Renishaw plc

26th January 2017 Interim report 2017 - for the six months ended 31st December 2016

Highlights

	6 months to 31st December 2016 £'000	Restated* 6 months to 31st December 2015 £'000	Restated* Year ended 30th June 2016 £'000
Revenue	240,424	198,488	436,598
Operating profit	35,568	28,455	85,171
Profit before taxation	35,694	28,595	85,694
Earnings per share	41.0p	32.4p	98.4p
Proposed dividend per share	12.5p	12.5p	48.0p

^{*} Previous year figures have been restated for the following:

^{1.} The results of Renishaw Diagnostics Limited have been excluded, as this business has been reclassified as a discontinued activity, see Chairman's statement below and note 5.

^{2.} The R&D tax credit, previously accounted for within the Income tax expense line has been reclassified to be part of administration expenses, thereby showing it as part of the profit before tax. This reclassification increased the Profit before tax by £1,100,000 for the current first half year, by £938,000 for the six months ended 31st December 2015 and by £2,420,000 for the year ended 30th June 2016.

Chairman's statement

I am pleased to report our group results for the six months to 31st December 2016.

Highlights

- First half year revenue of £240.4m, compared with previous year of £198.5m.
- Revenue growth of 21%, 12% at constant exchange rates.
- First half year profit before tax of £35.7m, compared with restated* £28.6m last year.

Trading results

Revenue for the six months ended 31st December 2016 was £240.4m, compared with £198.5m for the corresponding period last year, an increase of 21%, reflecting an underlying growth of 12% and a currency benefit of 9%.

Geographically, there was revenue growth in all regions. Revenue in the Far East grew by 27%, from £85.5m last year to £108.7m (18% at constant exchange rates). In Europe, revenue increased by 18%, from £52.1m to £61.3m (3% at constant exchange rates), in the Americas, revenue was higher by 11%, from £43.7m to £48.6m (6% at constant exchange rates) and in the UK revenue was up by 20%, from £11.0m to £13.2m.

Group profit before tax for the first half year increased by 25% to £35.7m (£26.5m at constant exchange rates), compared with a restated £28.6m last year. Earnings per share were 41.0p, compared with 32.4p last year.

The Group's cost base increase largely reflects investments made in the previous year, including an increase in labour costs supporting global marketing expansion, further strategic investment in our research and development programmes and investment in skills for future growth. Across the Group, we continue to focus on our operating costs. Exchange rate movements have given rise to higher overseas operating costs in Sterling terms.

Metrology

Revenue in our metrology sector for the first six months was £227.1m, compared with £184.9m last year. Operating profit was £41.6m, compared with £30.6m for the comparable period last year.

There was particularly strong growth in our encoder and laser calibration products lines.

In our laser calibration products line, we launched the XM-60 multi-axis calibrator. Designed for the machine tool market, it is a highly accurate laser system used to capture multiple machine errors in a single set-up.

We have also established a new subsidiary in Turkey to expand our marketing, sales, service and distribution infrastructure.

Healthcare

Revenue in our healthcare sector for the first six months was £13.3m, compared with £13.6m last year and there was an operating loss of £6.0m, compared with a loss (restated) of £2.2m for the comparable period last year.

We have experienced growth in our neurological products line, including the sale of two stereotactic robots during the period, one in the UK and one in the USA.

In our spectroscopy products line, we introduced the RA802 pharmaceutical analyser, designed exclusively for the pharmaceutical industry, enabling users to formulate tablets more efficiently by speeding up the analysis of tablet composition and structure.

Healthcare revenue prospects for the second half are positive with a strong order book in each of our neurological, spectroscopy and medical dental products lines.

Renishaw Diagnostics Limited (RDL)

As reported in our trading update in October 2016, the Board decided to discontinue operations at RDL, resulting in the closure of the business. Subsequently, certain assets of the business were sold.

In the first half year results, the RDL business has been accounted for as a discontinued activity, with comparative figures for the previous year being restated accordingly. The after tax loss of £3.5m accounted for as a discontinued activity comprises the running costs for RDL, including cessation costs and impairment write offs for assets and goodwill, less amounts received. The after tax loss in the equivalent period of the prior year was £1.2m.

Continued investment for long-term growth

We continue to maintain our investment in research and development, where net engineering expenditure increased by 15% to £38.3m, compared with £33.3m last year.

Capital expenditure for the first half year was £25.9m. Expenditure on property totalled £16.4m and included completion of our new USA headquarters in Chicago, which is now being occupied.

Expenditure on plant and equipment was £9.5m, where we continued to expand our manufacturing facilities, mainly in the UK, and continued investment in our global IT and distribution infrastructure.

Working capital

Net cash balances at 31st December 2016 were £14.0m, compared with £33.3m at 31st December 2015 and £21.3m at 30th June 2016

Additionally, there is an escrow account of £15.3m (31st December 2015: £13.9m, 30th June 2016: £15.3m) relating to the provision of security to the UK defined benefit pension scheme, which was closed to future accrual in 2007.

