		**(3,338)**	(4,161)
Sale of other intangibles		**-**	2,000
Decrease/(increase) in bank deposits	15	**42,500**	(52,500)
Interest received	5	**835**	1,145
Dividend received from associates and joint ventures	12	**512**	614
Proceeds from sale of shares in associate	12	**986**	-
Cash flows from investing activities		**(10,934)**	(123,072)
Financing activities			
Increase in borrowings	19	**1,894**	10,486
Repayment of borrowings	19	**(1,136)**	(87)
Interest paid	5	**(549)**	(57)
Repayment of lease liabilities	22	**(4,896)**	-
Dividends paid	21	**(33,478)**	(43,672)
Purchase of own shares	21	**-**	(404)
Cash flows from financing activities		**(38,165)**	(33,734)
Net increase in cash and cash equivalents		**55,560**	(50,317)
Cash and cash equivalents at beginning of the year		**54,326**	103,847
Effect of exchange rate fluctuations on cash held		**500**	796
Cash and cash equivalents at end of the year	15	**110,386**	54,326

*2019 cash and cash equivalents and bank deposits figures have been restated, see note 1.

NOTES (FORMING PART OF THE FINANCIAL STATEMENTS)

1. Accounting policies

Basis of preparation

Renishaw plc (the Company) is a company incorporated in England and Wales. 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 and joint ventures.

The financial information set out in the announcement does not constitute the Group's statutory accounts for the years ended 30 June 2020 or 30 June 2019. The financial information for the year ended 30 June 2019 is derived from the statutory accounts for that year, which have been delivered to the Registrar of Companies, but restated for the impact of a change in accounting policy. The auditor reported on those accounts; their report was unqualified, did not draw attention to any matters by way of emphasis without qualifying their report and did not contain a statement under s498 (2) or (3) Companies Act 2006. The audit of the statutory accounts for the year ended 30 June 2020 is not yet complete. These accounts will be finalised on the basis of the financial information presented by the Directors in this preliminary announcement and will be delivered to the Registrar of Companies following the Group's annual general meeting. The consolidated financial statements are presented in Sterling, which is the Company's functional currency and the Group's presentational currency, and all values are rounded to the nearest thousand (£'000).

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.

Critical accounting judgements and estimation uncertainties

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 areas of key estimation uncertainty and critical accounting judgement that have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities in the next financial year are summarised below, with further details included within accounting policies as indicated.

Item	Key judgements (J) and estimates (E)
Revenue recognition	J – Timing of satisfaction of performance obligations
Intangibles	E – Estimates of useful life of intangible assets
Research and development costs	J – Whether a project meets appropriate criteria for capitalisation
Goodwill and capitalised development costs	E – Estimates of future cash flows for impairment testing
Inventories	E – Determination of net realisable inventory value
Cash flow hedges	E – Estimates of highly probable forecasts of the hedged item
Defined benefit pension schemes	E – Valuation of defined benefit pension schemes' liabilities
Taxation	E – Estimates of future profits to utilise deferred tax assets

The impact of COVID-19 has been considered as part of the estimates and judgements above, and factored into sensitivity analyses included in the following notes. Global macroeconomic uncertainty preceding COVID-19, and furthered by COVID-19, has impacted the revenue, profit and cashflow forecasts which underpin most of the above estimates. The valuation of defined benefit pension schemes' liabilities are not affected by these forecasts, however COVID-19 has affected the key assumptions of discount rate and inflation rate. The timing of satisfaction of performance obligations has not been affected by COVID-19.

New, revised or changes to existing accounting standards

The following accounting standards have been applied for the first time, with effect from 1 July 2019, and have been adopted in the preparation of these financial statements

IFRS 16 'Leases'

IFRS 16 'Leases' replaces IAS 17 and related standards, and provides an accounting model under which substantially all leases are recognised on the balance sheet of the lessee. A 'right of use' asset is recognised, being the right to use the underlying asset of the lease, and a lease liability is also recognised on the balance sheet, being the obligation to make payments in respect of the use of the underlying asset.

The Group adopted IFRS 16 on 1 July 2019 using the modified retrospective transition approach (and has therefore not restated comparatives for the prior period) with the principal change being that leases previously classified as operating leases under IAS 17 were brought on to the balance sheet at 1 July 2019. The impact of IFRS 16 is disclosed later in this note.

In adopting IFRS 16 the Group took advantage of the following practical expedients permitted by the standard:

- The right of use assets were measured at an amount based on the lease liability at adoption, and initial direct costs incurred when obtaining leases were excluded from this measurement;

- Reliance was placed on previous assessments of whether leases are onerous (the assessment of which determined that the impact of onerous leases was trivial); and

- Operating leases with a remaining lease term of less than 12 months at 1 July 2019 were accounted for as 'short-term leases'.

As IFRS 16 no longer distinguishes between operating leases and finance leases, operating lease commitments disclosed at 30 June 2019 were replaced with a lease liability and recognised at 1 July 2019, as follows:

	£'000
Operating lease commitments as disclosed at 30 June 2019	16,390
Less: effect of discounting	(149)
Less: recognition differences and assumptions	(1,994)
Total lease liability recognised at 1 July 2019	14,247

Recognition differences include leases now classified as low value or short-term and re-evaluations of non-cancellable lease terms according to IFRS 16. The weighted average incremental borrowing rate applied to the Group's lease liabilities recognised in the consolidated balance sheet at 1 July 2019 was 2.4%.

The impact on the primary statements of adopting IFRS 16 at 1 July 2019 is summarised below:

Impact on the Consolidated balance sheet

	At 30 June 2020 £'000	At 1 July 2019 £'000
Right of use assets	12,672	14,550
Deferred tax assets	139	-
Non-current assets	**12,811**	14,550
Lease liabilities	4,241	4,799
Other payables	203	303
Current liabilities	**4,444**	5,102
Lease liabilities	8,925	9,448
Non-current liabilities	**8,925**	9,448
Total assets less total liabilities	**(558)**	-
Currency translation reserve	10	-
Retained earnings	(568)	-
Total equity	**(558)**	-

Right of use assets at 1 July 2019 consisted of £11,377,000 relating to property leases occupied for trading purposes, £3,013,000 relating to vehicle leases and a small amount relating to machinery leases.

Impact on the Consolidated income statement

The impact on the Consolidated income statement for the financial year ended 30 June 2020 is to increase operating profit by £62,000 and increase financial expenses by £766,000, therefore reducing profit before tax by £704,000. The aggregate of depreciation and interest expense will generally result in higher expenses in the earlier periods of leases than would have been the case under IAS 17.

Impact on the Consolidated cash flow statement

There is no change to net cash flow from the adoption of IFRS 16. Under IAS 17 operating lease payments were treated as operating cash outflows, however under IFRS 16 payments made at lease inception and subsequently (both principal and interest) are classified as financing outflows. The Group therefore shows both higher cash inflows from operating activities and higher cash outflows from financing activities under IFRS 16.

In addition to IFRS 16, the Group has adopted the following IFRS amendments, which have not had a material impact on amounts reported or disclosures in these financial statements:

– IFRS 17 'Insurance Contracts';

– IFRS 9 (amendments) – Prepayment Features with Negative Compensation;

– IAS 28 (amendments) – Long-term Interests in Associates and Joint Ventures;

– IAS 19 (amendments) – Plan Amendment, Curtailment or Settlement;

– IFRS 10 and IAS 28 (amendments) – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;

– Annual Improvements – Amendments to IFRS 3 Business Combinations, IFRS 11 Joint Arrangements, IAS 12 Income Taxes and IAS 23 Borrowing Costs; and

– IFRIC 23 'Uncertainty over Income Tax Treatments'.

Going concern

The Group's Principal risks and uncertainties are set out earlier in the announcement, and details of the financial and liquidity positions are given in the Group Finance Director's commentary. Note 20 sets out 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.

As explained in note 26 Restructuring costs, changes were made to the Group's strategy for Additive Manufacturing and resulted in impairments to capitalised development costs, goodwill and property and equipment relating to this part of the business. The Board do not consider that this will have a significant adverse effect on the Group's profitability or liquidity in the period covered by either the going concern assessment or the viability statement, and have taken account of these strategic changes when preparing the forecast models. This consideration is also applicable to the impact on the 12-month forecast period of the impairment in 2020 of other capitalised development costs.

As at 30 June 2020 the Group has a strong balance sheet, with net current assets of £286.4m, including net cash and bank deposits of £120.4m. Whilst the Group has secured eligibility to the Bank of England Covid Corporate Financing Facility (CCFF), no commercial papers have been issued and the Group does not anticipate making use of this facility. Access to the CCFF has not been taken into consideration in the downside scenarios discussed below.

Against the backdrop of the aforementioned strong financial position, as part of the directors' consideration of the appropriateness of adopting the going concern basis in preparing these financial statements, severe but plausible scenarios have been considered that estimate the potential impact of the principal risks on the financial forecasts over the assessment period, as well as the potential impact of the COVID-19 pandemic.

Third-party research and publications were reviewed, in which the most severe scenario considered that a 'second wave' of the pandemic would be experienced in the remainder of the calendar year 2020, before easing from the start of the calendar year 2021. The Board's most severe scenario therefore assumed that lockdown measures and other COVID-19 related restrictions would reoccur in calendar year 2020, resulting in reduced demand for that period, particularly in the aerospace and automotive markets. Principal risks most relevant to short-term revenue, being supply chain dependencies and exchange rate fluctuations were also assumed to crystallise in the first six months of the forecast period, reflecting the risks relating to Brexit and the impact on revenue of a 15% strengthening of sterling. Other principal risks of industry fluctuations and economic and political uncertainty are reflected in the assumption that trading in the second six months of the forecast period would be comparable to the first half of financial year 2020.

From this combination of assumptions, a revenue forecast of c£350m was determined for the 12 months to August 2021. In assessing liquidity for the going concern period the other key assumptions under this scenario were a deterioration in debtor days to 85 days (worse than was experienced by the Group in the 2009 global financial crisis), continued funding of the UK defined benefit pension scheme in line with the agreed recovery plan, no reduction in the Group's operating expenses beyond the cost-reduction initiatives that are already underway, and the impact on costs of a 15% strengthening in sterling against the major trading currencies of the Group. This scenario also assumes that the Group will conserve its cash by not paying dividends and by restricting capital expenditure to £10m per annum, a level which would support the Group's manufacturing facilities and IT infrastructure. No additional borrowings or financing are assumed in this severe scenario, and the cash flow forecast shows positive cash balances, net of working capital requirements, throughout the 12-month going concern period.

Reverse stress testing has also been applied to the model and was updated to reflect actual sales in July 2020. This stress testing demonstrated that the Group would retain a positive liquidity position until revenue decreased to c£169m for the 12 months to August 2021. The Board considers the possibility of this revenue forecast to be highly unlikely, and mitigating actions to further reduce operating costs would be put in place if actual trading in the period was consistent with this scenario.

As a result of the assessments undertaken, the Directors consider 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 a period of at least 12 months from August 2020. Accordingly, they continue to adopt the going concern basis in preparing these financial statements.

Basis of consolidation

Subsidiaries – Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to 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 noncontrolling 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.

Application of the equity method to associates and joint ventures – Associates and joint ventures 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 – Intragroup balances and transactions, and any unrealised income and expenses arising from intragroup 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.

Separately disclosed items

The directors consider that certain items should be separately disclosed to aid users' understanding of the Group's performance.

Gains and losses from the fair value of financial instruments are therefore separately disclosed in the Consolidated income statement, where these gains and losses relate to certain forward currency contracts that are not effective for hedge accounting. Restructuring costs are also separately disclosed where significant costs have been incurred in rationalising and reorganising our business as part of a Board-approved strategy and relate to matters that do not frequently recur.

These items are also excluded from Adjusted profit before tax, Adjusted operating profit and Adjusted earnings per share measures, as explained in Note 25 Alternative Performance Measures.

