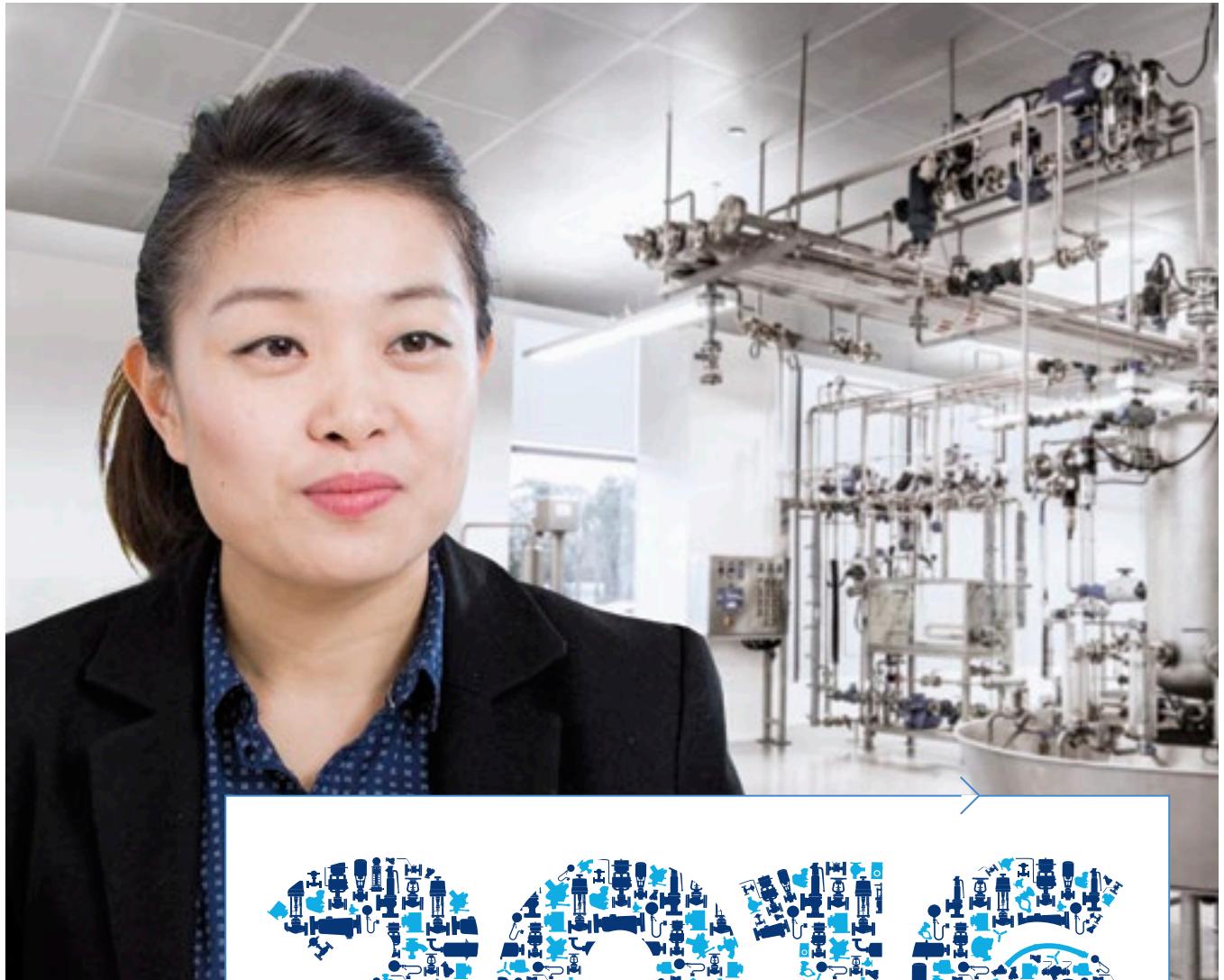


→
ENGINEERING
SUSTAINABLE
VALUE
←



Annual Report

→
Spirax-Sarco Engineering plc
←

A snapshot of 2016: for the year ended 31st December 2016

- > Organic sales growth of 4%[†]
- > Record operating margin of 23.8%*
- > Another excellent performance in Watson-Marlow
- > Robust cash generation, 101% cash conversion
- > Full year dividend increased by 10%

[†] Organic measures are at constant currency and exclude acquisitions and disposals.

* Adjusted profit measures exclude certain non-operational items, as set out and explained in the Financial Review and in Note 2 on page 128.

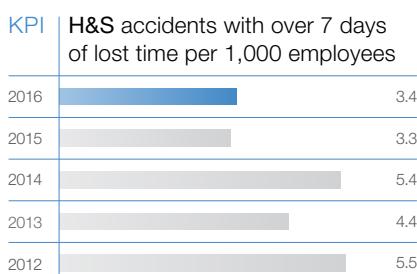
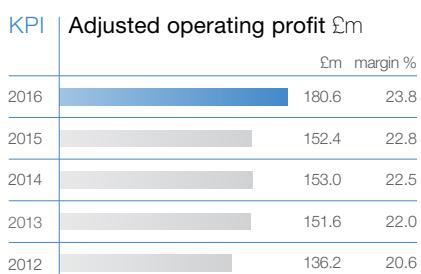
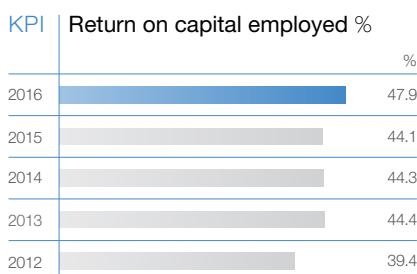
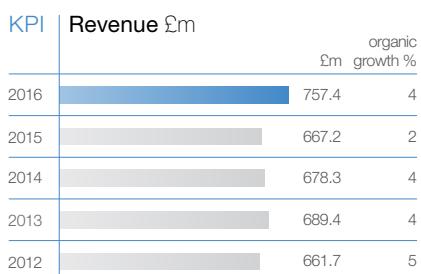
2016 key figures

Adjusted*	2016	2015	Reported	Organic [†]
Revenue	£757.4m	£667.2m	+14%	+4%
Adjusted operating profit*	£180.6m	£152.4m	+18%	+8%
Adjusted operating profit margin*	23.8%	22.8%	+100 bps	+80 bps
Adjusted profit before taxation*	£177.9m	£151.1m	+18%	
Adjusted basic earnings per share*	171.5p	142.6p	+20%	
Dividend per share	76.0p	69.0p	+10%	
Cash conversion	101%	95%		

Statutory	2016	2015	Reported
Operating profit	£174.1m	£142.8m	+22%
Profit before taxation	£171.4m	£139.7m	+23%
Basic earnings per share	165.0p	129.9p	+27%

[†] Organic measures are at constant currency and exclude acquisitions and disposals.

* Adjusted profit measures exclude certain non-operational items, as set out and explained in the Financial Review and in Note 2 on page 128.



KPI

Throughout this report, we use a symbol to indicate which measures are main Group KPIs.

Contents

Strategic Report

About Spirax-Sarco Engineering plc	1
Chairman's statement	2
How and where we operate	4
The markets we serve	6
Investment proposition and market share	8
About the Spirax Sarco Steam Specialities business	10
About Watson-Marlow Fluid Technology Group	12
Our business model	14
Our business model in action	16
Q&A with the Group Chief Executive	19
Our strategy in action	20
Key Performance Indicators	26
Risk and risk management	28
Our principal risks	30
Our 2016 performance in detail	32
Our divisional performance at a glance 2016	34
Group Chief Executive's Report	36
– Steam Specialties: Europe, Middle East and Africa	40
– Steam Specialties: Asia Pacific	42
– Steam Specialties: Americas	44
– Watson-Marlow Fluid Technology Group	46
Financial Review	48
Sustainability Report	52

Governance Report

Our governance	62
Board of Directors	64
Chairman's introduction	66
Leadership	68
– Governance structure	69
– Nomination Committee	71
Effectiveness	73
Accountability	76
– Audit Committee	76
– Risk Management Committee	79
Relations with shareholders	82
Remuneration	83
– Remuneration at a glance 2016	83
– Remuneration Committee	84
– Statement by the Chairman of the Committee	85
– Annual Report on Remuneration 2016	87
– Remuneration Policy Report 2017	100
Regulatory disclosures	108
Statement of Directors' Responsibilities	111

Financial Statements

Independent Auditor's Report	114
Consolidated Statement of Financial Position	119
Consolidated Income Statement	120
Consolidated Statement of Comprehensive Income	121
Consolidated Statement of Changes in Equity	121
Consolidated Statement of Cash Flows	123
Notes to the Consolidated Financial Statements	124
Company Statement of Financial Position	160
Company Statement of Changes in Equity	161
Notes to the Company Financial Statements	162

Corporate Information

Consolidated financial summary 2007–2016	168
Our global operations	169
Officers and advisers	172

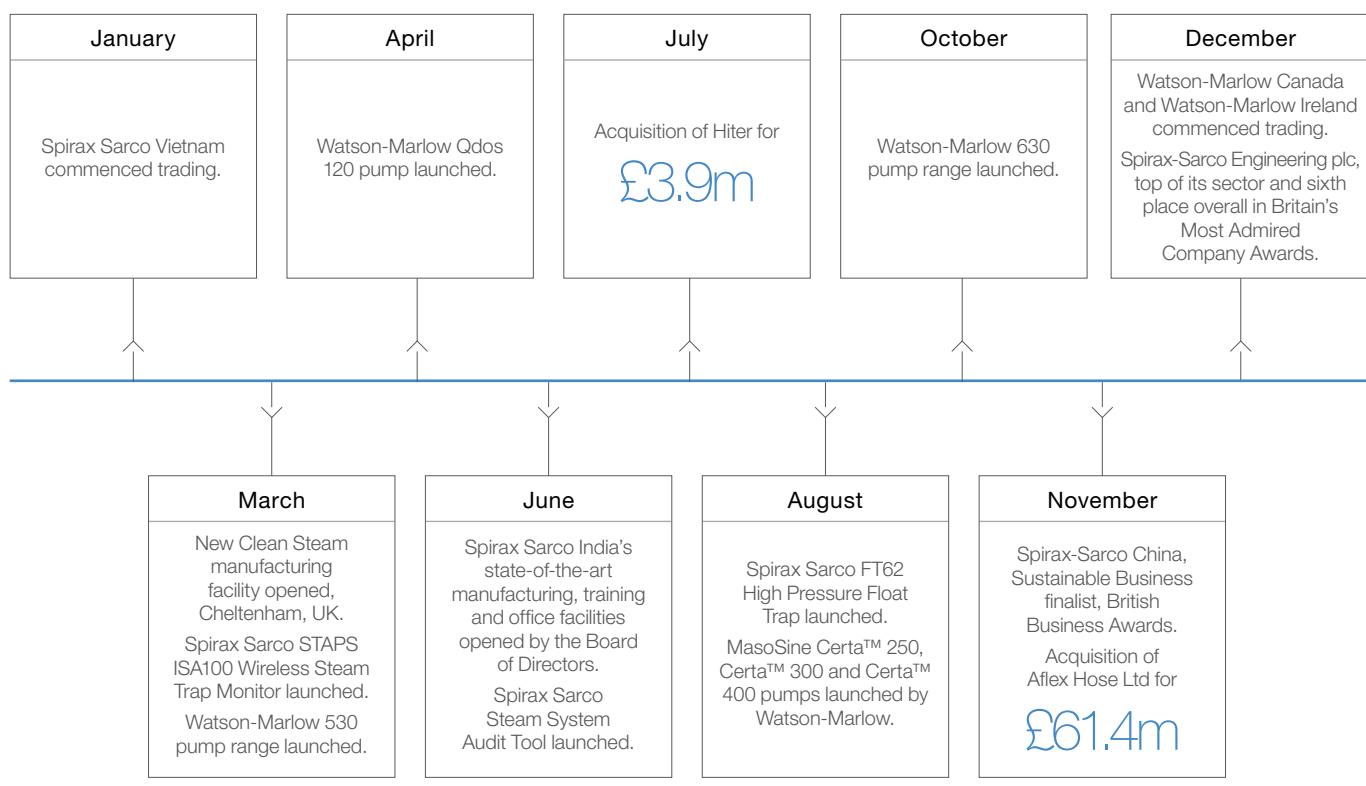
ABOUT SPIRAX-SARCO ENGINEERING PLC

ENGINEERING SUSTAINABLE VALUE

Spirax-Sarco Engineering plc is a multi-national industrial engineering group that has its headquarters in Cheltenham, England. The Group comprises two world-leading engineering businesses: Spirax Sarco for steam specialties and Watson-Marlow for niche peristaltic pumps and associated fluid path technologies. Through a direct sales approach, we deliver bespoke, value-added engineered solutions to customers.

Our customers span a wide range of sectors from food and beverage processing, to water treatment plants and pharmaceutical research. Across our diverse customer base our products, services and solutions enable end users to save energy and water, lower emissions, improve product quality, reduce waste, achieve regulatory compliance, develop safer workplaces and increase process efficiency. By staying close to our customers, understanding their day-to-day requirements and applying our sector expertise we are **engineering sustainable value** for all our stakeholders.

2016: our year in review



ENGINEERING SUSTAINABLE VALUE

FOR OUR SHAREHOLDERS



"I am pleased to report a good set of results in 2016 despite a backdrop of low industrial production growth rates and a year of economic and political uncertainty."

Bill Whiteley,
Chairman

Key points in this section:

- › Organic sales increased by 4% to a reported £757.4 million*
- › Favourable currency movements increased sales on translation by 8%
- › Adjusted operating profit increased by 8% on an organic basis to a reported £180.6 million*
- › Adjusted operating profit margin rose to a record 23.8%*
- › Increase in the total Ordinary dividend of 10% to 76.0p per share

* Unless otherwise stated, all profit measures exclude certain non-operational items, as set out and explained in the Financial Review and in Note 2 on page 128. Organic measures are at constant currency and exclude acquisitions and disposals.

Performance

Sales for the year were £757.4 million, an organic increase of 4%. Following the result of the UK Referendum on EU membership (Brexit referendum), sterling depreciated sharply against almost all currencies and this generated a significant favourable currency movement, increasing sales on translation by 8%. The net effect of acquisitions and disposals was to add an additional 1% to revenues. As a result, reported sales were 14% higher than 2015. Our Watson-Marlow Fluid Technology Group (WMFTG or Watson-Marlow) followed up a good 2015 with another strong year which saw organic sales up 10%, spread across all geographic regions. The Spirax Sarco Steam Specialties business also performed well with organic sales increasing by over 2%, with gains in all divisions.

Adjusted operating profit increased by 8% on an organic basis to a reported £180.6 million. Watson-Marlow delivered organic profit growth of 16%, with the Steam Specialties

business up 6% driven by EMEA and the Americas. Organic operating profit in Asia Pacific was marginally ahead of 2015. Favourable translation and transaction currency movements increased adjusted operating profit by a further 9% while acquisitions and disposals had a marginally positive impact leaving adjusted operating profit in total up 18%. The adjusted operating margin improved by 100 bps, to a record 23.8%.

Net finance costs increased from £1.5 million to £2.6 million reflecting the reduction in interest from reduced bank deposits following the payment of the special dividend in 2015, while the total income from Associates was a loss of £0.1 million. The Group adjusted pre-tax profit was therefore £177.9 million, 18% ahead at reported currency. Adjusted basic earnings per share was 20% ahead at 171.5 pence (2015: 142.6 pence).

The pre-tax profit on a statutory basis was £171.4 million (2015: £139.7 million) and includes non-operational items, explained in Note 2. The statutory basic earnings per share was 165.0 pence (2015: 129.9 pence).

Cash and dividends

Cash generation was robust, with very good cash conversion and we finished the year with net cash of £27 million compared with £5 million at 31st December 2015. Foreign exchange gains boosted net cash by £12 million.

The interim dividend for 2016, paid on 11th November 2016, was raised by 8.2% to 22.5 pence per share (2015: 20.8 pence per share). The Board is recommending an increase in the final dividend of 11.0% to 53.5 pence per share (2015: 48.2 pence). The total Ordinary dividend for the year, subject to approval by shareholders at the AGM on 9th May 2017 of the final proposed dividend, is therefore 76.0 pence per share, an increase of 10.1% over the 69.0 pence per share for the prior year. The proposed dividend is in line with the Group's dividend policy, which is to increase progressively the dividend to appropriately reflect the underlying trading performance while having regard to the

maintenance of a healthy dividend cover, the level of cash generation and the future capital requirements of the business.

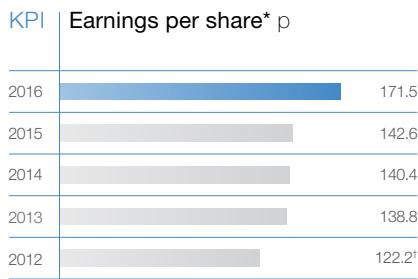
Governance and Board changes

On 10th May 2016, following 27 years of employment with the Company and nearly 24 years as Group Finance Director, David Meredith retired from the Board of Directors. On behalf of shareholders and the Board, I acknowledge the outstanding contribution that David made to the Company and express my thanks for his many years of dedicated service.

Following a rigorous selection process we were pleased to welcome Kevin Boyd to the Group on 11th April 2016, and to the Board on 11th May 2016, as David's successor. Kevin brings with him a wealth of experience; immediately prior to joining the Company he was Group Finance Director for Oxford Instruments plc and before that held the same position at Radstone Technology plc. Kevin is a Chartered Engineer, a Chartered Accountant, a Fellow of the Institute of Chartered Accountants and a Fellow of the Institution of Engineering and Technology. He is a Non-Executive Director of EMIS Group plc. Kevin's pragmatic approach and broad experience facilitated a smooth transition and enabled him to make an immediate contribution to the operation of the Board.

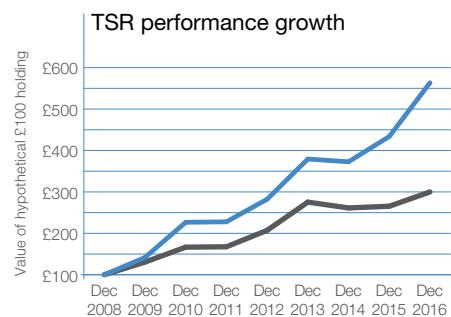
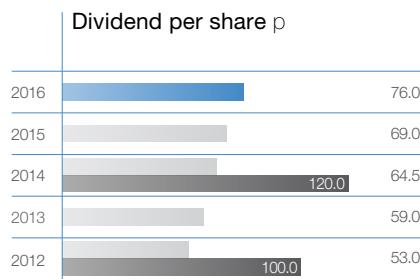
The Board is committed to ensuring the smooth transition of key Board positions. Following an independent, external Board effectiveness review in 2015, during 2016 the Nomination Committee placed particular emphasis on enhanced succession planning.

On 1st September 2016 we welcomed Jane Kingston to the Group as an Independent Non-Executive Director and member of the Audit, Nomination and Remuneration Committees; in November 2016 she was appointed Chairman of the Remuneration Committee. From 2006 until her retirement in December 2015, Jane served as Group Human Resources Director of Compass Group PLC and prior to that held the same position at BPB plc. Jane has worked in a wide variety of sectors and brings with her



* Based on adjusted operating profit.

[†] 2012 restated for IAS 19(R).



■ Special dividend

the skills and experience needed to support the Group's strategy for growth. She is a Non-Executive Director of National Express Group plc.

It was with great sadness that the Board was informed of the death of Dr Krishnamurthy Rajagopal (Raj) in November 2016. Raj had been an Independent Non-Executive Director of the Board since February 2009 and was Chairman of the Remuneration Committee from 2014 to October 2016. On behalf of the Board and shareholders, I express my appreciation for his great contribution to the Company during his years as a Non-Executive Director.

The work of the Board and its Committees is set out in the Governance Report, commencing on page 62.

Employees

During 2016, we were delighted to receive recognition as "Britain's Most Admired Company" within the engineering sector and to be acknowledged as Britain's sixth "Most Admired Company" by *Management Today*, following extensive peer research. This is an excellent achievement and is testament to the hard work that our employees put into ensuring the Company's continued success. On Behalf of the Board, I would like to thank all our employees throughout the world for their individual and collective contributions that have enabled us to deliver another set of good results in 2016.

Prospects

The wide diversity of our customer base across industry sectors and geography; the widespread global use of steam as an industrial energy source; and the extensive application of pumps and fluid path technologies, cause our markets to be strongly influenced by industrial production growth rates. In the first half of 2016 the global industrial production growth rate was around zero, having progressively slowed in prior years. During the second half there was a modest upturn, driven mostly by improvements in emerging markets, resulting in a full year average of 0.5%, a similarly low average as the previous year.

The outlook for 2017 remains unclear, with continued political and economic uncertainty in a number of our key markets. Global industrial production growth rates are therefore forecast to remain low, at less than 2% for the year. Given the lacklustre condition of our markets, we remain focused on delivering self-generated growth through the rigorous application of our business strategy, with strategic initiatives designed to increase the effectiveness of our highly skilled direct sales force, through sector-alignment and investment in training; broaden our global presence, through early entry into new and emerging markets; increase our ability to leverage new product developments; increase the agility and efficiency of our supply chain; and improve the sustainability of our and our customers' operations. With an effective direct sales business model and approximately 85% of revenue generated from our customers' maintenance and operational budgets, we have a degree of resilience which enables us to consistently outperform our markets.

In 2017 we could see a further favourable benefit from foreign exchange as 2017 will include a full year of post-Brexit referendum currency rates. As a guide, if current exchange rates were to prevail for the remainder of the year, revenues would be 6% higher due to translation. Movements in exchange rates are often volatile and unpredictable, therefore the actual impact could be significantly different.

Following the one-off impacts that benefited the first half of 2016, in the second half, as expected, we saw over 1% organic sales growth in the Steam Specialties business, a level more representative of the improving global industrial production growth rates of that period. In 2017, we anticipate modestly higher organic growth than in 2016, as global industrial production growth is expected to rise to just under 2% for the year. Watson-Marlow continued to exceed our expectations by delivering 10% organic growth in 2016. However, we do not expect this level to continue and, for 2017, maintain our expectations of mid-to-high single-digit organic growth.

Group operating margin rose to a record level in 2016 and, as predicted in our Half Year Report, we did not see any margin expansion in the second half of the year compared to the same period in 2015. In particular, Watson-Marlow saw margins grow to an exceptional 33.1% for the year. Our expectation is that on an organic basis we will be able to sustain these full year margins, while increasing investments in new products and routes to market as a means to continue delivering organic sales growth. Assuming no significant deterioration in trading conditions, the Board expects to make further progress in 2017.

We confirm that to the best of our knowledge:

- The Financial Statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation, taken as a whole.
- The Annual Report for 2016, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's performance, business model and strategy.
- The Directors have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31st December 2019. For the full Viability Statement, see page 110.
- The Strategic Report was approved by the Board on 8th March 2017.

Signed by:

Bill Whiteley

Chairman

on behalf of the Board of Directors
8th March 2017

ENGINEERING SUSTAINABLE VALUE THROUGH OUR BREADTH OF PRODUCTS AND SERVICES...

How we are organised

We comprise two world-leading engineering businesses: Spirax Sarco for steam specialties and Watson-Marlow for niche peristaltic pumps and associated fluid path technologies.

Spirax-Sarco Engineering plc



First for Steam Solutions

Spirax Sarco is the global leader in the supply of engineered solutions for the design, maintenance and provision of efficient industrial and commercial steam systems.

The Spirax Sarco offering is very wide, from single products through to complete turnkey bespoke packages that can include design, fabrication, commissioning and maintenance. Our products and services help our end users to improve operational efficiency, maintain product quality, reduce energy and water use, and comply with health, safety and environmental legislation.

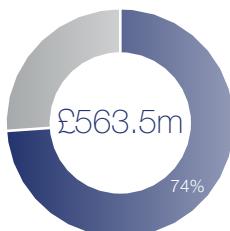


For more information visit:
www.spiraxsarco.com



Read more on pages 10-11.

Revenue £m



Adjusted operating profit* £m



* Before corporate expenses of £12.8 million. See Note 3.

...AND OUR WIDE GEOGRAPHIC REACH

87 operating units[†] in 44 countries*

Direct sales presence in 58 countries and on six continents

[†] Operating companies, branches and Associate.

* Global operations at the time of publication, March 2017. (Four operating units began trading after 31st December 2016: Spirax Sarco East Africa (Kenya), Watson-Marlow Indonesia, Watson-Marlow Thailand and Watson-Marlow Vietnam, and a direct sales presence was established in Greece in January 2017.)

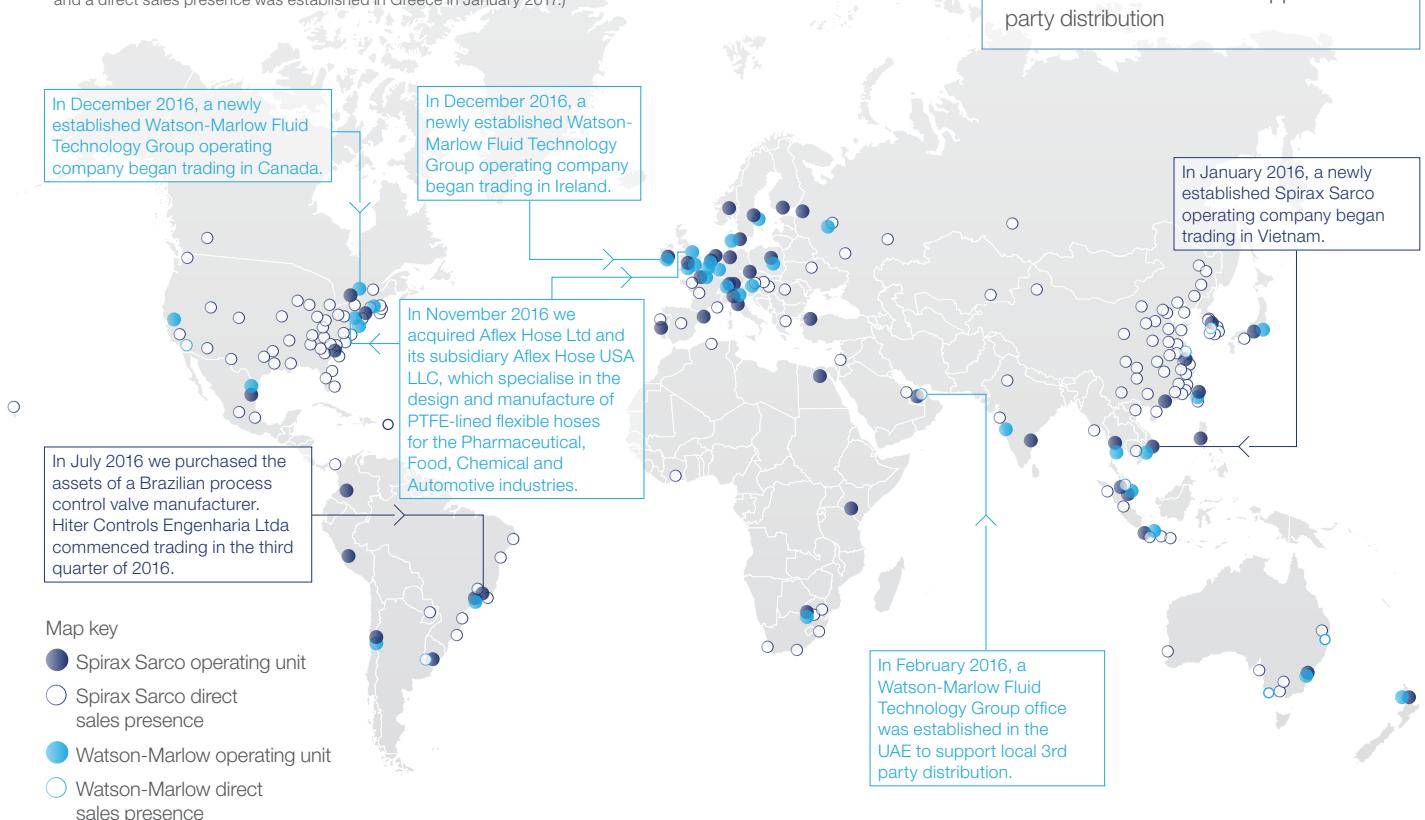
Summary

Expanding our business in 2016:

Three new start-ups trading

Two acquisitions

One office established to support 3rd party distribution



Our core products and services



Steam products



Engineering consultancy



Pumps and fluid path technology

Key facts

5,300+
employees

3,500+
product lines

100,000+
customers

ENGINEERING SUSTAINABLE VALUE

THROUGH THE DIVERSITY OF THE MARKETS WE SERVE



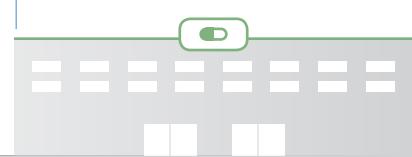
Food

Steam is widely used in the processing of foods for blanching, cooking, baking, packaging, cleaning and sterilising. Our pumps and associated equipment are used to meter ingredients, deliver food to process lines and treat process waste.



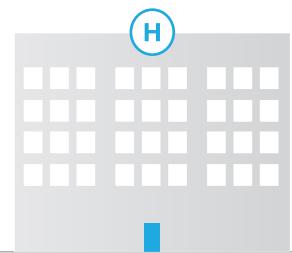
Pharmaceutical & Biotechnology

Clean steam reduces the risk of product and process contamination, and our peristaltic pumps, valves and single-use components enable precise flow control and fluid isolation in the Pharmaceutical and Biotechnology industries.



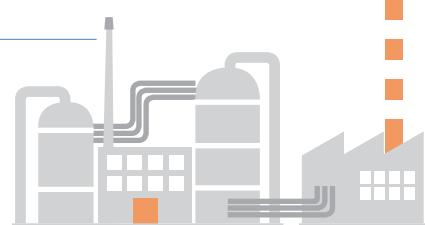
Healthcare

Steam is used in hospitals and clinics for space heating, hot water production, humidification and sterilisation. Pumps and associated equipment are used in the manufacture of products for the Healthcare industry.



Oil & Gas

Our steam system products and services enable optimum performance in steam and condensate systems and reduce energy use during oil and gas production.



Beverage

Steam is essential for brewing and distilling processes. It is used to protect product quality and flavour and ensure compliance with industry standards. Pumps are used to transfer fruit, juice, concentrates, yeast and other additives.



OEM Machinery

Original Equipment Manufacturers (OEMs) are companies that build and supply machines for use in industry. Our activities with OEMs vary from simple product supply to advising on machine performance improvements and process plant design.



**Chemical**

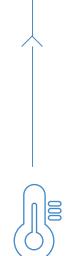
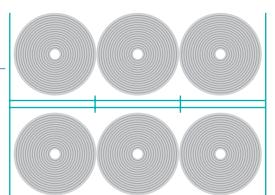
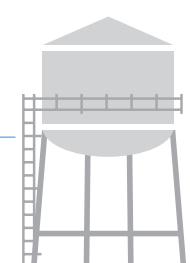
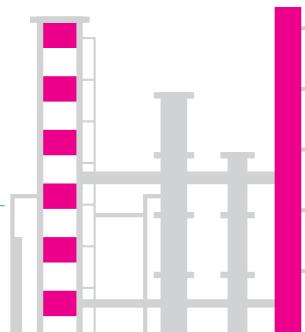
Steam is widely used as an energy source in chemical production and product processing, while our pumps and tubing are used to safely and accurately transfer and dose critical chemical components.