Inventory balances at 31st December 2016 were £90.8m, a reduction of £4.2m compared with 30th June 2016.

Employees

The workforce at the end of December 2016 was 4,358, an increase of 72 since June 2016. Included in the net increase were 76 graduates and apprentices. The directors thank employees for their valued support and contribution as the Group continues to develop and expand.

Outlook

Notwithstanding current economic uncertainties, the Board remains confident in the future prospects of the Group. We continue to anticipate growth in both revenue and profit in this financial year and expect full year revenue to be in the range of £500m to £530m and Profit before tax to be in the range of £85m to £105m.

Dividends

A maintained interim dividend of 12.5 pence net per share will be paid on 7th April 2017 to shareholders on the register on 10th March 2017.

Investor Day

An investor day is being held on 11th May 2017 and registration details will be published in due course.

- * Previous year figures have been restated for the following:
- 1. The results of Renishaw Diagnostics Limited have been excluded, as this business has been reclassified as a discontinued activity.
- 2. The R&D tax credit, previously accounted for within the Income tax expense line has been reclassified to be part of administration expenses, thereby showing it as part of the profit before tax.

Sir David R McMurtry
CBE, RDI, FRS, FREng, CEng, FIMechE
Chairman and Chief Executive,
26th January 2017

Consolidated income statement

Unaudited

			Restated	Restated
		6 months to	6 months to	Year ended
		31st December	31st December	30th June
		2016	2015	2016
Continuing operations	Notes	£'000	£'000	£'000
Revenue	2	240,424	198,488	436,598
Cost of sales		(125,077)	(104,826)	(216,142)
Gross profit		115,347	93,662	220,456
Distribution costs		(56,156)	(44,717)	(97,184)
Administrative expenses		(23,623)	(20,490)	(38,101)
Operating profit		35,568	28,455	85,171
Financial income	3	368	460	872
Financial expenses	3	(1,112)	(910)	(1,800)
Share of profits from associates		870	590	1,451
Profit before tax		35,694	28,595	85,694
Income tax expense	4	(5,961)	(5,282)	(14,583)
Profit for the period from continuing operations		29,733	23,313	71,111
Loss for the period from discontinued operations	5	(3,503)	(1,233)	(2,540)
Profit for the period		26,230	22,080	68,571
Profit attributable to: Equity shareholders of the parent company		26,360	22.201	60.005
Non-controlling interest		(130)	22,381	69,095 (524)
Profit for the period		26,230	(301)	
Profit for the period		20,230	22,080	68,571
		Pence	pence	pence
Dividend per share arising in respect of the period	10	12.5	12.5	48.0
Earnings per share from continuing operations (basic and diluted)	6	41.0	32.4	98.4
Loss per share from discontinued operations (basic and diluted)	6	(4.8)	(1.7)	(3.5)

Consolidated statement of comprehensive income and expense

Unaudited			Audited
	6 months to	6 months to	Year ended
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
Profit for the period	26,230	22,080	68,571
Other items recognised directly in equity:			
Items that will not be reclassified to the Consolidated income statement:			
Remeasurement of defined benefit pension liabilities	(2,525)	(904)	(20,868)
Deferred tax on remeasurement of defined benefit pension liabilities	728	(150)	3,480
Total for items that will not be reclassified	(1,797)	(1,054)	(17,388)
Items that may be reclassified subsequently to the Consolidated income statement:			
Foreign exchange translation differences	5,490	1,000	8,409
Comprehensive income and expense of associates	84	-	753
Effective portion of changes in fair value of cash flow hedges, net of recycling	(18,601)	(28,045)	(91,168)
Deferred tax on effective portion of changes in fair value of cash flow hedges	3,534	5,543	17,537
Total for items that may be reclassified	(9,493)	(21,502)	(64,469)
Total other comprehensive income and expense, net of tax	(11,290)	(22,556)	(81,857)
Total comprehensive income and expense for the period	14,940	(476)	(13,286)
Attributable to:			
Equity shareholders of the parent company	15,070	(175)	(12,762)
Non-controlling interest	(130)	(301)	(524)
Total comprehensive income and expense for the period	14,940	(476)	(13,286)