Alternative performance measures

The financial statements are prepared in accordance with adopted IFRS and applied in accordance with the provisions of the Companies Act 2006. In measuring our performance, the financial measures that we use include those which have been derived from our reported results in order to eliminate factors which distort year-on-year comparisons.

These are considered non-GAAP financial measures. We believe this information, along with comparable GAAP measurements, is useful to stakeholders in providing a basis for measuring our operational performance. The Board use these financial measures, along with the most directly comparable GAAP financial measures, in evaluating our performance (see note 25).

Revenue

The Group generates revenue from the sale of metrology and healthcare goods, capital equipment and services. These can be sold both on their own and together.

a) Sale of goods, capital equipment and services

The Group's contracts with customers consist both of contracts with one performance obligation and contracts with multiple performance obligations.

For contracts with one performance obligation, revenue is measured at the transaction price, which is typically the contract value except for customers entitled to volume rebates, and recognised at the point in time when control of the product transfers to the customer. This point in time is typically when the products are made available for collection by the customer, collected by the shipping agent, or delivered to the customer, depending upon the shipping terms applied to the specific contract.

Contracts with multiple performance obligations typically exist where, in addition to supplying product, we also supply services such as user training, servicing and maintenance, and installation services. Where the installation service is simple, does not include a significant integration service and could be performed by another party then the installation is accounted for as a separate performance obligation. Where the contracts include multiple performance obligations, the transaction price is allocated to each performance obligation based on the relative stand-alone selling prices, the assessment of which is documented in the Key judgement. The revenue allocated to each performance obligation is then recognised when, or as, that performance obligation is satisfied. For installation, this is typically at the point in time in which installation is complete. For training, this is typically the point in time at which training is delivered. For servicing and maintenance, the revenue is recognised evenly over the course of the servicing agreement except for ad-hoc servicing and maintenance which is recognised at the point in time in which the work is undertaken.

b) Sale of software

The Group provides software licences and software maintenance to customers, sold both on their own and together with associated products. Where the software licence and/or maintenance is provided as part of a contract that provides customers with software licences and other goods and services then the transaction price is allocated on the same basis as described in a) above.

The Group's software licences provide a right of use, and therefore revenue from software licences is recognised at the point in time in which the licence is supplied to the customer. Revenue from software maintenance is recognised evenly over the term of the maintenance agreement.

c) Programming contracts

Programming is typically a distinct performance obligation and revenue for this work is recognised at a point in time, being when the completed program is supplied to the customer.

d) Extended warranties

The Group provides standard warranties to customers that address potential latent defects that existed at point of sale and as required by law (assurance-type warranties). In some contracts, the Group also provides warranties that extend beyond the standard warranty period and may be sold to the customer (service-type warranties).

Assurance-type warranties continue to be accounted for by the Group under IAS 37 'Provisions, Contingent Liabilities and Contingent Assets'. Service-type warranties are accounted for as separate performance obligations and therefore a portion of the transaction price is allocated to this element, and then recognised evenly over the period in which the service is provided.

e) Contract balances

Contract assets represent the Group's right to consideration in exchange for goods and services that have been transferred to a customer, and mainly includes accrued revenue in respect of goods and services provided to a customer but not yet fully billed. Contract assets are distinct from receivables, which represent the Group's right to consideration that is unconditional.

Contract liabilities represent the Group's obligation to transfer goods or services to a customer for which the Group has either received consideration or consideration is due from the customer.

f) Disaggregation of revenue

The Group disaggregates revenue from contracts with customers between: goods, capital equipment and installation, and aftermarket services; reporting segment; and geographical location.

Management believe these categories best depict how the nature, amount, timing and uncertainty of the Group's revenue is affected by economic factors.

Key judgement - Timing of satisfaction of performance obligations

The majority of the Group's revenue is recognised at a point in time, and to determine that point an assessment is made as to when the customer obtains control of promised products or services. This assessment is made primarily by reference to the shipping terms applied to the specific contract for products that do not require customer acceptance.

Where the contract requires customer acceptance, management assess whether the Group can objectively determine that the criterion of the testing can be successfully met at the point of transferring the equipment to the customer. Where this can be objectively determined, customer acceptance testing is considered a formality and does not delay the recognition of revenue. Where this cannot be objectively determined control of the product is not deemed to have transferred to the customer and therefore the portion of the transaction price that relates to this performance obligation is not recognised until the acceptance criteria are met.

For revenue recognised over time, such as servicing contracts, the Group recognises the revenue on a basis that depicts the Group's performance in transferring control of the goods or services to the customer, having assessed the nature of the promised goods or service. The Group applies the relevant output or input method consistently to similar performance obligations in other contracts.

Foreign currencies

Consolidation – Overseas subsidiaries' results are translated into Sterling at weighted average exchange rates for the year, which is effected by translating each overseas 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 prevailing at that date. Differences on exchange resulting from the translation of overseas assets and liabilities are recognised in Other comprehensive income and are accumulated in equity.

Transactions and balances – Monetary assets and liabilities denominated in foreign currencies are reported at the rates prevailing at the time, with any gain or loss arising from subsequent exchange rate movements being included as an exchange gain or loss in the Consolidated income statement. Foreign currency differences arising from transactions are recognised in the Consolidated income statement.

Financial instruments and fair value measurements

The Group measures financial instruments such as forward exchange contracts at fair value at each balance sheet date in accordance with IFRS 9 'Financial instruments'. Fair value, as defined by IFRS 13 'Fair Value Measurement', is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Note 20, Financial instruments, provides detail on the IFRS 13 fair value hierarchy.

Trade and other current receivables are initially recognised at fair value and are subsequently held at amortised cost less any provision for bad and doubtful debts and expected credit losses according to IFRS 9. Long-term loans to associates and joint ventures are initially recognised at fair value and are subsequently held at amortised cost. Trade and other current payables are initially recognised at fair value and are subsequently held at amortised cost.

Financial liabilities in the form of loans are initially recognised at fair value and are subsequently held at amortised cost. Financial liabilities are assessed for embedded derivatives and whether any such derivatives are closely related. If not closely related, such derivatives are accounted for at fair value in the Consolidated income statement.

Foreign currency derivative cash flow hedges

Foreign currency derivatives are used to manage risks arising from changes in foreign currency rates relating to overseas sales and foreign currency denominated assets and liabilities. The Group does not enter into derivatives for speculative purposes. Foreign currency derivatives are stated at their fair value, being the estimated amount that the Group would pay or receive to terminate them at the balance sheet date, based on prevailing foreign currency rates.

Changes in the fair value of foreign currency derivatives which are designated and effective as hedges of future cash flows are recognised in Other comprehensive income and in the Cash flow hedging reserve, and subsequently transferred to the carrying amount of the hedged item or the Consolidated income statement. Realised gains or losses on cash flow hedges are therefore recognised in the Consolidated income statement within revenue in the same period as the hedged item.

Hedge accounting is discontinued when the hedging instrument expires or no longer qualifies for hedge accounting. At that time, any cumulative gain or loss on the hedging instrument previously recognised in equity is retained in equity until the hedged transaction occurs. If the hedged transaction is no longer expected to occur, the net cumulative gain or loss recognised in equity is then transferred to the Consolidated income statement.

Changes in fair value of foreign currency derivatives, which are ineffective or do not meet the criteria for hedge accounting in IFRS 9, are recognised in the Consolidated income statement within Gains/losses from the fair value of financial instruments.

In addition to derivatives held for cash flow hedging purposes, the Group uses short-term derivatives not designated as hedging instruments to offset gains and losses from exchange rate movements on foreign currency denominated assets and liabilities. Gains and losses from currency movements on underlying assets and liabilities, realised gains and losses on these derivatives and fair value gains and losses on outstanding

derivatives of this nature are all recognised in Financial income in the Consolidated income statement. See note 20 for further detail on financial instruments.

Key estimate – Estimates of highly probable forecasts of the hedged item

Derivatives are effective for hedge accounting to the extent that the hedged item is 'highly probable' to occur, with 'highly probable' indicating a much greater likelihood of occurrence than the term 'more likely than not'. Determining a highly probable sales forecast for Renishaw plc and Renishaw UK Sales Limited, being the hedged item, over a multiple year time period, requires judgement of the suitability of external and internal data sources and estimations of Renishaw's future sales. Relevant sensitivity analysis is included in note 20.

Cash and cash equivalents

During the FRC's review of our 2019 Annual Report we clarified that while we considered that certain bank deposits met the requirements of IAS 7 to be treated as cash equivalents, the expiry date of two of these short-term deposits exceeded 3 months. We have therefore amended our accounting policy to the following:

Cash and cash equivalents comprise cash balances, and deposits meeting the following criteria

– deposits with an original maturity of less than 3 months; and

– deposits with an original maturity date of more than 3 months where the deposit can be accessed on demand without significant penalty for early withdrawal and where the original deposit amount is recoverable in full

Bank overdrafts that are repayable on demand form part of cash and cash equivalents for the purposes of the Consolidated statement of cash flow.

This change in accounting policy has been applied retrospectively and therefore the comparatives in the Consolidated statement of cash flow has been amended to show a cash outflow of £52.5m in investing activities for the amounts placed on deposits exceeding 3 months and not accessible on demand, and the comparatives in the Consolidated balance sheet show £52.5m of Bank deposits separately from Cash and cash equivalents.

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.

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 in 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.

Key estimate – Estimates of useful life of intangible assets
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. Capitalised development costs are written off over five years, the period over which demand forecasts can be reasonably predicted.

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 anappropriate 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.

Key judgement – Whether a project meets appropriate criteria for capitalisation
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.

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 ten years.

Impairment of non-current assets

All non-current assets are tested for impairment whenever there is an indication that their carrying value may be impaired. An impairment loss is recognised in the Consolidated income statement to the extent that an asset's carrying value exceeds its recoverable amount, which represents the higher of the asset's net realisable value and its value in use. An asset's value in use represents the present value of the future cash flows expected to be derived from the asset or from the cash-generating unit to which it relates. The present value is calculated using a discount rate that reflects the current market assessment of the time value of money and the risks specific to the asset concerned.

Goodwill and capitalised development costs are subject to an annual impairment test.

Key estimate – Estimates of future cash flows used for impairment testing

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 11). Similarly, determining whether capitalised development costs are impaired requires an estimation of their value-in-use which involves significant judgement. Relevant sensitivity analysis is included in note 11.

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.

Inventory and work in progress

Inventory and work in progress is valued at the lower of actual cost on a first-in, first-out (FIFO) basis 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 that 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.

Key estimate – Determination of net realisable inventory value
Determining the net realisable value of inventory requires judgement, especially in respect of provisioning for slow moving and potentially obsolete inventory. Management use the higher of previous 12-month usage levels or demand from customer orders and manufacturing build plans as a basis for estimating the future annual demand of individual stock items. For most products and their components, provisions are typically made for quantities held in excess of three years' demand. A demand basis lower than three years is used for those products and related components where the sales history is more volatile. Where strategic purchases of critical components have been made, an outlook beyond three years is considered where appropriate.

Leases

As a lessee

At the lease commencement date the Group recognises a right of use asset for the leased item and a lease liability for any lease payments due.

Right of use assets are initially measured at cost, being the present value of the lease liability plus any initial costs incurred in entering the lease and less any lease incentives received. Right of use assets are subsequently depreciated on a straight-line basis from the commencement date to the earlier of i) the end of the useful life of the asset, or ii) the end of the lease term.

Lease liabilities are initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the incremental borrowing rate of the applicable entity. The lease liability is subsequently measured at amortised cost using the effective interest method and is remeasured if there is a change in future lease payments arising from a change in an index or rate (such as an inflation-linked increase), of if there is a change in the Group's assessment of whether it will exercise an extension or termination option. When this happens there is also a corresponding adjustment to the right-of-use asset.

Where the Group enters into leases with a lease term of 12 months or less, these are treated as 'short term' leases and are recognised on a straight-line basis as an expense in the Consolidated income statement. The same treatment applies to low-value assets, which are typically IT equipment and office equipment.