**Water & Wastewater**

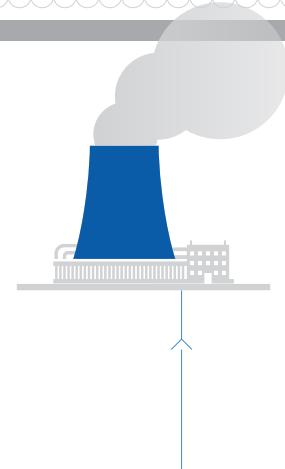
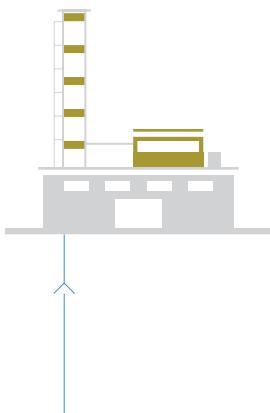
Peristaltic pumps are used to accurately dose chemicals during water treatment processes and efficiently transfer viscous and abrasive slurries.

**Pulp & paper**

Our steam and pump products facilitate the accurate control of critical processes, such as washing, bleaching, dyeing, drying and finishing, in the manufacture of paper and a wide range of domestic and industrial tissues.

**Buildings (HVAC)**

Our steam products are used to provide space heating, humidification and hot water to create comfortable working conditions for employees and visitors in public and private buildings.

**Mining & Precious Metal Processing**

Peristaltic pumps reduce water, energy and chemical use and increase reliability and productivity while moving and processing highly abrasive ores and slurries.

**Power Generation**

Superheated steam is an ideal fluid to transfer chemical energy in fuel into electrical energy through steam turbines. Steam is also used to distribute and re-use waste heat formed during the power generation process.

ENGINEERING SUSTAINABLE VALUE

THROUGH OUR MARKET SHARE AND HEADROOM FOR GROWTH

1. Our long-term market growth drivers remain positive

Population growth

Increased consumption and demand in all our major industry sectors.

Ageing population

Increased demand for healthcare and pharmaceutical products.

Increase in global energy consumption

Investment in the Oil & Gas industry and demand for energy management solutions.

Economic development in emerging markets

New markets and increased consumption.

National and international climate change mitigation strategies

Requirement for companies to manage energy more efficiently, increasing demand for energy management products and services.

Industrial production

As steam and pumps are so widely used across industry, our markets reflect changes in industrial production but our sales have consistently outperformed our markets as we have expanded our addressable market, extended our geographical penetration and grown our market share.

2. Significant income from maintenance and operations expenditure

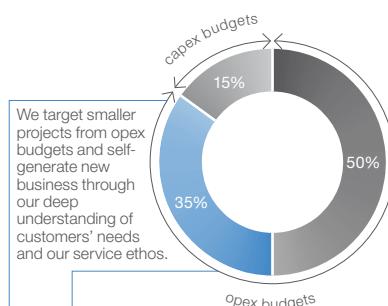
85%*

of Group revenue is generated from annual maintenance and operational budgets, rather than large projects from capex budgets, which are more likely to be cut during periods of slower growth.

By staying close to our customers, we are in a good position to self-generate growth from smaller, and typically better margin, projects.

* Based on Spirax Sarco internal estimates.

Customer capex vs opex spend*



■ Maintenance and repair sales that **maintain existing systems**, supported by the end users' opex budgets, with a typical invoice value of around £1k

■ Small project sales that **improve existing systems**, supported by the end users' opex budgets, with a typical invoice value of £10k-£50k

■ Large project sales that **build new systems**, supported by the end users' capex budgets, with a typical invoice value of over £75k

As our sales engineers walk our end users' plants and identify and provide solutions to meet their unrecognised needs we self-generate business.

* Based on Spirax Sarco internal estimates.

3. Serving less cyclical industries

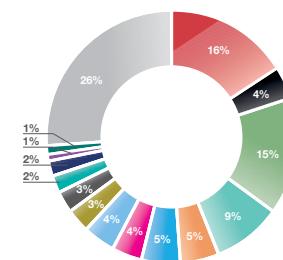
We have an excellent balance between higher-growth end markets and those that are more "defensive" and resilient.

50%*

of Group revenue is derived from defensive, less cyclical end markets, including: Food & Beverage, Pharmaceutical, Healthcare, Water & Wastewater and Power Generation.

* Based on Spirax Sarco internal estimates.

Revenue by key industry sector* %



Food	16%
Buildings (HVAC)	26%
Beverage	4%
Pharmaceutical & Biotechnology	15%
OEM Machinery	9%
Oil & Gas	5%
Healthcare	5%
Textiles	4%
Mining & Precious Metal Processing	3%
Pulp & Paper	3%
Power Generation	2%
Chemical	1%
Other	1%

* Approximately 19% of sales are through channels with little visibility of end industry. These sales have been allocated across key industries on a pro-rata basis. OEM sales to identifiable end industries have been allocated to those industries. Sales to OEM customers account for approximately 18% of Group sales.

4. Targeting self-generated growth

Our overall strategic objective is to deliver self-generated growth in order to outperform our markets. We achieve this by staying close to our customers, understanding their system requirements and providing them with innovative products and solutions to solve their challenges.



Read more about our strategy in action on pages 20-25.



Our market size and share

£5.8bn*

Estimated size of our total addressable market

* Based on Spirax Sarco internal estimates.

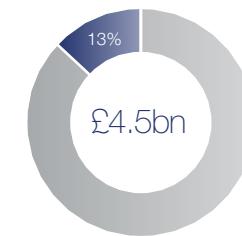
14%*

Our estimated global share of our total addressable market

* Based on Spirax Sarco internal estimates.

Market share by business

spirax sarco
First for Steam Solutions

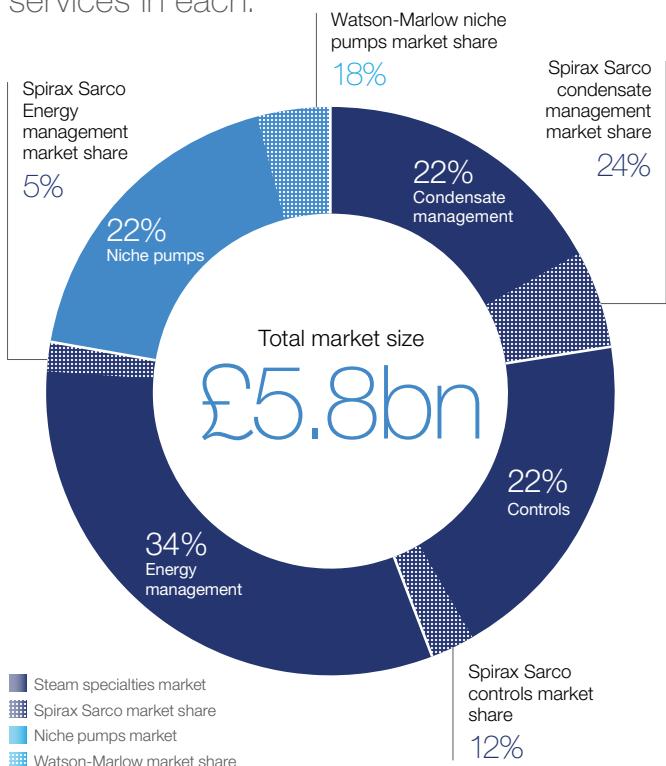


WATSON MARLOW
Fluid Technology Group



Understanding our marketplace

Our global addressable market comprises four key areas and we provide products and services in each.



Condensate management

Market size:

£1.3bn

Our typical products:

- Steam traps
- Condensate return pumps
- Isolation valves

Our market share:

24%*

Controls

Market size:

£1.3bn

Our typical products:

- Automatic control valves
- Pressure regulators
- Temperature controls

Our market share:

12%*

Energy management

Market size:

£1.9bn

Our typical products:

- Metering products
- Boiler house products
- Heat transfer packages
- Energy services

Our market share:

5%*

Niche pumps

and associated equipment

Market size:

£1.3bn

Our typical products:

- Positive displacement pumps
- Tubing and fluid path technologies
- Filling machines

Our market share:

18%*

The revised market size reflects underlying changes in market segment sizes, changes in the scope of the addressable market as a result of acquisitions, product development and the impact of exchange movements. Market share includes annualised revenue from acquisitions made during 2016.

* Based on Spirax Sarco internal estimates.

ENGINEERING SUSTAINABLE VALUE FOR OUR CUSTOMERS

What we do: Spirax Sarco Steam Specialties business

1. Design innovative products and packages

2. Manufacture most of the products we sell

3. Sell our products and services



New steam systems

In large capital projects, such as the construction of new hospitals or factories, our expert sales engineers work with end users, their design consultants, or their contractors to advise on, design or supply complete new steam systems.



Steam system audits

Detailed steam system audits, carried out by our sector specialist steam engineers, identify opportunities for improved efficiency in our end users' processes, including energy and water savings. Audits can identify the cause of known problems or uncover unrecognised needs.



Engineered solutions

Working directly with our customers, our sales engineers apply our deep applications and systems knowledge, breadth of products and expertise to create bespoke engineered solutions for energy and water savings, process efficiency, product quality and improvements in plant health, safety and regulatory compliance.



Maintenance, repair and operations

To maintain operational efficiency, production output and product quality, regular maintenance spending is required by our end users. We supply the replacement products required to keep our end users' steam systems operating at an optimum level and also offer service contracts.



Training

We offer training to our end users' technical and maintenance staff in 43 training centres worldwide, the majority of which contain live steam systems. Our training courses equip our end users with the skills required to run their steam systems as efficiently and effectively as possible.

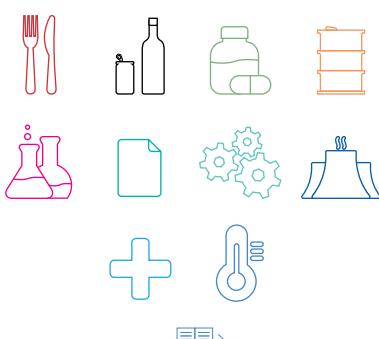
Direct sales

Our customers:

Where is steam used?

Steam is widely used across a diverse range of industries and in most manufacturing processes for heating, curing, cooking, cleaning and drying. Industries using steam in this way include Food & Beverage, Pharmaceutical & Biotechnology, Oil & Gas, Chemical, and Pulp & Paper.

Steam is also widely used in hospitals and buildings for space heating, humidification and sterilisation, and to provide a reliable source of hot water at a constant temperature.



For more information about how and where steam is used, see pages 6-7.

Why is steam used?

Steam is a preferred heat transfer medium in most industrial processes because of its high energy content (steam can hold five or six times as much energy as an equivalent mass of water).

Steam is highly controllable and can be generated at high pressures to give high temperatures. Temperature can be controlled throughout a steam system by controlling pressure.

When steam reaches the point of use, the condensation process efficiently transfers heat to the product being heated.

Steam can surround or be injected into a product being heated. It can fill any space at a uniform temperature and will supply heat by condensing at a constant temperature; eliminating temperature gradients.

Steam can be easily and cost effectively distributed to the point of use because it naturally flows from high to low pressure, meaning that costly circulating pumps are not required.

Steam is clean, sterile, non-hazardous and environmentally sound, and water is relatively inexpensive and plentiful.

Steam is convenient; it can be used for multiple purposes on a site from process applications, to space heating, sterilisation or hot water generation.

Creating value for customers through:

Improving

- Product quality
- Production output
- Efficiency
- Plant monitoring
- Profitability



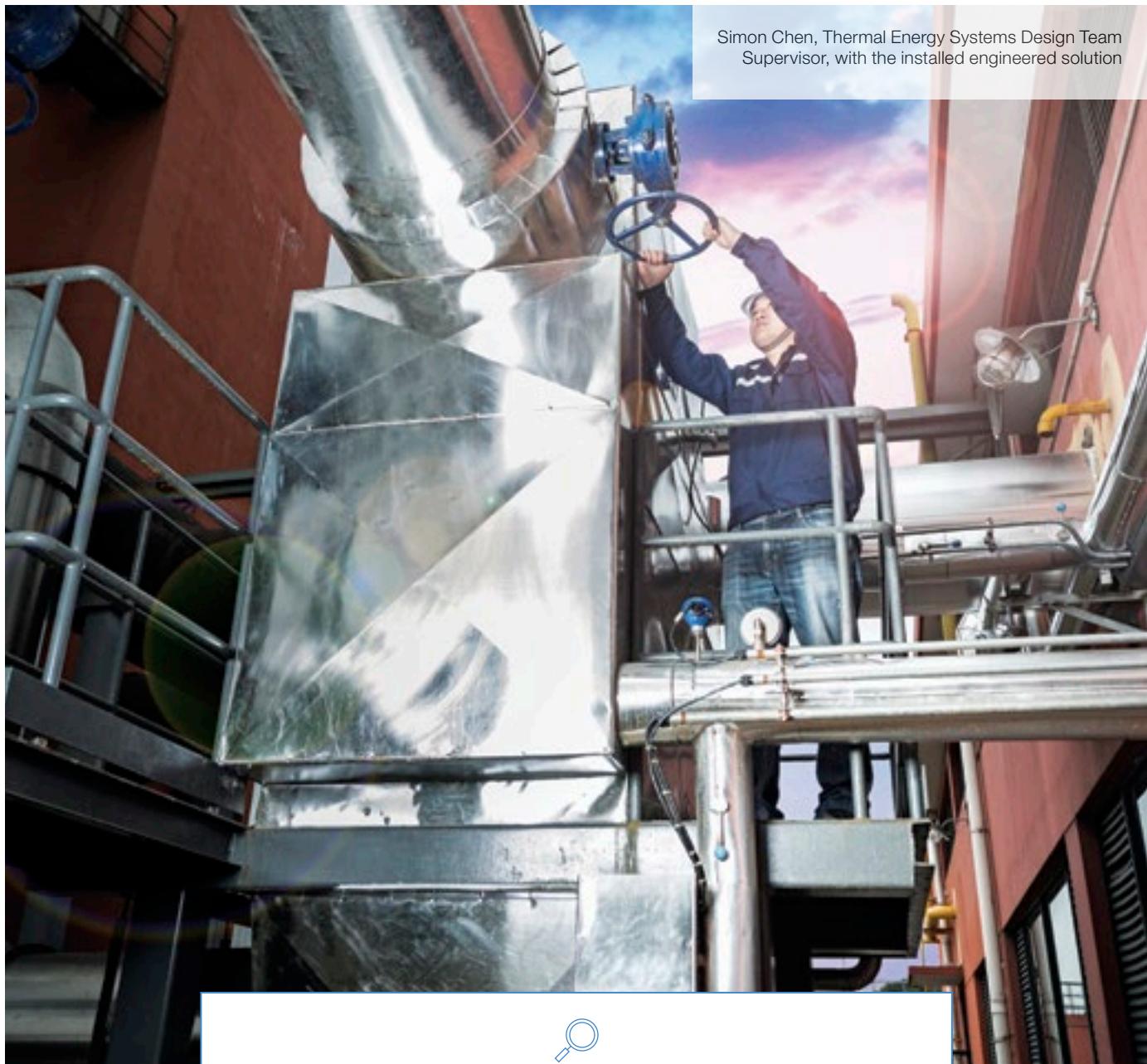
Reducing

- Energy use and costs
- Water use and costs
- CO₂ emissions
- Waste
- Production times
- Maintenance downtime



Meeting

- Statutory rules/regulations
- Industry standards
- H&S requirements



Simon Chen, Thermal Energy Systems Design Team Supervisor, with the installed engineered solution



Customer case study

At Shanghai Totole Food Ltd, a chicken bouillon manufacturer, steam is used to cook raw ingredients and produce the 130°C hot air required to dry the liquid bouillon to powder. Faced with high energy costs, Shanghai Totole Food Ltd asked Spirax Sarco China to audit its steam system.

Following the audit, Spirax Sarco recommended the installation of a packaged solution to recover waste heat from the boiler exhaust and use it to preheat the air used in the drying beds, reducing the amount of steam needed to heat the air to the required temperature. The solution included fitting an economiser to the boiler exhaust (reducing the flue gases from 190°C to 55°C) and several heat exchangers prior to the drying beds, which use hot water to preheat the air before steam is used to raise it to its final temperature.

As a result of the thermal energy management solution, Shanghai Totole Food Ltd has been able to reduce its energy consumption on this process line by over 10%, saving an estimated one million RMB (£120,000) per year and reducing water use by approximately 500m³ per year.

ENGINEERING SUSTAINABLE VALUE FOR OUR CUSTOMERS

What we do: Watson-Marlow

1. Design innovative products (in our 10 distinct brands)

2. Manufacture our wide range of products

3. Sell our products and services



Peristaltic and niche pumps

We supply positive displacement (peristaltic) pumps for fluid handling in a range of industries including Mining & Precious Metal Processing, Water & Wastewater and Pharmaceutical; sinusoidal MasoSine pumps which deliver low shear, gentle pumping for delicate products in a range of industries, including Food & Beverage; and Flexicon aseptic liquid filling and capping systems which are particularly suited to the Biotechnology industry.



Tubing and hoses

We supply a wide range of tubing and hoses, which complement our pumps and are suitable for use across a wide range of industries. For example, our Aflex PTPE-lined flexible hoses provide the highest levels of chemical resistance, superior flexibility and sterility in the Pharmaceutical, Chemical and Food & Beverage industries, while our Pumpsil platinum-cured silicone tubing offers full traceability ideal for single-use Biotechnology applications.



Single-use and fluid path technologies

Our BioPure brand supplies a range of single-use fluid path components, such as clamps, valves and connectors, to the Pharmaceutical and Biotechnology industries. Our Asepco brand supplies Biotechnology customers with wearless radial diaphragm valves for tank bottoms and in line process applications. Our FlowSmart brand supplies high purity sanitary gaskets, silicone transfer tubing and reinforced silicone hoses for the Biotechnology and Pharmaceutical industries.



Maintenance, repair and operations

We supply all the replacement parts required to keep our end users' pumping systems operating efficiently.



Sector-specific advice

Our expert engineers offer sector-specific advice to help our end users overcome their difficult pumping challenges through selecting the most appropriate pumps for their applications.

Direct sales

Our customers:

Hygienic applications

In peristaltic pumps the pump does not touch the fluid, making them ideal for hygienic applications where clean fluids must not be contaminated. A sterile tube makes a sterile pump.

Watson-Marlow pumps and filling machines are widely used in the Biotechnology, Pharmaceutical, and Food & Beverage industries.

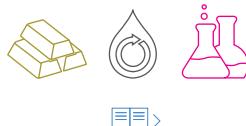


Dirty applications

In peristaltic pumps the fluid does not touch the pump, making them ideal for dirty or abrasive fluids – such as slurries, pigments, chemicals and effluent – which would contaminate or damage other pump types.

Our high performance tubing offers excellent long-term performance as it is variously designed for resistance to chemicals, abrasive fluids and oils, greases or detergents.

Watson-Marlow pumps and tubing are widely used in the Mining & Precious Metal Processing, Water & Wastewater and Chemical industries.



Single-use applications

Single-use is a growing trend in the Biotechnology and Pharmaceutical industries. Our cleanroom manufactured products reduce risk of contamination, enable the manufacture of single-use assemblies and improve the ease of our end users' validation processes.

For more information about how and where our products are used, see pages 6-7.

Creating value for customers through:



Improving

- Pumping accuracy
- Pump reliability
- Efficiency
- Productivity
- Ease of validation
- Maintenance



Reducing

- Whole life-cycle costs
- Maintenance downtime
- Chemical use and costs
- Water use and costs
- Energy use and costs
- Pumping time
- Risk of batch contamination



Meeting

- Statutory rules/regulations
- Industry standards (particularly around hygiene)



MasoSine Certa Sine™ pump
from Watson-Marlow

Customer case study

Shear-sensitive fluids, such as cream and whey, require gentle handling to preserve product integrity and texture. Delivering up to 50% more gentle handling than rotary lobe pumps, the recently launched MasoSine Certa Sine™ (Certa) pump from Watson-Marlow is enabling Goldsteig Käserien Bayerwald GmbH, Germany, to optimise production of its range of speciality cream cheeses.

Designed specifically for the food industry, with few internal components in direct contact with the product being pumped, Certa is ideally suited for clean-in-place or steam-in-place maintenance, reducing down-time and increasing production hygiene.

Operations Manager, Günter Schlattl, described the pump's performance and ease of cleaning as "simply outstanding".



Read more about the Certa pump on page 23.

ENGINEERING SUSTAINABLE VALUE THROUGH OUR DIRECT SALES BUSINESS MODEL

Creating value through meeting customer needs

Meeting the needs of our customers by helping them to solve their difficult productivity and process challenges, improve their operational sustainability and comply with increasingly stringent health, safety and environmental requirements, is at the core of what we do. Our customers' needs are at the heart of our business model and it is through meeting those needs that we create value. To meet our customers' needs we manufacture high quality products; advise customers on the most effective application of these products; design bespoke engineering packages; arrange installation of our engineered solutions; and help our customers to maintain and replace our installed equipment to ensure optimum efficiency in their industrial systems.

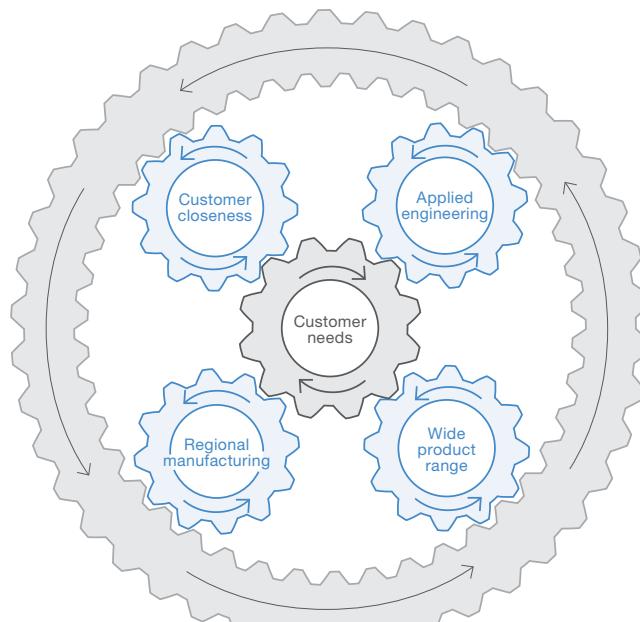
Competitive strengths

Customer closeness

Our direct sales business model creates a unique understanding of our customers' needs and enables us to build deep, long-term relationships as we help our customers solve their difficult productivity, control and energy efficiency problems, and improve their operational performance and sustainability.

Regional manufacturing

Local availability of a wide range of products, which meet applicable regional design codes, is critical to our business model and enhances top-line revenue growth. We have strategically located our major manufacturing plants across the world, in Europe, North America, Latin America and Asia.



Applied engineering

It is not our products alone that provide value to our customers – it is the application of our extensive knowledge of systems design, operations and maintenance. Our customers increasingly rely on our expertise to deliver unique engineering solutions to achieve enhanced and sustainable operating efficiencies.

Wide product range

The breadth of our product offering is unmatched by our competitors and our one-stop shop approach simplifies the procurement process for our customers who are increasingly seeking partnerships with competent full-service suppliers. We are committed to R&D to further widen our range of products and pre-fabricated engineered packages.

→ Value creation →
Driving sustainable growth and stakeholder value



For more insight into how we self-generate business by staying close to our customers see pages 16-17.

How we maximise value

We maximise value by focusing on our strategy for growth.



Read more on pages 19-25.

Our Core Values

Our Core Values of respect, accountability, passion, integrity and delivery shape our company culture and provide the foundation upon which we work.



Read more on page 56.

Beneficiaries of our value creation

		The value we create:	Link to sustainability objectives:
Customers 	Every year we serve an estimated 100,000+ customers in approximately 110 countries, through our global network of operating units, sales offices and distributors. As we focus on consistently delivering value to our customers we also generate value for other stakeholders.	Through using our products and services, end users improve operational efficiency, productivity and safety, meet regulatory requirements and increase their sustainability.	Engineering sustainable solutions.  Read more on page 60.
Shareholders 	We have a diverse range of institutional and private shareholders, who are geographically widespread. Our shareholders value our ability to achieve growth that outperforms our markets and our outstanding record of delivering shareholder value.	£51.9 million paid as dividends to shareholders during 2016.	
Employees 	Globally we employ over 5,300 people, in 58 countries. Our people are our most important asset and our greatest competitive advantage. We create value for employees as we invest in developing their knowledge and skills and remunerate them fairly for the work that they do.	Over £225 million paid in wages and salaries and extensive investment in training and development during 2016.	Engineering for excellence.  Read more on pages 54-56.
Suppliers 	By manufacturing regionally, using local and national suppliers, the beneficiaries of our value creation are geographically widespread. We select responsible suppliers who adhere to our Supplier Sustainability Code and they in turn create value for their stakeholders.	Over £300 million paid to suppliers of materials and services during 2016.	Engineering the responsible way.  Read more on page 57.
Governments 	Through paying taxes in the many countries in which we operate we support the development of public infrastructure, healthcare and educational provision, further broadening the reach of our value creation.	Approximately £200 million paid in taxes (corporation tax, employment taxes and net VAT) to national governments during 2016.	
Communities 	We seek to have a positive impact on the communities in which we operate, through making charitable donations to worthwhile causes, employee volunteering and educational provision. As we invest in charitable causes we create value for the people that live and work in our local communities.	£267,000 plus employee time donated to charitable causes worldwide during 2016.	Engineering better futures.  Read more on page 61.
The environment 	We create value for the environment as we provide products and services that improve the sustainability of our end users' operations; minimising their environmental impacts through reducing energy consumption, emissions, water use and waste.	4.4 million tonnes of CO ₂ emissions saved by our end users annually from products sold this year.	Engineering sustainable solutions.  Read more on page 60.

How we reward our value creation

Our remuneration policy creates a strong alignment between the creation of value and Executive Director remuneration

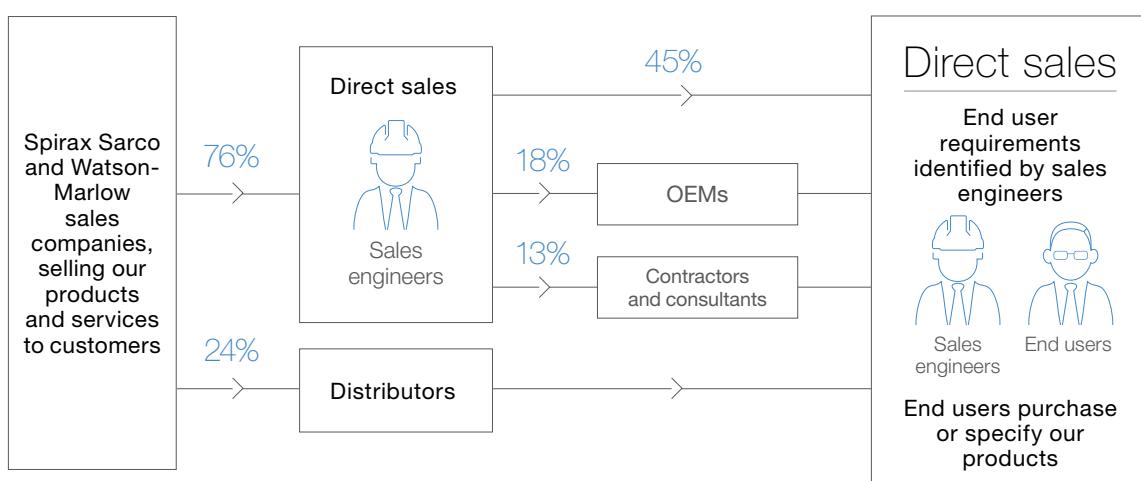


[Read more on pages 83-107.](#)

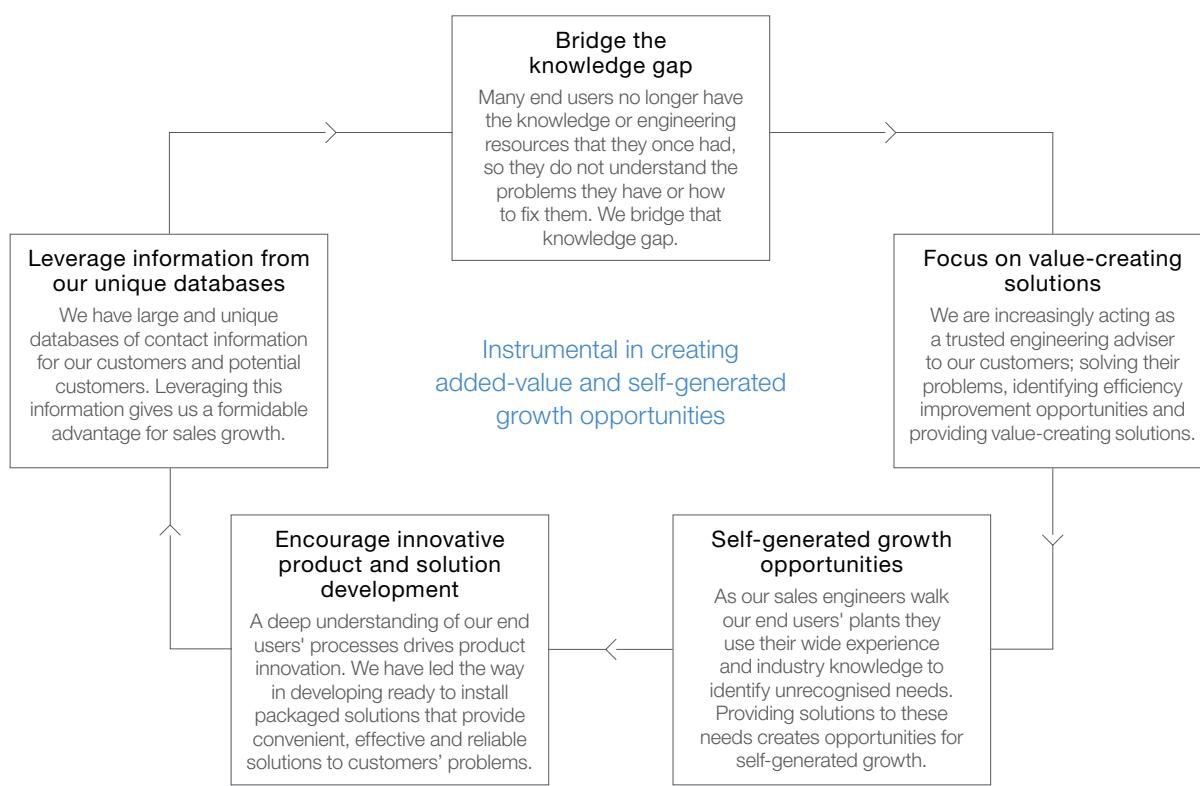
ENGINEERING SUSTAINABLE VALUE THROUGH OUR DIRECT SALES APPROACH

Our routes to market

Approximately three quarters of Group revenue is generated directly and the remaining quarter is generated indirectly from sales to distributors. Our direct sales model plays an important role in all our routes to market as our engineers call on end users and highlight the benefits of our products, solutions and services. End users may then purchase directly from us, specify our products in OEM equipment, request that contractors specify our products in their plans, or purchase from a distributor.



The benefits of our direct sales approach





Our direct sales approach

We have a direct sales presence in 58 countries where our local sales and service engineers are singularly focused on assisting steam and pump users to overcome their process challenges and meet their operational needs. We combine a detailed understanding of our end users' processes, a breadth of products, packages and services, and a global presence, to offer the most extensive local range of engineered solutions to our customers.

Our territories are covered segmentally where possible, with sector specialists allocated to our core industries, and geographically where sectorisation is not practical or appropriate. Our sales engineers build deep, long-term relationships with their customers, who trust them as valued engineering partners or expert advisers in their plants.