Consolidated balance sheet

Unaudited

		At 31st December	At 31st December	Audited At 30th June
		2016	2015	2016
	Notes	£'000	£,000	£'000
Assets				
Property, plant and equipment	7	230,595	191,217	213,917
Intangible assets	8	60,790	58,944	61,255
Investments in associates	9	6,256	3,760	5,658
Deferred tax assets		44,330	20,516	40,996
Derivatives	10	505	4,874	76
Total non-current assets		342,476	279,311	321,902
Current assets				
Inventories		90,802	91,704	94,959
Trade receivables		111,753	85,148	114,945
Current tax		2,740	1,042	1,166
Other receivables		16,615	14,606	18,090
Derivatives	10	99	7,325	859
Pension scheme cash escrow account	11	15,317	13,890	15,279
Cash and cash equivalents		26,490	33,350	31,278
Total current assets		263,816	247,065	276,576
Current liabilities				
Trade payables		20,025	16,440	22,379
Overdraft		12,519	-	9,975
Current tax		1,130	1,840	3,558
Provisions		2,793	2,487	2,375
Derivatives	10	31,180	4,681	19,987
Other payables	10	19,707	17,089	18,345
Total current liabilities		87,354	42,537	76,619
Net current assets		176,462	204,528	199,957
Non-current liabilities	4.4	00 705	40.500	07.000
Employee benefits	11	68,725	48,586	67,823
Deferred tax liabilities	40	21,999	17,271	21,999
Derivatives	10	57,729	14,099	50,652
Other payables Total non-current liabilities		148,453	589 80,545	140,474
		1 10, 100	00,040	,
Total assets less total liabilities		370,485	403,294	381,385
Equity				
Share capital	10	14,558	14,558	14,558
Share premium	10	42	42	42
Currency translation reserve	10	12,022	(1,714)	6,448
Cash flow hedging reserve	10	(71,527)	(5,331)	(56,460)
Retained earnings	10	416,442	399,138	420,419
Other reserve	10	(460)	(460)	(460)
Equity attributable to the shareholders of the		• ,	, ,	, ,
parent company		371,077	406,233	384,547
Non-controlling interest	10	(592)	(2,939)	(3,162)

Consolidated statement of changes in equity

	Share capital £'000	Share premium £'000	Currency translation reserve £'000	Cash flow hedging reserve £'000	Retained earnings	Other reserve £'000	Non- controlling interest £'000	Total £'000
Balance at 1st July 2015	14,558	42	(2,714)	17,171	402,559	(460)	(2,638)	428,518
Profit/(loss) for the period	-	-	-	-	22,381	-	(301)	22,080
Other comprehensive income and expense								
(net of tax) Remeasurement of defined benefit pension liabilities	_	_	-	-	(1,054)	-	-	(1,054)
Foreign exchange translation differences	-	-	1,000	-	-	-	-	1,000
Changes in fair value of cash flow hedges	-	-	-	(22,502)	-	-	-	(22,502)
Total other comprehensive income	-	-	1,000	(22,502)	(1,054)	-	-	(22,556)
Total comprehensive income	-	-	1,000	(22,502)	21,327	-	(301)	(476)
Transactions with owners recorded in equity								
Dividends paid	-	-	-	-	(24,748)	-	-	(24,748)
Balance at 31st December 2015	14,558	42	(1,714)	(5,331)	399,138	(460)	(2,939)	403,294
Profit/(loss) for the period	-	-	-	-	46,714	-	(223)	46,491
Other comprehensive income and expense (net of tax)								
Remeasurement of defined benefit pension liabilities	-	-	-	-	(16,334)	-	-	(16,334)
Foreign exchange translation differences	-	-	7,409	-	-	-	-	7,409
Relating to associates	-	-	753 -	- (51,129)	-	-	_	753 (51,129)
Changes in fair value of cash flow hedges				(31,129)				(31,129)
Total other comprehensive income	-	-	8,162	(51,129)	(16,334)	-	-	(59,301)
Total comprehensive income	-	-	8,162	(51,129)	30,380	-	(223)	(12,810)
Transactions with owners recorded in equity								
Dividends paid	-	-	-	-	(9,099)	-	-	(9,099)
Balance at 30th June 2016	14,558	42	6,448	(56,460)	420,419	(460)	(3,162)	381,385
Profit/(loss) for the period	-	-	-	-	26,360	-	(130)	26,230
Other comprehensive income and expense (net of tax)								
Remeasurement of defined benefit pension liabilities	-	-	-	-	(1,797)	-	-	(1,797)
Foreign exchange translation differences	-	-	5,490 84	-	-	-	-	5,490 84
Relating to associates	-	-	- 04	(15,067)	-	-	-	(15,067)
Changes in fair value of cash flow hedges				(10,001)				(10,007)
Total other comprehensive income	-	-	5,574	(15,067)	(1,797)	-	-	(11,290)
Total comprehensive income	-	-	5,574	(15,067)	24,563	-	(130)	14,940
Acquisition of non-controlling interest	-	-	-	-	(2,700)	-	2,700	-
Dividends paid	-	-	-	-	(25,840)	-	-	(25,840)
Transactions with owners recorded in equity	-	-	-	-	(28,540)	-	2,700	(25,840)
Balance at 31st December 2016	14,558	42	12,022	(71,527)	416,442	(460)	(592)	370,485