As a lessor

The Group acts as a lessor for Renishaw-manufactured plant and equipment and determines at inception whether the lease is a finance or an operating lease.

Where the Group transfers the risks and rewards of ownership of lease assets to a third party, the Group recognises a receivable in the amount of the net investment in the lease. The lease receivable is subsequently reduced by the principal received, while an interest component is recognised as financial income in the Consolidated income statement.

Where the Group retains the risks and rewards of ownership of lease assets, it continues to recognise the leased asset in Property, plant and equipment. Income from operating leases is recognised on a straight-line basis over the lease term and recognised as Revenue rather than Other revenue as such income is not material.

Employee benefits
The Group operates contributory pension schemes, largely for UK, Ireland and USA employees, which were of the defined benefit type up to 5 April 2007, 31 December 2007 and 30 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. Investment assets of the defined benefit schemes are measured at fair value using the bid price of the unitised investments, quoted by the investment manager, at the reporting date. 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 'The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction'. To the extent that contributions payable will not be available as a refund after they are paid into the plan, a liability is recognised at the point the obligation arises, which is the point at which the minimum funding guarantee is agreed. Overseas-based employees are covered by state, defined benefit and private pension schemes in their countries of residence.

Actuarial valuations of overseas pension schemes were not obtained, apart from Ireland and USA, because of the limited number of members. 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 and also for the annual performance bonus, if applicable.

Key estimate – Valuation of defined benefit pension schemes' liabilities
Determining the value of the future defined benefit obligation requires judgement in respect of the assumptions used to calculate liabilities and their present values. These include future mortality, discount rate and inflation. Management makes these judgements in consultation with independent actuaries. Details of the estimates and judgements in respect of the current year are given in note 13. Based on a review of the terms of the UK scheme trust deed, management has concluded that there are no likely circumstances which would result in the Company having an unconditional right to a refund in the event of a fund surplus. Relevant sensitivity analysis is included in note 13.

Share-based payments

The Group provides share-based payment arrangements to certain employees in accordance with the Renishaw plc deferred annual equity incentive plan (the Plan) (see the Governance section for further detail). The share awards are subject only to continuing service of the employee and are equity settled. The fair value of the awards at the date of grant, which is estimated to be equal to the market value, is charged to the Consolidated income statement on a straight-line basis over a three-year vesting period, with appropriate adjustments made to reflect expected or actual forfeitures. The corresponding credit is to Other reserve. The Renishaw Employee Benefit Trust (EBT) is responsible for purchasing shares on the open market on behalf of the Company to satisfy the Plan awards. Own shares held are recognised as an element in equity until they are transferred at the end of the vesting period, and such shares are excluded from earnings per share calculations.

Warranty provisions

The Group provides a warranty from the date of purchase, except for those products that are installed by the Group 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 Group financial statements, which is calculated on the basis of historical returns and internal quality reports.

Government grants

Government grants are recognised in the Consolidated income statement as a deduction against expenditure. Where grants are received in advance of the related expenses, they are initially recognised in the Consolidated balance sheet and released to match the related expenditure. Where grants are expected to be received after the related expenditure has occurred, and there is reasonable assurance that the entity will comply with the grant conditions, amounts are recognised to offset the expenditure and an asset recognised. Accordingly, amounts relating to the UK Coronavirus Job Retention Scheme are recognised as grants.

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 Other comprehensive income, 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.

Key estimate – Estimates of future profits to support the recognition of deferred tax assets
Deferred tax assets are recognised to the extent it is probable that future taxable profits (including the future release of deferred tax liabilities) will be available, against which the deductible temporary differences can be utilised, based on management's assumptions relating to the amounts and timing of future taxable profits. Estimates of future profitability on an entity basis are required to ascertain whether it is probable that sufficient taxable profits will arise to support the recognition of deferred tax assets relating to the corresponding entity. Relevant sensitivity analysis is included in note 9.

2. SEGMENTAL ANALYSIS

The Group manages its business in two segments, comprising metrology and healthcare products. The results of these are regularly reviewed by the Board to allocate resources to segments and to assess their performance. Within the operating segment of metrology, there are multiple product offerings with similar economic characteristics, and where the nature of the products and production processes and their customer bases are similar.

Year ended 30 June 2020	**Metrology £'000**	**Healthcare £'000**	**Total £'000**
Revenue	**475,203**	**35,012**	**510,215**
Depreciation, amortisation and impairment	**67,327**	**2,557**	**69,884**
Operating profit before losses from fair value of financial instruments	**31,188**	**1,737**	**32,925**
Share of profits from associates and joint ventures	**841**	**-**	**841**
Net financial expense	**-**	**-**	**(3,927)**
Losses from the fair value of financial instruments	**-**	**-**	**(26,631)**
Profit before tax	**-**	**-**	**3,208**

Year ended 30 June 2019	Metrology £'000	Healthcare £'000	Total £'000
Revenue	532,940	41,019	573,959
Depreciation and amortisation	37,714	2,700	40,414
Operating profit before gains from fair value of financial instruments	95,345	3,367	98,712
Share of profits from associates and joint ventures	3,815	-	3,815
Net financial gain	-	-	6,336
Gains from the fair value of financial instruments	-	-	1,081
Profit before tax	-	-	109,944

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 following table shows the disaggregation of group revenue by category:

	2020 £'000	2019 £'000
Goods, capital equipment and installation	**457,024**	519,782
Aftermarket services	**53,191**	54,177
Total Group revenue	**510,215**	573,959

Aftermarket services include repairs, maintenance and servicing, programming, training, extended warranties, and software licences and maintenance.

The analysis of revenue by geographical market was:

	2020 £'000	2019 £'000
APAC	**227,650**	240,115
EMEA	**167,253**	201,255
Americas	**115,312**	132,589
Total Group revenue	**510,215**	573,959

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:

	2020 £'000	2019 £'000
China	**102,840**	111,002
USA	**101,153**	113,235
Japan	**57,833**	63,650
Germany	**49,397**	60,916

There was no revenue from transactions with a single external customer which amounted to more than 10% of the Group's total revenue.

The following table shows the analysis of non-current assets, excluding deferred tax and derivatives, by geographical region:

	2020 £'000	2019 £'000
UK	**186,249**	196,214
Overseas	**159,258**	140,164
Total non-current assets	**345,507**	336,378

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:

	2020 £'000	2019 £'000
Wages and salaries	**183,165**	193,035
Compulsory social security contributions	**21,373**	21,485
Contributions to defined contribution pension schemes	**21,103**	22,701
Government grants - employment support	**(4,532)**	-
Share-based payment charge	**173**	158
Total payroll costs	**221,282**	237,379

Amounts recognised as 'Government grants - employment support' mostly relates to the UK Coronavirus Job Retention Scheme. 2020 total payroll costs do not include redundancy costs relating to restructuring, see note 26.

The average number of persons employed by the Group during the year was:

	2020 Number	2019 Number
UK	**3,001**	3,126
Overseas	**1,796**	1,842
Average number of employees	**4,797**	4,968

Key management personnel have been assessed to be the Directors of the Company. The total remuneration of the Directors was:

	2020 £'000	2019 £'000
Short-term employee benefits	**1,980**	2,810
Post-employment benefits	**136**	205
Share-based payment charge	**173**	158
Total remuneration of the directors	**2,289**	3,173

Full details of Directors' remuneration are given in the Directors' remuneration report.

4. COST OF SALES

Included in cost of sales are the following amounts:

	2020 £'000	2019 £'000
Production costs	**184,326**	200,050
Research and development expenditure	**66,614**	75,049
Other engineering expenditure	**15,755**	22,817
Gross engineering expenditure	**82,369**	97,866
Research and development expenditure capitalised (net of amortisation)	**(544)**	(2,947)
Research and development expenditure impaired (see note 11)	**9,881**	-
Research and development tax credit	**(4,399)**	(5,137)
Total engineering costs	**87,307**	89,782
Total cost of sales	**271,633**	289,832

Research and development expenditure includes the payroll costs, material costs and allocated overheads attributed to projects identified as being related to new products or processes. Other engineering expenditure includes the payroll costs, material costs and allocated overheads attributed to projects identified as being related to existing products or processes.

Research and development expenditure impaired excludes amounts relating to Restructuring costs, per note 26.

5. FINANCIAL INCOME AND EXPENSES

Financial income	2020 £'000	2019 £'000
Currency gains	**-**	5,940
Fair value gains from 1 month forward currency contracts (note 20)	**-**	76
Interest receivable	**913**	1,222
Total financial income	**913**	7,238
Financial expenses		
Net interest on pension schemes' liabilities (note 13)	**861**	845
Currency losses	**2,433**	-
Fair value losses from 1 month forward currency contracts (note 20)	**154**	-
Lease interest	**765**	-
Interest payable	**627**	57
Total financial expenses	**4,840**	902

Currency gains and losses relate to revaluations of foreign currency denominated balances using latest reporting currency exchange rates. The gains recognised in 2019 largely relate to a depreciation of Sterling relative to the US dollar affecting US dollar-denominated intragroup balances in the Company.

Certain intragroup balances were reclassified as 'net investments in foreign operations' during 2019, such that revaluations from currency movements on designated balances after this date accumulate in the Currency translation reserve in Equity. Additionally, from 1 January 2019, a policy of entering into rolling one month forward currency contracts began, with fair value gains and losses being recognised in financial income or expenses, to offset currency movements on remaining intragroup balances. See note 20 for further details.

6. PROFIT BEFORE TAX

Included in the profit before tax are the following costs/(income):

	Notes	2020 £'000	2019 £'000
Depreciation and impairment of property, plant and equipment and right of use assets	(a)	**33,168**	23,752
Amortisation and impairment of intangible assets	(a)	**36,716**	16,662
Loss on sale of property, plant and equipment	(b)	**22**	148
Profit on sale of other intangibles	(b)	**-**	(455)
Auditor:			
Audit of these financial statements	(b)	**293**	226
Audit of subsidiary undertakings pursuant to legislation	(b)	**398**	329
Other assurance	(b)	**12**	4
All other non-audit fees	(b)	**3**	1

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 and (b) within administrative expenses.

7. EARNINGS PER SHARE

Basic and diluted earnings per share are calculated on earnings of £288,000 (2019: £92,232,000) and on 72,778,904 shares (2019: 72,778,904 shares), being the number of shares in issue. The number of shares excludes 9,639 shares held by the EBT, which were purchased on 10 December 2018.

There is no difference between the weighted average earnings per share and the basic and diluted earnings per share.

For the calculation of adjusted earnings per share, per note 25, earnings of £288,000 (2019: £92,232,000) are adjusted by post-ax amounts for Fair value (gains)/losses on financial instruments not eligible for hedge accounting (reported in revenue), Fair value (gains)/losses on financial instruments not eligible for hedge accounting (reported in Gains/(losses) from the fair value of financial instruments) and restructuring costs, amounting to £592,000 gain, £18,095,000 loss and £19,276,000 loss respectively.

8. INCOME TAX EXPENSE

	2020 £'000	2019 £'000
Current tax:		
UK corporation tax on profits for the year	**-**	4,691
UK corporation tax – prior year adjustments	**333**	(622)
Overseas tax on profits for the year	**9,236**	11,980
Overseas tax – prior year adjustments	**(89)**	-
Total current tax	**9,480**	16,049
Deferred tax:		
Origination and reversal of temporary differences	**(9,349)**	2,719
Prior year adjustments	**(185)**	(882)
Derecognition of previously recognised tax losses and excess interest	**2,953**	-
Recognition of previously unrecognised tax losses	**(1,127)**	(55)
Effect on deferred tax for changes in tax rates	**1,148**	(119)
	(6,560)	1,663
Tax charge on profit	**2,920**	17,712

The tax for the year is higher (2019: lower) than the UK standard rate of corporation tax of 19% (2019: 19%).