Fabio Inzunza (sales engineer), Enrique Guevara (training manager) and Elliot Bustillo (sales manager), in Spirax Sarco's Steam Training Centre, Mexico



Expert knowledge and skills

The knowledge and skills of our direct sales and service engineers is a competitive advantage and a barrier to entry to others who cannot compete with the many years of experience within our direct sales workforce.

We have 51 state-of-the-art training centres located around the world, most of which are equipped with live steam or pumping installations, to facilitate hands-on training of our sales and service engineers. We have developed extensive e-learning resources to improve the technical training of our sales engineers and speed the process of their development. Additionally, we use information collection and sharing software to improve our ability to disseminate application knowledge and provide a common platform to share knowledge across our global sales network.

During 2016 we established the Spirax Sarco Academy to oversee the delivery of our learning and development programmes.



Read more on page 21.

ENGINEERING SUSTAINABLE VALUE BY IMPLEMENTING OUR STRATEGY FOR GROWTH



“As we implement our strategy we self-generate growth,
making us less reliant on our markets for growth opportunities.”

Nicholas Anderson,
Group Chief Executive

Q&A with the Group Chief Executive

Q: Why are global industrial production growth rates important?

A: Steam and pumps are widely used in many applications across industry and our customers are geographically and industrially diverse. Due to this diversity of end users, our markets tend to reflect changes in global economic conditions and, in particular, movements in global industrial production growth rates. Industrial production growth rates thus act as a barometer for the economic conditions within our markets.

Q: Do you expect industrial production growth rates to improve?

A: Following a strong declining trend in 2014 and 2015, driven by slowing emerging economies, global industrial production growth stabilised around zero percent in the first half of 2016 before experiencing a recovery in some emerging economies in the second half of the year. Overall, global industrial production growth in 2016 averaged 0.5%, the same very low levels of 2015, but exited the year with an annualised growth rate below 2%, which is predicted to continue in the first half of 2017. While the growth rates at the end of 2016 suggest an improvement for 2017, we remain cautious in predicting a market upturn and continue to focus on the implementation of our strategy, with its emphasis on self-generated growth. (Source: CHR Economics)

Q: How does the Group strategy help you achieve growth in these market conditions?

A: In the current low growth environment, the implementation of our strategy is helping us achieve growth that outperforms our markets as we focus on our six strategic themes. As we implement our strategy we increase the effectiveness of our direct sales organisation, leverage our strength in key sectors, identify and take advantage of attractive opportunities, expand our addressable markets and align and direct our resources more effectively to improve business performance.

The six Group strategic themes, outlined on the following pages, reflect the key elements of the business strategies of the Spirax Sarco Steam Specialties business and the Watson-Marlow Fluid Technology Group, underpinned by our Group acquisitions strategy that aims to create shareholder value through supplementing organic growth with targeted and returns-focused strategic acquisitions.

Q: How confident are you of achieving future growth?

A: Our direct sales approach is highly effective in uncovering opportunities to improve customers' steam systems and fluid path processes. Our ability to self-generate revenue, combined with a high proportion of sales that derive from end-users' maintenance and operating budgets and the diversity of the markets that we serve, makes our business highly resilient. As we consistently put the needs of our customers first, develop the skills of our people and focus on implementing our strategy for growth, we remain well-placed to achieve growth and continue to deliver value to our stakeholders.

Our strategic objective:

To deliver self-generated growth that outperforms our markets

Our strategic focus:

Doing better what we already do well

Our six strategic themes:

- 1. Increase direct sales effectiveness through sector focus [Read more on page 20.](#)
- 2. Develop the knowledge and skills of our expert sales and service teams [Read more on page 21.](#)
- 3. Broaden our global presence [Read more on page 22.](#)
- 4. Leverage our R&D investments [Read more on page 23.](#)
- 5. Optimise supply chain effectiveness [Read more on page 24.](#)
- 6. Operate sustainably and help improve our customers' sustainability [Read more on page 25.](#)

1

Increase direct sales effectiveness through sector focus

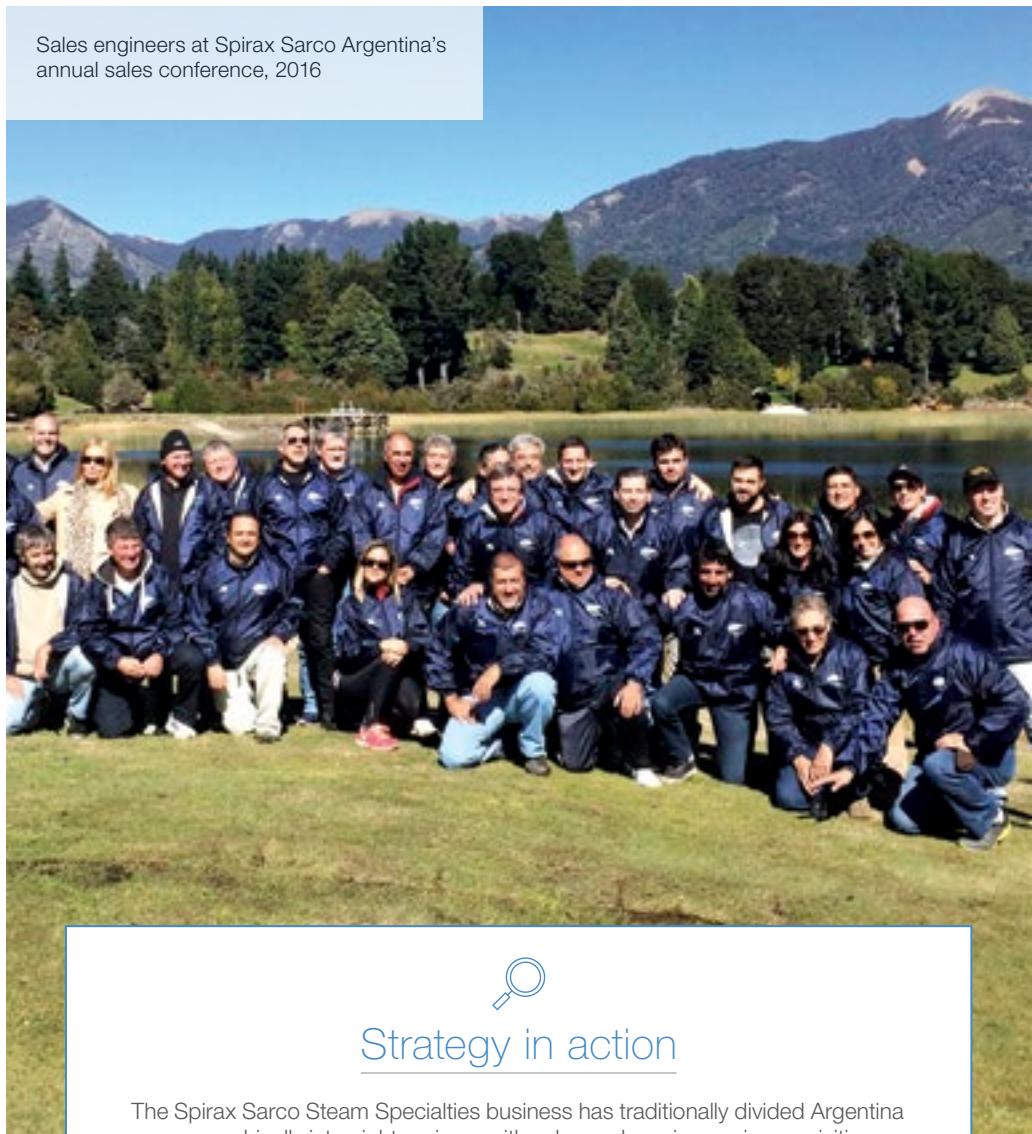
Why we are focusing on this

The ability of our sales and service engineers to solve our customers' operational and efficiency challenges is further enhanced as they develop industry specific knowledge and understand the intricacies of our end users' processes, requirements and regulatory environment. As we sectorise our sales force and increasingly align our products and services in support of this, we develop a global network of local industry experts and a portfolio of products tailored to meet customers' needs. This increases our ability to self-generate growth and provide value to our customers through enhanced Customer Value Propositions.

How we are doing it

We have identified several priority industries in which we have a strong competitive presence and that provide attractive growth opportunities and potential return on investment, such as Food & Beverage, Healthcare, Pharmaceutical and OEMs. We are sectorising our direct sales force where geographically appropriate and are increasingly tailoring new product development and our product offering around our priority sectors. We are also focusing on providing thermal energy management solutions, with the aim of making the Spirax Sarco Steam Specialties business the first choice provider for both steam solutions and thermal energy management.

Sales engineers at Spirax Sarco Argentina's annual sales conference, 2016



Strategy in action

The Spirax Sarco Steam Specialties business has traditionally divided Argentina geographically into eight regions, with sales and service engineers visiting customers across many industries within their allocated territory. With the implementation of the "Customer first" strategy, the company has extensively reorganised its sales force, creating industry specialists who are better able to meet the needs of customers within key industries.

The sectorisation process, which began in 2015 and continued in 2016, has been undertaken carefully to ensure a smooth transfer of customers between sales engineers. It has entailed comprehensive market analysis, employee skills mapping and training to ensure the efficient re-distribution of engineers in support of key industries.

With approximately 60% of engineers now having an industry specialisation and 40% operating regionally to maintain a broad industrial coverage, sectorisation has delivered notable results with increased sales effectiveness and improved company performance in 2016.

2

Develop the knowledge and skills of our expert sales and service teams

Why we are focusing on this

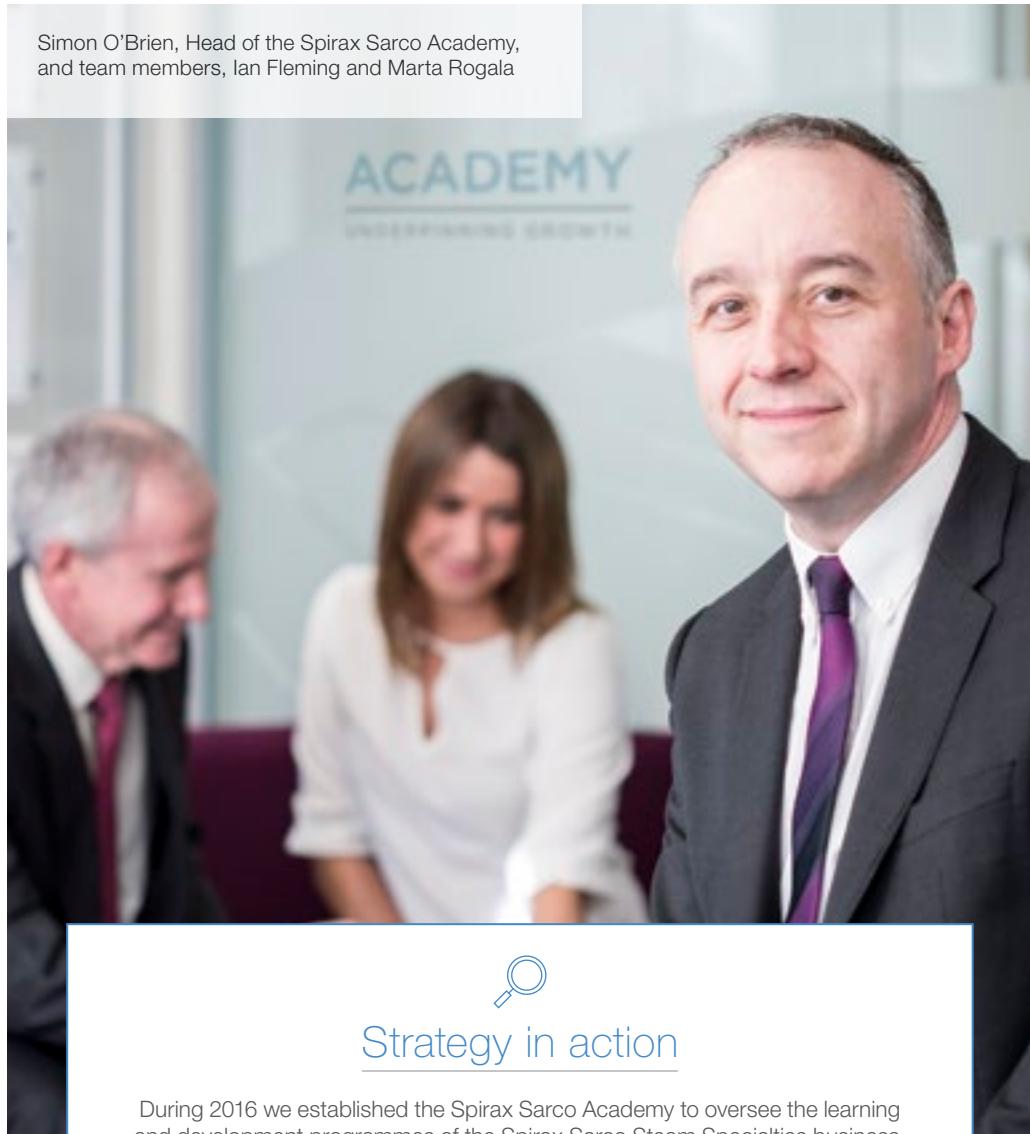
Our direct sales business model relies on the expertise of our sales and service engineers. Their ability to walk our end users' plants, identify improvement opportunities and deliver solutions to overcome difficult steam or pumping problems, enables us to self-generate growth and is a key differentiator. As we invest in the professional development of our people, we develop a level of expertise that is unrivalled by our competitors.

How we are doing it

Globally, we have 51 state-of-the-art training centres, most of which are equipped with live steam or pumping installations that facilitate the hands-on training of our customer facing employees. Our engineers also undergo extensive on-the-job training and mentoring as they develop the knowledge and skills required to enable them to sell effectively. We have an extensive online library of training materials, to which we added additional courses in 2016.

From 2017, the training of our Spirax Sarco Steam Specialties business customer facing employees will be overseen by the Spirax Sarco Academy.

Simon O'Brien, Head of the Spirax Sarco Academy, and team members, Ian Fleming and Marta Rogala



Strategy in action

During 2016 we established the Spirax Sarco Academy to oversee the learning and development programmes of the Spirax Sarco Steam Specialties business. The aim of the Academy is to underpin growth, which it will achieve by setting new, demanding and globally consistent knowledge and skill standards, facilitated by the provision of high-quality learning materials made easily available to all employees, regardless of location or language.

In addition to establishing a global standards system, syllabus and training materials, the Academy, which has its own governance structure and an independent budget, has created a real-world assessment system to evaluate the knowledge and skill level of employees and also their sales effectiveness.

As we invest in developing the knowledge and capabilities of our customer facing employees, the value that they provide to customers grows which further increases customer confidence in us, underpinning growth and reinforcing Spirax Sarco's position as the world leader for steam solutions.

3

Broaden our global presence

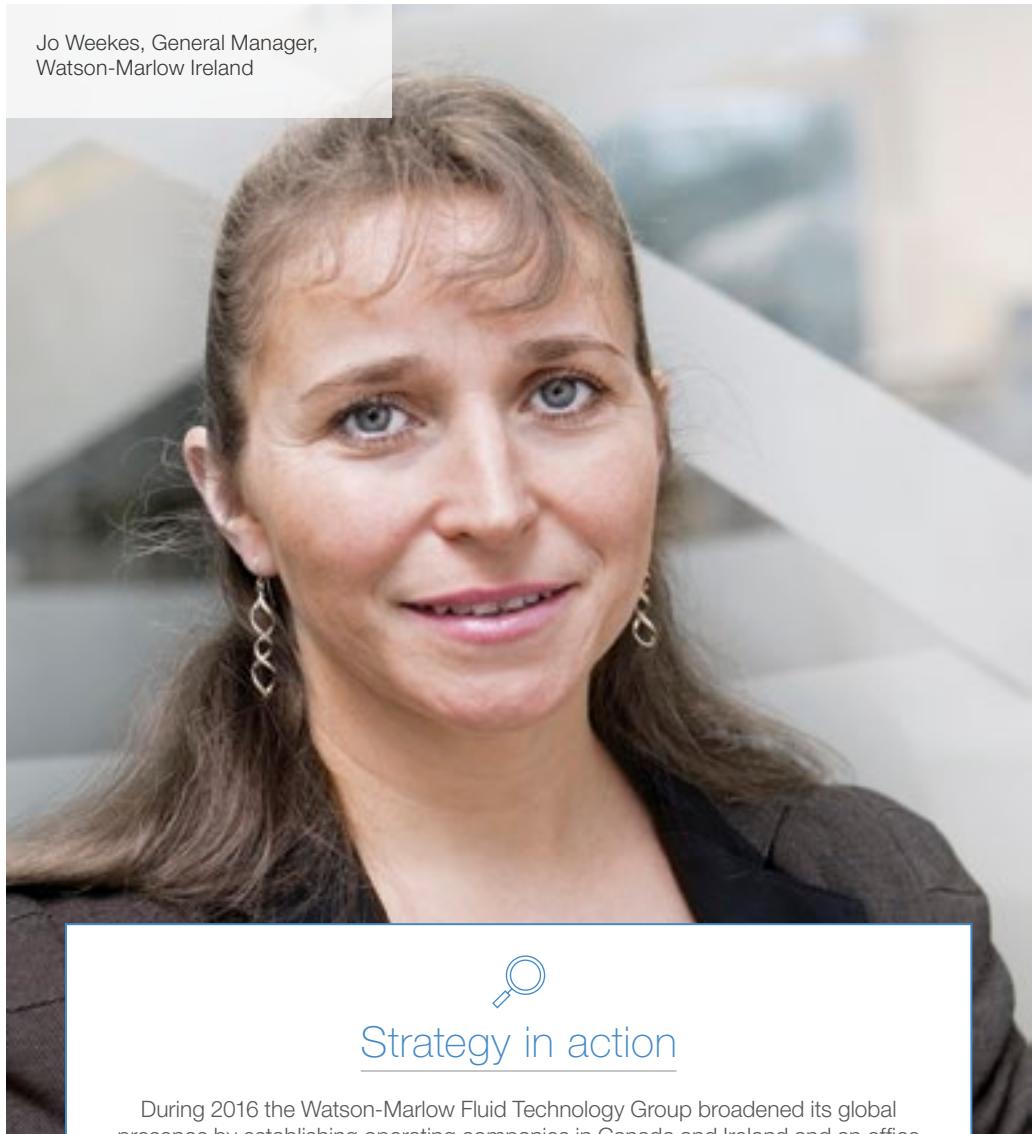
Why we are focusing on this

Our direct sales business model is dependent upon local engineers visiting customers, identifying their needs and offering solutions. While our business has a global reach, with 87 operating units in 44 countries, and a direct sales presence in 58 countries, there are still many new and emerging markets where we do not have a direct sales presence and that have the potential to provide opportunities for growth. As we broaden our global presence we achieve a first-to-market advantage from early entry into new markets and profit from the growth opportunities that this represents.

How we are doing it

Our strong global infrastructure enables us to successfully and rapidly branch into neighbouring markets. We generally enter new markets by establishing a direct sales presence in a country through the creation of a sales office or the installation of one or more sales engineers. Occasionally we purchase our distributor to gain a foothold in an emerging market. We also leverage our existing infrastructure to pioneer the introduction of Watson-Marlow into new markets, demonstrating the superior technology and lower lifecycle costs of the company's peristaltic and niche pumps.

Jo Weekes, General Manager,
Watson-Marlow Ireland



Strategy in action

During 2016 the Watson-Marlow Fluid Technology Group broadened its global presence by establishing operating companies in Canada and Ireland and an office to support 3rd party distribution in the United Arab Emirates.

The new company in Cork, Ireland is well-placed to serve several large multinational pharmaceutical companies as well as customers in a range of other sectors. We anticipate good growth opportunities due to the strength of the Pharmaceutical industry in the area and the previously untapped customer base in the Food & Beverage and Environmental sectors. The company is being managed by Jo Weekes, a mechanical engineer who joined the Spirax Sarco Steam Specialties business in 1999, before transferring to Watson-Marlow in 2016. Jo has a wide range of experience, including roles in engineering, sales, management and strategic implementation.

As we continue to widen our geographical footprint by entering new territories we are able to leverage the benefits of our direct sales business model in these new markets.

4

Leverage our R&D investments

Why we are focusing on this

New product development is essential to enable us to meet changing customer requirements, continuously improve the scale and scope of our offering, respond to market trends, expand our addressable market and maintain our market-leader position in each of our business niches. Our technically-expert direct sales force allows us to leverage our brands into new products and applications. This increases the amount of plant spend that we can capture in the small-scale projects and maintenance activities that lie at the heart of our business.

How we are doing it

As a Group, we invest approximately £10 million in R&D annually, utilising our state-of-the-art R&D and testing facilities in both Cheltenham, UK for the Steam Specialties business and Falmouth, UK for Watson-Marlow. R&D also takes place, on a smaller scale, in many of our global operations.

We are focusing on reducing our time-to-market for new products and packaged solutions, increasingly aligning product development with sector requirements, and strengthening our thermal energy management capabilities.

Where appropriate, we seek acquisitions in related areas that deliver new products and technologies or expand our addressable market.



MasoSine Certa Sine™ pump
from Watson-Marlow

Strategy in action

During 2016 Watson-Marlow launched the new Certa Sine™ (Certa) pump, by MasoSine. Designed specifically for use in the Food & Beverage industries, this innovative new pump offers unrivalled pumping technology to end users, providing gentle and virtually pulsation-free pumping; superior handling of viscous fluids, with up to 50% lower energy use than other pump types; ease of maintenance and cleaning; a low spares inventory; and EHEDG (European Hygienic Engineering and Design Group) Type EL – Class 1 hygienic design certification.

The Certa pump meets the highest standards in hygiene and cleanability while also improving process efficiency and minimising total cost of ownership. The accuracy and reliability of the Certa pump, combined with gentle, low-shear, pulsation-free handling, improves batch consistency and product quality and reduces wastage of raw ingredients.

We estimate that the new Certa pump range has increased our addressable market by £110 million.

5

Optimise supply chain effectiveness

Why we are focusing on this

As a Group we operate a regional manufacturing strategy and have strategically located manufacturing plants in Europe, North America, Latin America and Asia. We strive for continuous improvement as an efficient and effective supply chain enables greater focus on the needs of customers and provides opportunities to deliver growth. We are focusing on implementing demand-centric solutions within our supply chain that will increase supply chain agility, compress lead times, enable greater responsiveness, reduce costs and improve customer service.

How we are doing it

We are investing in moving manufacturing closer to the point of sale in developing markets. During 2016 we completed the construction of a state-of-the-art Steam Specialties business manufacturing facility, with accompanying offices, warehouses and training facilities, in Chennai, India and expanded our manufacturing capabilities in China.

We continuously drive efficiency improvements in our supply chain as we strengthen our supply chain community, identify inefficiencies, share best practice and better align our manufacturing and sales organisations.

Watson-Marlow's Global Excellence in Manufacturing programme is delivering continuous improvements as opportunities are identified, reviewed, agreed and implemented to deliver greater efficiency and best practice operations.

Melanie Mitchell, Assembly Operator, preparing clean steam traps for packing within the ISO7 cleanroom, Cheltenham, UK



Strategy in action

In response to a growing industry requirement for process clean steam, the Spirax Sarco Steam Specialties business opened a dedicated clean steam manufacturing facility in Cheltenham, UK during 2016. The 1,200m² factory is managing the production of Spirax Sarco's comprehensive range of clean steam system components, primarily destined for the Pharmaceutical, Healthcare and Food & Beverage industries, and is the business's first sectorised manufacturing facility.

Designed to reflect industry expectations and increasingly stringent regulatory requirements, the state-of-the-art facility manufactures only stainless steel products, to eliminate the risk of cross contamination between ferrous and non-ferrous metals, and product assembly is completed in a dedicated ISO Class 7 cleanroom.

As well as offering full traceability of products and certified validation of the materials used, the facility demonstrates to customers that we understand their requirements, thereby strengthening sales into the facility's target industries. Since its opening in March 2016, clean steam product unit sales have increased by over 70% by volume, compared with the same period in the prior year.

6

Operate sustainably and help improve our customers' sustainability

Why we are focusing on this

In a resource constrained and competitive world, improving the sustainability of our operations – by reducing our environmental impacts and wherever possible having positive social and environmental impacts, while managing our business for financial success – makes good business sense; we manage costs, increase our competitiveness, attract and retain talented people and reduce risk. As we deliver innovative products, solutions and services that improve the efficiency of our end users' operations, we create value for customers and drive growth.

How we are doing it

Our Group sustainability strategy encompasses five key areas: our workplaces, our supply chain, our environment, our customers and our communities. We have set strategic objectives in each area, monitor performance against targets and strive for continuous improvement. During 2016 we rolled out our refined sustainability strategy across the Group and have a detailed communication plan to raise employee awareness and understanding of the strategy during 2017.



[Read more on pages 52-61.](#)

Chris Davis, Senior Design Draughtsman, creating 3D CAD models for the thermal energy solutions



Strategy in action

Working on a collaborative project with Nestlé and Sheffield Hallam University, Spirax Sarco UK recently secured public funding from government body "Innovate UK" to research and design innovative solutions to reduce energy consumption by 15% in Nestlé's wafer baking process.

A large volume of hot air is produced by the ovens during the baking process, which is typically vented to atmosphere. The hot air is available for heat recovery.

The proposed Spirax Sarco solution will entail the use of a heat pipe exchanger, manufactured by our Associate company Econotherm, to recover waste heat from the wafer ovens, generating process hot water that can then be used elsewhere on site.

The aim of the project is to create a replicable solution that can be applied to Nestlé's baking ovens across their global operations. Once approved, the solution will be piloted at a Nestlé KitKat manufacturing site in the UK and will significantly improve the sustainability of the wafer baking process, lowering energy consumption by an estimated 3,000 MWh per year, resulting in annual savings of around £70,000, and reducing CO₂ emissions by 550 tonnes per year.

ENGINEERING SUSTAINABLE VALUE

AS WE DELIVER PROGRESS ON OUR KPIs

KPI 1. Organic revenue growth %

KPI	1. Organic revenue growth %
2016	4
2015	2
2014	4
2013	4
2012	5

Definition

Organic revenue growth measures the change in revenue in the current year compared with the prior year from continuing Group operations. The effects of currency movements, acquisitions and disposals have been removed.

Link to strategy¹



■ Direct link ■ Indirect link

Progress in 2016

Organic sales increased by 4%. Watson-Marlow saw the strongest growth, up 10% organically, spread across all geographic regions. The Spirax Sarco Steam Specialties business also performed well, increasing organic sales by over 2%, with gains in all three geographic segments.

Link to remuneration²

Revenue growth is a key driver of profit generation and a central element in the annual planning process. Bonus targets are driven off annual plans and therefore revenue growth drives a key measure of variable remuneration.

■ Bonus measure ■ Performance Share Plan measure

Link to risk³



Direct link Indirect link No link

KPI 2. Adjusted operating profit* £m

KPI	2. Adjusted operating profit* £m
2016	180.6
2015	152.4
2014	153.0
2013	151.6
2012	136.2

Definition

Adjusted operating profit is the profit earned from our business operations before interest, taxes, the share of profit of Associate companies and certain non-operational items.*

Link to strategy¹



■ Direct link ■ Indirect link

Progress in 2016

Adjusted operating profit was ahead 8% on an organic basis. Watson-Marlow achieved organic profit growth of 16%, with the Steam Specialties business up 6%, driven by EMEA and the Americas. Organic operating profit in Asia Pacific was marginally ahead of 2015.

Link to remuneration²

Group operating profit is the other key element of the annual planning process. Bonus targets are driven off annual plans and therefore profit is a key measure of variable remuneration.

■ Bonus measure ■ Performance Share Plan measure

Link to risk³



Direct link Indirect link

KPI 3. Operating profit margin* %

KPI	3. Operating profit margin* %
2016	23.8
2015	22.8
2014	22.5
2013	22.0
2012	20.6

Definition

Operating profit margin is defined as adjusted operating profit expressed as a percentage of revenue.

Link to strategy¹



■ Direct link ■ Indirect link

Progress in 2016

Operating profit margin increased by 100 bps to a record 23.8%, benefiting from low input costs, restructuring in the UK and USA in 2015, and transactional foreign exchange gains as we are a net exporter from the UK.

Link to remuneration²

Executive Directors' variable remuneration is measured on two main indicators: profit and ROCE. Operating profit margin is a key driver of both profit and ROCE.

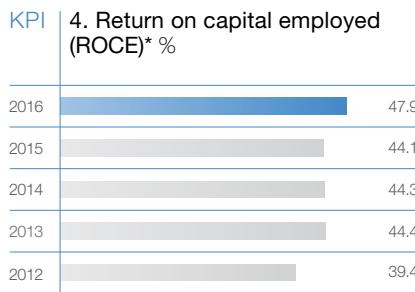
■ Bonus measure ■ Performance Share Plan measure

Link to risk³



Direct link Indirect link

* Based on adjusted operating profit. Adjusted operating profit excludes certain non-operational items as set out and explained in the Financial Review and in Note 2 on page 128.

**Definition**

ROCE is a pre-tax measure of the efficiency with which the Group generates operating profits from its capital. ROCE is calculated as adjusted operating profit divided by average capital employed.

Link to strategy¹

■ Direct link □ Indirect link

Progress in 2016

ROCE increased to 47.9%, an increase of 380 bps, due to our close control of the various components of capital employed and improvement in the operating profit margin.

Link to remuneration²

ROCE is a key measure in Executive Directors' annual bonus arrangements.

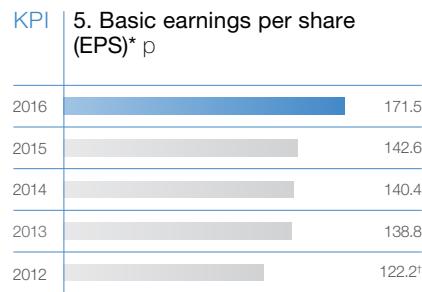
■ Bonus measure ■ Performance Share Plan measure

Link to risk³

● Direct link ○ Indirect link



¹ More information about our strategy can be found on pages 20-25.



† Restated for IAS 19 (R).

Definition

Earnings per share is a measure of the profit performance of the Group, taking into account the equity structure. EPS is defined as the adjusted after-tax profit attributable to equity shareholders divided by the weighted average number of shares in issue.

Link to strategy¹

■ Direct link □ Indirect link

Progress in 2016

Adjusted basic earnings per share increased by 20%, benefiting marginally from a reduction in the number of shares in issue following the share consolidation in June 2015 of 28 existing Ordinary shares to 27 new Ordinary shares in conjunction with the special dividend paid in July 2015.

Link to remuneration²

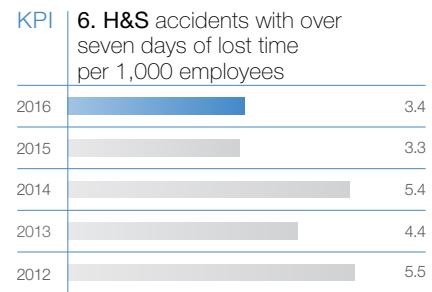
EPS measured over three-year periods is one of the two components of the Performance Share Plan.

Link to risk³

● Direct link ○ Indirect link



² More information about our remuneration measures can be found on pages 83-107.

**Definition**

The number of work-related accidents that resulted in over seven days of absence per 1,000 employees. For an accident to be considered "work-related" the machinery, plant, substances, or equipment being used; the way the work was carried out; or the condition of the site, must have played a significant role.

Link to strategy¹

■ Direct link □ Indirect link □ No link

Progress in 2016

Our over seven day lost time accident rate was relatively unchanged at 3.4 accidents per 1,000 employees, maintaining the significantly improved performance achieved in 2015. We focused extensively on leading indicators in 2016 and expect to see the benefits of this in 2017.