Consolidated statement of cash flow

Unaudited

		Restated	Restated
	6 months to	6 months to	Year ended
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£,000	£'000
Cash flows from operating activities			
Profit for the period	26,230	22,080	68,571
Amortisation of development costs	5,756	4,417	9,116
Amortisation of other intangibles	2,605	1,149	2,313
Depreciation	10,716	8,736	18,258
Loss/(profit) on sale of property, plant and equipment	170	(64)	166
Share of profits from associates	(870)	(590)	(1,451)
Financial income	(368)	(460)	(872)
	1,112	910	` ,
Financial expenses	5,961	5,282	1,800
Tax expense	25,082	19,380	14,583
	20,002	10,000	43,913
Decrease/(increase) in inventories	4,157	(14,031)	(17,286)
Decrease/(increase) in trade and other receivables	8,358	17,569	(2,951)
(Decrease)/increase in trade and other payables	(1,428)	(16,688)	(12,439)
Increase in provisions	418	772	660
more and providence	11,505	(12,378)	(32,016)
Defined honefit manaism contributions	(2,415)	(1,297)	(0.700)
Defined benefit pension contributions	(9,075)	(14,713)	(2,708)
Income taxes paid	(3,073)	(14,713)	(22,581)
Cash flows from operating activities	51,327	13,072	55,179
Investing activities			
Purchase of property, plant and equipment	(25,896)	(28,734)	(52,996)
Development costs capitalised	(7,177)	(6,032)	(12,246)
Purchase of other intangibles	(80)	(401)	(1,294)
Investment in subsidiaries and associates	•	`	(284)
Sale of property, plant and equipment	1,399	266	826
Interest received	368	460	872
Dividends received from associates	356	310	310
Payments (to)/from pension scheme escrow account (net)	(38)	841	(548)
Cash flows from investing activities	(31,068)	(33,290)	(65,360)
Financing activities			
Interest paid	(320)	(25)	(231)
Dividends paid	(25,840)	(24,748)	(33,847)
Cash flows from financing activities	(26,160)	(24,773)	(34,078)
Not describe and and and	/5 QQ4\	(44 004)	(44.050)
Net decrease in cash and cash equivalents	(5,901) 21,303	(44,991) 82 171	(44,259)
Cash and cash equivalents at the beginning of the period	•	82,171	82,171
Effect of exchange rate fluctuations on cash held	(1,431)	(3,830)	(16,609)
Cash and cash equivalents at the end of the period	13,971	33,350	21,303

Responsibility statement

We confirm that to the best of our knowledge:

- As required by DTR 4.2 of the Disclosure Rules and Transparency Rules, the condensed set of financial statements, which has been prepared in accordance with the applicable set of accounting standards, gives a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation as a whole. The Interim report has been prepared in accordance with the EU endorsed standard IAS 34, 'Interim financial reporting'.
- The Interim report includes a fair review of the information required by:
 - (a) DTR 4.2.7 of the Disclosure Rules and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and
 - (b) DTR 4.2.8 of the Disclosure Rules and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last annual report that could do so.

On behalf of the Board

A C G Roberts FCA Group Finance Director 26th January 2017

Notes

Status of Interim report and accounting policies

The Interim report, which has not been audited, was approved by the directors on 26th January 2017.

General information

The Interim report has been prepared in accordance with the EU endorsed standard IAS 34, 'Interim financial reporting'. This interim financial information has been prepared on the basis of the accounting policies adopted in the most recent annual financial statements, these being for the year ended 30th June 2016, as revised for the implementation of specified new amended endorsed standards or interpretations.

Given the nature of some forward-looking information included in this report, which the directors have given in good faith, this information should be treated with due caution. The Interim report is available on our website www.renishaw.com.

The interim financial information for the six months to 31st December 2016 and the comparative figures for the six months to 31st December 2015 are unaudited. The comparative figures for the financial year ended 30th June 2016 are not the Company's statutory accounts for that financial year. Those accounts have been reported on by the Company's auditors and delivered to the registrar of companies. The report of the auditors was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006, relating to the accounting records of the Company.

Going concern

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

After making enquiries, the directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the next twelve months. Accordingly, they continue to adopt the going concern basis in preparing the Interim report.

Accounting policies

The accounting policies applied and significant estimates used by the Group in this Interim report are the same as those applied by the Group for the year ended 30th June 2016.

2. Segmental information

Renishaw's business is metrology, the science of measurement. The Group manages its business in two business segments, Metrology, being the traditional core business, and Healthcare.