The differences are explained as follows:

	2020 £'000	2019 £'000
Profit before tax	**3,208**	109,944
Tax at 19% (2019: 19%)	**610**	20,889
Effects of:		
Different tax rates applicable in overseas subsidiaries	**(312)**	(124)
UK patent box	**-**	(1,787)
Expenses not deductible for tax purposes	**576**	583
Companies with unrelieved tax losses	**189**	231
Share of profits of associates and joint ventures	**(85)**	(631)
Items with no tax effect	**(596)**	(203)
Prior year adjustments	**58**	(1,504)
Effect on deferred tax for change in tax rates	**1,148**	(119)
Recognition of previously unrecognised tax losses	**(1,127)**	(55)
Derecognition of previously recognised tax losses and excess interest	**2,953**	-
Utilisation of unrecognised losses	**(399)**	-
Other differences	**(95)**	432
Tax charge on profit	**2,920**	17,712
Effective tax rate	**91.0%**	16.1%

The Group's future effective tax rate (ETR) will mainly depend on the geographic mix of profits and whether there are any changes to tax legislation in the Group's most significant countries of operations. Whilst the UK patent box benefit normally has a significant impact on the ETR, UK losses in 2020 have resulted in nil patent box benefit for 2020 (2019: £1,787,000 credit). In the Spring Budget 2020, the Government announced that from 1 April 2020 the UK corporation tax rate would remain at 19%, rather than reducing to 17% as previously enacted. This has resulted in a deferred tax charge of £1,059,000. A partial derecognition of the deferred tax asset totalling £2,953,000 relating to US tax losses, further contributed to the year-on-year increase in the ETR.

The deferred tax asset derecognition has arisen from uncertainty over the recoverability of a portion of previously recognised losses against future taxable profits in our US business, as a consequence of recent macroeconomic uncertainty and AM restructuring (see note 26).

9. DEFERRED TAX

Deferred tax assets and liabilities are offset where there is a legally enforceable right of offset and there is an intention to net settle the balances. After taking these offsets into account, the net position of £39,142,000 asset (2019: £29,316,000 asset) is presented as a £39,641,000 deferred tax asset (2019: £29,855,000 asset) and a £499,000 deferred tax liability (2019: £539,000 liability) in the Group's consolidated balance sheet.

Where deferred tax assets are recognised, the Directors are of the opinion, based on recent and forecast trading, that the level of profits in current and future years make it more likely than not that these assets will be recovered.

Balances at the end of the year were:

	2020			2019		
	Assets £'000	**Liabilities £'000**	**Net £'000**	Assets £'000	Liabilities £'000	Net £'000
Property, plant and equipment	**306**	**(14,234)**	**(13,928)**	184	(13,265)	(13,081)
Intangible assets	**-**	**(1,264)**	**(1,264)**	-	(2,494)	(2,494)
Intragroup trading (inventories)	**14,249**	**(289)**	**13,960**	16,686	-	16,686
Intragroup trading (fixed assets)	**2,071**	**-**	**2,071**	2,309	-	2,309
Defined benefit pension schemes	**11,951**	**(55)**	**11,896**	8,526	-	8,526
Derivatives	**6,344**	**-**	**6,344**	8,816	-	8,816
Tax losses	**14,077**	**-**	**14,077**	3,255	-	3,255
Other	**6,023**	**(37)**	**5,986**	5,927	(628)	5,299
Balance at the end of the year	**55,021**	**(15,879)**	**39,142**	45,703	(16,387)	29,316

Other deferred tax assets include timing differences relating to inventory provisions totalling £1,876,000, other provisions of £1,628,000, employee benefits relating to Renishaw KK of £731,000, and uniform capitalisation relating to Renishaw Inc of £729,000, with the balance relating to a number of other temporary differences.

The movements in the deferred tax balance during the year were:

	2020 £'000	2019 £'000
Balance at the beginning of the year	**29,316**	27,240
IFRS 15 transition adjustment	**-**	372
Reallocation from current tax	**163**	340
Movements in the Consolidated income statement	**6,560**	(1,663)
Movement in relation to the cash flow hedging reserve	**(1,978)**	4,561
Movement in relation to the currency translation reserve	**(403)**	-
Movement in relation to the defined benefit pension schemes	**5,484**	(1,534)
Total movement in the Consolidated statement of comprehensive income and expense	**3,103**	3,027
Balance at the end of the year	**39,142**	29,316

The deferred tax movement in the Consolidated income statement is analysed as:

	2020 £'000	2019 £'000
Property, plant and equipment	**(847)**	(4,369)
Intangible assets	**1,230**	945
Intragroup trading (inventories)	**(2,725)**	(708)
Intragroup trading (fixed assets)	**(238)**	(13)
Defined benefit pension schemes	**(2,114)**	(1,036)
Derivatives	**(494)**	(1,155)
Tax losses	**10,822**	1,400
Other	**926**	3,273
Total movement for the year	**6,560**	(1,663)

A deferred tax asset of £11,225,000 is recognised in respect of losses made in the Company in 2020. It is considered likely that the business will generate sufficient future taxable profits to recognise the deferred tax asset in full, as losses made in 2020 include a number of costs, such as restructuring costs per note 26, which are unlikely to reoccur in future years. Further deferred tax net assets in respect of losses of £2,852,000 have been recognised across other group companies where it is considered likely that the business will generate sufficient future taxable profits.

Deferred tax assets have not been recognised in respect of tax losses carried forward of £20,930,000 (2019: £21,028,000), due to uncertainty over their offset against future taxable profits and therefore their recoverability, of which 98% is accounted for by group companies in the US, Brazil, Canada, Switzerland and Australia. US and Canada losses, accounting for 65%, can be carried forward for minimum of 20 years, Switzerland (17%), for 7 years (with the existing losses expiring by 2023), while there are no time limitations on the remainder.

In determining profit forecasts for each group company, revenue forecasts have been estimated using consistently applied external and internal data sources, which is the key variable in the profit forecasts, while cost forecasts reflect cost reduction measures and AM restructuring undertaken during the year (see note 26). A reduction of 5% to relevant revenue forecasts, would result in an impairment to deferred tax assets recognised in respect of losses of less than £2,000,000, while an increase of 5% would result in additions to deferred tax assets in respect of tax losses not recognised of less than £1,100,000.

10. PROPERTY, PLANT AND EQUIPMENT

Year ended 30 June 2020	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
Cost					
At 1 July 2019	197,474	245,027	9,555	8,758	460,814
Additions	11,808	7,818	309	18,722	38,657
Transfers	15,948	5,169	-	(21,117)	-
Disposals	(297)	(10,061)	(1,305)	-	(11,663)
Currency adjustment	623	33	(33)	-	623
At 30 June 2020	225,556	247,986	8,526	6,363	488,431
Depreciation					
At 1 July 2019	31,893	158,567	6,877	-	197,337
Charge for the year	3,985	20,796	1,061	-	25,842
Impairment	-	2,590	-	-	2,590
Disposals	(386)	(6,389)	(1,235)	-	(8,010)
Currency adjustment	350	300	(27)	-	623
At 30 June 2020	35,842	175,864	6,676	-	218,382
Net book value					
At 30 June 2020	**189,714**	**72,122**	**1,850**	**6,363**	**270,049**
At 30 June 2019	165,581	86,460	2,678	8,758	263,477

At 30 June 2020, properties with a net book value of £83,200,000 (2019: £75,200,000) were subject to a fixed charge to secure the UK defined benefit pension scheme liabilities.

Additions to assets in the course of construction of £18,722,000 (2019: £8,690,000) comprise £12,836,000 (2019: £5,806,000) for freehold land and buildings and £5,886,000 (2019: £2,884,000) for plant and equipment.

Impairments in the year relate to restructuring costs described in note 26.

Year ended 30 June 2019	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
Cost					
At 1 July 2018	174,156	218,018	9,736	6,800	408,710
Additions	19,603	27,596	903	8,690	56,792
Transfers	2,846	3,886	-	(6,732)	-
Disposals	(1,520)	(6,016)	(1,241)	-	(8,777)
Currency adjustment	2,389	1,543	157	-	4,089
At 30 June 2019	197,474	245,027	9,555	8,758	460,814
Depreciation					
At 1 July 2018	30,776	138,576	6,801	-	176,153
Charge for the year	741	20,701	1,155	-	22,597
Impairment	-	1,155	-	-	1,155
Disposals	(106)	(2,628)	(1,182)	-	(3,916)
Currency adjustment	482	763	103	-	1,348
At 30 June 2019	31,893	158,567	6,877	-	197,337
Net book value					
At 30 June 2019	165,581	86,460	2,678	8,758	263,477
At 30 June 2018	143,380	79,442	2,935	6,800	232,557

11. INTANGIBLE ASSETS

Year ended 30 June 2020	Goodwill on consolidation £'000	Other intangible assets £'000	Internally generated development costs £'000	Software licences and Intellectual property £'000	Total £'000
Cost					
At 1 July 2019	20,227	13,823	150,042	20,827	204,919
Additions	-	1,986	17,405	1,352	20,743
Disposals	-	-	-	(140)	(140)
Currency adjustment	291	20	-	24	335
At 30 June 2020	**20,518**	**15,829**	**167,447**	**22,063**	**225,857**
Amortisation					
At 1 July 2019	8,220	11,260	108,954	17,429	145,863
Charge for the year	-	267	16,861	1,299	18,427
Impairment	808	1,600	15,881	-	18,289
Disposals	-	-	-	(87)	(87)
Currency adjustment	-	(22)	-	23	1
At 30 June 2020	**9,028**	**13,105**	**141,696**	**18,664**	**182,493**
Net book value					
At 30 June 2020	**11,490**	**2,724**	**25,751**	**3,399**	**43,364**
At 30 June 2019	12,007	2,563	41,088	3,398	59,056

Year ended 30 June 2019	Goodwill on consolidation £'000	Other intangible assets £'000	Internally generated development costs £'000	Software licences and intellectual property £'000	Total £'000
Cost					
At 1 July 2018	19,763	11,795	131,951	24,658	188,167
Additions	-	2,014	18,091	2,147	22,252
Disposals	-	-	-	(6,000)	(6,000)
Currency adjustment	464	14	-	22	500
At 30 June 2019	**20,227**	**13,823**	**150,042**	**20,827**	**204,919**
Amortisation					
At 1 July 2018	8,220	11,256	93,810	20,370	133,656
Charge for the year	-	18	15,144	1,500	16,662
Disposals	-	-	-	(4,455)	(4,455)
Currency adjustment	-	(14)	-	14	-
At 30 June 2019	**8,220**	**11,260**	**108,954**	**17,429**	**145,863**
Net book value					
At 30 June 2019	12,007	2,563	41,088	3,398	59,056
At 30 June 2018	11,543	539	38,141	4,288	54,511

Goodwill

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 cash generating units (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 following table, only the goodwill relating to the acquisition of Renishaw Fixturing Solutions, LLC is expected to be subject to tax relief.

The analysis of acquired goodwill on consolidation is:

	2020 £'000	2019 £'000
itp GmbH	**3,148**	3,092
Renishaw Mayfield S.A.	**2,039**	1,930
Renishaw Fixturing Solutions, LLC	**5,585**	5,453
Other smaller acquisitions	**718**	1,532
Total acquired goodwill	**11,490**	12,007

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 the next five financial years, or estimated growth rates over the five years, which are set out below. The cash flows beyond this forecast are extrapolated into perpetuity using a nil growth rate on a prudent basis, to reflect the uncertainties over forecasting beyond five years.

The following pre-tax discount rates have been used in discounting the projected cash flows:

	2020 Discount rate	2019 Discount rate
itp GmbH	**8%**	12%
Renishaw Fixturing Solutions, LLC	**8%**	12%
Renishaw Mayfield S.A.	**15%**	15%

Discount rates for metrology CGUs (itp GmbH and Renishaw Fixturing Solutions, LLC) are based on a Group weighted average cost of capital. The healthcare CGU (Renishaw Mayfield S.A.) has a higher risk weighting, reflecting the less mature nature of this segment.