Link to remuneration²

The safety of our employees is central to the sustainability of our business and has an impact on the financial success and profitability of the Group, creating an indirect link with Executive Directors' variable remuneration.

■ Performance Share Plan measure

Link to risk³

● Direct link ○ Indirect link ○ No link



³ More information about our risks can be found on pages 30-31.

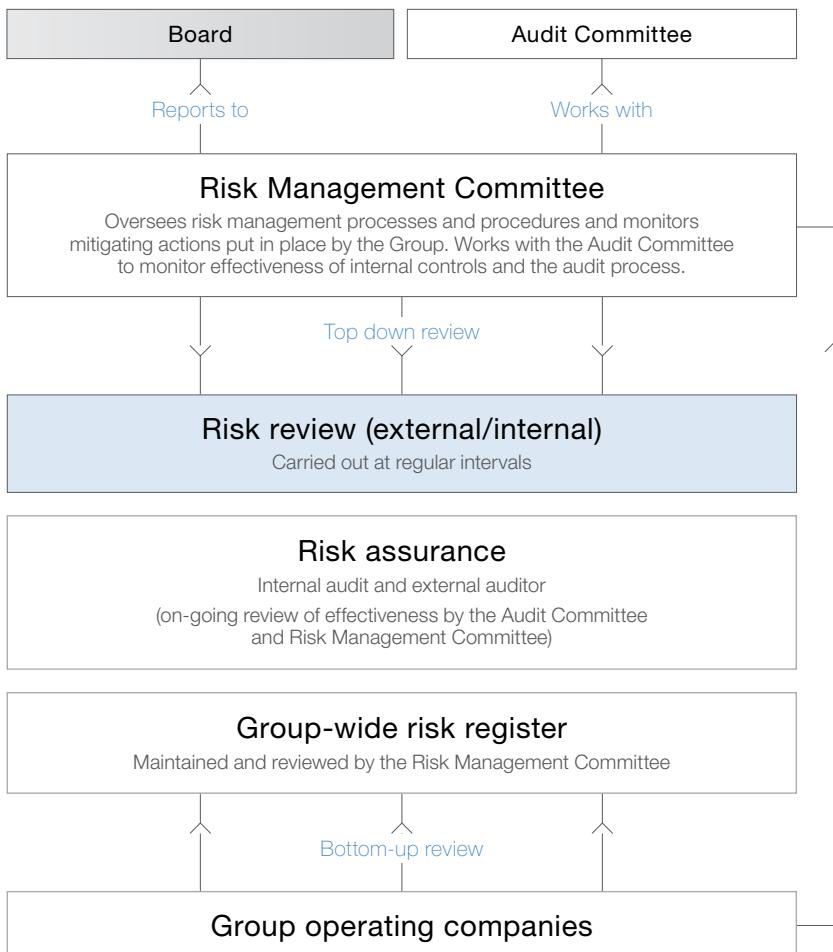
ENGINEERING SUSTAINABLE VALUE
BY MANAGING RISK



"In 2016 we undertook a risk appetite assessment and in 2017 we will be reviewing the structure of our internal audit function."

Nicholas Anderson,
Risk Management Committee Chairman

Managing risks



Our approach and appetite for risk

Risk management is integral to the Group's strategy and to the achievement of our long-term goals. Our continued success as an organisation depends on our ability to identify and pursue the opportunities generated by our business and the markets in which we operate. The Board is responsible for the overall stewardship of our system of risk management and internal control. It has established the level of risk that is appropriate to enable the business to meet its strategic objectives. The leadership team uses an embedded approach to risk management so that all projects are assessed for the risks and opportunities that they offer on an ongoing basis.

During 2016 we implemented a risk appetite assessment, determining the Group's appetite for each of its seven principal risks. This exercise included assessing the associated control and mitigation measures in place, ethical concerns and other factors affecting each risk. These ratings will be monitored and reviewed as necessary to reflect changes in circumstances affecting the Group.



The risk appetite ratings are set out in the table on pages 30-31.



The roles and responsibilities of the Board and its committees are set out on pages 68-69.

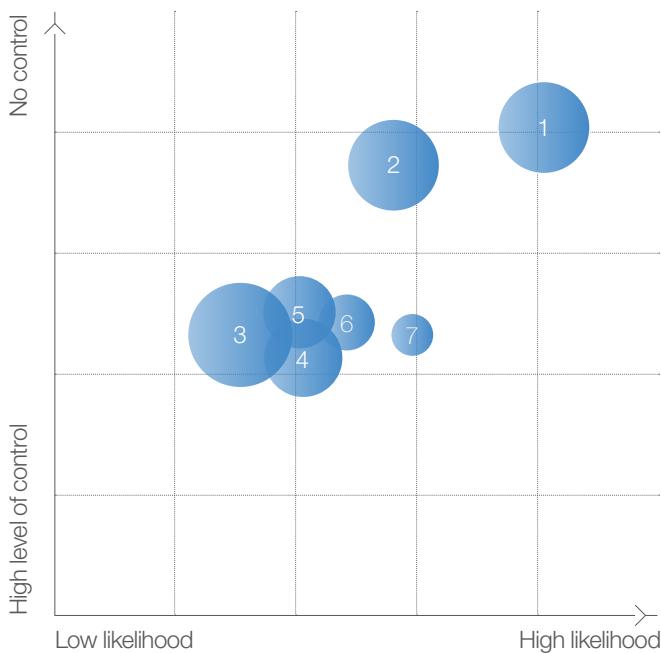
Pages 79-81 of the Governance Report provide further information on the Group's approach to risk, including risk appetite, along with the roles, responsibilities, and actions of the Risk Management Committee.

Pages 109-110 contain our Going Concern and Viability Statements.

Risk likelihood, control and impact

The Committee's analysis of the principal risks affecting the Group, before mitigation, is set out in the diagram below.

The numbers relate to the principal risks outlined on pages 30-31.



Key

1. Economic and political instability
2. Significant exchange rate movements
3. Loss of manufacturing output at any Group factory
4. Defined benefit pension deficit
5. Breach of legal and regulatory requirements
6. Non-compliance with health, safety and environmental legislation
7. Solution specification failure



Potential impact of the risk



For details of the principal risks see pages 30-31.

Summary of the key areas of focus for 2017:

- Monitor business ethics across the Group
- Monitor the impacts of the Brexit referendum
- Bottom-up risk review

Statement regarding the impact of Brexit on risk

As a Group we are well prepared for and have commenced implementation of our Brexit contingency plan. As part of our plan we analysed our exposure to the effects of a UK exit from the EU. The Board will monitor closely any effects on financial or trading positions using a range of indices, which will guide our actions over the coming months as the situation develops.

The Group is a global organisation. We have a broad geographic reach with wholly owned operations in all of the world's major economies and a regional manufacturing strategy that will help to

Important developments in the year

Our risk management approach is subject to continuous review and updating to take account of new and developing issues which might impact our business objectives. The following actions have been undertaken during the year to address significant developments:

Risk appetite: ratings and statement

We performed an in-depth evaluation of risk appetite for each of the Group's principal risks. Based on those determinations, as well as a robust assessment of all other risks that could threaten the Group's business model, future performance, solvency or liquidity, we agreed on a Risk Appetite Statement applicable for the Group. The statement is included on page 81.

Brexit contingency plan

During the year a Brexit contingency plan was developed to include an analysis of the exposure and the effects of a UK exit from the EU across all of our business operations. The plan involves close monitoring of any effects on financial or trading positions, to mitigate the challenges and capitalise on the opportunities that may arise.

Modern Slavery Act

A statement has been approved by the Board and is available on our website, www.spiraxsarcoengineering.com.

This year we updated the Group's Distributor Agreement template to include a clause requiring compliance with the Act and a commitment to the principles it addresses.

The Group has implemented and will continue to implement measures to protect workers from being abused or exploited in our organisation and supply chain.

Our Global Excellence in Supply Chain Initiative provides a framework for on-going monitoring of supplier standards that are set out in our Supplier Sustainability Code.

Principal risks

We undertook a top-down review of the principal risks and introduced enhanced monitoring throughout the year in accordance with changes to the UK Corporate Governance Code.

Regular updates

The Executive Committee reviews the risk register at each meeting to determine if the risks are still current and the Board is provided with regular updates.

mitigate any short-term volatility. We have a resilient business model and provide our engineered solutions to a diverse customer base across a wide range of market sectors in many international markets. Over 90% of our revenues and profits are generated outside of the UK and as a Group we are well-prepared and well-placed to take on the challenges and identify the opportunities resulting from a UK exit from the EU. We have navigated periods of political and economic uncertainty in the past and have a long and successful history of growth.

PRINCIPAL RISKS

The table below sets out the Group's principal risks and describes the links to strategy, the mitigation measures and the appetite for each risk. The year-on-year change column sets out the direction of change from 2015.

This list includes those risks which we have identified as most relevant to the Group for the current year.

Principal risk and why it is relevant	Year-on-year change	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating	Link to strategic themes (pages 20-25)									
1 Economic and political instability The Group operates worldwide and maintains operations in territories that have historically experienced economic or political instability. This type of instability, which includes the uncertainties of regime change, creates risks for our locally based direct operations and broader risks to credit, liquidity and currency.	↑	<ul style="list-style-type: none"> • Scenario planning • Compliance with Group Treasury Policy • Strong internal controls • Resilient business model with 10% of Group sales in higher risk areas <p>Executive sponsor: Nicholas Anderson Change: Increased instability post-Brexit referendum, other European political movements and the USA election</p>	<input checked="" type="radio"/> Very low <input type="radio"/> Low <input type="radio"/> Balanced <input checked="" type="radio"/> High <input type="radio"/> Very high	We have the background and know-how to successfully manage the unique challenges in economically and politically unstable territories. We are willing to accept these challenges where opportunities for growth are substantial.	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> <tr> <td>4</td><td>5</td><td>6</td></tr> <tr> <td>■ Direct link</td><td>□ Indirect link</td><td>□ No link</td></tr> </table>	1	2	3	4	5	6	■ Direct link	□ Indirect link	□ No link
1	2	3												
4	5	6												
■ Direct link	□ Indirect link	□ No link												
2 Significant exchange rate movements The Group reports its results and pays dividends in sterling. Operating and manufacturing companies trade in local currency. With sales companies in over 40 different countries and manufacturing spread across the globe, the nature of the Group business necessarily results in exposure to exchange rate volatility.	↑	<ul style="list-style-type: none"> • Spread of manufacturing across currency areas • Forward cover where appropriate and in line with the Group Treasury Policy • Focus on reducing manufacturing costs • Over 90% of revenue and profits generated out of the UK and so the Group is well positioned to deal with unknown impacts of Brexit <p>Executive sponsor: Kevin Boyd Change: Increased volatility post-Brexit referendum</p>	<input type="radio"/> Very low <input type="radio"/> Low <input checked="" type="radio"/> Balanced <input type="radio"/> High <input type="radio"/> Very high	We take a balanced view of this risk: the risk arises as a direct result of our global presence, but our geographical spread means we are not wholly dependent on any one currency.	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> <tr> <td>4</td><td>5</td><td>6</td></tr> <tr> <td>■ Direct link</td><td>□ Indirect link</td><td>□ No link</td></tr> </table>	1	2	3	4	5	6	■ Direct link	□ Indirect link	□ No link
1	2	3												
4	5	6												
■ Direct link	□ Indirect link	□ No link												
3 Loss of manufacturing output at any Group factory The risk includes loss of output as a result of natural disasters, industrial action, and accidents. Loss of manufacturing output at any important plant risks serious disruption to sales operations.	→	<ul style="list-style-type: none"> • Business continuity planning and disaster recovery plans • Stocks of components and finished products in sales companies • Regular and comprehensive back-up of IT systems • Use of audits/inspections and business interruption insurance • Appropriate building construction with sprinkler systems or alternatives <p>Executive sponsors: Jay Whalen and Ian Farnworth Change: No change</p>	<input type="radio"/> Very low <input checked="" type="radio"/> Low <input type="radio"/> Balanced <input type="radio"/> High <input type="radio"/> Very high	Whilst we have mitigated this risk through a geographical spread of factories, calculated replication of capacity and management of stock, the potential negative consequences to the Group and its customers warrants a low appetite for this risk.	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> <tr> <td>4</td><td>5</td><td>6</td></tr> <tr> <td>■ Direct link</td><td>□ Indirect link</td><td>□ No link</td></tr> </table>	1	2	3	4	5	6	■ Direct link	□ Indirect link	□ No link
1	2	3												
4	5	6												
■ Direct link	□ Indirect link	□ No link												
4 Defined benefit pension deficit Defined benefit pension schemes carry risks in relation to investment performance, security of assets, longevity and inflation. A deficit in the scheme is dependent on a number of variables at any given time, including investment performance, mortality assumptions for employees and pensioners, inflation assumptions, changes in bond yields used to assess liability values, and any deficit reduction payments made to the scheme.	↑	<ul style="list-style-type: none"> • Use of independent professional advisers and custodians • Pension scheme de-risking strategy in place • Use of Mercer "Dynamic De-Risking Solution" <p>Executive sponsor: Kevin Boyd Change: Continued volatility of bond yields have led to increased fund liabilities</p>	<input type="radio"/> Very low <input type="radio"/> Low <input checked="" type="radio"/> Balanced <input type="radio"/> High <input type="radio"/> Very high	The nature of the Defined Benefit scheme requires accepting some inherent risk of deficit. The consequences of accepting that risk must be viewed against the expensive alternative of completely de-risking the fund by shifting away from certain asset classes. We therefore have a balanced approach to this risk.	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td></tr> <tr> <td>4</td><td>5</td><td>6</td></tr> <tr> <td>■ Direct link</td><td>□ Indirect link</td><td>□ No link</td></tr> </table>	1	2	3	4	5	6	■ Direct link	□ Indirect link	□ No link
1	2	3												
4	5	6												
■ Direct link	□ Indirect link	□ No link												

↑ Increased risk

→ No change to risk

↓ Decreased risk

Principal risk and why it is relevant	Year-on-year change	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating	Link to strategic themes (pages 20-25)
5 Breach of legal and regulatory requirements With the global spread of its business, the Group is subject to the unique laws and regulations in various countries and regions. All commercial operations and agreements must function in compliance with relevant requirements on all matters, including competition, corporate governance, securities and industry certifications, among others. Breaching these laws and regulations could have serious consequences.	→	<ul style="list-style-type: none"> Established strong ethical culture Regular updates on Corporate Governance and Stock Exchange rules Review of commercial arrangements undertaken with external advice Procedures in place to maintain accreditations Effective monitoring of litigation Executive sponsor: Andy Robson Change: No change	● Very low ● Low ● Balanced ● High ● Very high	We respect the laws, rules and regulations of the jurisdictions in which we operate and believe we have an ethical duty to comply with those requirements.	1 2 3 4 5 6 ■ Direct link □ Indirect link □ No link
6 Non-compliance with health, safety and environmental legislation A major health, safety or environmental incident could cause total or partial closure of a manufacturing facility. As a premium provider of safety critical products, a breach of these requirements would also have reputational consequences for the Group.	→	<ul style="list-style-type: none"> Increased focus by Board and Executive Committee Compliance with legislation and codes of best practice Regular audits, site checks and reporting On-going training Employee concerns recorded and investigated Executive sponsor: Ian Farnworth Change: No change	● Very low ● Low ● Balanced ● High ● Very high	We take seriously the health and safety of our employees, customers and all related stakeholders. We continually strive to put in place policies and procedures to ensure compliance with HSE legislation.	1 2 3 4 5 6 ■ Direct link □ Indirect link □ No link
7 Solution specification failure Total solutions demand understanding of customers' complex technical requirements and there is risk involved in pursuing new opportunities in engineering systems design, installation and servicing. Failure could result in disruption and loss to a customer's production line.	→	<ul style="list-style-type: none"> Extensive internal and field testing of new products prior to launch On-going capital investment in the latest manufacturing technology Cross-checks established between manufacturing and sales to ensure we have properly understood customer requirements Testing policy and procedures in place across manufacturing sites Executive sponsors: Jay Whalen and Ian Farnworth Change: No change	● Very low ● Low ● Balanced ● High ● Very high	Satisfying customer requests for new, innovative products and designs is an important aspect of our business, but it must always be pursued without compromising our hard-earned reputation for quality products.	1 2 3 4 5 6 ■ Direct link □ Indirect link □ No link

↑ Increased risk → No change to risk ↓ Decreased risk

Risk appetite ratings defined:

Very low

Following a marginal-risk, marginal-reward approach that represents the safest strategic route available.

Low

Seeking to integrate sufficient control and mitigation methods in order to accommodate a low level of risk, though this will also limit reward potential.

Balanced

An approach which brings a high chance for success, considering the risks, along with reasonable rewards, economic and otherwise.

High

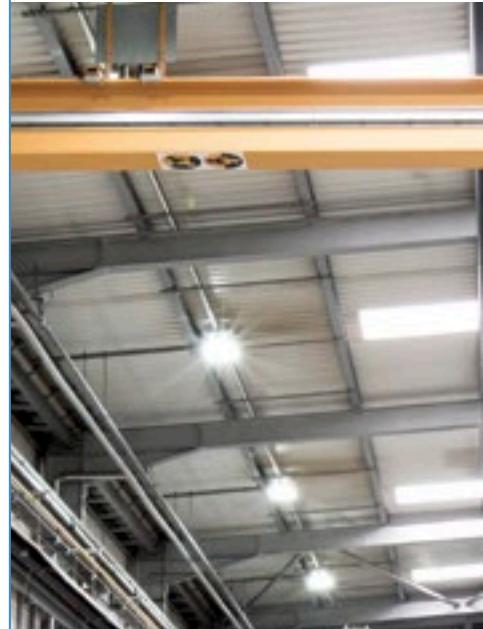
Willing to consider bolder opportunities with higher levels of risk in exchange for increased business payoffs.

Very high

Pursuing high-risk, unproven options that carry with them the potential for high-level rewards.

OUR 2016 PERFORMANCE IN DETAIL

Our divisional performance at a glance 2016	34
Group Chief Executive's Report	36
– Steam Specialties: Europe, Middle East and Africa	40
– Steam Specialties: Asia Pacific	42
– Steam Specialties: Americas	44
– Watson-Marlow Fluid Technology Group	46
Financial Review	48
Sustainability Report	52





Engineered Systems Manufacturing Unit, Spirax Sarco Steam Specialties manufacturing site, Cheltenham, UK

ENGINEERING SUSTAINABLE VALUE BY ACHIEVING ORGANIC GROWTH

Our focus on key economic areas allows us to understand and respond rapidly to market and customer demands.



Europe, Middle East and Africa (EMEA)

Revenue	Operating profit	Operating margin
£234.3m	£50.0m	21.3%
Reported	Reported	Reported
+7%	+17%	+190 bps
Organic	Organic	Organic
+1%	+10%	+180 bps

Asia Pacific

Revenue	Operating profit	Operating margin
£193.3m	£49.9m	25.8%
Reported	Reported	Reported
+13%	+12%	-20 bps
Organic	Organic	Organic
+3%	+1%	-70 bps

Americas

Revenue	Operating profit	Operating margin
£135.9m	£29.2m	21.5%
Reported	Reported	Reported
+10%	+8%	-50 bps
Organic	Organic	Organic
+5%	+9%	+90 bps



Fluid Technology Group

Watson-Marlow

Revenue	Operating profit	Operating margin
£193.9m	£64.3m	33.1%
Reported	Reported	Reported
+27%	+34%	+170 bps
Organic	Organic	Organic
+10%	+16%	+180 bps

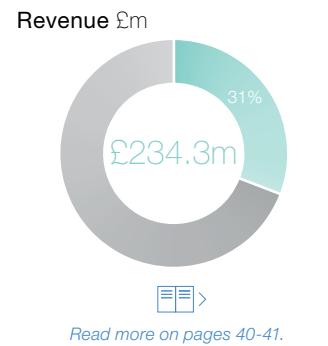
* Unless otherwise stated, all profit measures exclude certain non-operational items, see Note 2 on page 128.

No. of operating units* 25 operating units
at year end

Direct sales presence at year end 32 countries

Key industries Food; Oil & Gas; Pharmaceutical & Biotechnology; Chemical

Performance summary Organic sales up 1%; operating profit up 10%. Industrial Production growth remained very low, around 1%. Sales growth in the UK and Germany, lower in France and Italy. Strong currency tailwind more than off-set M&M disposal in 2015. Manufacturing efficiencies boost profit margin by 140 bps. Well positioned for another challenging year.

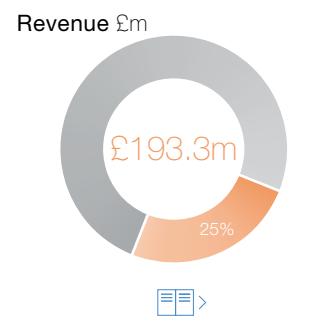


No. of operating units* at year end 14 operating units
A new operating company in Vietnam commenced trading in 2016

Direct sales presence at year end 15 countries

Key industries Food; Oil & Gas; Beverage; Buildings (HVAC)

Performance summary Organic sales up 3%, ahead in almost all countries. China performed strongly, self-generated sales and profits up. Korea sales and profit slightly higher; project sales carried over from 2015. State-of-the-art manufacturing facility opened in India. Investments for growth reduce profit margins by 20 bps. Well positioned to self-generate growth in soft markets.

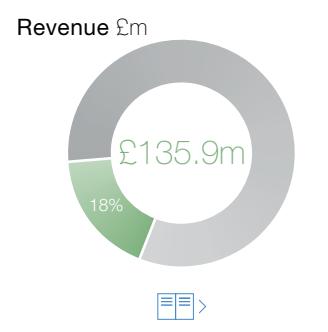


No. of operating units* at year end 9 operating companies
One acquisition in Brazil (Hiter) during 2016

Direct sales presence at year end 10 countries

Key industries Food; Oil & Gas; Buildings (HVAC); Pharmaceutical & Biotechnology

Performance summary Organic sales up 5%; operating profit up 9%. North America – distribution markets down; weak Oil & Gas market. Latin America – strong organic growth in all operations except Brazil. Profit margin improved by manufacturing efficiencies and Argentina pricing. Hiter acquisition dilutes profit margin by 60 bps. Well positioned for further progress despite continued uncertainty.

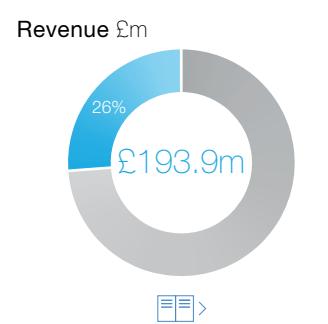


No. of operating units* at year end 35 operating units
Two operating companies established (Ireland and Canada) and Aflex Hose Ltd (UK), and its subsidiary Aflex Hose USA LLC, acquired during 2016

Direct sales presence at year end 29 countries

Key industries Pharmaceutical & Biotechnology; Food; Water and Wastewater; Mining & Precious Metal Processing

Performance summary Organic sales up an outstanding 10%. Strong growth in Pharmaceutical & Biotechnology sector. Good growth in all regions, Asia Pacific outstanding. Acquisitions performed well, boost sales by £10.6 million. Aflex Hose acquired for £61.4 million in November. Profit up 16% by operational gearing and factory efficiencies.



* Operating companies, branches and Associate.

ENGINEERING SUSTAINABLE VALUE AS WE OUTPERFORM OUR MARKETS



"I am very pleased with the results delivered in 2016, which again demonstrate the robustness of our strategy and strong direct sales business model. We achieved good organic growth and expanded our margin to a record high, against a backdrop of very low global industrial production growth."

Nicholas Anderson,
Group Chief Executive

Key points in this section:

- › Positive, 4% organic growth against a backdrop of very low to zero industrial production growth*
- › Significant currency tailwind
- › Sales up 14% at reported exchange rates
- › Increased investment to deliver our strategic objective of achieving above market organic growth
- › Adjusted operating profit 8% ahead on an organic basis*
- › Record operating profit margin

* Unless otherwise stated, all profit measures exclude certain non-operational items, as set out and explained in the Financial Review and in Note 2 on page 128. Organic measures are at constant currency and exclude acquisitions and disposals.

Introduction

The Group achieved a good financial result in 2016, delivering positive organic growth against a backdrop of very low to zero industrial production growth and for the first time since 2010 enjoyed a significant currency tailwind. We again expanded our geographical reach, opening three new sales companies in the year and we completed two acquisitions, one each in the Steam Specialties business and in Watson-Marlow.

Our direct sales business model in both our Steam Specialties and Watson-Marlow businesses, driven through our team of nearly 1,400 highly skilled and experienced sales and service engineers, is effective in uncovering opportunities to improve customers' steam systems and fluid path processes. This "self-generated" element of our business, combined with the high proportion of sales that derive from end users' maintenance and operating budgets, makes our business highly resilient, especially in the current low market growth environment. Our sales and service engineers generate solutions for customers' problems and deliver benefits to end users in the shape of reduced energy usage and lower CO₂ emissions, water savings, increased productivity, improved quality, better reliability, reduced costs, reduced chemical use and enhanced regulatory compliance, to help meet our stated goal of outperforming our markets.

Strategy implementation

Effective implementation of our strategy for growth has been key in delivering above market organic growth in 2016. We will continue to invest in the strategic objective of outperforming our markets by delivering self-generated growth, which we achieve through focusing on our six strategic themes:

- increase direct sales effectiveness through sector focus;
- develop the knowledge and skills of our expert sales and service teams;
- broaden our global presence;
- leverage R&D investments;
- optimise supply chain effectiveness; and
- operate sustainably and help improve our customers' sustainability.

Notable progress in implementing our strategy has been made in:

- delivering greater alignment with our selected target industries, notably Food & Beverage, Healthcare, Pharmaceutical, Oil & Gas, Chemical and OEM customers, as we have further progressed the sectorisation of our direct sales force;
- establishing the Spirax Sarco Academy to oversee the training and development needs of the Steam Specialties business's sales and service organisation, developing its curriculum, training materials and assessment systems;
- continued geographic expansion, with three new direct sales companies established and operating in the year and a further four operating units established that will commence direct selling in 2017;

	2015	Exchange	Organic	Acquisitions & disposals	2016	Organic	Reported
Revenue	£667.2m	£52.6m	£30.3m	£7.3m	£757.4m	+4%	+14%
Adjusted operating profit	£152.4m	£14.5m	£13.2m	£0.5m	£180.6m	+8%	+18%
Adjusted operating margin	22.8%				23.8%	+80 bps	+100 bps

- leveraging R&D investments, with a number of key product launches occurring during 2016, including the MasoSine Certa™ pump range, Qdos 120 pump, Watson-Marlow 530 and 630 pumps, Spirax Sarco STAPS ISA100 Wireless Steam Trap Monitor, and Spirax Sarco FT62 High Pressure Float Trap;
- developing the capacity and efficiency of our supply chain, with the completion of a new state-of-the-art manufacturing facility in India, the opening of a new clean steam manufacturing facility in the UK and the expansion of our manufacturing plant in China; and
- the Group-wide roll-out of our sustainability strategy.

We have concentrated on the alignment of the entire organisation behind our strategic themes. Improvements have been made to our health & safety management processes, and our risk management processes have also been enhanced and integrated further into the everyday business.

Market environment

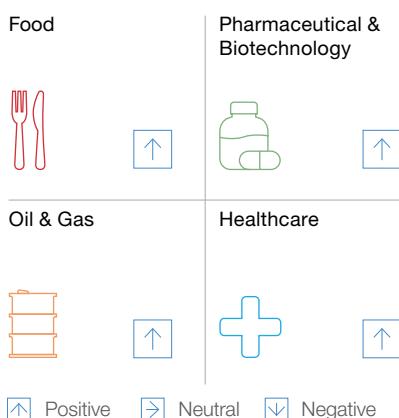
Steam is used in a huge range of manufacturing processes for heating, curing, cooking, drying and cleaning across a diverse range of different industries, including Food & Beverage, Pharmaceutical, Oil & Gas, Chemical and Pulp & Paper. Steam is also used in hospitals and buildings for space heating, humidification and sterilisation, and to provide a reliable source of hot water at constant temperature. Likewise, peristaltic and niche pumps are also used across a wide range of similar industries to address difficult pumping problems. This wide spread of industry sectors and relatively large proportion of revenues that derive from end users' maintenance and operating budgets, means that our markets tend to be correlated to the growth in industrial production. Our exposure to large capital projects is limited, accounting for approximately 15% of our revenues, with the proportion of capital projects historically higher in emerging markets.

Following a strong declining trend in 2014 and 2015, driven by slowing emerging economies, global industrial production growth stabilised around zero percent in the first half of 2016 before experiencing a recovery in some emerging economies in the second half of the year. Overall, global industrial production growth in 2016 averaged 0.5%, the same very low levels of 2015, but exited the year with an annualised growth rate below 2%, which is predicted to continue in the first half of 2017.

In EMEA, industrial production growth, which had slowed modestly in 2015, returned to just below its 2014 levels at 1.1%, with the Eurozone and the UK remaining at broadly the same low levels of previous years. Russia experienced a broadly flat year after the industrial recession of 2015.

Asia Pacific, excluding China, remained at the same weak levels of 2015, posting sub-one percent growth, while industrial production in China returned to higher growth rates during the second half of the year, comparable to those of 2013 and 2014.

Key market performance



- Our markets are strongly influenced by industrial production growth rates, which were lacklustre during 2016
- Global industrial production stabilised around zero percent in the first half of 2016 before experiencing a recovery in some emerging economies in the second half of the year
- As we have invested in the sectorisation of our direct sales force we have increased alignment with our selected target industries, delivering above market growth in the Food & Beverage, Pharmaceutical & Biotechnology, Oil & Gas and Healthcare industries, in particular
- New product launches have strengthened our position in key industries, including the Certa™ pump range from Watson-Marlow for the Food & Beverage industry

In the Americas, industrial production growth was negative in both North and South America, with the latter being particularly hard hit by the recession in Brazil and the effect of the currency devaluation in Argentina at the end of 2015. Although not immune from the severe economic turmoil in the region, our strong long-standing businesses across Latin America, that include local manufacturing, have helped insulate us against the impact of currency weakness and enabled us to outperform the market.

Progress in 2016

Overall we saw organic sales growth of 4%. The strongest performance was again in Watson-Marlow where we achieved growth in all geographic regions. Organic sales in the Steam Specialties business grew by over 2% after a flat 2015, registering growth in all three geographic segments.

Group sales at £757.4 million were up 14% at reported exchange rates (2015: £667.2 million). The weakening of sterling following the UK referendum on EU membership gave a translation boost to sales of 8% with the pound weakening against all our major trading currencies with the notable exception of the Argentine peso. Currency movements have been volatile for some time, making projections increasingly uncertain. However, if recent exchange rates prevail for the full year, sales in 2017 would be 6% higher on translation into sterling compared to 2016, as we would see a similar uplift in the first half of 2017 as we saw in the

second half of 2016. The two acquisitions we made in the year, combined with the full year effects of the acquisitions made in 2015, offset the disposal of M&M and resulted in a net contribution of £7.3 million or around 1% of sales. We estimate that the full year effect of the acquisitions made in 2016 should add 3% to sales in 2017.