Our products / Metrology

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

The product range includes the following:

Co-ordinate measuring machine (CMM) products

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

Machine tool probe systems

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

Styli for probe systems

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

Performance testing products

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

Gauging

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

Spatial measurement

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

Fixtures

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

Position encoders

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

Additive manufacturing (AM)

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

Vacuum casting

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

Our products / Healthcare

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

The product range includes the following:

Dental scanners

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

Dental computer-aided design (CAD) software

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

Dental structures manufacturing service

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

Craniomaxillofacial custom-made implants

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

Neurosurgical robot

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

Neurosurgical planning software

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

Neurosurgical implants

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

Neurosurgical accessories

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

Raman microscopes

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

Hybrid Raman systems

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

Turn-key Raman analysis

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

Segmental financial results were:

6 months to 31st December 2016	Metrology £'000	Healthcare £'000	Total £'000
Revenue	227,083	13,341	240,424
Depreciation and amortisation	15,402	1,783	17,185
Operating profit/(loss)	41,588	(6,020)	35,568
Share of profits from associates	870	-	870
Net financial expense	-	-	(744)
Profit before tax	-	-	35,694
6 months to 31st December 2015 (restated)			
Revenue	184,905	13,583	198,488
Depreciation and amortisation	12,648	1,475	14,123
Operating profit/(loss)	30,612	(2,157)	28,455
Share of profits from associates	590	-	590
Net financial expense	-	-	(450)
Profit before tax	-	-	28,595
Year ended 30th June 2016 (restated)			
Revenue	408,184	28,414	436,598
Depreciation and amortisation	26,334	2,966	29,300
Operating profit/(loss)	88,000	(2,829)	85,171
Share of profits from associates	1,451	-	1,451
Net financial expense	-	-	(928)
Profit before tax	-	-	85,694

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 analysis of revenue by geographical market:

	6 months to	6 months to	Year ended
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
Far East, including Australasia	108,677	85,441	195,343
Continental Europe	61,290	52,116	112,075
North, South and Central America	48,646	43,733	92,198
United Kingdom and Ireland	13,208	11,009	23,208
Other regions	8,603	6,189	13,774
Total group revenue	240,424	198,488	436,598

Revenue in the above 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:

	6 months to 31st December 2016 £'000	6 months to 31st December 2015 £'000	Year ended 30th June 2016 £'000
China	58,176	45,510	107,628
USA	41,245	38,576	79,984
Germany	26,194	21,729	48,509
Japan	24,755	23,275	49,328

There was no revenue from transactions with a single external customer amounting to 10% or more of the Group's total revenue for the period.

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

	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
United Kingdom	188,258	180,026	190,396
Overseas	109,383	73,895	90,434
	297,641	253,921	280,830

No overseas country had non-current assets amounting to 10% or more of the Group's total non-current assets.

3. Financial income and expenses

	1,112	910	1,800
Bank interest payable	320	25	231
Interest on pension schemes' liabilities	792	885	1,569
	£'000	£,000	£'000
	2016	2015	2016
	31st December	31st December	30th June
Financial expenses	6 months to	6 months to	Year ended
Bank interest receivable	368	460	872
	£'000	£,000	£'000
	2016	2015	2016
	31st December	31st December	30th June
Financial income	6 months to	6 months to	Year ended

4. Income tax expense

The income tax expense has been estimated at a rate of 16.7% (December 2015: 18.5%), the rate expected to be applicable for the full year.

5. Discontinued operations

On 13th October 2016, the Group announced that it had decided to discontinue operations at Renishaw Diagnostics Limited (RDL). Financial information relating to the discontinued operation is set out below.

Net decrease in cash and cash equivalents from discontinued operations	(697)	(1,565)	(2,665
Cash flows from investing activities	916	(451)	(827
Cash flows from operating activities	(1,613)	(1,114)	(1,838
	£'000	£'000	£'00
	2016	2015	201
	31st December	31st December	30th Jun
	6 months to	6 months to	Year ende
Loss for the period from discontinued operations	3,503	1,233	2,54
Tax credit	(423)	(340)	(698
Loss before tax	3,926	1,573	3,23
Goodwill impairment	1,784	-	
Operating loss, comprising operating costs of RDL	2,142	1,573	3,23
	£'000	£'000	£'00
	2016	2015	201
	31st December	31st December	30th Jun
	6 months to	6 months to	Year ended

6. Earnings per share

The earnings per share on continuing operations for the six months ended 31st December 2016 is calculated on earnings of £29,863,000 (December 2015: £23,614,000) and on 72,788,543 shares, being the number of shares in issue during the period.

The earnings per share on continuing operations for the year ended 30th June 2016 is calculated on earnings of £71,635,000 and on 72,788,543 shares, being the number of shares in issue during that year.

The loss per share on discontinued operations for the six months ended 31st December 2016 is calculated on losses of £3,503,000 (December 2015: £1,233,000) and on 72,788,543 shares, being the number of shares in issue during the period.

The loss per share on discontinued operations for the year ended 30th June 2016 is calculated on losses of £2,540,000 and on 72,788,543 shares, being the number of shares in issue during that year.