An increase of 5% in the discount rate would not result in an impairment on any of the CGUs. Management believes the likelihood of any increase in discount rates above 5% to be remote.

The following bases have been used in determining cash flow projections:

Forecast cash flows and future growth rates	**2020 Basis of forecast**	2019 Basis of forecast
itp GmbH	**5 % growth rate**	5 % growth rate
Renishaw Fixturing Solutions, LLC	**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, given that the cost bases of the businesses can be flexed in line with revenue performance. 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 to these forecast cash flows of 53% for itp GmbH, 70% for Renishaw Fixturing Solutions, LLC and 67% for Renishaw Mayfield S.A. Management deems the likelihood of these reductions to be remote.

Internally generated development costs

The key assumption in determining the value-in-use for internally generated development costs is the forecast unit sales over five years, which is determined by management using their knowledge and experience with similar products and the sales history of products already available in the market. Resulting cash flow projections over five years, the period over which product demand forecasts can be reasonably predicted and internally generated development costs are written off, are discounted based on a Group weighted average cost of capital, being 8%.

Impairments of internally generated development costs in the year totalled £15,881,000 (2019: nil), of which £9,881,000 was recognised in Cost of sales and £5,999,000 was recognised in Restructuring costs (see note 26) in the Consolidated income statement. Amounts recognised in Cost of sales primarily relate to metrology products of a capital nature, where the high-volume growth previously anticipated is now less predictable as a result of global macroeconomic uncertainty.

For the largest projects, comprising over 75% of the net book value at 30 June 2020, a 10% reduction to forecast unit sales, or an increase in the discount rate by 5%, would result in a further impairment of less than £1,000,000.

12. INVESTMENT IN ASSOCIATES AND JOINT VENTURES

The Group's investments in associates and joint ventures (all investments being in the ordinary share capital of the associate and joint ventures), whose accounting years end on 30 June, except where noted otherwise, were:

	Country of incorporation and principal place of business	**Ownership 2020 %**	Ownership 2019 %
RLS Merilna tehnika d.o.o. (joint venture)	Slovenia	**50.0**	50.0
Metrology Software Products Limited (joint venture)	England & Wales	**50.0**	50.0
HiETA Technologies Limited (31 December) (associate)	England & Wales	**33.3**	24.9

Movements during the year were:

	2020 £'000	2019 £'000
Balance at the beginning of the year	**13,095**	9,822
Additions	**4,299**	-
Dividends received	**(512)**	(614)
Share of profits of associates and joint ventures	**841**	3,815
Impairment	**(1,306)**	-
Exchange differences	**187**	72
Balance at the end of the year	**16,604**	13,095

On 6 January 2020 a third party acquired shares in Renishaw's associate company, HiETA Technologies Limited (HiETA). As part of the transaction, Renishaw plc converted a loan to share capital in HiETA, disposed of a proportion of its shareholding, and the remaining shareholding was diluted following a share issue to the third party. This resulted in an addition to Renishaw's investments in associates and joint ventures of £4,299,000, which represents the converted loan of £1,524,000 and the fair value gain of £2,775,000 on the loan option, with the latter being recognised in the Consolidated income statement. Following the transaction, Renishaw plc has a 33.33% shareholding in HiETA.

A revision to HiETA's five year business plan at 30 June 2020 in light of macroeconomic uncertainty resulted in a subsequent impairment to Renishaw's investment of £1,306,000 and an impairment in the long-term loan of £1,297,000. The residual carrying value of this long-term loan at 30 June 2020 is £2,500,000, which is expected to be repaid by December 2022.

Other Long-term loans to associates and joint ventures amounts of £318,000 relate to RLS Merilna tehnika d.o.o.

Long-term loans to associates and joint ventures are tested for impairment using discounted cash flow projections at each reporting period, according to five-year business plans approved by management, or where there are indicator of impairments.

In respect of HiETA, a 30% reduction in forecast cashflows would result in additional impairments to the investment and loan carrying values of £1,961,000 and £587,000 respectively, while an increase of 3% to the discount factor would result in additional impairments to the investment and loan carrying values of £552,000 and £333,000 respectively.

Summarised aggregated financial information for associates and joint ventures:

	Joint ventures		Associate	
	2020 £'000	2019 £'000	**2020 £'000**	2019 £'000
Assets	**32,861**	30,570	**5,171**	3,083
Liabilities	**(5,053)**	(5,180)	**(7,494)**	(8,669)
Net assets/(liabilities)	**27,808**	25,390	**(2,323)**	(5,586)
Group's share of net assets/(liabilities)	**13,904**	12,695	**(767)**	(1,391)
Revenue	**23,899**	26,886	**1,926**	1,032
Profit/(loss) for the year	**3,068**	7,630	**(3,685)**	(1,980)
Group's share of profit/(loss) for the year	**1,534**	3,815	**(1,088)**	(493)

The aggregate of the group's share or profit/(loss) for the year does not total to amounts recognised as share of profits of associates and joint ventures in the Consolidated income statement and the table above, with losses of £395,000 recognised in administrative expenses as an impairment against loan amounts until the carrying value of Renishaw's investment in HiETA was in a positive position.

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 members. The major scheme, which covers qualifying UK-based employees, is of the defined benefit type. This scheme, along with the Ireland and USA defined benefit pension 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 £21,103,000 (2019: £22,701,000), of which £136,000 (2019: £205,000) related to Directors and £5,253,000 (2019: £6,440,000) related to overseas schemes.

The latest full actuarial valuation of the UK defined benefit pension scheme was carried out as at 30 September 2018 and updated to 30 June 2020 by a qualified independent actuary. The mortality assumption used for 2020 is S2PMA and S2PFA tables, CMI (core) 2019 model with long-term improvements of 1% per annum.

Major assumptions used by the actuary for the UK and Ireland schemes were:

	30 June 2020			30 June 2019		
	UK scheme	**Ireland scheme**	**US scheme**	UK scheme	Ireland scheme	US scheme
Rate of increase in pension payments	**2.8%**	**1.3%**	**-**	3.3%	1.5%	-
Lump sum - assumed settlement rate	**-**	**-**	**0.8%**	-	-	1.3%
Discount rate	**1.5%**	**1.1%**	**2.8%**	2.3%	1.2%	3.3%
Inflation rate (RPI)	**2.8%**	**1.3%**	**-**	3.4%	1.5%	-
Inflation rate (CPI)	**2.2%**	**-**	**-**	2.4%	-	-
Retirement age	**64**	**65**	**65**	64	65	65

The life expectancies implied by the mortality assumption at age 65 are:

	2020 years	2019 years
Male currently aged 65	**21.4**	21.3
Female currently aged 65	**23.4**	23.2
Male currently aged 45	**22.4**	22.3
Female currently aged 45	**24.6**	24.4

The weighted average duration of the defined benefit obligation is around 24 years.

The assets and liabilities in the defined benefit schemes at the end of the year were:

	30 June 2020 £'000	**% of total assets**	30 June 2019 £'000	% of total assets
Market value of assets:				
Equities	**110,027**	**58**	111,209	61
Multi-asset funds	**54,822**	**29**	64,708	36
Bonds	**17,756**	**10**	3,135	2
Cash and other	**6,014**	**3**	2,536	1
	188,619	**100**	181,588	100
Actuarial value of liabilities	**(253,514)**	**-**	(233,458)	-
Deficit in the schemes	**(64,895)**	**-**	(51,870)	-
Deferred tax thereon	**11,896**	**-**	8,526	-

Equities are held in externally-managed funds and primarily relate to UK and US equities. Bonds relate to UK, US and Eurozone government-linked securities, again held in externally-managed funds. The fair values of these equity and fixed income instruments are determined using the bid price of the unitised investments, quoted by the investment manager, at the reporting date and therefore represent 'Level 2' of the fair value hierarchy defined in note 20.

Multi-asset funds are also held in externally-managed funds, with active asset allocation to diversify growth across asset classes such as equities, bonds and money-market instruments. The fair value of these funds is determined on a comparable basis to the equity and fixed income funds, and therefore are also 'Level 2' assets.

'Cash and other' investment assets were higher at the year-end than in 2019 primarily due to the partial reallocation of investment assets in the US, with a portion of funds being temporarily transferred from previous holdings in to highly liquid assets at the year-end, before being invested primarily in equities in the next financial year.

No scheme assets are directly invested in the Group's own equity.

The UK scheme is closed for future accrual and is expected to mature over the coming years, and therefore while the focus of the investment strategy remains on growth the trustees intend to start gradually de-risking the investments where appropriate.

The overall target investment strategy for the period to 30 June 2020 was therefore to still hold 64% of investment assets in equities, 35% in diversified growth funds and 1% in index-linked gilts, excluding the investment of the £8.7m annual deficit contributions agreed as part of the 2019 funding arrangement. These contributions for the year ended 30 June 2020 were invested in a fund classified as 'Fixed income' as a short-term approach, and are expected to be invested in an externally-managed high lease-to-value property fund in the future.

The movements in the schemes' assets and liabilities were:

Year ended 30 June 2020	**Assets £'000**	**Liabilities £'000**	**Total £'000**
Balance at the beginning of the year	**181,588**	**(233,458)**	**(51,870)**
Contributions paid	**11,814**	**-**	**11,814**
Interest on pension schemes	**4,371**	**(5,232)**	**(861)**
Remeasurement loss under IAS 19	**(2,237)**	**(21,741)**	**(23,978)**
Benefits paid	**(6,917)**	**6,917**	**-**
Balance at the end of the year	**188,619**	**(253,514)**	**(64,895)**

Year ended 30 June 2019	Assets £'000	Liabilities £'000	Total £'000
Balance at the beginning of the year	172,842	(240,220)	(67,378)
Contributions paid	6,831	-	6,831
Interest on pension schemes	4,902	(5,747)	(845)
Remeasurement loss from GMP equalisation	-	(751)	(751)
Remeasurement gain under IAS 19 and IFRIC 14	4,219	6,054	10,273
Benefits paid	(7,206)	7,206	-
Balance at the end of the year	181,588	(233,458)	(51,870)

The analysis of the amount recognised in the Consolidated statement of comprehensive income and expense was:

	2020 £'000	2019 £'000
Actuarial gain/(loss) arising from:		
- Changes in demographic assumptions	**(682)**	2,937
- Changes in financial assumptions	**(22,402)**	(22,941)
- Experience adjustment	**1,648**	(4,677)
Return on plan assets excluding interest income	**(2,542)**	3,454
Adjustment to liabilities for IFRIC 14	**-**	31,500
Total amount recognised in the Consolidated statement of comprehensive income and expense	**(23,978)**	10,273

The cumulative amount of actuarial gains and losses recognised in the Consolidated statement of comprehensive income and expense was a loss of £124,782,000 (2019: loss of £100,804,000).

The total deficit of the Group's defined benefit pension schemes, on an IAS 19 basis, has increased from £51,870,000 at 30 June 2019 to £64,895,000 at 30 June 2020, primarily reflecting the net impact of decreases in the discount rate, RPI and CPI for the UK defined benefit scheme since 30 June 2019. The latest actuarial report prepared in September 2018 shows a deficit of £70,700,000, which is based on funding to self sufficiency and uses prudent assumptions. IAS 19 requires best estimate assumptions to be used, resulting in the IAS 19 deficit being lower than the actuarial deficit.

For the UK defined benefit scheme, a guide to the sensitivity of the value of the respective liabilities is as follows:

	Variation	Approximate effect on liabilities
UK – discount rate	Increase/decrease by 0.5%	-£24.0m/+£28.1m
UK – future inflation	Increase/decrease by 0.5%	+£23.3m/-£23.1m
UK – mortality	Increased life by one year	+£10.5m
UK – early retirement	One year earlier than assumed	+£5.8m

A deficit funding plan for the UK defined benefit pension scheme was agreed with The Pensions Regulator in 2018, which superseded all previous arrangements. The Company agreed to pay £8,700,000 per annum into the scheme for five years with effect from 1 October 2018.