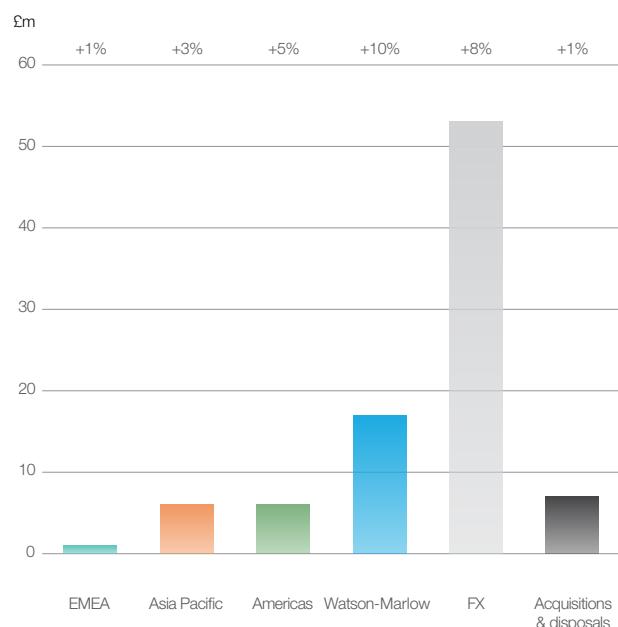
In our Steam Specialties business, which accounted for 74% of Group revenues, organic sales growth was over 2%. At reported exchange rates sales were up 10%, helped by favourable currency movements that increased sales by 7% and the net effect of the acquisition of Hiter in July 2016 offset by the loss of sales due to the disposal of M&M in the prior year. We again saw a small decline in the number of large project sales as the Oil & Gas industry continues to contract, however this was more than countered for by gains in our strategic target industries and product groups. Our business remains very resilient, reflecting the high proportion of sales that are derived from our end users' operating and maintenance spend.

Geographically, we achieved a modest organic sales increase in EMEA, with gains in the UK and Germany but small declines in Italy and France. The devaluation of the Argentine peso in December 2015 and the ensuing price rises in that country, combined with excellent performance from our smaller Latin America territories, offset a decline in recession-hit Brazil and a much smaller

decline in the USA to deliver 5% organic growth in the Americas. Hiter is successfully being integrated into the Group and is performing to plan. As expected it was loss making in 2016 due to pre-trading losses and ramp up costs. These losses are expected to narrow in the current year as revenues build. In Asia Pacific an excellent performance in the first half of the year, helped by large one-off projects in China and Korea, helped organic sales to grow by 3%. Pleasingly, Korea delivered growth against the backdrop of a difficult economic environment and China recorded much improved growth compared to 2015 despite industrial overcapacity continuing to reduce the level of project work. While much smaller than China or Korea, Australia had an excellent year as did some of our businesses in Southeast Asia.

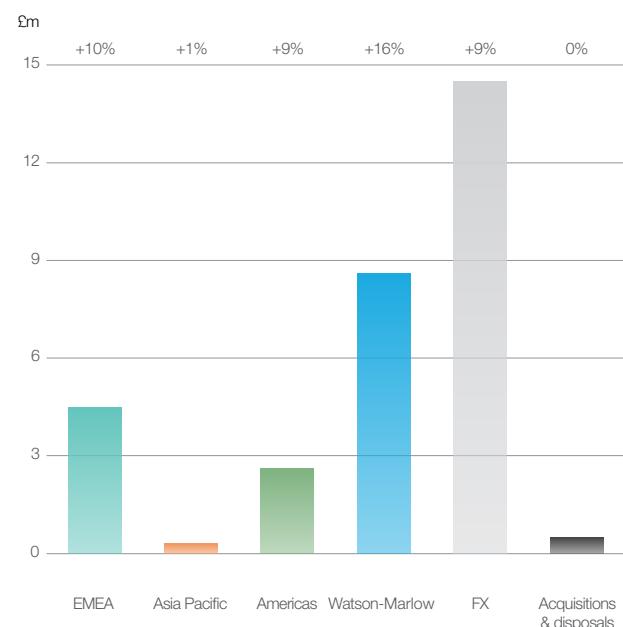
Watson-Marlow, which accounted for 26% of Group revenues, grew sales by 27% at reported exchange rates and by 10% on an organic basis. The effect of having a full year of the three acquisitions made in 2015 plus the acquisition of Aflex at the end of November 2016 was to add a further 7% to sales. Growth was achieved across all geographic regions, with our strategy of geographic expansion leading to excellent growth in Asia Pacific. We continue to benefit from positive conditions in our key Pharmaceutical & Biotechnology market where recent acquisitions combined with the launch of innovative new products have expanded the width and depth of our product portfolio.

Segment revenue changes* £m



* Rates of change at constant currency.

Segment operating profit changes* £m



* Rates of change at constant currency.

Group adjusted operating profit of £180.6 million was 8% ahead of the prior year on an organic basis. The operating profit at reported exchange rates grew by 18%, helped by a 9% benefit from translational and transactional exchange rate gains following the devaluation of sterling and a net 0.3% from acquisitions and disposals. Three of our four segments delivered double digit organic operating profit growth, with Watson-Marlow deserving particular praise. Asia Pacific posted a more subdued profit growth.

The Group adjusted operating profit margin expanded by 100 bps to a record 23.8% (2015: 22.8%). We continued to benefit from low input costs although we believe that we reached a turning point in the second half of the year as we began to see modest material price increases. The restructuring carried out in the UK and USA in 2015 had a beneficial impact on margins, as did transactional foreign exchange gains since we are a net exporter from the UK. In the face of a relatively

stagnant market, we continued to invest in the business to deliver growth and will accelerate that programme in 2017 in order to support our goal to deliver organic growth ahead of our markets, now and in the future. As a result, while our aim is to sustain these margins, we would not expect to see them expand in the current year.

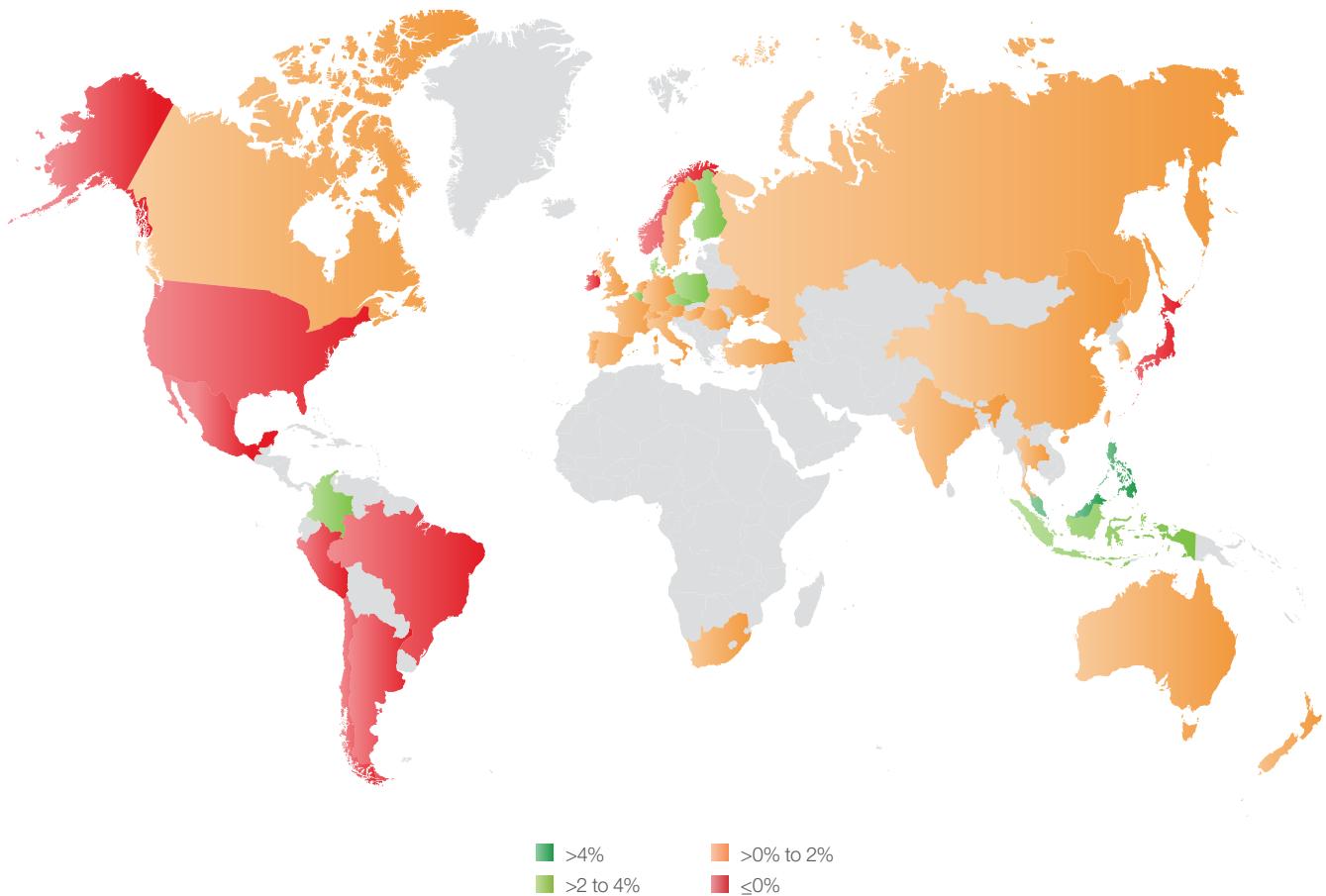
Market outlook

We are pleased with our progress in 2016 against a backdrop of near zero industrial production growth. We have seen good organic growth, improved margins and made two acquisitions that are performing well. In addition, we continue to make progress on our strategic themes, facilitating self-generated growth and making us less reliant on external market conditions.

Global industrial production remained stagnant during the first half of the year, recovering in the latter part of 2016. While the growth rates at the end of 2016 suggest an

improvement for 2017, we remain cautious in predicting a sustained market upturn and continue to focus on the implementation of our strategy, with its emphasis on self-generated growth. We have a strong direct sales business model which, combined with a large proportion of our revenues being derived from end users' maintenance and operating budgets, gives us a high degree of resilience in difficult economic conditions. We increased investment in 2016 and, during 2017, will prioritise accelerating revenue and capital investments for growth over further margin expansion, to ensure we continue delivering organic sales growth. Assuming no significant deterioration in trading conditions, the Board expects to make further progress in 2017.

Industrial production growth rates, 2016*



* Compared with the prior year. (Source: Global Industrial Production Watch, CHR Economics, February 2017)

EUROPE, MIDDLE EAST AND AFRICA



"Organic sales increased by 1% to a reported £234.3 million and operating profit increased by 10% on an organic basis to a reported £50.0 million. Currency movements were favourable and increased both sales and profit by 8%."

Neil Daws,
Executive Director, EMEA

Revenue

£234.3m

(2015: £219.4m)

+7% at reported exchange rates

+1% organic

Revenue £m



Operating profit

£50.0m

(2015: £42.7m)

+17% at reported exchange rates

+10% organic

Operating profit £m



* Before corporate expenses.

Operating margin

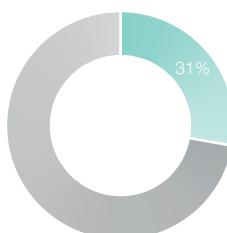
21.3%

(2015: 19.5%)

+190 bps at reported exchange rates

+180 bps organic

Group revenue %



Our division at a glance (at year end)

25 operating units*

32 countries with a direct sales presence

2,199 employees

* Operating companies, branches and Associate

	2015	Exchange	Organic	Disposal	2016	Organic	Reported
Revenue	£219.4m	£17.5m	£1.4m	(£4.0m)	£234.3m	+1%	+7%
Adjusted operating profit	£42.7m	£3.6m	£4.5m	(£0.8m)	£50.0m	+10%	+17%
Adjusted operating margin	19.5%				21.3%	+180 bps	+190 bps

above market growth in the Food & Beverage industries. The OEM markets proved challenging in 2016 despite an increased number of buying customers, which offer the potential for uplift in 2017.

Progress in 2016

In EMEA, sales increased by 1% on an organic basis to a reported £234.3 million with significant favourable currency movements increasing sales on translation by 8% and the 2015 disposal of M&M reducing sales by 2%, giving a reported sales increase of 7%. The favourable currency movements reflect the strengthening of the majority of currencies in the region against sterling following the Brexit referendum, including the euro which strengthened by 11%. Organic sales growth in the major territories of the region was mixed, with the UK and Germany up while France and Italy were down.

Our business performed well in 2016 and operating profit of £50.0 million was ahead 10% on an organic basis, driven mostly by manufacturing efficiencies and lower material costs. This included the actions taken in 2015 to reduce headcount by 8% in our UK manufacturing operations, incurring one-off costs of £1.0 million that delivered annualised benefits of £2.2 million from April 2015. As expected, these annualised benefits have been fully realised and contributed to a £1.6 million profit increase in 2016. Continuing price management initiatives, as well as strict overhead control, also contributed to increase operating profit by 17% on a reported basis, with favourable

currency movements enhancing profit by 8% and the 2015 disposal of M&M reducing profit by 2%. Operating profits were mixed across the region with organic growth in the key territories of the UK, Germany, France and Italy offset to a degree by some of the smaller businesses in the region such as Poland and Egypt.

This strong profit growth delivered an operating profit margin of 21.3%, or 180 bps higher on an organic basis, with the manufacturing efficiencies contributing 140 bps of margin improvement.

Strategy update

We have made pleasing progress generally with the implementation of our strategy for growth, particularly strengthening our market presence in the Netherlands with good results and in Egypt, where we began trading in 2015. We have completed the groundwork to begin trading through a newly established operating company in Kenya (Spirax Sarco East Africa) in 2017. We completed the establishment of the Spirax Sarco Academy, ready for roll-out in 2017, which will accelerate the development of the knowledge and skills of our sales teams, and have continued to implement sales force sectorisation across the division, making steady progress as we align our sales engineers to better serve our target sectors. As a result of this focus, we have seen strong growth in the Chemical sector and in the Food & Beverage sector, with progress in the Dairy industry in particular. We have strengthened our strategic account management process, with some

notable success, and are evolving our service capability to further improve customer support and strengthen business relationships, as well as making further improvements to the wider supply chain. Together, these strategic actions are underpinning our ability to deliver self-generated growth that outperforms our markets.

Outlook

We anticipate that our markets will remain challenging with, at best, a modest improvement in industrial production growth rates. Continuing uncertainty around Brexit could act as a headwind during 2017 and beyond, although it is too early to determine the extent of the impact until the UK exit strategy is more clearly defined. We are monitoring the situation carefully, have a contingency plan prepared and are well-placed to mitigate the challenges and capitalise on the opportunities that may arise. Oil prices are likely to remain subdued and to act as a drag on levels of investment in new Oil & Gas capacity throughout 2017. Despite the challenging conditions, we are well-positioned to continue to deliver progress as we strengthen the capabilities of our sales and service engineers; better align our organisation to the industries that we serve; and carefully balance investments, aligned to market opportunities, whilst controlling costs.

Key market performance

Food



Pharmaceutical & Biotechnology



Oil & Gas



Chemical



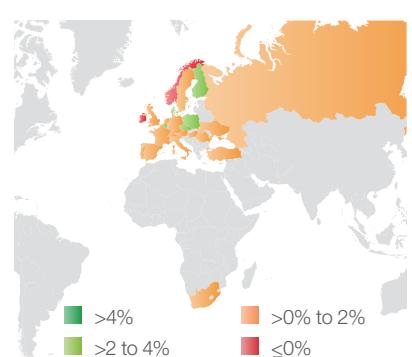
Positive

Neutral

Negative

- Industrial production growth rates remained low, around 1%
- Economic and political uncertainty created a challenging backdrop
- Record-low oil prices reduced investment projects in the Oil & Gas sector
- Above market growth achieved in priority sector Food & Beverage
- OEM markets challenging

Industrial production growth rates, 2016*



* Compared with the prior year. (Source: Global Industrial Production Watch, CHR Economics, February 2017)

ASIA PACIFIC



"Organic sales were ahead 3% and up 13% at reported exchange rates to £193.3 million, reflecting the strengthening of all currencies in the region against sterling. Operating profit increased by 1% on an organic basis to a reported £49.9 million."

Paul Lee Suay Wah,
Divisional Director, Asia Pacific

Revenue

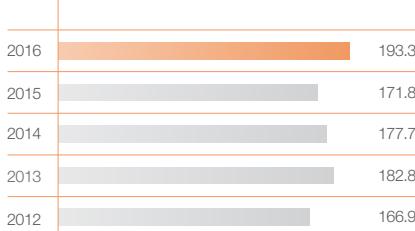
£193.3m

(2015: £171.8m)

+13% at reported exchange rates

+3% organic

Revenue £m



Operating profit

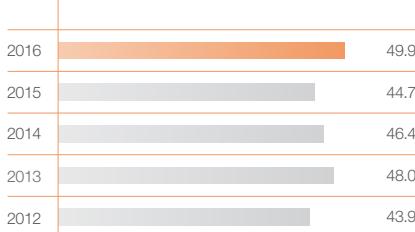
£49.9m

(2015: £44.7m)

+12% at reported exchange rates

+1% organic

Operating profit £m



Operating margin

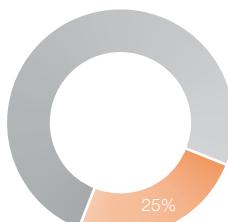
25.8%

(2015: 26.0%)

-20 bps at reported exchange rates

-70 bps organic

Group revenue %



Market overview

After four successive years of declining industrial production growth rates, China saw a modest improvement in 2016 with 2% year-on-year growth. Whilst this increase is encouraging, the current modest growth rate is forecast to prevail in 2017, suggesting the continuation of a relatively subdued operating environment in China in the short-to-medium term. Elsewhere in Asia Pacific, economic conditions were mixed, with Japan in negative growth and low growth rates (less than 1%) in India and Korea, with the latter returning from a negative 2015. Some of our smaller markets, such as the Philippines and Malaysia, saw good growth. The Oil & Gas market continued to struggle as a result of the low global oil price, although we were able to achieve growth as a result of our strategic focus on this important industry. Project work remained weak across the region, reflecting overcapacity and lower investment confidence in many Asian markets. Despite this we still achieved modest growth in project sales during 2016. We continued to

Our division at a glance (at year end)

14 operating units*

15 countries with a direct sales presence

1,086 employees

* Operating companies, branches and Associate.

	2015	Exchange	Organic	Acquisitions/ Disposals	2016	Organic	Reported
Revenue	£171.8m	£15.4m	£6.1m	-	£193.3m	+3%	+13%
Adjusted operating profit	£44.7m	£4.9m	£0.3m	-	£49.9m	+1%	+12%
Adjusted operating margin	26.0%				25.8%	-70 bps	-20 bps

successfully implement changes in our direct sales approach, reducing our reliance on large capex projects by strengthening our ability to identify and deliver smaller-scale operational efficiency improvement projects for our customers. As a result of these changes, self-generated sales increased.

Progress in 2016

Sales in Asia Pacific were £193.3 million, up 3% on an organic basis and up 13% at reported exchange rates. The favourable currency movements reflect the strengthening of all currencies in the region against sterling following the Brexit referendum, including the Chinese renminbi and Korean won which strengthened by 6% and 9% respectively. Despite tough economic conditions, organic sales were ahead in all regions, except Japan and Singapore, as we continue to reap the benefits of the successful implementation of our strategy.

Our largest sales and profit contributor, which accounted for just over 10% of total Group sales in 2016, is China, where overcapacity and reduced investments in the manufacturing sector persist, reducing large project orders. Despite this China performed strongly, with sales and profit up on 2015 as we continued our transformation from reliance on big projects to self-generated business. The £13 million plant expansion project is nearly complete and this should help to further increase efficiency and improve customer delivery performance.

In Korea, our second largest territory in Asia Pacific, sales and profit were slightly up on an organic basis, benefiting from the delivery of project sales carried over from 2015.

Elsewhere in Asia Pacific, Australia, Malaysia, the Philippines and Thailand enjoyed strong sales growth. Vietnam, in its first year of operation, had good sales volumes in line with expectations and we delivered good expansion in other developing markets including Myanmar and Cambodia.

Singapore had a challenging year with sales down on 2015, while Japan was flat after strong sales growth in the previous year.

In March 2015, we completed the separation from our long-standing joint venture in India via the sale of the Group's interest in Spirax Marshall. Our new wholly owned direct sales operation commenced trading in the second half of 2015 and has made a small contribution to sales in 2016. As expected, the company made an operating loss during the year as we continue to incur start-up costs to develop the business. The state-of-the-art manufacturing, training and office facilities are now complete and manufacturing commenced in June 2016. We are seeing a steadily improving trend of business as our brand value becomes better understood. The availability of locally manufactured products and world-class service levels, position us well to penetrate the market and we look forward to sales growing over the coming years.

Operating profit increased by 1% on an organic basis, with good progress in most of the established companies. On a reported basis, profits were up 12% to £49.9 million.

There was a moderate decline in the operating margin to 25.8% due to continued investment around the region, including the start-up costs in India and Vietnam, as well as lower margin on some larger project sales.

Strategy update

We have continued to invest in the strategic alignment of our sales engineers, matching them to key industries as geography allows, and enhancing training to further develop their application knowledge and skills. By the end of 2016, approximately 30% of the division's sales and services engineers had a designated sector focus. This increased alignment with core industries delivered good growth in the Oil & Gas industry and to OEM customers in particular. Sales to the Food & Beverage and Healthcare industries also achieved above market growth. We have focused on increasing supply chain efficiency, improving customer service, cost effectiveness and flexibility.

Outlook

Overall, industrial production growth rates in Asia Pacific, excluding China, are expected to improve in 2017, with increases predicted in Korea, India and Japan, while China remains at around 2%. Nevertheless, the outlook remains uncertain with the impacts of India's "demonetarisation" experiment yet to be fully seen and weak domestic demand and political scandal having the potential to undermine business confidence in Korea. We remain focused on further developing our direct sales business model, strategical alignment with key industry sectors and strengthening our presence in new markets, to generate our own growth opportunities.

Key market performance

Food



Oil & Gas



Beverage



Buildings (HVAC)



Positive

Neutral

Negative

- After four successive years of declining industrial production growth, China saw a modest improvement at 2% growth
- Elsewhere conditions were mixed; negative industrial production growth in Japan, low growth (less than 1%) in India and Korea, and good growth in some of our smaller markets, such as the Philippines and Malaysia
- Despite sector weakness, we saw growth in Oil & Gas as a result of our strategic focus
- Increased sector focus delivered good results in Food & Beverage

Industrial production growth rates, 2016*



* Compared with the prior year. (Source: Global Industrial Production Watch, CHR Economics, February 2017)

AMERICAS



"Organic sales increased by 5%, despite a tough economic climate, to a reported £135.9 million. Profit was also ahead with a 9% increase on an organic basis, to a reported £29.2 million. Net exchange gains added £5.6 million to sales."

Sheldon Banks,
Divisional Director, Americas

Revenue

£135.9m

(2015: £123.4m)

+10% at reported exchange rates

+5% organic

Revenue £m

2016	135.9
2015	123.4
2014	126.2
2013	132.0
2012	137.5

Operating profit

£29.2m

(2015: £27.1m)

+8% at reported exchange rates

+9% organic

Operating profit £m

2016	29.2
2015	27.1
2014	28.0
2013	26.1
2012	26.2

* Before corporate expenses.

Operating margin

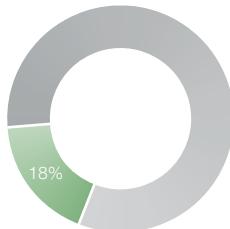
21.5%

(2015: 22.0%)

-50 bps at reported exchange rates

+90 bps organic

Group revenue %



Our division at a glance (at year end)

9 operating units*

10 countries with a direct sales presence

885 employees

* Operating companies, branches and Associate.

	2015	Exchange	Organic	Acquisitions	2016	Organic	Reported
Revenue	£123.4m	£5.6m	£6.2m	£0.7m	£135.9m	+5%	+10%
Adjusted operating profit	£27.1m	£0.2m	£2.6m	(£0.7m)	£29.2m	+9%	+8%
Adjusted operating margin	22.0%				21.5%	+90 bps	-50 bps

Progress in 2016

On an organic basis, sales increased by 5% in the Americas to a reported £135.9 million despite a tough economic climate. Latin America grew 22%, driven largely by the benefit of US dollar-based pricing in Argentina, partially offsetting a 3% reduction in North America. There were significant currency fluctuations in the region. Against sterling, the Brazilian real rose 7% and the US dollar was up 11% while the Argentine peso fell 40% due to the devaluation at the end of 2015. This resulted in net exchange gains of £5.6 million and reported sales up 10%.

Total operating profit was up 9% on an organic basis to a reported £29.2 million reflecting higher margin sales in Argentina, prudent control of overheads in inflationary environments and positive pricing strategies. Including an expected pre-operating loss following the acquisition of the assets of Brazilian control valve manufacturer Hiter, as well as slightly favourable exchange movements, the reported operating profit increased by 8%. The organic operating profit margin was 22.1% (2015: 21.2%).

In North America, sales declined modestly in Canada due to the generally inactive Oil & Gas sector. Within the USA, slow economic conditions affected our distributors, particularly within the Oil & Gas markets, who reduced stock levels accordingly. Despite uncertain conditions, we continued to invest in our sales force as we develop our direct sales model. The journey to strengthen the direct channel to our customers not only enables us to respond to growing end user expectations for more sophisticated solutions but also creates incremental opportunities for our distribution partners that continue to provide an important route to market. The self-generated progress made this year against tough economic conditions helped to restrict the decline in sales in North America to 3%, with operating profits modestly lower on an organic basis.

In Latin America, despite the difficult trading conditions in Brazil and Argentina, we reported strong progress; sales were up 22% on an organic basis, with all operations except Brazil ahead. Despite the well documented economic problems in Brazil, we still managed to outperform the market and our smaller operations in Latin America, including our new company in Peru, performed well while our new acquisition in Colombia performed in line with expectations. Operating profits were significantly ahead on an organic basis driven by an increase in Argentina, largely due to dollar-based pricing, as well as increased sales across the region except in Brazil.

On 1st July 2016 we acquired the assets of Hiter Indústria e Comércio de Controles Termo-Hidráulicos Ltda (Hiter), a process control valve manufacturer based in Brazil. Hiter is highly synergistic with Spirax Sarco's Brazilian steam and process fluid applications business. The Hiter brand has a well established reputation in Brazil with a large installed base. Following the acquisition, Spirax Sarco became the only significant manufacturer of both control and safety valves in Brazil. After re-establishing Hiter's market position during 2017, this business is expected to make a positive contribution to Group earnings from 2018.

Excluding the acquisition the adjusted operating profit margin increased to 22.1% (2015: 22.0%) driven by higher margin sales in Argentina, savings from the closure of the small manufacturing site in Colorado, USA in 2015, prudent control of overheads and positive pricing strategies. The pre-operating loss on the Hiter acquisition diluted the margin by 60 bps.

Strategy update

Good progress has been made in implementing our strategy across the Americas, with a focus on the Food & Beverage, Pharmaceutical and Chemical industries countering the worst effects of the Oil & Gas slowdown. Of particular note

has been growth in the Food & Beverage industry where our re-structured sales teams have developed deeper relationships with major global food manufacturers to deliver good growth.

We have significantly invested in developing the sector-specific and applications knowledge of our sales and service engineers during 2016, and have continued the process of reorganising our sales force, where appropriate, by industry. This better enables our sales engineers to deliver value to customers by identifying improvement projects, with the additional benefit of bringing new technology to many of those solutions.

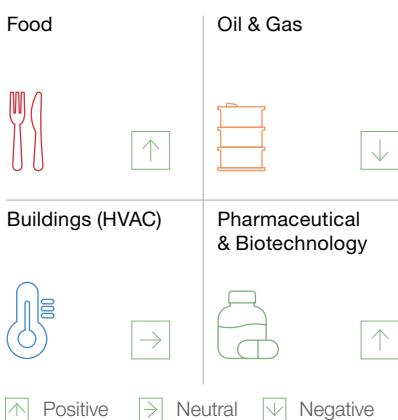
Our manufacturing operations have made good progress in planning, sourcing and health & safety, while driving significant improvements in our delivery performance of both components and fabricated systems.

Outlook

In North America, economies remain generally weak with some uncertainty arising from the outcome of the US Presidential election and Canada still suffering from a slow Oil & Gas business. Industrial production is forecast to grow in 2017, albeit at the relatively low rate of slightly above 1%, following a shrinkage of almost 1% in 2016. Oil & Gas spending is unlikely to restart in 2017, though existing facilities should still generate good levels of maintenance business across the Americas.

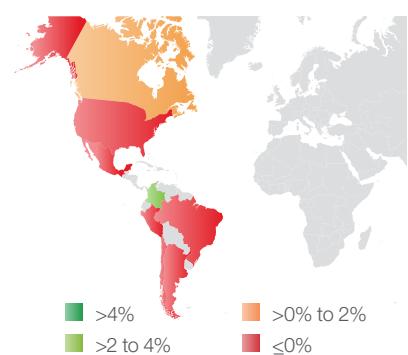
In Latin America, Brazil's decline over the past three years is expected to bottom-out in 2017, with slight signs of confidence returning to the economy, although political uncertainty remains a threat to an economic turnaround in the short term. Argentina's austerity measures are expected to stabilise the economy in 2017. Within Latin America as a whole, a further reduction in industrial production, of less than 1%, is forecast for 2017, a significantly lower reduction than in the past two years. While the short-term economic outcome remains uncertain, we are well-positioned to continue benefiting from our self-generated growth initiatives.

Key market performance



- Latin America remained in industrial recession and North America also saw negative growth, of just under 1%
- Industrial confidence was subdued as political and economic uncertainty weighed heavily on economic growth
- Low oil price depressed upstream investments
- Increased sector focus on Food & Beverage, Pharmaceutical and Chemical industries countered the worst effects of the Oil & Gas slowdown

Industrial production growth rates, 2016*



* Compared with the prior year. (Source: Global Industrial Production Watch, CHR Economics, February 2017)

WATSON-MARLOW



"Sales increased by an outstanding 10% on an organic basis to a reported £193.9 million, with acquisitions contributing £10.6 million to sales. Operating profit was ahead 16% on an organic basis to a reported £64.3 million. Significant exchange gains strengthened reported figures."

Jay Whalen,
Executive Director, Watson-Marlow

Revenue

£193.9m

(2015: £152.6m)

+27% at reported exchange rates

+10% organic

Revenue £m



Operating profit

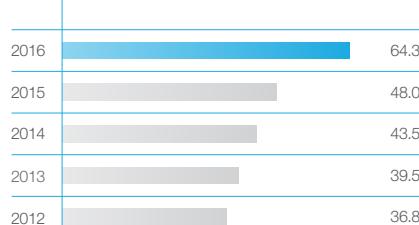
£64.3m

(2015: £48.0m)

+34% at reported exchange rates

+16% organic

Operating profit £m



* Before corporate expenses.

Operating margin

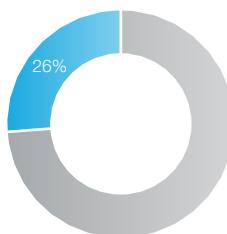
33.1%

(2015: 31.4%)

+170 bps at reported exchange rates

+180 bps organic

Group revenue %



Our division at a glance (at year end)

35 operating units*

29 countries with a direct sales presence

1,214 employees

* Operating companies, branches and Associate.

	2015	Exchange	Organic	Acquisitions	2016	Organic	Reported
Revenue	£152.6m	£14.1m	£16.6m	£10.6m	£193.9m	+10%	+27%
Adjusted operating profit	£48.0m	£5.7m	£8.6m	£2.0m	£64.3m	+16%	+34%
Adjusted operating margin	31.4%				33.1%	+180 bps	+170 bps

Overall, large project orders increased, with a number of orders from Biopharmaceutical customers, in particular, contributing to this growth.