7. Property, plant and equipment

	Freehold land and buildings £'000	Plant and equipment £'000	Motor vehicles £'000	Assets in the course of construction £'000	Total £'000
Cost	2000	2000	2000	2000	2000
At 1st July 2016	142,665	187,048	9,600	14,886	354,199
Additions	2,614	5,223	534	17,525	25,896
Transfers	3,596	1,171	-	(4,767)	-
Disposals	, -	(3,400)	(445)	-	(3,845)
Currency adjustment	2,697	1,560	191	-	4,448
At 31st December 2016	151,572	191,602	9,880	27,644	380,698
Depreciation					
At 1st July 2016	27,241	107,045	5,996	-	140,282
Charge for the period	1,360	8,629	727	-	10,716
Released on disposals	-	(1,916)	(360)	-	(2,276)
Currency adjustment	484	781	116	-	1,381
At 31st December 2016	29,085	114,539	6,479	_	150,103
Net book value					
At 31st December 2016	122,487	77,063	3,401	27,644	230,595
At 30th June 2016	115,424	80,003	3,604	14,886	213,917

Additions to assets in the course of construction of £17,525,000 (December 2015: £23,137,000) comprise £13,765,000 (December 2015: £10,688,000) for freehold land and buildings and £3,760,000 (December 2015: £12,449,000) for plant and equipment.

At the end of the period, assets in the course of construction, not yet transferred, of £27,644,000 (December 2015: £18,374,000) comprise £21,484,000 (December 2015: £10,673,000) for freehold land and buildings and £6,160,000 (December 2015: £7,701,000) for plant and equipment.

8. Intangible assets

	Goodwill on consolidation	Other intangible assets	Internally generated development costs	Software licences	Total
	£'000	£'000	£'000	£'000	£'000
Cost					
At 1st July 2016	21,268	11,249	101,463	22,587	156,567
Additions	-	-	7,177	80	7,257
Disposals	(1,784)	-	-	=	(1,784)
Currency adjustment	604	40	-	28	672
At 31st December 2016	20,088	11,289	108,640	22,695	162,712
Amortisation					
At 1st July 2016	-	10,939	67,682	16,691	95,312
Charge for the period	1,784	171	5,756	650	8,361
Released on disposal	(1,784)	-	-	-	(1,784)
Currency adjustment	-	7	-	26	33
At 31st December 2016	-	11,117	73,438	17,367	101,922
Net book value					
At 31st December 2016	20,088	172	35,202	5,328	60,790
At 30th June 2016	21,268	310	33,781	5,896	61,255

The analysis of acquired goodwill on consolidation is:

The analysis of asquired goodhiii on concentation is:	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
Acquisition of:	£'000	£'000	£'000
itp GmbH	2,960	2,546	2,886
Renishaw Mayfield S.A.	1,794	1,537	1,738
Measurement Devices Limited	6,661	6,661	6,661
Renishaw Software Limited	1,559	1,559	1,559
R&R Fixtures, LLC	5,585	4,679	5,168
Renishaw Diagnostics Limited (92.4%)	-	1,784	1,784
Other smaller acquisitions	1,529	1,370	1,472
Balance at the end of the period	20,088	20,136	21,268

During the period, the total amount of goodwill relating to Renishaw Diagnostics Limited was written off, see note 5.

9. Investments in associates

Movements during the period were:	6 months to 31st December 2016 £'000	6 months to 31st December 2015 £'000	Year ended 30th June 2016 £'000
Balance at the beginning of the period	5,658	3,480	3,480
Dividends received	(356)	(310)	(310)
Share of profits of associates	870	590	1,451
Other comprehensive income and expense	84	-	753
New investments	-	-	284
Balance at the end of the period	6,256	3,760	5,658

10. Capital and reserves

Share capital	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
Allotted, called-up and fully paid			
72,788,543 ordinary shares of 20p each	14,558	14,558	14,558

The ordinary shares are the only class of share in the Company. Holders of ordinary shares are entitled to vote at general meetings of the Company and receive dividends as declared. The Articles of Association of the Company do not contain any restrictions on the transfer of shares nor on voting rights.

Currency translation reserve

The currency translation reserve comprises all foreign exchange differences arising from the translation of the financial statements of the foreign operations, offset by foreign exchange differences on bank liabilities which have been accounted for directly in equity on account of them being classified as hedging items.

Cash flow hedging reserve

The cash flow hedging reserve comprises all foreign exchange differences arising from the valuation of forward exchange contracts which are effective hedges and mature after the period end. These are valued on a mark-to-market basis, are accounted for directly in equity and are recycled through the Consolidated income statement when the hedged item affects the Consolidated income statement. The forward contracts mature over the next three and a half years.