A number of UK properties owned by the Company with a book value of £83,200,000 at 30 June 2020 are subject to registered fixed charges and continue to provide security to the scheme under the current plan. The Company also has an escrow bank account with a balance of £10,568,000 at the end of the year (2019: £10,490,000) which is subject to a registered floating charge. There is no scheduled release of funds back to the Company under the plan.

In the event a subsequent actuarial valuation results in the combined value of the properties and the escrow bank account exceeding 120% of the actuarial deficit, some of the contingent assets will be released back to the Company. Any remaining contingent assets will be released from charge when the deficit no longer exists.

The current agreement will continue until 30 June 2031 and any outstanding deficit paid at that time. The agreement will end sooner if the actuarial deficit (calculated on a self-sufficiency basis) is eliminated in the meantime.

The charges may be enforced by the trustees if one of the following occurs: (a) the Company does not pay funds into the scheme in line with the agreed plan; (b) an insolvency event occurs in relation to the Company; or (c) the Company does not pay any deficit at 30 June 2031.

The value of the guaranteed payments under the plan is lower than the IAS 19 pension scheme deficit at 30 June 2020 and as such, in accordance with IFRIC 14, no adjustment to the scheme's liabilities has been necessary. At 30 June 2019, the increase in liabilities under IFRIC 14 was also nil.

Under the Ireland defined benefit pension scheme deficit funding plan, a property owned by Renishaw (Ireland) Designated Activity Company is subject to a registered fixed charge to secure the Ireland defined benefit pension scheme's deficit.

14. SHARE-BASED PAYMENTS

Deferred annual equity incentive plan

In accordance with the remuneration policy approved by shareholders at the 2017 AGM, the deferred annual equity incentive plan (the Plan) was implemented in relation to the financial year ending 30 June 2018. The 20 July 2018 Remuneration Committee meeting recommended plan rules that were adopted by a resolution of the Board on 24 July 2018. The Committee also approved the grant of awards under the Plan to the participating Executive Directors.

The number of shares to be awarded is calculated by dividing the relevant amount of annual bonus under the Plan by the average price of a share during a period determined by the Committee of not more than five dealing days ending with the dealing day before the award date. These shares must be purchased on the open market and cannot be satisfied by issuance of new shares or transfer of existing treasury shares.

An employee benefit trust (EBT) exists to purchase and hold such shares, until transferring to the employee, which will normally be on the third anniversary of the award date, subject to continued employment. Malus and clawback provisions can be operated by the Committee within five years of the award date. During the vesting period, no dividends are payable on the shares. However, upon vesting, employees will be entitled to additional shares or cash, equivalent to the value of dividends paid on the awarded shares during this period.

The total cost recognised in the 2020 Consolidated income statement in respect of the Plan was £173,000 (2019: £158,000).

No awards have been made in respect of 2020.

15. CASH AND CASH EQUIVALENTS

An analysis of cash and cash equivalents at the end of the year was:

	2020 £'000	2019 £'000
Bank balances and cash in hand	**108,609**	49,897
Short-term deposits	**1,777**	4,429
Balance at the end of the year	**110,386**	54,326

The UK defined benefit pension scheme cash escrow account is shown separately within assets.

*2019 cash and cash equivalents figures have been restated, where the original expiry date of short-term deposits totalling £52,500,000 exceeded 3 months, see note 1. Accounting policies. Consequently, bank deposits amounting to £52,500,000 are shown separately within current assets at 30 June 2019, which have reduced to £10,000,000 at 30 June 2020. This amount is held by the Company, maturing on 28 July 2020.

16. INVENTORIES

An analysis of inventories at the end of the year was:

	2020 £'000	2019 £'000
Raw materials	**37,717**	46,102
Work in progress	**18,737**	23,431
Finished goods	**49,043**	59,493
Balance at the end of the year	**105,497**	129,026

During the year, the amount of inventories recognised as an expense in the Consolidated income statement was £169,769,000 (2019: £185,344,000) and the amount of write-down of inventories recognised as an expense in the Consolidated income statement was £7,473,000 (2019: £1,276,000), which includes £4,910,000 related to restructuring costs, see note 26. At the end of the year, the gross cost of inventories which had provisions held against them totalled £21,133,000 (2019: £14,137,000).

17. PROVISIONS

Warranty provision movements during the year were:

	2020 £'000	2019 £'000
Balance at the beginning of the year	**2,846**	3,453
Created during the year	**5,308**	2,236
Utilised in the year	**(2,563)**	(2,843)
	2,745	(607)
Balance at the end of the year	**5,591**	2,846

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. Included within the warranty provision created during the year is £3,400,000 (2019: nil) where the warranty cost has been reassessed to be the cost of replacing certain AM machines where the business will not have the capability to honour the warranty on these machines going forward as a result of the Board's decision before the year-end to fundamentally change the direction of the AM business. As we will not have the ability to repair or maintain these machines, the warranty cost reflects the cost of replacing these machines. These warranty costs are expected to be incurred in the next financial year.

18. OTHER PAYABLES

Balances at the end of the year were:

	2020 £'000	2019 £'000
Payroll taxes and social security	**5,833**	**7,333**
Other creditors and accruals	**28,539**	**33,732**
Total other payables	**34,372**	**41,065**

19. BORROWINGS

Third party borrowings at 30 June 2020 include a five year loan entered into on 31 May 2019 by Renishaw KK, with original principal of JPY 1,447,000,000 (£10,486,000), and a loan drawn down in stages throughout 2020 by Renishaw (Korea) Limited, amounting to KRW 2,835,636,000 (£1,894,000).

For the Renishaw KK loan, principal of JPY 12,000,000 is repayable each month, with a fixed interest rate of 0.81% also paid on monthly accretion. The residual principal at 31 May 2024 of JPY 739,000,000 can either be repaid in full at that time, or extended for another five years. For the Renishaw (Korea) Limited loan, repayment in full is required on completion of a new property, expected to be in the year ended 30 June 2022, with no interest payable.

Borrowings are held at amortised cost. There is no significant difference between the book value and fair value of borrowings, which is estimated by discounting contractual future cash flows, which represents level 2 of the fair value hierarchy defined in note 20.

Movements during the year were:

	2020 **£'000**	2019 £'000
Balance at the beginning of the year	**10,399**	-
Additions	**1,894**	10,486
Interest	**78**	3
Repayments	**(1,136)**	(90)
Currency	**308**	-
Balance at the end of the year	**11,543**	10,399

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 are: level 1 where instruments are quoted on an active market; level 2 where the assumptions used to arrive at fair value have comparable market data; and level 3 where the assumptions used to arrive at fair value do not have comparable market data.

Credit risk

The Group's liquid funds are substantially held with banks with high credit ratings and the credit risk relating to these funds is therefore limited. The Group carries a credit risk relating to non-payment of trade receivables by its customers. The Group's policy is that 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 & finance lease receivables 2020 £'000	2019 £'000	Other receivables 2020 £'000	2019 £'000	Cash & bank deposits 2020 £'000	2019 £'000
Pound Sterling	**9,293**	10,628	**16,974**	12,704	**75,052**	64,919
US Dollar	**33,358**	38,724	**946**	935	**7,096**	7,666
Euro	**15,607**	29,516	**1,663**	4,120	**6,324**	7,846
Japanese Yen	**20,416**	18,087	**337**	740	**4,553**	3,966
Other	**33,186**	26,196	**3,276**	5,962	**27,361**	22,429
	111,860	123,151	**23,196**	24,461	**120,386**	106,826

The above trade receivables, finance lease receivables, other receivables and cash are predominately held in the functional currency of the relevant entity, with the exception of £18,142,000 of US Dollar-denominated trade receivables being held in Renishaw (Hong Kong) Limited and £3,940,000 of Euro-denominated trade receivables being held in Renishaw UK Sales Limited, along with some foreign currency cash balances which are of a short-term nature.

Other receivables include mostly prepayments and indirect tax receivables. Prepayment balances are reviewed at each reporting period to confirm that prepaid goods or services are still expected to be received, while indirect tax balances are reviewed for recoverability.

The ageing of trade receivables past due, but not impaired, at the end of the year was:

	2020 £'000	2019 £'000
Past due 0-1 month	**11,703**	14,999
Past due 1-2 months	**4,510**	4,438
Past due more than 2 months	**15,495**	16,486
Balance at the end of the year	**31,708**	35,923

Movements in the provision for impairment of trade receivables during the year were:

	2020 £'000	2019 £'000
Balance at the beginning of the year	**3,081**	3,301
Changes in amounts provided	**3,254**	292
Amounts utilised	**(370)**	(512)
Balance at the end of the year	**5,965**	3,081

The Group applies the simplified approach when measuring the expected credit loss for trade receivables, with a provision matrix used to determine a lifetime expected credit loss.

For this provision matrix, trade receivables are grouped into credit risk categories, with category 1 being the lowest risk and category 5 the highest. Risk scores are allocated to the customer's country of operation, their type (such as distributor, end-user and OEM), their industry and the proportion of their debt that was past due at the year-end. These scores are then weighted to produce an overall risk score for the customer, with the lowest scores being allocated to category 1 and the highest scores to category 5.

The matrix then applies an expected credit loss rate to each category, with this rate being determined by adjusting the Group's historic credit loss rates to reflect forward-looking information. This includes management's assessment of the impact of COVID-19 and the associated global macroeconomic uncertainty and has resulted in an increase in the expected credit loss rate, and the expected credit loss allowance, compared to the prior year.

Where certain customers have been identified as having a significantly elevated credit risk these have been provided for on a specific basis. Both elements of expected credit loss are shown in the matrix below and have been shown separately so as not to distort the expected credit loss rate.

The Group has no material contract assets, and finance lease receivables are subject to the same approach as noted above for trade receivables.

Year ended 30 June 2020	Risk category 1 £'000	Risk category 2 £'000	Risk category 3 £'000	Risk category 4 £'000	Risk category 5 £'000	2020 Total £'000	2019 Total £'000
Gross trade receivables	714	39,931	64,908	5,187	302	111,042	113,848
Expected credit loss rate	1.24%	1.35%	1.42%	1.58%	1.69%	1.49%	0.19%
Expected credit loss allowance	9	541	922	82	5	1,559	220
Specific loss allowance	-	-	3,730	676	-	4,406	2,861
Total expected credit loss	9	541	4,652	758	5	5,965	3,081
Net trade receivables	705	39,390	67,038	4,429	297	105,077	116,929

The maximum exposure to credit risk is £259,200,000, comprising the Group's trade and other receivables, cash and cash equivalents and derivative assets.

The maturities of non-current other receivables, being long-term loans to associates and joint ventures and derivatives, at the year end were:

	2020 £'000	2019 £'000
Receivable between 1 and 2 years	**905**	1,075
Receivable between 2 and 5 years	**3,155**	1,485
	4,060	2,560

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 on a rolling 12-month basis to monitor cash requirements.

In respect of net cash and bank deposits, being £120,386,000, the carrying value approximates to fair value because of the short maturity of the deposits. Net cash is affected by interest rates that are either fixed or floating and based on LIBOR, which can change over time, affecting the Group's interest income. Of the net cash subject to floating interest rate charges, an increase of 1% in interest rates would result in an increase in interest income of approximately £1,200,000.

Changes in liabilities arising from financing activities

Movements during the year were:

	1 July 2019	**Cash flows**	**Additions**	**Interest**	**Currency**	**30 June 2020**
Lease liabilities	**14,247**	**(4,896)**	**3,234**	**766**	**(185)**	**13,166**
Borrowings	**10,399**	**(1,136)**	**1,894**	**78**	**308**	**11,543**
	24,646	**(6,032)**	**5,128**	**844**	**123**	**24,709**

There is no comparative for lease liabilities and the comparative for borrowings is disclosed in note 19.