Progress in 2016

Sales increased by an outstanding 10% on an organic basis to a reported £193.9 million, boosted by an excellent fourth quarter. Acquisitions made in 2015 have performed well and together with Aflex, acquired in November 2016, contributed a further £10.6 million to sales. We received a significant exchange benefit of £14.1 million which resulted in sales increasing by 27% on a reported basis.

On an organic basis, sales growth was achieved in all geographic regions.

Asia Pacific enjoyed an outstanding year, benefiting from our strategy of geographical expansion. Europe also performed strongly given market uncertainties, with organic sales growth of 9%, led by Germany, France, Belgium and Russia. In the Americas, all operations reported an increase in sales on an organic basis. North America, our most mature market, was solid with the USA up 3% while Latin America continued to rebound with Mexico and Brazil seeing double-digit organic sales growth and Argentina benefiting from the impact of the Argentine peso devaluation.

Asepcos, acquired in April 2015, had a very strong year and has exceeded our sales and profit expectations while FlowSmart, acquired in November 2015, had sales in line with, and operating profit above, expectations.

New product development continues to be a priority, with 2016 launches including the Watson-Marlow 530 and 630 pumps, Qdos 120 pump and MasoSine Certa™ 250, 300 and 400 pumps. The 2017 pipeline for new product releases remains strong.

On 30th November 2016 we acquired Aflex Hose Limited and its subsidiary Aflex Hose USA LLC (Aflex) for £61.4 million. Aflex specialises in the design and manufacture of PTFE-lined flexible hoses for the Pharmaceutical, Food, Chemical and Automotive industries. Aflex is a natural extension to the WMFTG fluid path product portfolio and further strengthens WMFTG's already strong global presence in the Biotechnology, Pharmaceutical, Industrial, Chemical and Food & Beverage sectors. Aflex's premium PTFE-lined hoses complement our FlowSmart silicone hoses and WMFTG's other fluid path products, as part of our strategy to provide a complete value-added hose and tubing range. Its initial performance reinforces our confidence that it is an excellent fit for the Watson-Marlow group.

Watson-Marlow's operating profit of £64.3 million was an excellent performance, up 16% on an organic basis and 34% on a reported basis. The operating profit margin increased 180 bps on an organic basis benefiting from gains on transaction and operational gearing. The reported margin of 33.1% grew 10 bps less than the organic measure as the dilutionary effect of acquisitions fully offset the margin benefit due to exchange.

Strategy update

We have consistently executed our strategy, which focuses on market, product and direct sales force development, and geographic expansion, supported by our Global Excellence in Manufacturing programme and related acquisitions, to expand our addressable market. During 2016 we established new sales companies in Ireland and Canada, to take advantage of the opportunities that these markets present, and established sales offices in Indonesia,

Thailand and Vietnam in preparation for commencing direct sales in 2017. We continue to strengthen our market sectorisation approach and to invest in the professional development of our employees. New product development is a key driver of sales growth and we develop innovative products that grow the addressable market of our niche pumps and associated fluid path technologies and expand our addressable market. Through the strategic acquisition of Aflex, we extended our product portfolio and our position in a number of important markets.

We have invested extensively in a new ERP system and the successful implementation of this project is now almost complete with the vast majority of our business now being transacted through the new system.

Outlook

Our market conditions are shaped by levels of investment in our core focus sectors, as well as industrial production growth rates and general macroeconomic conditions in the countries in which we operate. Our largest market, Pharmaceutical & Biotechnology, is expected to remain resilient, although political rhetoric surrounding drug prices in the USA may dampen capital investment in this important market. We are able to self-generate opportunities for growth as we demonstrate the benefits of peristaltic pumping technology and develop new applications for our pumps, gaining market share from other pump types; and expand our addressable market through product development and geographical expansion. In 2017, we will continue to invest in new product development and expand our routes to market in order to maintain above market organic sales growth. Our expectation of mid-to-high single-digit organic growth remains unchanged.

Key market performance

Pharmaceutical & Biotechnology



Food



Water & Wastewater



Mining & Precious Metal Processing



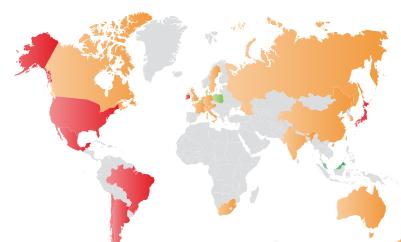
Positive

Neutral

Negative

- Zero to low global industrial production growth rate, with developed OECD markets around zero and non-OECD market conditions marginally better
- Pharmaceutical market buoyant, with good sales growth achieved and strong contributions from BioPure, Aspeco and Flexicon
- Food & Beverage challenging, but showed recovery in the fourth quarter following the launch of the new Certa™ pump range
- Increase in large project orders

Industrial production growth rates, 2016*



* Compared with the prior year. (Source: Global Industrial Production Watch, CHR Economics, February 2017)

ENGINEERING SUSTAINABLE VALUE BY MANAGING THE BUSINESS FOR FINANCIAL SUCCESS



"A good financial result of 4% sales growth and 8% profit growth on an organic basis, further strengthened by a currency tailwind, against a background of effectively zero industrial production growth."

Kevin Boyd,
Group Finance Director

Key points in this section:

- › The Board has proposed a final dividend of 53.5p per share, giving a total Ordinary dividend of 76.0p per share, an increase of 10%
- › Adjusted basic earnings per share increased by 20% to 171.5p
- › Return on capital employed increased 380 bps to 47.9%
- › Strong cash generation, 101% cash conversion

The Group reports under International Financial Reporting Standards (IFRS) and also uses adjusted and organic figures where the Board believe that they help to effectively monitor the performance of the Group and help users of the Financial Statements to draw comparisons with our peers. Unless otherwise stated, adjusted figures are used throughout this section and exclude the amortisation and impairment of acquisition-related intangible assets and costs associated with acquisitions. A reconciliation of adjusted operating profit to statutory operating profit is given below and more detail can be found in Note 2 to the Financial Statements. As we are a multi-national group of companies, who trade in a large number of foreign currencies and regularly acquire and sometimes dispose of companies, we also refer to organic performance measures. These strip out the effects of the movement of foreign currency exchange rates and of acquisitions and disposals. The Board believe that this allows

users of the Financial Statements to gain a further understanding of how the Group has performed.

A good financial result was achieved in 2016 against the background of effectively zero industrial production growth. Sales at reported exchange rates grew 14% to £757.4 million (2015: £667.2 million). Organic sales grew by 4% overall. Watson-Marlow had another excellent year with 10% organic growth, spread across the business but with a particularly good performance in Asia Pacific. Organic sales grew by over 2% in the Steam Specialties business, with a 1% advance in EMEA, 3% gain in Asia Pacific helped by two large project sales in the first half, and 5% growth in the Americas boosted by currency devaluation in Argentina which led to significant price increases. The net effect of the three small acquisitions in Watson-Marlow and one disposal in the

Steam Specialties business in 2015 combined with the acquisitions of Hiter and Aflex in 2016 added 1% to sales.

The weakening of sterling following the UK referendum to leave the EU had a dramatic effect on revenue in the second half of the year giving a gain of 8% for the full year. The only major trading currency of ours that sterling strengthened against was the Argentine peso (+40%). Due to the sterling devaluation happening mid-year in 2016 it is likely to also have an effect on revenue in 2017. If recent exchange rates prevail for the whole of 2017 we would expect to see a 6% exchange gain to sales on translation versus 2016.

Adjusted operating profit of £180.6 million (2015: £152.4 million) was 18% ahead at reported exchange rates and 8% ahead on an organic basis (constant currency, excluding acquisitions and disposals). On the same

	Adjusted operating profit 2016 £m	Adjusted operating margin 2016 %	Adjusted operating profit 2015 £m	Adjusted operating margin 2015 %
Europe, Middle East and Africa	50.0	21.3%	42.7	19.5%
Asia Pacific	49.9	25.8%	44.7	26.0%
Americas	29.2	21.5%	27.1	22.0%
Steam Specialties business	129.1	22.9%	114.5	22.3%
Watson-Marlow	64.3	33.1%	48.0	31.4%
Corporate expenses	(12.8)		(10.1)	
Adjusted operating profit	180.6	23.8%	152.4	22.8%
Amortisation of acquisition-related intangible assets	(6.0)		(4.7)	
Acquisition and disposal costs	(0.5)		(0.8)	
Loss on closure of USA metering unit	–		(3.8)	
Profit on disposal of M&M, less recycled exchange losses	–		(0.3)	
Statutory operating profit	174.1		142.8	

basis the Steam Specialties business saw profits increase by 6% with 10% growth in EMEA, 9% in the Americas but only 1% in Asia Pacific. On the back of good sales growth, Watson-Marlow's profits grew 16% on an organic basis.

Currency movements boosted operating profit by 9%, a mixture of translational and transactional gains. The net transactional gain of £3.3 million was impacted by adverse currency hedges which were entered into prior to the post-Brexit referendum devaluation. The main transactional exposure flow affecting the Group is the export of products from our factories in the UK invoiced in sterling, less the import of goods from overseas Group factories and third parties priced predominately in euros and US dollars. The net exposure is in the range £60-65 million. If recent exchange rates prevail for the whole of 2017 we would expect to see a 9% uplift to profit, as a result of transactional and translation foreign exchange movements.

Adjusted operating profit margins in the Steam Specialties business grew 70 bps to 22.9% and in Watson-Marlow by 170 bps to an exceptional 33.1%.

The statutory operating profit was £174.1 million (2015: £142.8 million).

Interest

Net interest rose from £1.5 million to £2.6 million. Net bank interest decreased from a credit of £0.8 million in 2015 to a neutral position in 2016 reflecting the lower average cash balances held by the Group as a result of the £91 million special dividend paid in 2015 and the £67 million spent on acquisitions in 2016. Net finance costs under IAS 19 in respect of the Group's defined benefit pension schemes increased slightly to £2.6 million (2015: £2.3 million).

Associates

Following the disposal of the Group's interest in Spirax Marshall, India in March 2015, the Group has only one Associate holding, a 38.9% interest in Econotherm heat pipe technology business. Econotherm's performance in 2016 was similar to 2015, with our share, net of tax, amounting to a loss of £0.1 million (2015: £0.1 million loss).

Pre-tax profit

The adjusted profit before tax of £177.9 million (2015: £151.1 million) was 18% ahead at

reported exchange rates. As outlined earlier, currency movements were favourable in the year. At constant currency, adjusted profit before tax increased by 8%.

The statutory profit before tax was £171.4 million (2015: £139.7 million) and includes the non-operating items listed below that have been excluded from the adjusted profit:

- a charge of £6.0 million (2015: £4.7 million) for the amortisation of acquisition-related intangible assets; and
- acquisition and disposal costs of £0.5 million (2015: £0.8 million).

Taxation

The tax charge on the adjusted profit before tax, excluding the results of the Associate (which is presented on an after-tax basis), fell to 29.1% (2015: 29.8%) primarily as a result of lower withholding tax payments in China. The Group's overall tax rate essentially reflects the blended average of the tax rates in over 40 tax jurisdictions around the world in which our operations trade and generate profit. The Group comprises over 80, mainly small, operating units reflecting our local direct sales business model. We would anticipate a broadly similar tax rate in 2017.

Earnings per share

Adjusted basic earnings per share increased by 20% to 171.5 pence (2015: 142.6 pence). The 2016 earnings per share benefited marginally from a reduction in the number of shares in issue from 15th June 2015, following the share consolidation of 28 existing Ordinary shares into 27 new Ordinary shares, in conjunction with the 120.0 pence per share special dividend paid in July 2015. Statutory earnings per share was 165.0 pence (2015: 129.9 pence). The fully diluted earnings per share was not materially different in either year.

Dividends

We have a progressive dividend policy where dividend payments follow underlying earnings per share growth while maintaining prudent levels of dividend cover. The aim is to provide sustainable, affordable dividend growth, building on our 49 year record of dividend growth, with a compound annual increase of 10.9% over that period; in line with the 11.2% per annum increase over the last 10 years. The Board is proposing a final dividend of 53.5 pence per share for 2016

(2015: 48.2 pence) payable on 26th May 2017 to shareholders on the register at 28th April 2017. Together with the interim dividend of 22.5 pence per share (2015: 20.8 pence), total Ordinary dividends are therefore 76.0 pence per share, which is an increase of 10.1% on Ordinary dividends of 69.0 pence in 2015.

The total amount paid in dividends during the year was £51.9 million. This compares with £140.3 million, including the special dividend of £91.0 million, paid in 2015.

Acquisitions and disposals

Acquisitions are an important complement to our strategy for growth. Dedicated resource is focused on identifying opportunities to add attractive businesses that closely match our strategic, industrial and commercial requirements. We have a strong Balance Sheet and considerable debt capacity, giving us significant flexibility. In 2016 we made two acquisitions at a total cost of £67 million. Both fulfil one or more of our three broad acquisition criteria:

- geographic expansion, typically through the acquisition of a distributor in a developing market;
- products that can be integrated into our existing businesses; and
- related acquisitions that fit alongside our existing Steam Specialties and Watson-Marlow businesses.

On 9th August 2016 we announced the acquisition of the assets of the Brazilian process control valve manufacturer, Hiter Indústria e Comércio de Controles Térmico-Hidráulicos Ltda (Hiter) for consideration of £3.9 million. Hiter is highly synergistic with Spirax Sarco's successful Brazilian steam and process fluid applications business. Following the acquisition, Spirax became the only significant manufacturer of both control and safety valves in Brazil.

We acquired Aflex Hose Limited and its subsidiary Aflex Hose USA LLC (Aflex) on 30th November 2016 for £61.4 million plus taxes and working capital adjustments. This business joined the Watson-Marlow Fluid Technology Group. Aflex specialises in the design and manufacture of PTFE-lined flexible hoses for the Pharmaceutical, Food, Chemical and Automotive industries. It is highly synergistic with, and a natural extension to, the Watson-Marlow fluid path product portfolio.

The three acquisitions that Watson-Marlow made in 2015, Asepco, Masosine (Japan) and FlowSmart, have all been integrated successfully into the business and are performing in-line with or ahead of expectations.

Research and development

The development of innovative new products, and getting those products to market faster and sold more effectively, is an important element of our strategy for growth.

Our Steam Specialties business continued its focus on sector specific innovation, with over a third of our development projects now being sector specific. For the Oil & Gas sector, we launched STAPS ISA100, a wireless steam trap monitoring solution and a new float trap to expand our offer in higher pressure steam systems. We also released a ready to install, compact clean steam generator for the Food & Beverage sector.

In our Watson-Marlow niche peristaltic pump and associated fluid path technologies business, the drive is for truly innovative products that target attractive market opportunities and expand our addressable market by taking market share from other positive displacement pump types. We have concentrated, through 2016, on making MasoSine sinusoidal pumps a first choice in the Food & Beverage market and developing both pumps and fluid path components for 2017 launch, to further strengthen

our position in the Pharmaceutical & Biotechnology market.

Overall the Group's total investment in research and development was £10.6 million (2015: £9.9 million).

Capital employed

Total capital employed has increased 19% at reported exchange rates but was flat if the effects of currency and acquisitions are excluded. This compares with organic sales growth of 4%.

Tangible fixed assets increased by £32 million to £201.8 million. Of this increase, £16 million was due to changes in exchange rates, and £9 million came from acquisitions giving organic growth of £7 million, just under 4%. Significant capital expenditure projects included the completion of the new plant in Chennai, India and the extension of our plant in Shanghai, China, where work commenced late in 2015 and is scheduled for completion in early 2017, and the opening of the first sector-focused manufacturing unit dedicated to clean steam products, in the UK. Watson-Marlow continued with the implementation of a global ERP solution and the vast majority of their business is now transacted through the new system. We generate significant cash flow and our first priority is to reinvest in the business, taking opportunities to generate good returns from increased efficiency, reduced costs and flexibility.

Total working capital increased by just under £34 million, all of which is down to currency effects and acquisitions. Trade receivables grew 4% on an organic basis in line with a 4% organic growth in sales while inventory levels remained flat, a reflection on the focus that we have on maintaining efficient levels of inventory around the world to help better service our customers while effectively managing our resources.

The ratio of working capital to sales increased to 27.5% (2015: 26.2%) purely due to foreign exchange effects and acquisitions. On a constant currency basis, excluding acquisitions, working capital as a percentage of sales fell 140 bps.

Return on capital employed (ROCE)

This is an important key performance indicator and forms a meaningful element of Executive Directors' annual bonuses. ROCE measures effective management of fixed assets and working capital relative to the profitability of the business. ROCE increased to 47.9% (2015: 44.1%), an increase of 380 bps due to our close control of the various components of capital employed and improvement in the operating profit margin.

Post-retirement benefits

The net post-retirement benefit liability under IAS 19 rose to £94.2 million (2015: £73.7 million) primarily as a result of the increase in liabilities due to the reduction in the AA corporate bond rates used to discount future cash flows. In total, liabilities rose by £101 million (24%) which could not be fully compensated by the £80 million rise in assets (23%).

The main UK schemes, which constitute 88% of assets, were closed to new members in 2001 but have remained open to future service accrual. These schemes continue to be managed under a dynamic de-risking strategy whereby asset and liability values are monitored on a daily basis by the asset manager and appropriate asset allocation decisions taken as the funding level improves against pre-agreed trigger points. Due to the fall in the discount rate the cost of future accrual is expected to increase by £2.5 million in 2017.

The last actuarial valuation of the UK schemes, as at the 31st December 2013, was completed in September 2014 and showed those schemes to be broadly in balance. As a consequence, deficit reduction cash contributions by the Company ceased with

	2016 £m	2015 £m
Capital employed		
Property, plant and equipment	201.8	169.9
Inventories	112.5	92.5
Trade receivables	185.5	152.1
Prepayments and other current assets/(liabilities)	(89.8)	(70.0)
Capital employed	410.0	344.5
Intangibles and investment in Associate	169.7	109.0
Post-retirement benefits	(94.2)	(73.7)
Deferred tax	15.0	15.3
Non-current provisions and long-term payables	(3.5)	(1.6)
Net cash	27.4	4.8
Net assets	524.4	398.3
 Adjusted operating profit	 180.6	 152.4
Average capital employed	377.3	345.4
Return on capital employed	47.9%	44.1%

effect from October 2014. The next actuarial valuation will be as at the 31st December 2016 and as a result of higher liabilities it is anticipated that deficit reduction cash contributions will recommence in 2017.

Cash flow and treasury

Cash generation in 2016 was very strong, driven by conversion of operating profit into cash, whilst continuing to invest in capital expenditure projects that generate good returns from improvements in efficiency and cost reduction, and in support of sales growth.

Cash from operations increased to £182.7 million (2015: £145.5 million) representing 101% cash conversion. This improvement reflects a £4.3 million inflow of working capital versus an outflow of £2.7 million in 2015, in part due to sales being more evenly spread over the year and a continuing focus on inventory efficiency.

Capital expenditure was £31.3 million (2015: £30.9 million) and we would expect capital expenditure in the current year to increase as we continue to invest in the Group. In particular we are considering new facilities in Australia, a new distribution

centre for Southeast Asia, a consolidation of distribution in the UK and an accelerated equipment upgrade programme for some of our manufacturing facilities to continue the efficiency gains seen in 2016.

Tax paid in the year was £56.5 million (2015: £43.3 million) reflecting the higher level of profit and payments made on account in the USA. Excluding these, tax paid was broadly in line with the tax charge in the profit & loss account and included tax paid in virtually every one of the 44 countries in which the Group has operating units. Free cash flow rose to £126.2 million (2015: £103.0 million), providing funds for dividends to shareholders and acquisitions.

Dividend payments were £52.1 million, including payments to minorities, (2015: £140.5 million) and represent the final dividend for 2015 and the interim dividend for 2016. The prior year comparative also includes the special dividend of £91.0 million paid in July 2015.

There was a net cash outflow of £66.5 million for acquisitions in the year compared with a net figure for the prior year of £10.2 million, comprising a cash cost of £23.6 million for acquisitions, net of an inflow of £13.3 million

in respect of disposals. Shares issued under the Group's various employee share schemes gave a cash inflow of £1.3 million (2015: £4.7 million).

Net cash in the year increased by £22.6 million aided by exchange movements of £11.9 million, resulting in a net cash balance of £27.4 million at 31st December 2016.

The Group's Profit and Loss account and Balance Sheet are exposed to movements in a wide range of different currencies. This stems from our direct sales business model, with a large number of local operating units. These currency exposures and risks are managed through a rigorously applied Treasury Policy, typically using centrally managed and approved simple forward contracts to mitigate exposures to known cash flows and avoiding the use of complex derivative transactions. The largest exposures are to the euro, US dollar, Chinese renminbi and Korean won. Whilst currency effects can be significant, the structure of the Group provides mitigation through our regional manufacturing strategy, diverse spread of geographic locations and through the natural hedge of having a high proportion of our overhead costs in local currency in our direct sales operating units.

Capital structure

The Board keeps the capital requirements of the Group under regular review, maintaining a strong Balance Sheet to protect the business and provide flexibility of funding for growth. The Group earns a high return on capital, which is reflected in strong cash generation over time. Our first priority is to maximise investment in the business to generate further good returns in the future, aligned with our strategy for growth and targeting improvement in our key performance indicators. We also prioritise finding suitable acquisitions that can expand our addressable market through increasing our geographic reach, deepening our market penetration and broadening our product range. Acquisition targets need to exhibit good strategic fit and meet strict commercial, economic and return on investment criteria. Where cash resources significantly exceed expected future requirements, we will seek to return capital to shareholders, as evidenced by the cash return of £91.0 million via the special dividend of 120.0 pence per share that was paid in July 2015.

	2016 £m	2015 £m
Adjusted cash flow		
Operating profit	180.6	152.4
Depreciation and amortisation	25.6	22.2
Cash payments to the pension schemes less than the charge to operating profit	1.6	1.2
Equity settled share plans	1.9	3.3
Working capital changes	4.3	(2.7)
Net capital expenditure (including capitalised R&D)	(31.3)	(30.9)
Cash from operations	182.7	145.5
Net interest	–	0.8
Tax paid	(56.5)	(43.3)
Free cash flow	126.2	103.0
Net dividends paid	(52.1)	(140.5)
Provisions	2.3	0.7
Proceeds from issue of shares / purchase of Employee Benefit Trust shares	1.3	4.7
Acquisitions and disposals	(66.5)	(10.2)
Adjustments	(0.5)	(2.1)
Cash flow for the year	10.7	(44.4)
Exchange movements	11.9	(3.3)
Opening net cash	4.8	52.5
Net cash at 31st December	27.4	4.8

ENGINEERING SUSTAINABLE VALUE
BY MANAGING OUR SOCIAL
AND ENVIRONMENTAL IMPACTS



"We are committed to improving the sustainability of our operations and assisting our customers to do the same."

Nicholas Anderson,
Group Chief Executive

Sustainability is one of the six key strategic priorities through which we are driving growth and achieving shareholder value.

Our sustainability vision:

To engineer a more sustainable future.

Our sustainability mission:

We will operate sustainably through responsibly managing our:

- business for on-going financial success;
- operations in accordance with laws and regulations;
- social and environmental impacts;
- ethical and social responsibilities; and
- customer and supplier relationships, to improve the sustainability of their operations.

We commit to engineering a sustainable future by focusing on five core areas: our workplaces, our supply chain, our environment, our customers and our communities, setting objectives and targets in each area.

Our sustainability strategy: 2016 update

During 2016 we created a Group Sustainability Policy which was formally approved, translated into 14 languages, disseminated across the Group and made available on a new sustainability intranet site, which can be accessed by all employees.

Our 10 sustainability project teams worked with their topic sponsors to establish a five-year plan for each sustainability objective and commenced implementation of their plans. A newly established Sustainability Committee met every two months to review and oversee progress.

The sustainability strategy was rolled out across the Group, using briefing packs and a sustainability animation, translated into the Group's core languages. A communication plan is in place for 2017 to continue to raise awareness of the sustainability programme; all employees will be required to complete a sustainability e-learning module during 2017.

Managing sustainability

We have a well-defined management structure to help us achieve our sustainability objectives.

Group Chief Executive

Responsible for the Group sustainability strategy

Supported by

Board of Directors

Sustainability Committee

Senior Managers (Divisional Director, Spirax Sarco Americas; Group Supply Chain Director; Group EHS* Executive; WMFTG Supply Chain Director) oversee strategy implementation and review progress against strategic objectives

Sustainability strategy sponsors

Senior managers allocated to each sustainability objective

Divisional Directors, Regional and General Managers

Ensure the Group's sustainability policies are upheld and implemented by our operating companies

Sustainability strategy project leaders and teams

Establish strategic priorities, with sponsors, and oversee strategic implementation

Employees and organised employee groups

Oversee, record and report on strategic implementation and performance within their local workplaces

* Environmental, Health and Safety

Sustainability objectives

1. Our workplaces



Engineering for excellence

- To achieve health and safety (H&S) excellence through engagement, empowerment and fostering good behaviours, while targeting zero accidents.
- To promote diversity and equality through employment practices that are free from discrimination and in accordance with international human rights principles.
- To act in accordance with our Core Values, upholding a zero tolerance approach to bribery and corruption.
- To invest in developing the knowledge and skills of our people.

2. Our supply chain



Engineering the responsible way

- To focus on continuous improvement in our supply chain with particular emphasis on sustainability.
- To incorporate sustainability factors into our product design process, including energy efficiency, emissions, serviceability, recyclability and the availability of compliant and ethically sourced materials.

3. Our environment



Engineering for our planet

- To limit the environmental impacts of our operations through reducing water use and minimising and managing effluent and waste.
- To minimise the environmental impacts of our operations by managing energy consumption with the aim of reducing carbon emissions.

4. Our customers



Engineering sustainable solutions

- To provide products and services that improve the sustainability of our customers' operations through helping them reduce their environmental impacts, improve plant efficiency and productivity, and maintain product quality.

5. Our communities



Engineering better futures

- To engage positively with the communities in which we operate and to offer financial support to approved charities.

Sustainability spotlight: achievements in 2016

MasoSine; celebrating 17 years without a lost time incident

On 28th September 2016, MasoSine, a Watson-Marlow Fluid Technology Group company that manufactures sinusoidal pumps for use in the food industry, celebrated an outstanding record of 17 years without a lost time incident.

This excellent achievement is due to rigorous H&S management including immediate action to address safety concerns, thorough root cause analysis of near misses, a well-established H&S culture and a focus on continuous improvement. A detailed annual risk assessment programme is also undertaken for all employees, along with quarterly safety committee reviews that include input from an independent EHS consultant.

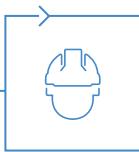
Spirax Sarco China; sustainability award finalist

During 2016 Spirax Sarco Engineering (China) Ltd was shortlisted as a finalist in the Sustainable Business Award category, of the British Business Awards, organised by the British Chamber of Commerce in Shanghai. The nomination recognised the company's outstanding commitment to improving its customers' sustainability, its support for the education of young engineers and its drive to continuously improve the sustainability of its own operations. Although narrowly missing out on the top spot, the judges praised Spirax Sarco China for its passion and commitment to sustainability.



Spirax-Sarco Engineering is a constituent of the FTSE4Good UK Index

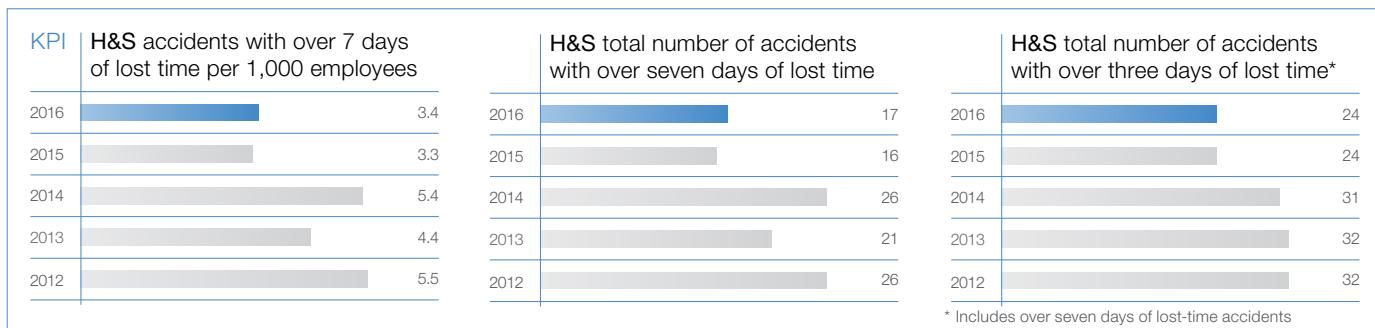
FTSE Group confirms that Spirax-Sarco Engineering plc has been independently assessed according to the FTSE4Good criteria and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index company FTSE Group, FTSE4Good is an equity index series that is designed to facilitate investment in companies that meet globally recognised corporate responsibility standards. Companies in the FTSE4Good Index Series have met stringent environmental, social and governance criteria, and are positioned to capitalise on the benefits of responsible business practices.



Engineering for excellence Health & Safety

Objective: To achieve health and safety (H&S) excellence through engagement, empowerment and fostering good behaviours while targeting zero accidents

Target: Zero accidents



Overview

We strive for H&S excellence, protecting the health and well-being of employees, contractors and visitors to our sites. We actively promote a strong H&S culture and have a clear H&S management structure. The Group Chief Executive and Board of Directors oversee our H&S programmes and performance, with H&S a standing item on the agenda of every Board meeting. All operating units are required to adhere to the Group H&S Policy and also operate in line with a more detailed local policy, procedures and management system.



"Rigorous application of best practice standards, a H&S culture and a focus on leading indicators are key to keeping our people safe."

Mark Wyatt,
Group Environment, Health and Safety Executive

Performance in 2016

During 2016 our over seven day lost-time accident rate was relatively unchanged at 3.4 accidents per 1,000 employees (2015: 3.3). We benchmarked our performance against RIDDOR's "Over 7-day, rate of reported non-fatal injury per 100,000 employees, 2013/14-2015/16" in the UK manufacturing sector, which was 360. Our H&S performance was therefore slightly better than the industry average. Our total number of accidents resulting in over three days of lost time, which includes over seven day accidents, stayed the same at 24 accidents for 2016. While we were disappointed not to have reduced our accident rate, we were pleased to maintain the significantly improved performance that we achieved in 2015.

We increased the number of H&S training units delivered to 14,958 (2015: 10,566). We have encouraged reporting of employee concerns through a "Don't walk by" campaign; 7,845 concerns were raised during 2016 (2015: 1,644). We view this increase as a positive outcome, reflecting the success of the campaign and the embedding of behavioural based safety (BBS) within our supply sites. A total of 250 near misses were reported during the year, these were investigated and corrective action taken (2015: 213). We employ 32 full time, qualified H&S professionals and additional part-time EHS

employees (2015: 25). During 2016 we completed over 489 internal continuous improvement EHS inspections across our supply sites (2015: 400).

At the end of the year, 11 of our 19 manufacturing sites held OHSAS 18001 certification and a number of companies are working towards achieving it. All of the Spirax Sarco Steam Specialties manufacturing sites have now established a BBS programme, to be fully embedded in 2017 (2015: four).

During 2016 we completed the construction and opening of our new manufacturing, office, warehouse and training facility in India, without any lost-time accidents; MasoSine, a Watson-Marlow company, achieved 17 years without a lost-time incident; and our Spirax Sarco Steam Specialties business manufacturing site in the USA recorded three years (1.86 million man hours) without a lost time accident.