Movements during the period were:	6 months to 31st December 2016 £'000	6 months to 31st December 2015 £'000	Year ended 30th June 2016 £'000
Balance at the beginning of the period	(56,460)	17,171	17,171
Amounts transferred to the Consolidated income statement	8,975	(8,189)	(14,125)
Revaluations during the period	(27,576)	(19,856)	(77,043)
Deferred tax movement	3,534	5,543	17,537
Balance at the end of the period	(71,527)	(5,331)	(56,460)

The cash flow hedging reserve is analysed as:

	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
Derivatives in non-current assets	505	4,874	76
Derivatives in current assets	99	7,325	859
Derivatives in current liabilities	(31,180)	(4,681)	(19,987)
Derivatives in non-current liabilities	(57,729)	(14,099)	(50,652)
	(88,305)	(6,581)	(69,704)
Included in deferred tax assets/liabilities	16,778	1,250	13,244
Balance at the end of the period	(71,527)	(5,331)	(56,460)

Dividends

	6 months to	6 months to	Year ended
	31st December	31st December	30th June
Dividends paid during the period were:	2016	2015	2016
	£'000	£'000	£'000
2016 final dividend of 35.5p per share (2015: 34.0p)	25,840	24,748	24,748
2016 interim dividend of 12.5p	-	-	9,099
Total dividends paid during the period	25,840	24,748	33,847

An interim dividend for 2017 of £9,098,568 (12.5p net per share) will be paid on 7th April 2017 to shareholders on the register on 10th March 2017, with an ex-div date of 9th March 2017.

Other reserve

The other reserve is in relation to additional investments in subsidiary undertakings.

Non-controlling interest

Movements during the period were:	6 months to 31st December	6 months to 31st December	Year ended 30th June
	2016	2015	2016
	£'000	£'000	£'000
Balance at the beginning of the period	(3,162)	(2,638)	(2,638)
Acquisition of remaining shareholding in Renishaw Mayfield A.G.	2,700	-	=
Share of loss for the period	(130)	(301)	(524)
Balance at the end of the period	(592)	(2,939)	(3,162)

11. Employee benefits

The Group operates a number of pension schemes throughout the world. The major scheme, which covers the UK-based employees, was of the defined benefit type. This scheme, along with the Ireland and USA defined benefit schemes, has ceased any future accrual for current members and all these schemes are now closed to new members. UK, Ireland and USA employees are now covered by defined contribution schemes.

The latest full actuarial valuation of the UK defined benefit scheme was carried out at September 2015 and updated to 31st December 2016 by a qualified independent actuary. The major assumptions used by the actuary were:

	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
Discount rate	2.9%	4.1%	3.2%
Inflation rate – RPI	3.7%	3.5%	3.3%
Inflation rate – CPI	2.7%	2.5%	2.3%
Retirement age	64	64	64
The assets and liabilities in the defined benefit schemes were:			
	At	At	At
	31st December	31st December	30th June
	2016	2015	2016
	£'000	£'000	£'000
Market value of assets	165,641	142,904	149,227
Actuarial value of liabilities under IAS 19	(226,566)	(175,890)	(201,650)
	(60,925)	(32,986)	(52,423)
Increase in liability under IFRIC 14	(7,800)	(15,600)	(15,400)
Deficit in the schemes	(68,725)	(48,586)	(67,823)
Deferred tax thereon	12,860	9,128	12,528

The movements in the schemes' assets and liabilities were:

	6 months to 31st December	6 months to	Year ended 30th June
	2016	2015	2016
	£'000	£'000	£'000
Balance at the beginning of the period	(67,823)	(48,094)	(48,094)
Contributions paid	2,415	1,297	2,708
Interest on pension schemes	(792)	(885)	(1,569)
Remeasurement gain/(loss) under IAS 19	(10,125)	4,496	(15,668)
Change in remeasurement loss under IFRIC 14	7,600	(5,400)	(5,200)
Balance at the end of the period	(68,725)	(48,586)	(67,823)

An agreement has been entered into with the trustees of the UK defined benefit pension scheme in relation to deficit funding plans which supersede the previous arrangements.

The Company has agreed to pay all monthly pensions payments and lump sum payments, and transfer payments up to a limit of £1,000,000 in each year (Benefits in Payment).

A number of UK properties owned by the Company are subject to registered fixed charges. One or more of the properties may be released from the fixed charge if on a subsequent valuation, the value of all properties under charge exceed 120% of the deficit.

The Company has also established an escrow bank account, which is subject to a registered floating charge. The balance of this account was £15,317,000 at the end of the period (December 2015: £13,890,000). The funds will be released back to the Company from the escrow account over a period of 6 years.

The agreement continues until 30th June 2031, but may end sooner if the deficit (calculated on a self-sufficiency basis as defined in the agreement) is eliminated in the meantime. At 30th June 2031 the Company is obliged to pay any deficit at that time. All properties will be released from charge when the deficit no longer exists.

The charges may be enforced by the trustees if one of the following occurs: (a) the Company does not pay any Benefits in Payment; (b) an insolvency event occurs in relation to the Company; or (c) the Company does not pay any deficit at 30th June 2031.