The contractual maturities of financial liabilities at the year end were:

				Contractual cash flows		
Year ended 30 June 2020	**Carrying amount £'000**	**Effect of discounting £'000**	**Gross maturities £'000**	**Up to 1 year £'000**	**1-2 years £'000**	**2-5 years £'000**
Trade payables	**16,998**	**-**	**16,998**	**16,998**	**-**	**-**
Other payables	**34,372**	**-**	**34,372**	**34,372**	**-**	**-**
Borrowings	**11,543**	**226**	**11,769**	**1,149**	**3,034**	**7,586**
Forward exchange contracts	**63,648**	**-**	**63,648**	**22,546**	**29,220**	**11,882**
	126,561	**226**	**126,787**	**75,065**	**32,254**	**19,468**

Year ended 30 June 2019	Carrying amount £'000	Effect of discounting £'000	Gross maturities £'000	Up to 1 year £'000	1-2 years £'000	2-5 years £'000
Trade payables	21,513	-	21,513	21,513	-	-
Other payables	41,065	-	41,065	41,065	-	-
Borrowings	10,399	310	10,709	1,120	1,115	8,474
Forward exchange contracts	54,147	-	54,147	18,920	12,626	22,601
	127,124	310	127,434	82,618	13,741	31,075

Borrowings relate to loans in Renishaw KK and Renishaw (Korea) Limited, see note 19 for further detail.

Contract liabilities

Movements during the year were:

Year ended 30 June 2019	Extended Warranties £'000	Maintenance Contracts £'000	Volume rebates £'000	Point in time performance Obligations £'000	Total £'000
Balance at the beginning of the year	1,226	2,668	678	1,059	5,631
Released during the year	(950)	(1,299)	(675)	(878)	(3,802)
New items added	316	1,668	182	1,934	4,100
Currency	9	38	-	-	47
Balance at the end of the year	601	3,075	185	2,115	5,976

Contract liabilities relating to volume rebates are the rebate agreements treated as a distinct performance obligation rather than variable consideration. The aggregate amount of the transaction price allocated to performance obligations that are unsatisfied at the end of the year amounts to £7,416,000, of which £1,489,000 is not expected to be recognised in the next 12 months.

Market risk

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.

The Group enters into US Dollar, Euro and Japanese Yen derivative financial instruments to manage its exposure to foreign currency risk, including:

i. Forward foreign currency exchange contracts to hedge a significant proportion of the Group's forecasted US Dollar, Euro and Japanese Yen revenues over the next three and a half years.

ii. Foreign currency option contracts, entered into alongside the forward contracts above until May 2018 as part of the Group revenue hedging strategy, are ineffective for cash flow hedging purposes. Note 25, 'Alternative performance measures', gives an adjusted measure of profit before tax to reflect the original intention that these derivatives were entered into for hedging purposes. The final option contract will mature in November 2021.

iii. One-month forward foreign currency exchange contracts to offset the gains/losses from exchange rate movements arising from foreign currency denominated intragroup balances of the Company.

For both the Group and the Company, the following table details the fair value of these forward foreign currency derivatives according to their accounting treatment, and according to the categorisations of instruments noted in the previous market risk section.

	2020 Nominal value £'000	**Fair value £'000**	2019 Nominal value £'000	Fair value £'000
Forward currency contracts in a designated cash flow hedge (i)				
Non-current derivative assets	**78,527**	**1,133**	36,152	319
Current derivative assets	**19,467**	**283**	37,060	340
Current derivative liabilities	**154,045**	**(11,415)**	198,339	(18,749)
Non-current derivative liabilities	**290,499**	**(24,925)**	671,442	(34,967)
	542,538	**(34,924)**	942,993	(53,057)
Amounts recognised in the Consolidated statement of comprehensive income and expense	**-**	**13,924**	-	(27,573)
Forward currency contracts ineffective as a cash flow hedge (i)				
Current derivative liabilities	**93,962**	**(10,030)**	-	-
Non-current derivative liabilities	**153,585**	**(16,021)**	-	-
	247,547	**(26,051)**	-	-
Amounts recognised in Gains/(losses) from the fair value of financial instruments in the Consolidated income statement	**-**	**(24,361)**	-	-
Foreign currency options ineffective as a cash flow hedge (ii)				
Non-current derivative assets	**-**	**108**	-	991
Current derivative assets	**-**	**3,394**	-	2,365
Current derivative liabilities	**-**	**(122)**	-	(104)
Non-current derivative liabilities	**-**	**(155)**	-	(260)
	-	**3,225**	-	2,992
Amounts recognised in Gains/(losses) from the fair value of financial instruments in the Consolidated income statement	**-**	**2,021**	-	1,081
Forward currency contracts not in a designated cash flow hedge (iii)				
Current derivative assets	**5,127**	**80**	26,671	73
Current derivative liabilities	**62,549**	**(979)**	19,463	(67)
	67,676	**(899)**	46,134	6
Amounts recognised in Financial income in the Consolidated income statement	-	**(154)**	-	76
Total forward contracts and options				
Non-current derivative assets	**78,527**	**1,242**	36,152	1,310
Current derivative assets	**24,594**	**3,758**	63,731	2,778
Current derivative liabilities	**310,556**	**(22,546)**	217,802	(18,920)
Non-current derivative liabilities	**444,085**	**(41,102)**	671,442	(35,227)
	857,762	**(58,648)**	989,127	(50,059)

In addition to amounts noted above as recognised in Gains/(losses) from the fair value of financial instruments in the Consolidated income statement, totalling £22,340,000 net loss, an additional loss of £4,291,000 was recognised in Gains/ (losses) from the fair value of financial instruments relating to ineffective portions of forward currency contracts which matured during the year. Therefore, the total amounts recognised in Gains/(losses) from the fair value of financial instruments in the Consolidated income statement amounts to £26,631,000.

The amounts of foreign currencies relating to these forward contracts and options are, in Sterling terms:

	2020		2019	
	Nominal value £'000	**Fair value £'000**	Nominal value £'000	Fair value £'000
US Dollar	**596,032**	**(56,562)**	678,323	(43,689)
Euro	**159,221**	**409**	187,833	(3,501)
Japanese Yen	**102,509**	**(2,495)**	122,971	(2,868)
	857,762	**(58,648)**	989,127	(50,059)

The following are the exchange rates which have been applicable during the financial year.

	2020			2019		
Currency	**Average forward contract rates**	**Year end exchange rate**	**Average exchange rate**	Average forward contract rates	Year end exchange rate	Average exchange rate
US Dollar	**1.37**	**1.24**	**1.26**	1.39	1.27	1.29
Euro	**1.09**	**1.10**	**1.14**	1.12	1.12	1.13
Japanese Yen	**136**	**134**	**136**	139	138	144

For the Group's foreign currency forward contracts and options at the balance sheet date, if Sterling appreciated by 5% against the US Dollar, Euro and Japanese Yen, this would increase pre-tax equity by £25,800,000 and increase profit before tax by £12,000,000, while a depreciation of 5% would decrease pre-tax equity by £28,500,000 and decrease profit before tax by £18,300,000.

Hedging

In relation to the forward currency contracts in a designated cash flow hedge, the hedged item is a layer component of forecast sales transactions. Forecast transactions are deemed highly probable to occur and Group policy is to hedge at least 75% of net foreign currency exposure for USD, EUR and JPY. The hedged item creates an exposure to receive USD, EUR or JPY, while the forward contract is to sell USD, EUR or JPY and buy GBP. Therefore, there is a strong economic relationship between the hedging instrument and the hedged item. The hedge ratio is 100%, such that, by way of example, £10m nominal value of forward currency contracts are used to hedge £10m of forecast sales. Fair value gains or losses on the forward currency contracts are offset by foreign currency gain or losses on the translation of USD, EUR and JPY based sales revenue, relative to the forward rate at the date the forward contracts were arranged. Foreign currency exposures in HKD and USD are aggregated and only USD forward currency contracts are used to hedge these currency exposures. Sources of hedge ineffectiveness according to IFRS 9 Financial instruments include: changes in timing of the hedged item; reduction in the amount of the hedged sales considered to be highly probable; a change in the credit risk of Renishaw or the bank counterparty to the forward contract; and differences in assumptions used in calculating fair value.

During 2020, global macroeconomic uncertainty resulted in a reduction to the 'highly probable' revenue forecasts of Renishaw plc and Renishaw UK Sales Limited, being the hedged item, which has resulted in proportions of forward contracts failing hedge effectiveness testing, with nominal value amounting to £247,547,000.

Accumulated fair value losses on forward currency contracts ineffective as a cash flow hedge amounting to £24,361,000 were recycled from the Cash flow hedging reserve to the Consolidated income statement to the extent that the hedged item was no longer 'expected to occur', in accordance with IFRS 9.6.5.12.

Based on forward currency contracts outstanding at 30 June 2020, a reduction of 10% to the highly probable revenue forecasts of the hedged item would result in an additional nominal value of £16,600,000 of forward currency contracts becoming ineffective, with an additional £1,565,000 loss recycled to the Consolidated income statement.

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 long-term progressive dividend policy, while ensuring the security of the Group is 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.

In light of the increased global macroeconomic uncertainty experienced in the first half of the year, and with redundancy programmes in progress, the Director's elected to waive their right to the 2020 interim dividend. Following the outbreak of the COVID-19 pandemic, and according to the Board's priority of conserving cash and managing the Group in a prudent manner through this period of uncertainty, the interim dividend payable during the year was then cancelled, and no final dividend is declared in respect of the year. The Board will review its position on dividends during the next fiscal year with the intention of reinstating its long-term progressive dividend policy as soon as it is appropriate to do so.

21. SHARE CAPITAL AND RESERVES

Share capital

	2020	2019
	£'000	£'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.

Dividends paid

Dividends paid comprised:

	2020	2019
	£'000	£'000
2019 final dividend paid of 46.0p per share (2018: 46.0p)	**33,478**	33,483
Interim dividend paid of nil per share (2019: 14.0p)	**-**	10,189
Total dividends paid	**33,478**	43,672

No final dividend is proposed in respect of the current financial (2019: £33,482,729)

Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the financial statements of the foreign operations and currency movements on intragroup loan balances classified as net investments in foreign operations from December 2018 (see note 5).

Movements during the year were:	**2020**	2019
	£'000	£'000
Balance at the beginning of the year	**14,577**	12,665
Gain on net assets of foreign currency operations	**996**	1,218
Gain on intragroup loans classified as net investments in foreign operations	**2,373**	827
Tax on translation of net investments in foreign operations	**(403)**	(205)
Gain in the year relating to subsidiaries	**2,966**	1,840
Currency exchange differences relating to associates and joint ventures	**186**	72
Balance at the end of the year	**17,729**	14,577

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 in Other comprehensive income and expense and accumulated in Equity, and are recycled through the Consolidated income statement and Company income statement when the hedged item affects the income statement, or when the hedging relationship ceases to be effective. See note 20 for further detail.

Movements during the year were:	**2020**	2019
	£'000	£'000
Balance at the beginning of the year	**(42,401)**	(19,389)
Losses on contract maturity recognised in revenue during the year	**16,216**	19,782
Losses transferred to the Consolidated income statement during the year	**24,361**	-
Deferred tax transferred to the consolidated income statement	**(4,629)**	-
Revaluations during the year	**(26,653)**	(47,355)
Deferred tax movement	**2,651**	4,561
Balance at the end of the year	**(30,455)**	(42,401)

Other reserve

The other reserve relates to additional investments in subsidiary undertakings and share-based payments charges according to IFRS 2 in relation to the Plan.

Movements during the year were:

	2020 **£'000**	2019 £'000
Balance at the beginning of the year	**(302)**	(460)
Share-based payments charge	**173**	158
Balance at the end of the year	**(129)**	(302)

Own shares held

The EBT is responsible for purchasing shares on the open market on behalf of the Company to satisfy the Plan awards, see note 14 for further detail. Own shares held are recognised as an element in equity until they are transferred at the end of the vesting period.

Movements during the year were:

	2020 **£'000**	2019 £'000
Balance at the beginning of the year	**(404)**	-
Acquisition of own shares	**-**	(404)
Balance at the end of the year	**(404)**	(404)

On 10 December 2018, 9,639 shares were purchased on the open market by the EBT at a price of £41.66, costing a total of £404,348.