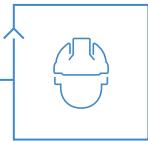
Actions taken in 2016

We completed a Group-wide roll-out of a "Don't walk by" campaign, a hand safety campaign and a safe driving campaign. We established a Group Driving on Company Business Policy, which was translated into our core Group languages, and rolled out an e-learning safe driving module in the UK. We undertook extensive manual handling training and risk assessments, completed a thorough review of machine guarding and continued the roll-out of our BBS programme across the Steam Specialties business's supply sites. Across the Group we established a roof control programme and installed safety equipment to protect maintenance employees and contractors working at height on Company-owned buildings.

We completed an employee H&S survey and a H&S risk "heat map" exercise, with accompanying risk reduction plans, across our Steam Specialties business supply sites. We established an EHS academy syllabus to ensure consistent EHS training across the Group and established a Management of Change Policy, which is being used to identify and evaluate significant changes in activities, processes, facilities and equipment to minimise the potential for harm to personnel, the environment or the communities in which we work.

Next steps for 2017

- Complete implementation of BBS at sites that established the programme during 2016 and roll out BBS across Watson-Marlow supply sites
- Implement risk reduction actions identified by the H&S risk heat map assessments and the hand safety, working at height and manual handling campaigns
- Establish a cross-business internal EHS audit programme
- Drive further adoption of the leading indicator programme
- Company-wide implementation of the Driving on Company Business Policy



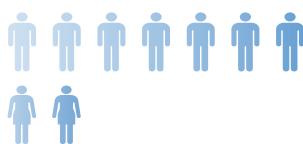
Engineering for excellence

Employment practices

Objective: To promote diversity and equality through employment practices that are free from discrimination and in accordance with international human rights principles

Target: 25% of women on our Board, as opportunities arise

Board gender diversity*

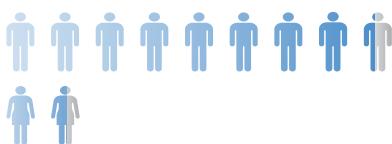


Males: 7

Females: 2

* At year end

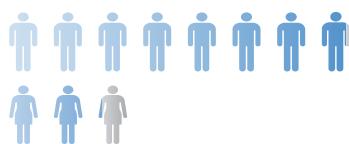
Senior management gender diversity*



Males: 392

Females: 77

Total workforce gender diversity*



Males: 4,243

Females: 1,141

Overview

By basing our employment practices on our Core Values, in particular the value of “respect”, we make fair and equitable employment decisions. We believe that diversity of culture, gender, age, experience and expertise enhance our ability to operate effectively and ethically, increasing the sustainability of our business.

We have policies and commitments about the way that we treat people, including the Group Management Code, Group Human Rights Policy, Modern Slavery Act Statement, and local HR policies. Since 2011 we have used a global grading system to provide transparency within the organisation around promotion and remuneration packages and to help facilitate the objective evaluation of roles and performance. Along with the Group Whistle-Blowing Policy, our HR policies and systems provide a strong framework to protect the rights of employees and ensure their fair and equitable treatment.



“As an equal opportunities employer, we value diversity and recognise the strength that this brings to our global business.”

Jim Devine,
Group Human Resources Director

Applicants and employees are treated equally during recruitment, transfer, promotion, training or salary assessment, and we do not discriminate on the basis of an individual’s sex, marital status, sexual orientation, age, religion, beliefs, pregnancy or maternity, or any other protected characteristic, as prescribed by law.

We are a member of the Business Disability Forum (UK) and the Employers Network for Equality & Inclusion (UK), give full and fair consideration to applications for employment made by disabled persons, having regard to their abilities and aptitudes, and support the continuing employment of individuals who become disabled during their period of employment with the Company. Disabled persons are entitled to the same professional development and opportunities for promotion as other Company employees.

We support, respect and adhere to the Human Rights principles set out in the Universal Declaration of Human Rights and the Core Conventions of the International Labour Organisation. Our Group Human Rights Policy recognises

the right of all individuals to lead a dignified life, free from fear and want and free to express independent beliefs, as well as the right of employees to equal opportunities, non-discriminatory treatment, a safe working environment and a fair wage. We do not use forced, compulsory or child labour either directly or within our supply chain; we respect the rights of children; maintain workplaces free of victimisation, harassment or bullying; and accept the rights of employees to association and collective bargaining.

We communicate regularly with employees through a variety of channels, to ensure that they have a wide understanding of the operations and performance of the Group, as well as being engaged in the business locally. We undertake confidential employee surveys to assess our performance as an employer and have well-established grievance and whistle-blowing procedures to enable employees to raise concerns.

Performance in 2016

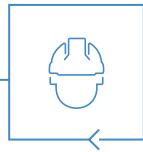
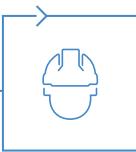
During 2016 we appointed Jane Kingston as a Non-Executive Director and are now close to meeting our target of 25% female representation on the Board. Across the Group, gender diversity remained relatively unchanged with 4,243 males (2015: 3,821) and 1,141 females (2015: 1,040) across the workforce as a whole, and 392 male (2015: 386) and 77 female (2015: 72) senior managers. It is inherently difficult to address a workforce gender imbalance in the short to medium-term as entrenched global gender stereotypes result in a shortage of female engineers. We continue to work hard to address this imbalance through fair and transparent recruitment practices and compensation packages; talent management and succession planning; seeking to recruit and appoint females into senior management positions within the Group; and through educational outreach programmes within our communities.

Actions taken in 2016

During the year, we updated our Group Management Code. Its application, and that of other employment practices, was audited through an Internal Controls Questionnaire. In preparation for the implementation of Gender Pay Gap Reporting from April 2017, we completed a detailed internal review of our systems and processes; established a consistent framework and methodology for recording and reporting on gender pay, based on the Government’s draft legislation; identified areas for improvement and updated our systems where necessary; and participated in the legislation’s national consultation.

Next steps for 2017

- Implement Gender Pay Gap Reporting within the UK, in accordance with legislation
- On-going assessment of employment practices that support the Group’s inclusion objectives



Engineering for excellence Ethical business practices

Objective: To act in accordance with our Core Values, upholding a zero tolerance approach to bribery and corruption

Target: Zero incidents of bribery and corruption



"We create a corporate culture that promotes and rewards ethical behaviour."

Andy Robson,
General Counsel and Company Secretary

Overview

The Group's Core Values of Respect, Accountability, Passion, Integrity and Delivery provide the foundation upon which we individually and collectively operate. Our Group Management Code outlines the standards that we expect all employees within the Group to meet, including compliance with laws, regulations and Group policies.

We are committed to conducting business free from bribery and corruption and will not enter into contractual relationships with third parties who are known to engage in corrupt practices. Our Anti-Bribery and Corruption Policy is available in all of the Group's core languages, has been disseminated directly to employees and is available on our intranet. We operate in accordance with competition laws and follow international sanctions, embargoes and restrictions. We do not make political donations.

Confidential, multi-lingual whistle-blowing facilities are in place and available to all employees globally to facilitate the reporting of suspected breaches of Company policies or ethical business practices.

Performance in 2016

During the year, two whistle-blowing calls were made to "Safecall" our third party managed, confidential, whistle-blowing helpline. These reports were thoroughly investigated and, where required, appropriate action was taken.

By the end of 2016, 4,460 employees had completed anti-bribery and corruption training, since its roll-out in 2012 (2015: nearly 4,000) and 1,079 employees had completed a biennial anti-bribery and corruption training refresher course which was launched during 2015 (2015: 400).

Actions taken in 2016

During 2016 we established divisional ethics officers, to act as another point of contact for employees and with responsibility for overseeing the ethical operation of our business. We also formally recognised the Risk Management Committee as the Group's "Ethics Overview Committee". The Group Supply Chain and Group Legal departments implemented the Supplier Sustainability Code, which obliges our suppliers to comply with the UK Modern Slavery Act, international conflict mineral and anti-bribery and corruption legislation and best practice. We also undertook the translation of our Core Values into all of the Group's main languages.

Next steps for 2017

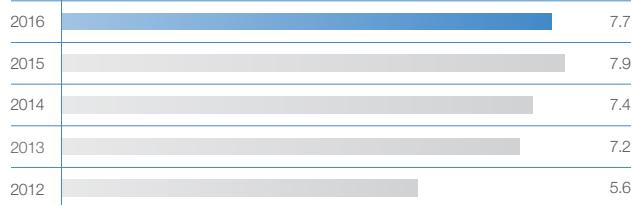
- Complete the roll-out of our biennial anti-bribery and corruption training refresher course across the Group
- Ensure that employees are properly using the online Global Gifts and Hospitality register

Engineering for excellence Training

Objective: To invest in developing the knowledge and skills of our people

Target: 10 days of formal training per customer facing employee

KPI Average number of formal training days per customer facing employee



Overview

Developing the knowledge and skills of our people is central to our strategy for growth and for the long-term sustainability of our business. All employees are actively encouraged to pursue development opportunities and as they enhance their knowledge and skills we are better able to deliver value to our customers, growth that outperforms our markets and shareholder value.

We deliver extensive training of our employees in our 51 training centres located worldwide, and have developed an extensive e-learning library. Our sales and service engineers also undergo extensive on-the-job training and mentoring.

Performance in 2016

During 2016 the average number of formal training days per customer facing employee (excluding on-the-job training) decreased slightly to 7.7 days per person (2015: 7.9 days). This is largely because we have reviewed the way that we deliver training within the Group and have increased our focus on on-the-job training and personal mentoring of our customer facing employees, which is not reflected in the formal training days metric.

A further 15 senior managers attended a two-week Advanced Management Programme, run by the Ashridge Business School, taking the total number who have attended to 72 since the programme was launched in 2011. During 2016, 95 managers participated in our Advancing High Performance (formerly "Aspire") leadership programme, taking the number who have participated to 239 since the programme was launched in 2013.

Actions taken in 2016

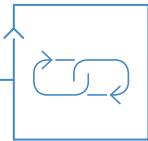
We completed a nine-month pilot of "Initiating High Performance", a new leadership development programme. Following the successful pilot, the programme was officially launched and the first cohort of 12 team leaders began the programme in September. We also established a syllabus and completed a pilot for a "Developing High Performance" leadership programme.

We opened three new Spirax Sarco Steam Specialties business training facilities, in India, Vietnam and the Philippines.

The Spirax Sarco Academy, which has an independent budget and leadership team, was established in 2016, to oversee the learning and development programmes of the Spirax Sarco Steam Specialties business. (For more information, see page 21.)

Next steps for 2017

- Continue to develop the Spirax Sarco Academy's training programmes
- Review and update training metrics and target to reflect changes to our training approach



Engineering the responsible way

End-to-end supply chain

Objective: To focus on continuous improvement in our supply chain with particular emphasis on sustainability

2016 Target: 90%, by spend, of Group direct suppliers to have signed our Supplier Sustainability Code by the end of 2016* (Target exceeded)

2017 Target: 90% of sales company direct suppliers to have signed our Supplier Sustainability Code by the end of 2017*

* Excludes suppliers of businesses acquired in 2016. Individual roll-out programmes are being prepared for these businesses.

Overview

Our supply chain encompasses all the activities that transport and transform raw materials and components into finished products and their delivery to the customer. Improving the sustainability, efficiency and effectiveness of our end-to-end supply chain is a key strategic objective for the Group.

We pursue a regional manufacturing strategy, operating globally across 19 manufacturing sites. By manufacturing close to the point of sale we improve customer service by reducing lead times, ensure that our products meet local specifications, reduce transportation requirements for finished products and provide local employment in the regions in which we operate.

Our Supplier Sustainability Code (Code) is a central component of our supply chain sustainability programme. The Code outlines the expectations that we have for suppliers, particularly in relation to the fair treatment of employees and their environmental impacts, and enables us to embed sustainability criteria into our purchasing processes.

The Supplier Sustainability Code specifies that our suppliers must not use forced, bonded or non-voluntary labour; should establish recognised employment relationships in accordance with national laws, including non-discriminatory employment practices, maximum working hours and the freedom of association; and exercise clarity in relation to wages.



"By striving for excellence in our supply chain, the rigorous application of our Supplier Sustainability Code and our supplier development activities, we drive continuous improvement in operational sustainability."

Ian Farnworth,
Group Supply Chain Director

We require suppliers to ensure that their activities are safe for the health of their employees, their contractors, the local community and the users of their products. Suppliers must have an appropriate H&S policy, H&S operating and management systems and take proactive steps to prevent work-related injuries and illnesses, through identifying, evaluating and mitigating risks.

Suppliers' facilities must be constructed and maintained to an acceptable standard and suppliers must avoid the use of substances dangerous to their employees' health and safety; including, but not limited to, carcinogenic, mutagenic and toxic to reproduction substances. All products and services delivered by suppliers must meet the quality and safety standards required by applicable laws.

We expect our suppliers to act ethically, operate within the laws of their country, conduct business free from bribery or corruption, and adhere to the UN Guiding Principles on Business and Human Rights and the Core Conventions of the International Labour Organisation. We do not countenance the use of child labour.

Lastly, our suppliers are expected to take steps to mitigate their environmental impacts, deliver a high product quality and source responsibly.

Modern Slavery Act statement

Spirax-Sarco Engineering plc prides itself on setting high standards for sustainable and ethical business practices in its operations worldwide. Included in those high standards is a commitment to respecting and protecting the human rights of all individuals and combating all forms of modern slavery or human trafficking in all parts of our business organisation, including our supply chain. We are continuously developing and improving our business practices and policies in line with that commitment. We support a strong, collective stand to identify, prevent and raise awareness of modern slavery and human trafficking practices in all parts of the world.

To read the statement in full, please visit the Group's website:
www.spiraxsarcoengineering.com/Sustainability/Pages/our-supply-chain.aspx

Performance in 2016

We exceeded our phase 1 target of 90%, by spend, of Group direct suppliers to have signed our Supplier Sustainability Code by the end of 2016. By the end of the year approximately 98% by spend of direct material suppliers had signed the Code. Having achieved our phase 1 target, we established a phase 2 target and commenced rolling out the Code to suppliers of our sales companies.

Actions taken in 2016

During 2016 we established a Group-wide supplier classification, which uses a risk-based methodology to determine which suppliers are required to receive the Code. In countries and for specific commodities deemed to be high risk, all suppliers are required to sign. We also translated the Code, making it available in the Group's 15 core languages.

We completed the phase 1 roll-out of the Code to over 1,500 direct material suppliers of the Spirax Sarco Steam Specialties business and Watson-Marlow's manufacturing sites. Supplier development engineers are working with suppliers on a continuous improvement basis to further develop their capabilities. We have also exited a small number of suppliers who we felt were unable to meet our requirements.

We prepared for the commencement of the phase 2 roll-out by identifying approximately 500 suppliers of our Spirax Sarco and Watson-Marlow sales companies that will be required to sign the Code.

To monitor and audit compliance with the Code, we enhanced our existing supplier audit programme and undertook on-site and desktop supplier audits.

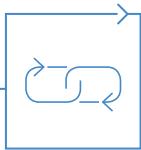
We have made good progress in the execution of our operational excellence programme and are on plan to achieve our cost-reduction targets.

We progressed our Group and regional sourcing programmes to improve supply chain efficiency, reduce costs and improve customer service.

During 2016 we established a Steam Specialties business-wide sourcing excellence KPI to enable us to better monitor supply chain performance.

Next steps for 2017

- Phase 2 roll-out of the Supplier Sustainability Code to sales company direct suppliers
- Continue to execute our operational excellence programme
- Enhance sustainability and environmental monitoring within our supplier audits



Engineering the responsible way Product responsibility

Objective: To incorporate sustainability factors into our product design process, including energy efficiency, emissions, serviceability, recyclability and the availability of compliant and ethically sourced materials

Target: Continuing compliance with all applicable EHS standards, while meeting customer expectations of performance and cost



"Delivering safe, responsibly designed and ethically produced products to market is fundamental to enabling business sustainability."

Stephen Dewfall,
Group R&D Manager (Steam Specialties)

Overview

Managing the environmental impacts of our products, ensuring that they are safe for our customers to use and are manufactured using ethically sourced materials, begins with robust product development processes. Our R&D processes incorporate best practice in the areas of design-for-manufacture and compliance with safety and environmental standards.

We apply eco-design principles; avoid the use of hazardous materials; consider the availability of raw materials; and place strong emphasis on in-service performance, product life and continuous improvement.

All products and product developments undergo assessment and validation by analysis or physical testing, in line with legislation and national standards relevant to the location of sale or release. Structured internal compliance processes exist to enable the identification of regulatory requirements and compilation of supporting evidence. Where applicable, third party validation testing is employed. Central policies exist to ensure responsibilities for product safety and compliance are clear and understood.

Our products are sold with Installation and Maintenance Instructions, ensuring that they can be safely installed and maintained.

Performance in 2016

Innovation is at the heart of the design process as we continue to drive improvements in product safety, performance and compliance. We implement best practice design and manufacture products sustainably, supporting end users to reduce their environmental impacts and meet their sustainability goals.

Actions taken in 2016

During 2016 we completed a best practice review of our current design practices. The review demonstrated that we have strong project management and compliance processes that support our goals for product responsibility and sustainability. We also undertook a product responsibility competitor assessment.

We continued to embed sustainability criteria within our quality management system to ensure that progress against our targets is measured.

Next steps for 2017

- Establish an auditable process to link supply chain sustainability processes to our eco-design and new product development processes.

Engineering for our planet Water and waste

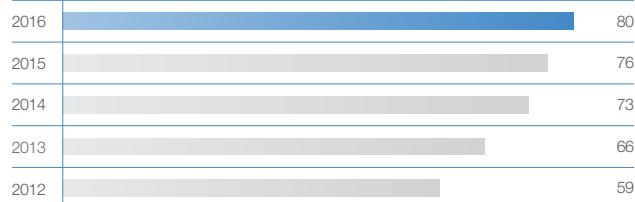
Objective: To limit the environmental impacts of our operations through reducing water use and minimising and managing effluent and waste

2016 Target: All operating companies to achieve or be working towards ISO 14001: 2004 by the end of 2016*

2017 Target: To achieve a year-on-year reduction in our water usage and waste creation intensity

* Excludes recent acquisitions and new start-ups, which are to achieve ISO 14001: 2004 within an agreed timeframe

Employees working in operations with ISO 14001 %



Overview

We take steps to manage and reduce water use across our businesses, for example, utilising rainwater harvesting and grey water for irrigation purposes across a number of our manufacturing sites. Across the Group we use dedicated contractors to manage waste and recycling schemes are in place across the Group. Wherever possible we seek to avoid generating waste, for ourselves and our customers by, for example, reducing the quantity of packaging used, utilising sustainably sourced and recyclable packaging materials where possible and encouraging employees to use, store and share documents electronically, rather than printing them.

Performance in 2016

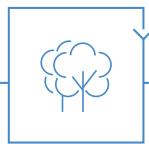
By the end of 2016, 80% of our employees were working in operations covered by the environmental management standard ISO 14001, with over 90% of employees working in operations that have or are currently working towards certification. During 2016, five operating units achieved this standard for the first time and a further 13 companies were working towards certification. Companies that were not working towards certification by the end of 2016 were generally either newly purchased or established, or small operations where the resource required to achieve certification relative to the size of the business is prohibitive.

Actions taken in 2016

We established quarterly data collection for water and waste across our global operations, with reduction targets established. We have undertaken a review of our waste contractors' capabilities, with the intention of establishing a Group-wide framework for approving our waste contractors/vendors. At our annual global EHS conference, we completed an EHS "treasure hunt" across our UK Steam Specialties business manufacturing facility, with participation by all of the attending EHS leaders. A treasure hunt process and checklist was established and EHS leaders were asked to complete these in their own operations in 2016 and repeat the exercise annually thereafter.

Next steps for 2017

- Secure management approval for new water and waste reduction targets and publicise these internally and externally
- Externally verify and report Group water and waste data
- Establish a campaign to promote waste reduction across the Group

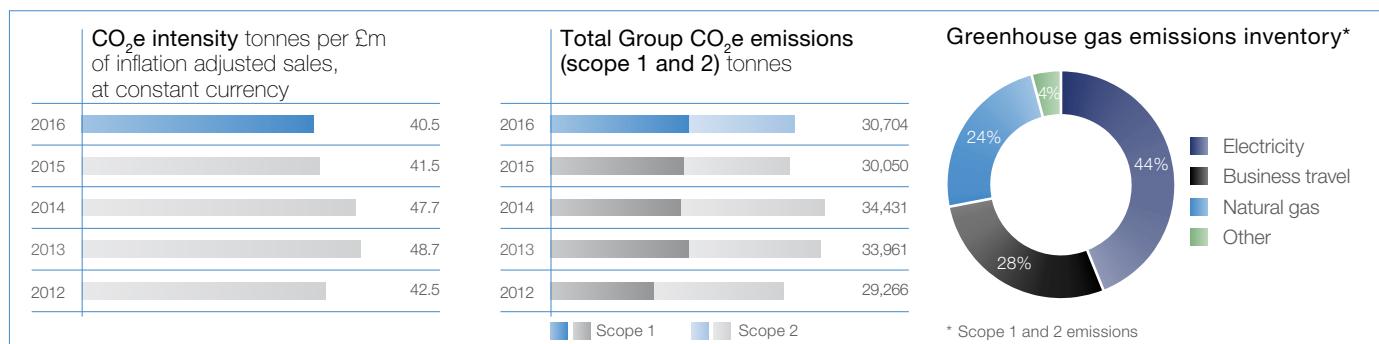


Engineering for our planet

Energy and carbon

Objective: To minimise the environmental impacts of our operations by managing energy consumption with the aim of reducing carbon emissions

Target: To achieve a year-on-year reduction in our energy consumption and CO₂e emissions intensity



Overview

In accordance with national and international directives, we endeavour to continuously reduce the carbon intensity of our business and implement strategies to minimise our carbon footprint.

We employ an “operational control” definition to outline our carbon footprint boundary. Included within that boundary are manufacturing facilities, administrative and sales offices where we have authority to implement our operating policies. For each of these entities we have measured and reported on our relevant Scope 1 and Scope 2 emissions. (Scope 1 refers to direct emissions from sources owned or controlled by the Company; Scope 2 refers to indirect emissions resulting from the purchase of energy generated off site, including electricity.) Excluded from our footprint boundary are entities where we do not have operational control. In 2016 this included Econotherm. Also excluded from the footprint boundary are emission sources from operating companies established or acquired during 2016. We have used the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) and emission factors from the UK Government’s GHG Conversion Factors for Company Reporting 2016 to calculate our total CO₂e emissions figures.

Performance in 2016

Our CO₂e 2016 emissions data have been audited by TÜV UK Ltd, part of TÜV NORD Group, which has provided limited assurance as follows:

“TÜV UK Ltd is acting as the independent verifier of the carbon footprint of SPIRAX SARCO. Based on our checks and reviews, taking into consideration a materiality level of 10% and a limited level of assurance we have found no evidence suggesting that the calculated greenhouse gas emissions are materially misstated and, hence, they are not an unreasonable assertion of the greenhouse gas-related data and information.”

Further, no facts became evident, which led us to the assumption that the calculation was not carried out in accordance with the applied international norm for the quantification, monitoring and reporting of GHG emissions (GHG-Protocol).

The emissions for the reporting period 1st January 2016 to 31st December 2016 (inclusive) are: 17,354 tCO₂e for Scope 1 and 13,350 tCO₂e for Scope 2.

TÜV UK Ltd
London
February 2017

The small increase in total emissions reflects the expansion of our business, including the new operations that were acquired or established in 2015 whose emissions were included for the first time in 2016; the new manufacturing, office and training facilities in India; and increased production in the UK, set against emissions reductions made elsewhere across the Group as a result of our energy saving activities. Our emissions intensity reduced by 2% in 2016, giving a 17% reduction in emissions intensity since 2013, our benchmark year.



“As we act to reduce our energy use we are driving down the emissions intensity of our business.”

Stephanie Temme,
Group Energy and Environmental Manager

Actions taken in 2016

During 2016 we established energy champions and smart energy metering across a number of our manufacturing sites to aid the identification of energy saving opportunities. During the year, Spirax Sarco Italy, Spirax Sarco Portugal, Watson-Marlow MasoSine, Watson-Marlow Alitea, Watson-Marlow USA and Watson-Marlow BioPure replaced their traditional lighting with more energy efficient LED lighting as part of their drive to improve site energy efficiency.

We initiated an EHS “treasure hunt” programme across our supply sites, with treasure hunts conducted across Spirax Sarco Steam Specialties business manufacturing sites during the last quarter of the year, and plan to roll this out across Watson-Marlow’s supply sites during 2017.

Spirax Sarco Mexico achieved certification to energy management standard ISO 50001, taking the total number of our sites with the standard to three, and a number of our companies were working towards certification.

A steering team was established to research, shortlist and procure, in 2017, carbon accounting software, to increase the ease of carbon data validation across the Group.

Next steps for 2017

- EHS “treasure hunts” to be carried out across Watson-Marlow manufacturing sites and be established in the larger sales companies
- Procure and implement global carbon accounting software
- All Steam Specialties manufacturing sites to achieve or be working towards achieving energy management standard ISO 50001



Engineering sustainable solutions Customers

Objective: To provide products and services that improve the sustainability of our customers' operations through helping them reduce their environmental impacts, improve plant efficiency and productivity and maintain product quality

Tonnes of CO₂e emissions our end users saved as a result of purchasing our energy management products

2016		4.4m
2015		4.4m
2014		4.8m
2013		4.6m
2012		4.9m

Case study

During 2016, Dong Energy completed a landmark project to convert its coal fired power station in Studstrup, Denmark, to sustainable biomass. Twenty-one Bredel hose pumps from Watson-Marlow have been installed at the site, helping Dong Energy to supply green district heating to around 106,000 homes and green electricity, equivalent to the annual consumption of approximately 230,000 homes, to the Danish grid. The project is also expected to reduce the plant's carbon emissions by 310,000 tonnes per year.

To generate green energy, the site combusts sustainably sourced wooden pellets. When burned the pellets produce alkaline gases. To counter this a fine coal ash, reclaimed from landfill depositories, is added to the pellets prior to combustion. Dosing the ash requires pumps that can handle the thick, abrasive slurry produced when the ash is mixed with water.

Bredel peristaltic hose pumps were selected after trials demonstrated their superior ability to overcome the challenges associated with pumping the high density, inhomogeneous and abrasive particles, compared to large double-acting hydraulic pumps. Engineers from Watson-Marlow worked closely with Dong Energy and the site contractor Eurocon to deliver an optimised engineered solution to extend hose life, reduce costs and deliver reliable pumping in this innovative and sustainable energy project.



Actions taken in 2016

During 2016 we commenced a trial at a customer's paper manufacturing site to evaluate the impact of pump accuracy on CO₂ emissions. We also commenced a trial of Qdos pumps, from Watson-Marlow, to evaluate the level of chemical savings they achieve over alternative pump types. Within the Steam Specialties business we strengthened our product management process to incorporate an assessment of customer environmental impacts within new product proposals and progressed our approach to measuring the impact of our products on our end users' environmental sustainability. As part of our focus on thermal energy management solutions, we increased our resources in solutions design, increasing our thermal energy management capabilities and customer offering.

Next steps for 2017

- Complete and evaluate data from the two Watson-Marlow pump trials
- Assess the impact of single use systems on energy and water savings in the Biotechnology industry
- Assess the levels of water savings achieved through the use of condensate pumps



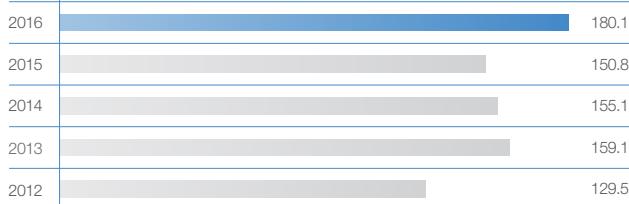
Engineering better futures

Community engagement

Objective: To engage positively with the communities in which we operate and to offer financial support to approved charities

Target: All operating units to appoint a community engagement champion, either individually or in partnership with another operating unit, by the end of 2017

Group Charitable Trust donations* £000



* 2012-2015 figures restated

Overview

We seek to have a positive impact in the communities in which we operate, through making charitable donations to worthwhile causes and contributing time, resources and expertise where there is a local need. Our Group Charitable Donations Policy guides our community engagement activities. Our primary focus is education (particularly in the sciences and engineering), but we seek to identify and respond to local needs and will also make donations and organise activities in support of the underprivileged young, disadvantaged, disabled and elderly, and contribute to natural disaster relief.

Performance in 2016

During 2016 we increased funding to the Spirax Sarco Group Charitable Trust (Trust), which made 46 donations, ranging in size from £150 to £20,000, with a total value of £180,150 to a geographically widespread and diverse range of charities. For example, the Trust donated £4,000 to "IT Schools Africa", a local Cheltenham Charity that works with prisons, the unemployed and schools in the UK to refurbish computers, clean them of data and prepare them for shipping to Africa, where the charity delivers IT teaching training and technical support to recipient schools to provide students with access to e-learning. A further £87,000 was donated to charitable causes by our operating companies during 2016 (2015: £58,000).

Actions taken in 2016

During 2016 we reviewed and updated our Group Charitable Donations Policy and disseminated it, along with a "Quick Guide to Community Engagement", across the Group. Our operating units were each encouraged to appoint a community engagement champion, either individually or in conjunction with another Group company. The primary responsibilities of the champions will include identifying opportunities and organising community engagement activities in their local communities; overseeing data collection; and sharing their community engagement activities. To date, over 30 champions have been appointed across the Group.

We also established and rolled out a new community engagement data collection framework, and accompanying guidance document, to enable us to record and report a greater range of community engagement activities, including employee sponsored volunteering, in-kind giving and financial donations. Data collection, using the new framework, will commence in 2017.

Case study

Esther Landeros, Community Engagement Champion in Spirax Sarco Mexico, stated, "The greatest heritage that you can leave is education". Embracing this philosophy, the company makes a significant and transformative difference to the lives of underprivileged students in Mexico. During 2016, the company donated packets of school equipment, such as paper, pens and pencils to children in a rural primary school. The company also supports students in their immediate community where, although less than £100 a semester, school fees are unaffordable for the parents of many students at the local state-run Technical High School. Unable to pay the school fees, aspiring pupils frequently have to drop out of school to commence working to supplement the family income. Recognising the wasted talent that this represents, employees at Spirax Sarco Mexico sponsor six students, paying their school fees, enabling them to continue in full-time education. The company further supports the school by providing technical work placements, four hours a day, five days a week, within their production department, training students as Mechanical or Mechatronic Technicians. When the students graduate, the company hires them, as vacancies arise.

In addition, the company has agreements with a number of Mexican universities to offer discounted fees to Spirax employees, their children or close family members, to enable them to further their education.

In December 2016, the Mexican Centre for Philanthropy and Alliance for Corporate Social Responsibility recognised Spirax Sarco Mexico as a "Socially Responsible Company". The award, one of the most prestigious of its kind in Mexico, was judged on four criteria (quality of work environment, ethics and values, environmental management and community engagement) and recognises that the company has a proven commitment to operating ethically and responsibly.



Next steps for 2017

- Commence data collection using the new framework
- Appoint community engagement champions across all operating units
- Establish a Group community engagement award to recognise the Group companies or individuals making an outstanding difference within their local communities

ENGINEERING SUSTAINABLE VALUE
THROUGH GOOD
GOVERNANCE



- | | | | |
|--|---|---|--|
| 1. Bill Whiteley
Chairman | 4. Neil Daws
Executive Director, EMEA | 7. Jay Whalen
Executive Director, WMFTG | 10. Andy Robson
General Counsel and
Company Secretary |
| 2. Nicholas Anderson
Group Chief Executive | 5. Kevin Boyd
Group Finance Director | 8. Clive Watson
Independent
Non-Executive Director | David Meredith,
Group Finance Director, retired on
10th May 2016. |
| 3. Trudy Schoolenberg
Independent
Non-Executive Director | 6. Jane Kingston
Independent
Non-Executive Director | 9. Jamie Pike
Independent
Non-Executive Director and
Senior Independent Director | Dr Krishnamurthy Rajagopal,
Non-Executive Director, passed away
on 10th November 2016. |



Full Board biographies can be found
on pages 64-65.