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

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

The Company has given a guarantee relating to recovery plans for the UK defined benefit pension scheme. The value of the guarantee is greater than the value of the pension scheme's deficit. As such, in line with IFRIC 14, the UK defined benefit pension scheme's liabilities have been increased by £7,800,000, to represent the maximum discounted liability as at 31st December 2016 (2015: £15,600,000).

12. Deferred tax

On 26th October 2015, the reduction in the UK rate of corporation tax to 19% from 1st April 2017 and 17% from 1st April 2020 was substantively enacted. Deferred tax assets and liabilities have been calculated based on the rate expected to be applicable when the relevant items are expected to reverse.

13. Related party transactions

The only related party transactions which have taken place during the first half year were normal business transactions between the Group and its associates, which have not had a material effect on the results of the Group for this period.

14. Principal risks and uncertainties

As reported in the 2016 Annual report, the business implications of Brexit remain uncertain and any risks arising will be a key focus area for the risk committee for the foreseeable future. Currency fluctuations, trading arrangements, employment issues, research and development project funding and other risks that become apparent over time are under review by the committee and mitigations are being put in place where possible.

Area of risk	Description	Potential impact	Mitigation
Current trading levels and order book	Revenue growth is unpredictable and orders from customers generally involve short lead-times with the outstanding order book at any time being around one month's worth of revenue value.	Global market conditions continue to highlight risks to growth and demand which can lead to fluctuating levels of revenue. Whilst global investment in production systems and processes is expected to expand, future growth is difficult to predict, especially with such a short-term order book. This limited forward order visibility leaves the annual revenue forecasts uncertain.	The Group is expanding and diversifying its product range in order to maintain a world-leading position in its sales of metrology products. Investment in sales and marketing resources continues in order to support the breadth of the product range. The Group is applying its measurement expertise to grow its healthcare and additive manufacturing business activities. The Group retains a strong balance sheet and has the ability to flex manufacturing resource levels and shift patterns.
Research and development	The development of new products and processes involves risk, such as	Being at the leading edge of new technology in metrology and healthcare, there are	Patent and intellectual property generation is core to new product developments.

development timescales, meeting the required technical specification and the impact of alternative technology developments. uncertainties whether new developments will provide an economic return.

R&D programmes are regularly reviewed against milestones and, when necessary, projects are cancelled.

Medium to long-term R&D strategies are monitored regularly by both the Board and Executive Board, including reviews of the allocation of R&D resource to key projects.

Product development processes around the Group are reviewed and aligned where possible to provide consistency and efficiency.

New products involve beta testing at customers to ensure they will meet the needs of the market.

Market developments are closely monitored.

Supply chain management

Customer deliveries may be threatened by a failure in the supply chain. Inability to meet customer deliveries could result in loss of revenue and profit. Production facilities are maintained with fire and flood risk in mind.

Critical production processes are replicated at different locations where practical.

The Group is highly vertically integrated, providing increased control over many aspects of the supply chain.

Ability to flex manufacturing resource levels and shift patterns.

Regular vendor reviews are performed for critical part suppliers.

Stock policies are reviewed by the Board on a regular basis.

Product quality is closely monitored.

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

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

Specialist legal and regulatory staff support the healthcare business.

Experience of healthcare regulatory matters at board level.

Healthcare operations in UK and France have ISO13485 certification for their quality management systems, with Ireland and other subsidiary healthcare operations falling under the UK quality management system.

Defined benefit pension schemes

Investment returns and actuarial valuations of the defined benefit pension fund liabilities are subject to economic and social factors

Volatility in investment returns and actuarial assumptions can significantly affect the defined benefit pension fund deficit, impacting on future funding The investment strategy is managed by the pension fund trustees who operate in line with a statement of investment principles. which are outside of the control of the Group.

requirements.

A new recovery plan was agreed in June 2016 for the 2015 actuarial valuation based on funding to selfsufficiency.

Exchange rate fluctuations

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

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

The Group enters into forward contracts in order to hedge varying proportions of forecast US Dollar, Euro and Japanese Yen revenue and other currencies from time to time.

The Group uses currency borrowings to hedge the main foreign currency denominated assets held in the Group's balance sheet.

Monthly board review of currency rates and hedging position.

Financial calendar

Record date for 2017 interim dividend 2017 interim dividend payment Announcement of 2017 full year results Mailing of 2017 Annual report Annual general meeting 2017 final dividend payment

Registered office: Renishaw plc New Mills Wotton-under-Edge Gloucestershire

UK GL12 8JR

Registered number: 1106260

Telephone. +44 1453 524524
Fax. +44 1453 524901
email. uk@renishaw.com
Website. www.renishaw.com

10th March 2017 7th April 2017 26th July 2017 Late August 2017 20th October 2017 23rd October 2017