Non-controlling interest

Movements during the year were:

	2020 **£'000**	2019 £'000
Balance at the beginning of the year	**(577)**	(577)
Share of profit for the year	**-**	-
Balance at the end of the year	**(577)**	(577)

The non-controlling interest represents the minority shareholdings in Renishaw Diagnostics Limited – 7.6%.

22. LEASES AND RIGHT OF USE ASSETS

Leases as lessor

The Group acts as lessor for Renishaw manufactured plant and equipment on both an operating and finance lease basis.

Operating leases

Where the Group retains the risks and rewards of ownership of leased assets, it continues to recognise the leased asset in property, plant and equipment, while the lease payments made during the term of the operating lease are recognised in revenue (2020: £1,183,000 and 2019: £1,231,000). Operating leases are on one to five year terms. The total of future minimum lease payments receivable under non-cancellable operating leases were:

	2020 **£'000**	2019 £'000
Receivable in less than one year	**742**	804
Receivable between one and five years	**152**	700
Total future minimum lease payments receivable	**894**	1,504

Finance leases

Where the Group transfers the risks and rewards of ownership of leased assets to a third party, the Group recognises a receivable in the amount of the net investment in the lease in Finance lease receivables. The lease receivable is subsequently reduced by the principal received, while an interest component is recognised as financial income in the Consolidated income statement. Standard contract terms are up to five years and there is a nominal residual value receivable at the end of the contract. The total future lease payments are split between the principal and interest amounts below:

	2020			2019		
	Gross investment £'000	**Interest £'000**	**Net investment £'000**	Gross investment £'000	Interest £'000	Net investment £'000
Receivable in less than one year	**2,113**	**131**	**1,982**	1,348	118	1,230
Receivable between one and five years	**5,118**	**317**	**4,801**	5,469	477	4,992
Total future minimum lease payments receivable	**7,231**	**448**	**6,783**	6,817	595	6,222

Finance lease receivables are now identified as separate line items in the Consolidated balance sheet. 2019 figures have been reclassified to recognise £4,992,000 as Finance lease receivables in non-current assets and £1,230,000 as Finance lease receivables in current assets, reducing Trade receivables by the total amount of £6,222,000.

Leases as lessee

The Group acts as lessee for land and buildings and vehicles in certain subsidiaries and from 1 July 2019 recognises leases as a liability in the Consolidated balance sheet, with a corresponding amount recognised as a right of use asset.

Total amounts recognised in the Consolidated income statement include depreciation expense of right of use assets of £4,736,000, interest expense on lease liabilities of £766,000, and expenses relating to short-term and low-value leases of £80,000, totalling £5,582,000. Total cash outflows for leases amounted to £4,896,000, while non-cash additions to right of use assets and lease liabilities amounted to £3,234,000.

Lease liabilities are analysed as below:

	2020		2019	
	Leasehold property £'000	**Vehicles £'000**	Leasehold property £'000	Vehicles £'000
Due in less than one year	**3,011**	**1,325**	3,338	1,442
Due between one and five years	**4,754**	**1,130**	5,211	2,309
Due in more than five years	**7,182**	**-**	4,090	-
Total future minimum lease payments payable	**14,947**	**2,455**	12,639	3,751
Effect of discounting	**(4,189)**	**(47)**	na	na
Lease liability	**10,758**	**2,408**	na	na

Right of use assets are analysed as below:

Year ended 30 June 2020	**Leasehold property £'000**	**Vehicles £'000**	**Total £'000**
Net book value			
At 1 July 2019	**11,537**	**3,013**	**14,550**
Additions	**2,270**	**779**	**3,049**
Depreciation	**(3,351)**	**(1,385)**	**(4,736)**
Currency adjustment	**(169)**	**(22)**	**(191)**
At 30 June 2020	**10,287**	**2,385**	**12,672**

23. CAPITAL COMMITMENTS

Authorised and committed capital expenditure at the end of the year, for which no provision has been made in the Financial statements, were:

	2020 £'000	2019 £'000
Property	**640**	18,087
Plant and equipment	**1,621**	3,995
Intangibles (software)	**3,854**	280
Total committed capital expenditure	**6,115**	22,362

24. RELATED PARTIES

Associates, joint ventures and other related parties had the following transactions and balances with the Group:

	Joint ventures		Associate	
	2020	2019	**2020**	2019
	£'000	£'000	**£'000**	£'000
Purchased goods and services from the Group during the year	**837**	908	**526**	913
Sold goods and services to the Group during the year	**17,160**	21,290	**-**	1
Paid dividends to the Group during the year	**512**	614	**-**	-
Amounts owed to the Group at the year end	**87**	167	**3,227**	424
Amounts owed by the Group at the year end	**3,103**	1,933	**-**	-
Loans owed to the Group at the year end	**955**	1,250	**2,500**	6,144

There were no bad debts relating to related parties written off during the year (2019: nil).

By virtue of their long-standing voting agreement, Sir David McMurtry (Executive Chairman 36.23% shareholder) and John Deer (Non-executive Deputy Chairman, together with his wife, 16.72%), are the ultimate controlling party of the Group. The only significant transactions between the Group and these parties are in relation to their respective remuneration.

25. ALTERNATIVE PERFORMANCE MEASURES

In accordance with Renishaw's Alternative Performance Measures (APMs) policy and ESMA Guidelines on Alternative Performance Measures (2015), APMs are defined as - Revenue at constant exchange rates, Adjusted profit before tax, Adjusted earnings per share and Adjusted operating profit.

Revenue at constant exchange rates is defined as revenue recalculated using the same rates as were applicable to the previous year and excluding forward contract gains and losses.

	2020	2019
Revenue at constant exchange rates	**£'000**	£'000
Statutory revenue as reported	**510,215**	573,959
Adjustment for forward contract losses	**12,054**	19,782
Adjustment to restate current year at previous year exchange rates	**(6,821)**	-
Revenue at constant exchange rates	**515,448**	593,741
Year-on-year revenue growth at constant exchange rates	**-13.2%**	

Year-on-year revenue growth at constant exchange rates for 2019 was -6.8%.

Adjusted profit before tax, Adjusted earnings per share and Adjusted operating profit are defined as the profit before tax, earnings per share and operating profit after excluding costs relating to business restructuring, and gains and losses in fair value from forward currency contracts which did not qualify for hedge accounting and which have yet to mature.

Restructuring costs reported separately in the Consolidated Income statement have also been excluded from adjusted measures, on the basis that they relate to matters that do not frequently recur. See note 26 for further detail.

From 2017, the gains and losses from the fair value of financial instruments not effective for cash flow hedging have been excluded from statutory profit before tax, statutory earnings per share and statutory operating profit in arriving at Adjusted profit before tax, Adjusted earnings per share and Adjusted operating profit to reflect the Board's intent that the instruments would provide effective hedges. This is classified as 'Fair value (gains)/losses on financial instruments not eligible for hedge accounting (i)' in the following reconciliations. The amounts shown as reported in revenue represent the amount by which revenue would change had all the derivatives qualified as eligible for hedge accounting.

Gains and losses which recycle through the Consolidated income statement as a result of contracts deemed ineffective during 2020, as described in note 20, are also excluded from adjusted profit measures, on the basis that all forward contacts are still expected to be effective hedges for Group revenue, while the potentially high volatility in fair value gains and losses relating to these contracts will otherwise cause confusion for users of the financial statements wishing to understand the underlying trading performance of the Group. This is classified as 'Fair value (gains)/losses on financial instruments not eligible for hedge accounting (ii)' in the following reconciliations.

The Board considers these alternative performance measures to be more relevant and reliable in evaluating the Group's performance.

Adjusted profit before tax:	**2020 £'000**	2019 £'000
Statutory profit before tax	**3,208**	109,944
Restructuring costs	**23,797**	-
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (i):		
- reported in revenue	**(731)**	(5,001)
- reported in gains from the fair value in financial instruments	**(2,021)**	(1,081)
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (ii):		
– reported in gains from the fair value of financial instruments	**24,361**	-
Adjusted profit before tax	**48,614**	103,862

Adjusted earnings per share:	**2020 Pence**	2019 Pence
Statutory earnings per share	**0.4**	126.7
Restructuring costs	**26.5**	-
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (i):		
- reported in revenue	**(0.8)**	(5.6)
- reported in gains in fair value in financial instruments	**(2.2)**	(1.2)
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (ii):		
– reported in gains from the fair value of financial instruments	**27.1**	-
Adjusted earnings per share	**51.0**	119.9

Adjusted operating profit:	**2020 pence**	2019 pence
Statutory operating profit	**6,294**	99,793
Restructuring costs	**23,797**	-
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (i):		
- reported in revenue	**(731)**	(5,001)
- reported in gains in fair value in financial instruments	**(2,021)**	(1,081)
Fair value (gains)/losses on financial instruments not eligible for hedge accounting (ii):		
– reported in gains from the fair value of financial instruments	**24,361**	-
Adjusted operating profit	**51,700**	93,711

Adjustments to the segmental operating profit:

Metrology	**2020 £'000**	2019 £'000
Operating profit before loss from fair value of financial instruments	**31,188**	95,345
Restructuring costs	**23,797**	-
Fair value gains on financial instruments not eligible for hedge accounting (i):		
- reported in revenue	**(688)**	(4,745)
Fair value gains on financial instruments not eligible for hedge accounting (ii):		
– reported in revenue	**(4,036)**	-
Adjusted metrology operating profit	**50,261**	90,600

Healthcare	**2020 £'000**	2019 £'000
Operating profit before loss from fair value of financial instruments	**1,737**	3,367
Fair value gains on financial instruments not eligible for hedge accounting (i):		
- reported in revenue	**(43)**	(256)
Fair value gains on financial instruments not eligible for hedge accounting (ii):		
– reported in revenue	**(255)**	-
Adjusted healthcare operating profit	**1,439**	3,111

26. RESTRUCTURING COSTS

During the year the Board introduced its 'Fit for the future' strategy, which incorporated the rationalisation and reorganisation of certain operating activities, particularly relating to the additive manufacturing (AM) business, and cost control measures which included a UK compulsory redundancy programme.

For the changes in the AM business, there has been a rationalisation in the AM product range to focus on the Group's multi-laser platform, and therefore restructuring costs include the impairment of capitalised development costs, goodwill, and plant and equipment where these relate to technologies that are not being taken forward in the AM business. Write-downs in the carrying value of inventories for these AM products have also been reported in Restructuring costs, as has the increase in warranty provision that directly arises from the reassessed warranty costs for certain machines that the business will not have the capability to repair and therefore where the warranty will be honoured by replacing the machines. Part of the impairment of capitalised development costs relate to technologies which will be taken forward by the Group but where economic benefits are not expected to be realised in the next five years. The costs of the UK compulsory redundancy programme, arising from a reorganisation of the business, are also reported in Restructuring costs.

The Board considers that the costs relating to these restructuring activities should be reported separately in the Consolidated income statement in order to aid users' understanding. The table below shows the analysis of these costs:

	£'000
Redundancy costs (a)	6,281
Impairment of capitalised research and development costs (b)	5,999
Impairment of goodwill (c)	405
Impairment of property, plant and equipment (a)	2,590
Increase in inventory provisions (b)	4,910
Increase in warranty provisions (b)	3,400
Other expenses (c)	212
Total Restructuring expenses	23,797

These costs would be found under the following headings in the Consolidated income statement if they had not been separately identified in Restructuring costs: (a) within cost of sales, distribution costs and administrative expenses; (b) within cost of sales; and (c) within administrative expenses.

Registered office:
Renishaw plc
New Mills
Wotton-under-Edge
Gloucestershire
GL12 8JR
UK

Registered number: 01106260
LEI number: 21380048ADXM6Z67CT18

Telephone: +44 1453 524524
Email: uk@renishaw.com
Website: www.renishaw.com