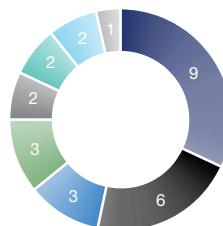
IN THIS SECTION

Governance Report

Our governance	62	Relations with shareholders	82
Board of Directors	64	Remuneration	83
Chairman's introduction	66	– Remuneration at a glance 2016	83
Leadership	68	– Remuneration Committee	84
– Governance structure	69	– Statement by the Chairman	
– Nomination Committee	71	of the Committee	85
Effectiveness	73	– Annual Report on	
Accountability	76	Remuneration 2016	87
– Audit Committee	76	– Remuneration Policy Report 2017	100
– Risk Management Committee	79	Regulatory disclosures	108
		Statement of Directors' Responsibilities	111

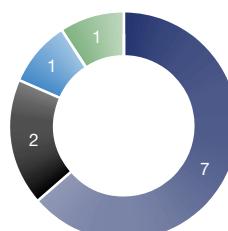
Focus on our Board*

Core expertise



- Engineering
- International
- Finance
- Sales and marketing
- Operational
- Product development
- Senior management
- HR

Nationality

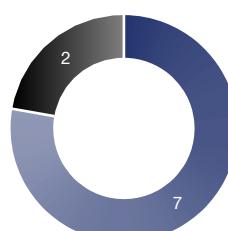


- British¹
- American¹
- Dutch
- Irish²

¹ N.J. Anderson holds dual British and American citizenship.

² J. Pike holds dual British and Irish citizenship.

Gender



- Male
- Female

* At time of publication, March 2017

BOARD OF DIRECTORS

N



Bill Whiteley
BSc, FCMA (68)

Chairman

Appointed to the Board

July 2002. Appointed Chairman in June 2009

Areas of experience

- Senior management
- Engineering
- Finance
- International

Background

Until his retirement in 2008, Bill Whiteley was Chief Executive of Rotork plc, where he had been a Director since 1984. Bill has been awarded an honorary Doctorate of Engineering by the University of Bath.

External appointments

Chairman of Hill & Smith Holdings PLC.

N R



Nicholas Anderson
BSc Engineering, MBA (56)

Group Chief Executive

Appointed to the Board

March 2012. Appointed Chief Operating Officer in August 2013 and Group Chief Executive in January 2014

Areas of experience

- International
- Operational
- Industrial
- Sales and marketing
- Engineering

Background

Before joining the Group in 2011 as Director EMEA, Nicholas Anderson was Vice-President of John Crane Asia Pacific (part of Smiths Group plc), based in Singapore, and President of John Crane Latin America, based in the USA. Previously, Nicholas held senior positions with Alcoa Aluminio in Argentina and the Foseco Minsep Group plc in Brazil.

R K



Kevin Boyd
BEng, CEng, FIET, FCA (52)

Group Finance Director

Appointed to the Board

May 2016

Areas of experience

- Finance and accounting
- Engineering
- Pensions
- International

Background

Before joining the Group in 2016, Kevin Boyd was Group Finance Director for Oxford Instruments plc. Prior to that he was Group Finance Director of Radstone Technology plc and previously held senior finance positions within Siroyan Ltd and the TI Group (now Smiths Group plc). Kevin is a Chartered Engineer, a Chartered Accountant and a Fellow of the Institute of Chartered Accountants and the Institution of Engineering and Technology.

External appointments

Non-Executive Director of EMIS Group plc.

A N R



Jamie Pike

MBA, MA, MIMechE (61)

Independent Non-Executive Director
Senior Independent Director

Appointed to the Board

May 2014

Areas of experience

- Senior management
- Engineering
- International

Background

Jamie Pike joined Burmah Castrol in 1991 and was Chief Executive of Burmah Castrol Chemicals before leading the Foseco buy-out in 2001 and its subsequent flotation in 2005. Prior to joining Burmah, he was a partner at Bain & Company. Jamie was educated at Oxford, holds an MBA from INSEAD and is a Member of the Institute of Mechanical Engineers.

External appointments

Chairman of Ibstock plc, Tyman plc* and RPC Group.

* Stepping down as Chairman and Director in May 2017.

A N R*



Jane Kingston

BA (59)

Independent Non-Executive Director

Appointed to the Board

September 2016

Areas of experience

- Human Resources
- Remuneration
- International
- Engineering

Background

From 2006 until her retirement in December 2015, Jane Kingston served as Group Human Resources Director for Compass Group PLC. Prior to this, she served as Group Human Resources Director for BPB plc. Jane has worked in a variety of sectors, including roles with Blue Circle Industries plc, Endis plc and Coats Viyella plc and has significant international experience.

External appointments

Non-Executive Director of National Express Group plc.

RK

**Neil Daws**

CEng, FIMechE (54)

Executive Director, EMEA**Appointed to the Board**

June 2003

Areas of experience

- Manufacturing
- Engineering
- Product development
- Sales and marketing
- Broad operational experience

Background

Neil Daws joined the Group in 1978 and held positions in production and design engineering prior to being named as UK Supply Director. Following this Neil has held responsibility for Asia Pacific, Latin America and the Group's Supply operations, including the Group's health, safety and environmental matters.

RK

**Jay Whalen**

BA, MBA (60)

Executive Director, WMFTG**Appointed to the Board**

March 2012

Areas of experience

- Sales and marketing
- Engineering
- International business development

Background

Jay Whalen joined the Group in 1991 as President of Watson-Marlow Inc. in the USA. He was named Sales and Marketing Director of the global Watson-Marlow business in 2002 and in 2010 was appointed to his current Group position of President, Watson-Marlow Fluid Technology Group. Prior to joining Watson-Marlow, Jay was Vice-President Operations for Harvard Bioscience, Inc.

RK

**Andy Robson**

LLB Law, Barrister (54)

General Counsel and Company Secretary**Appointed as General Counsel and Company Secretary**

June 2012

Areas of experience

- International law
- Corporate governance
- International business development including mergers and acquisitions
- Business restructuring
- Information technology, public private partnership and private finance initiative projects
- Contract negotiation

Background

Before joining the Group in 2012, Andy Robson was General Counsel and Company Secretary of RM Plc, a role he held for 14 years. Prior to this he was European General Counsel with Cendant Corporation headquartered in Baltimore, USA.

A N R

**Trudy Schoolenberg**

PhD (58)

Independent Non-Executive Director**Appointed to the Board**

August 2012

Areas of experience

- Engineering
- Product development
- Oil and petrochemical

Background

Prior to her most recent position at AkzoNobel, Trudy Schoolenberg served as Vice-President of Global Research & Development at Wärtsilä Oy. Trudy previously held senior management positions with Royal Dutch Shell plc and was Head of Strategy for Shell Chemicals. Until October 2016, Trudy served as Director of Integrated Supply Chain and Research, Development and Innovation, Decorative Paints Division of AkzoNobel.

External appointments

Non-Executive Director of COVA and Low & Bonar PLC.

A N R

**Clive Watson**

B Comm (Acc), ACA, CTA (59)

Independent Non-Executive Director**Appointed to the Board**

July 2009

Areas of experience

- Finance
- Tax and treasury
- Engineering

Background

Clive Watson held several tax and finance roles before joining Black & Decker in 1988 as Director of Tax and Treasury Europe. He was later appointed Vice-President of Business Planning and Analysis in the USA. Clive then joined Thorn Lighting as Group Finance Director before working for Borealis as Chief Financial Officer and Executive Vice-President of Business Support.

External appointments

Executive Director and Group Finance Director of Spectris plc.

At year end

A Audit Committee

N Nomination Committee

R Remuneration Committee

RK Risk Management Committee

* Denotes Committee Chairman

Flag denotes country of citizenship

SUSTAINABLE GOVERNANCE IS AT THE HEART OF WHAT WE DO



"At a time of enormous global uncertainty, the Board aims to provide our shareholders with confidence that the Group can successfully navigate the opportunities and challenges that lie ahead."

Bill Whiteley,
Chairman

Key points in this section:

- › Changes in Board leadership and succession planning
- › Analysing our appetite for risk
- › Internal effectiveness review
- › Preparing for Brexit
- › Strengthening and refreshing our compliance programme

Sustainable governance

This was a year of change on the Board. I would like to thank David Meredith for his considerable contribution to the Group over 27 years. We were pleased to welcome Kevin Boyd in May 2016 as our Group Finance Director, and Jane Kingston in September 2016 as a Non-Executive Director and, in November, as the newly-appointed Chairman of the Remuneration Committee. Both Kevin and Jane have proven track records of delivering results and their appointments reflect the Company's commitment to bringing broader sector experience to the Board. On a personal level, I was very saddened by the loss of Dr Krishnamurthy Rajagopal in November 2016. Raj had been a Non-Executive Director of the Board since February 2009 and Chairman of the Remuneration Committee from 2014 to October 2016. I would like to express my sincere gratitude for the many contributions that he made to the Company both professionally and personally.

As a Board it is our responsibility to provide strategic oversight of management's direction of travel for the Group, in order to encourage innovation and continuous improvement whilst providing stability and steady growth for shareholders and stakeholders. Above all is the Board's commitment to ethical business practices and to ensuring the business operates to the highest standards of corporate governance.

In this section of the Annual Report, we set out our approach to governance, using the five main principles of the Corporate Governance Code 2016 (see page 67) and explain how the Board and its Committees are structured and their areas of focus during the year.

Regulatory disclosures required under the Disclosure and Transparency Rules 7.2.6 can be found on pages 108 to 110.

You will find the Remuneration Report on pages 83 to 107, where Jane Kingston, the Remuneration Committee Chairman, outlines compensation in 2016 against performance, and summarises our three-year Remuneration Policy that will be put to a shareholder vote at our Annual General Meeting (AGM) in May 2017. The Annual Report on Remuneration 2016 sets out the details of Executive compensation throughout 2016, which will be subject to the normal advisory vote at the AGM in May 2017.

A new chapter

From a UK perspective, Brexit was an interesting development and one that we as a Group are well prepared for, as set out in more detail on page 29. As a global organisation, with over 90% of our revenues and profits generated outside of the UK, we are well-positioned for a UK exit from the EU. Our Brexit plan has 11 areas of focus, ranging from UK and EU customer targeting to a review of IT systems and acquisition opportunities. We have navigated periods of political and economic uncertainty in the past and have a long and successful history of growth.

Key actions during the year

In 2016, we paid particular attention to enhanced succession planning for the Board, as part of our on-going response to the key recommendations from the 2015 external Board effectiveness review conducted by Dr Tracy Long CBE (the findings of the review are set out on page 74). In addition to reviewing the tenure of the Non-Executive Directors in order to ensure independence, we have begun the implementation of a long-term succession plan to ensure key Board

Our approach to governance

Governance helps us to:

- Ensure our shareholders receive a good return on their investment
- Behave with integrity
- Treat our customers, suppliers and local communities properly
- Respect the environment

positions transition smoothly, when required. As a Group we are committed to gender equality and, with the appointment of Jane Kingston, we are just shy of our minimum target of 25% female representation on the Board. Further information is set out on page 72 in the Nomination Committee Report.

Another key activity this year was the internal Board effectiveness review. I am pleased that this anonymised, internal evaluation of the Board and our Committees supported the independent evaluation carried out during 2015; confirming that the Board is collegiate, transparent and effective. A summary of the findings and recommendations are set out on pages 73 and 74 of this Report. The next external review is set for 2018, in accordance with the Code.

For the first time this year, the Risk Management Committee implemented a risk appetite review, quantifying the Group's appetite for each of its seven principal risks. These ratings will be monitored and reviewed as necessary to reflect changes in circumstances affecting the Group. The appetite ratings also informed the Committee's work in developing our first Risk Appetite Statement, set out on page 81. Further details are contained in the Strategic Risk and Risk Management Report beginning on page 28 and the Risk Management Committee Report starting on page 79.

The Remuneration Committee was active in 2016, refreshing its Terms of Reference and updating the Company's Remuneration Policy, in consultation with key institutional shareholders. While the new Remuneration Policy is broadly the same as that approved by 98.5% of our shareholders in 2014, the Committee proposed some changes to the Annual Incentive Plan and Long-Term Incentive Plan awards to bring executive remuneration into line with market practices so that we continue to attract and retain key talent. The updated Remuneration Policy will be put to a shareholder vote at the 2017 AGM. In addition to Jane Kingston's summary of the changes in her Report on pages 85 and 86, full details can be found in the Remuneration Report beginning on page 83.

In July 2016, the Board responded to the introduction of the Market Abuse Regulation by amending the Group's Share Dealing Code and Insider List and notifying key employees in order to comply with these stricter rules on the management and disclosure of inside information, the maintenance of insider lists, the persons discharging managerial responsibility notification regime and restrictions on share dealing. We have also introduced a search option for Insider Information on the Regulatory News section of our website, www.spiraxsarcoengineering.com.

Perhaps the most engaging activity for the Board in 2016 was our annual strategy meeting at the Group's new manufacturing and sales facility in Chennai, India in June. This was an exciting opportunity to review the progress of the implementation of the Group's five-year strategic plan, particularly our increased focus on acquisitions. The Group made its largest-ever acquisition, Aflex Hose Limited, for £61.4 million at the end of 2016. We are currently outperforming our markets as detailed in the Strategic Report beginning on page 1.

Core values

The Board takes seriously its responsibilities for promoting the Group's Core Values and, in particular, for ensuring that all employees and everyone associated with the Group are aware of their responsibility to act lawfully and conduct themselves in accordance with high standards of business integrity. These values are embedded in our Group Management Code and driven by tone-from-the-top.

A strong anti-bribery and corruption culture is central to the Group's values and all employees are required to undertake anti-bribery training. A biennial refresher examination programme ensures that we maintain this position.

This year we formally recognised the Risk Management Committee as the Group's "Ethics Overview Committee" and appointed divisional ethics officers to act as another point of contact for employees with responsibility for overseeing the ethical operation of our business within their respective divisions. To ensure that our suppliers comply with human rights principles we expect them to adhere to our Supplier Sustainability Code, which has been written in accordance with international standards such as the OECD Guidelines for Multinational Enterprises, the Universal Declaration of Human Rights, the Core Conventions of the International Labour Organisation and the UN Guiding Principles on Business and Human Rights. More information on this can be found in our Sustainability Report on page 57.

The Board also took a decision to increase the amount that the Group can donate to legitimate charitable causes, in line with our community engagement theme of "Engineering better futures".

As a Group our primary focus is education, particularly in the sciences and engineering, because we recognise the transformative impact that education can have on the lives of individuals and the well-being of communities.

I am pleased to report that good corporate governance is integrated into our culture at Spirax Sarco.

I look forward to welcoming you at our AGM on Tuesday, 9th May 2017.

Compliance statement

Our Governance Report over the following pages explains how the Group has applied the principles and complied with the provisions of the UK Corporate Governance Code 2016 (Code).

We are fully compliant with the requirements of the Code, as set out in detail on the Group's website, www.spiraxsarcoengineering.com, under the Governance section.

1

Leadership

Nomination Committee Report



See pages 68–72.

2

Effectiveness



See pages 73–75.

3

Accountability

Audit Committee Report Risk Committee Report



See pages 76–81.

4

Relations with shareholders



See page 82.

5

Remuneration

Remuneration Committee Report



See pages 83–107.

Fair, balanced and understandable

In accordance with the Code, the Directors confirm that they consider that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's performance, business model and strategy.

1. LEADERSHIP

The Board

The Board relies on executive management to run the business and monitor management activities and holds them accountable against targets and standards. The Board also approves long-term corporate and strategic plans after a full review and assessment of market and technology trends, business drivers and risks. Having a senior management team that is capable of executing the strategic plans is a key focus for the Board.

The formal schedule of matters reserved for the Board's decision is available on the Group's website, www.spiraxsarcoengineering.com, under the Governance section.

The Non-Executive Directors provide independent challenge and review, bringing wide experience, specific expertise and a fresh objective perspective.

The Board meets as often as is necessary to discharge its duties. In 2016 the Board met seven times. All Directors are expected to attend all Board meetings and relevant Committee meetings unless prevented by prior commitments, illness or a conflict of interest. Directors unable to attend specific Board or Committee meetings are sent

the relevant papers and asked to provide comments in advance of the meeting to the Chairman of the Board or Committee. In addition, all Board and Committee members receive the minutes of meetings as a matter of course.

The Directors' attendance record at Board and Committee meetings is set out on page 70. The Non-Executive Directors meet without the Executive Directors present to discuss the Executive Directors' performance and other matters.

The Senior Independent Director is available to discuss concerns with shareholders, in addition to the normal channels of the Chairman, Group Chief Executive or the Group Finance Director.

The Board has a conflicts of interest policy and has put in place procedures for the disclosure and review of any potential or actual conflicts.

Committee composition

The Non-Executive Directors play an important governance role in the detailed work they carry out on our Committees on behalf of the Board. All the Non-Executive Directors are determined by the Board to be independent in character and judgement, in

compliance with the Code. The Chairman was independent on appointment.

The General Counsel and Company Secretary supports the Committee Chairmen in making sure members are equipped for informed decision-making and that they appropriately allocate their time to subjects.

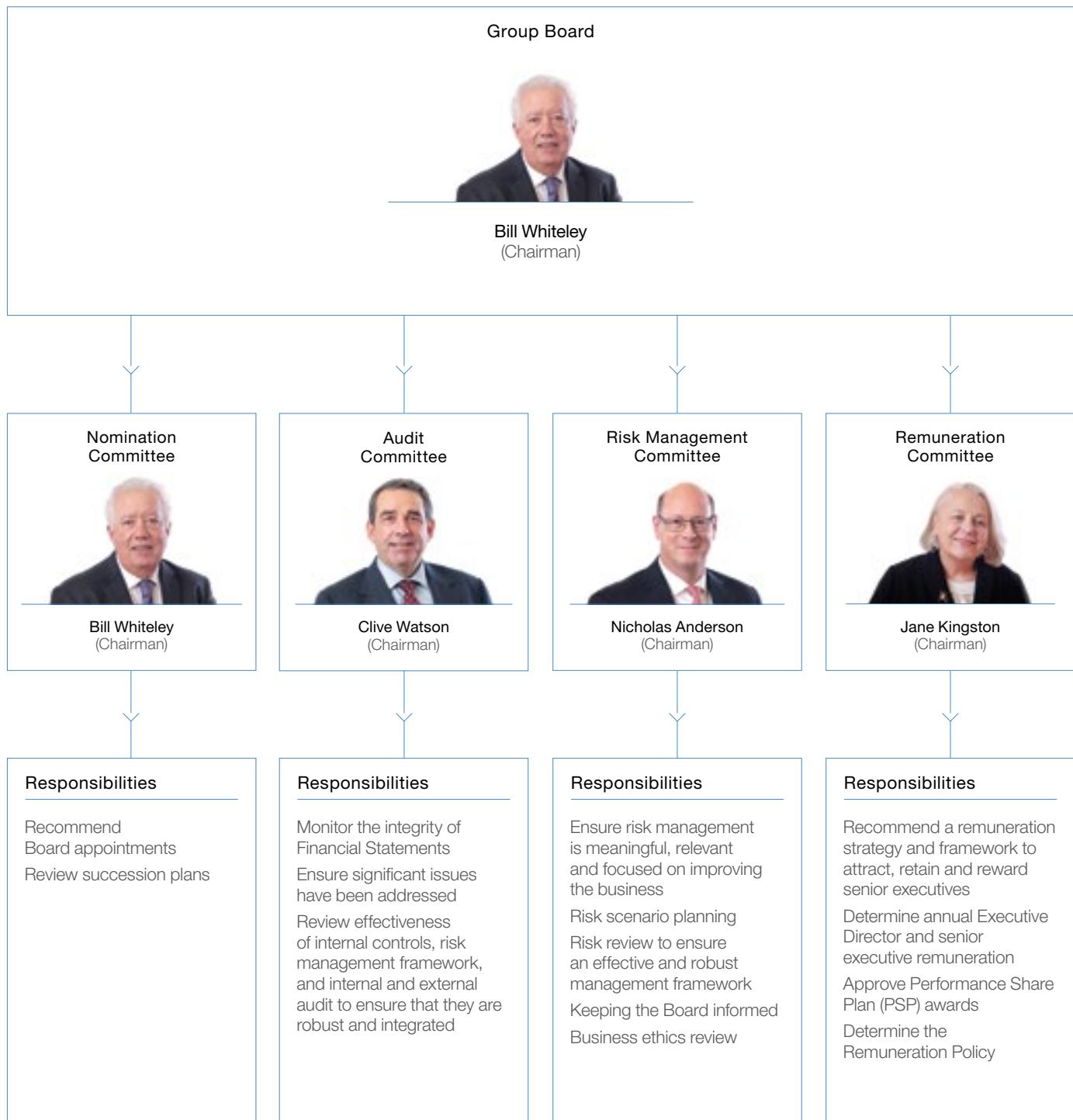
The Board has satisfied itself that at least one member of the Audit Committee, namely Clive Watson, has recent and relevant financial experience and is confident that the collective experience of its members enables it to be effective. The Audit Committee also has access to the financial expertise of the Group, the external and internal auditors and can seek further professional advice at the Company's expense, if required. There is also one Non-Executive Director, Jane Kingston, with relevant sector experience across a range of different industries, including a strong services background, to add additional support to the implementation of the Group's strategy for growth.

Division of roles and responsibilities

Key Board matters	Chairman	Senior Independent Director	Group Chief Executive
The approval of corporate and strategic business plans	Managing the Board	Relations with shareholders	Leadership
The approval of the annual and interim results	Safeguarding governance	Reviewing effectiveness of the Chairman as part of the annual Board evaluation	The Group's short, medium and long-term performance
Trading updates	Performance – with the Group Chief Executive		Stewardship of capital, technical and human resources
Integrated risk management framework	Shareholder contact – with the Group Chief Executive and the Group Finance Director		Corporate and business strategy
Acquisitions/disposals	Director performance		Internal risk management controls
Major capital expenditure	Succession planning		Organisational structure
Director appointments			
Material litigation			

Governance structure

The Board Committees and their Chairmen are listed below, together with an overview of each Committee's responsibilities. The Terms of Reference for the Committees are published on the Group's website, www.spiraxsarcoengineering.com, on the Policies and procedures page, within the Governance section.



Further information on each of the Committees' activities during the 12-month period to 31st December 2016 is set out on pages 71-107.

1. LEADERSHIP

CONTINUED

Board activities in 2016

The Board ensures good governance practices are embedded throughout the Group as they are an integral part of running a successful business. In the adjacent chart we have set out how the Board spent its time during 2016. The Board agendas are carefully planned to ensure focus on the Group's strategic priorities and key monitoring activities, as well as reviews of significant issues. During 2016, the Board devoted 35% of its time to the Spirax Sarco steam and Watson-Marlow Fluid Technology Group (WMFTG) strategies, the Group 2020 plan and reviewing implementation progress of the Group corporate strategy. With the Board undertaking a risk appetite review, which determines the Group's appetite for each of its seven principal risks, 20% of time was allocated to this activity.

Health and safety is of fundamental importance to the business and is considered at each Board meeting. It is also considered in detail at each Executive Committee meeting.

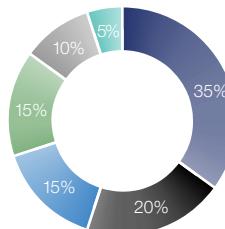
In February 2016, the Board met at WMFTG's headquarters in Falmouth, confirming that this is a well-governed, high performing business.

This was followed, in June, by the Board's annual strategy meeting that was held at the Group's new manufacturing and sales office in Chennai, India, where over £11 million has been invested. In Chennai, succession planning was high on the agenda.

In October, the Board visited the Group's new Clean Steam Facility in Cheltenham. At this meeting the Board evaluated and approved the Group's acquisition of Aflex Hose Limited for £61.4 million.

During 2016, the Board regularly reviewed the Group's performance and satisfied itself that despite challenging trading conditions, management was on track in delivering the strategic business plan. The Board also concentrated its attention on formulating a pro-active Brexit strategy, looking at both the challenges and opportunities for the Group posed by a UK exit from the EU. The Board continued to engage with shareholders on governance, remuneration and trading during the period.

Board focus during 2016



- Strategy
- Operations and risk
- Governance and shareholders
- People and succession
- Finance
- New product development

Board attendance

Details of the number of Board and Committee meetings, and individual attendance by Director for 2016, are set out in the table below.

	Board	Audit Committee	Nomination Committee	Remuneration Committee	Risk Management Committee
Number of meetings	7	3	2	3	3
W.H. Whiteley	7	N/A	2	N/A	N/A
N.J. Anderson	7	N/A	2	N/A	3
K.J. Boyd ¹	4	N/A	N/A	N/A	2
N.H. Daws	7	N/A	N/A	N/A	3
J.L. Whalen	7	N/A	N/A	N/A	3
J.S. Kingston ²	2	1	0	1	N/A
J. Pike ³	7	3	2	2	N/A
G.E. Schoolenberg	7	3	2	3	N/A
C.G. Watson	7	3	2	3	N/A
D.J. Meredith ⁴	3	N/A	N/A	N/A	1
K. Rajagopal ⁵	4	1	1	2	N/A

N/A means not applicable.

¹ Appointed to the Board on 11th May 2016 and attended all Board and relevant Committee Meetings held after this date

² Appointed to the Board on 1st September 2016 and attended all Board and relevant Committee Meetings held after this date

³ Absence due to prior commitment

⁴ Retired from the Board on 10th May 2016

⁵ Absence due to illness, prior to his death on 10th November 2016

1. LEADERSHIP

NOMINATION COMMITTEE



"A number of key appointments to the Board and senior management team this year has proven that our succession planning is working well. We continue to focus on ensuring the right balance of skills, experience and diversity amongst our Directors to promote the long-term sustainability of the Company."

Bill Whiteley,
Nomination Committee Chairman

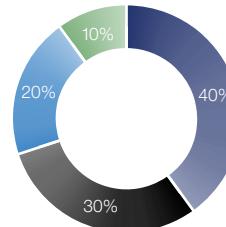
Membership and attendance*

NUMBER OF MEETINGS

2

Committee member	Attendance	Committee member	Attendance
W.H. Whiteley	2	J. Pike	2
N.J. Anderson	2	G.E. Schoolenberg	2
J. Kingston ¹	0	C.G. Watson	2

How the Committee spent its time during the year



- Succession planning
- Recruitment
- Diversity
- Board and Committee composition

¹ Appointed 1st September 2016

* K. Rajagopal attended 1 meeting prior to his death on 10th November 2016

Role of the Committee

The main role of the Committee is to recommend changes to the Board and consider succession planning for the future.

Summary of the key Committee activities in 2016:

- Appointment of Kevin Boyd to the Board as Group Finance Director and Executive Director, and appointment of Jane Kingston as Non-Executive Director and Chairman of the Remuneration Committee
- Succession planning
- Reviewed tenure of Non-Executive Directors
- Reviewed Board and executive management diversity



Read more on page 72.

Summary of the key areas of focus for 2017:

- Board and Committee succession planning
- Executive Director succession planning

1. LEADERSHIP

NOMINATION COMMITTEE

CONTINUED

Responsibilities

Make appropriate recommendations to the Board for the appointment, re-appointment or replacement of Directors

Review the structure and composition of the Board with regard to the overall balance of skills, knowledge and experience against current and perceived future requirements of the Group

Recommend any proposed changes to the Board

Consider succession planning arrangements for Directors and, more generally, senior executives

Review of 2016

Following a rigorous and independent selection process, we welcomed Kevin Boyd as Group Finance Director on 11th May 2016. The transition has been a smooth one, and Kevin is making valuable contributions to the direction of the Company.

Jane Kingston was appointed as an independent Non-Executive Director with effect from 1st September 2016, and has joined the Audit, Remuneration and Nomination Committees. In November 2016 Jane was appointed Chairman of the Remuneration Committee.

This year we put into action the recommendations from the external Board evaluation carried out by Dr Long of Boardroom Review Ltd in 2015, with a focus on enhanced succession planning. The most recent review of succession planning by the full Board and the executive and senior management team was undertaken as part of the strategic review meeting held in June 2016. We have begun to implement our succession plan to ensure that appointments for Board roles are phased over the next few years with the benefit of adequate handover periods, ensuring a smooth transition.

An independent external agency, Korn Ferry, has been instructed to advise on the suitability of candidates against a job description approved by the Committee. Korn Ferry provides no other services to the Group.

We are committed to appropriate engagement with shareholders throughout this process. A review of the tenure of the Non-Executive Directors was undertaken as part of the succession planning and we shall ensure that, at all times, the number of independent Non-Executive Directors is the same or more than the number of Executive Directors so that we remain compliant with the Code.

The appointment of Jane Kingston is part of the succession planning being undertaken to recruit Directors with the skills and experience to support the implementation of the Group's strategy for growth. Jane brings with her a broad range of relevant sector experience, particularly her extensive services experience from her time at Compass Group PLC.

We cultivate a culture of achievement and career progression. High-potential individuals are supported in their professional development through our Leadership Academy, in conjunction with Ashridge Business School, and our "Advancing High Performance" programme for senior managers. We also encourage leadership development through robust succession planning and an individualised performance management culture.

The Group recognises the importance of diversity at all levels of the Company as well as on the Board.

We believe that the Board's perspective and approach is greatly enhanced by gender, age and cultural diversity and it is our policy to consider overall Board balance and diversity when appointing new Directors. As shown on page 63, the range of nationalities and experience of our Board is particularly relevant given the broad international reach of the Group, and we will seek to increase the diversity of our international footprint with future appointments to the Board.

In compliance with the 2017 proxy voting guidelines from Institutional Shareholder Services and Glass Lewis, which recommend that Directors should hold no more than two Chairmanships plus one additional Non-Executive Director position, Senior Independent Director Jamie Pike has announced his intention to step down as Chairman and Director of Tyman PLC in May 2017.

This will bring his total Board appointments to two Chairmanships and one Non-Executive Directorship. Also in relation to the guidelines, Bill Whiteley has stepped down as Chairman of Brammer plc.

With the appointment of Jane Kingston, we now exceed 20% gender diversity on the Board and we remain committed to a target of a minimum of 25% women on our Board as opportunities arise.

We support the promotion of women to senior positions throughout the Group and, during the last 12 months, women were appointed as: General Manager (Turkey), Asia Pacific HR Lead, Group Corporate Counsel, Group IT Manager, General Manager (Watson-Marlow Ireland), Country Sales Manager (Watson-Marlow Indonesia), General Manager (Global OEM), UK EHS Manager (Group Supply Chain), Group HR Project Manager, with a number of these being internal promotions.

We continue to offer practical support for the Department for Business Innovation and Skills' "Women on Boards – FTSE 250" initiative by encouraging two women from our senior management team to serve as Non-Executive Directors on other company Boards.



In September 2016, Maike Nielsen, General Manager (Global OEM), was nominated from a very competitive field to participate in the CBI Leadership Programme. The programme is designed to equip the next generation of business frontrunners with the skills and knowledge to engage with public policy at the most senior levels both in the UK and internationally.

2. EFFECTIVENESS

Board evaluation

During 2016, the Board carried out an internal evaluation of the performance of the Board and the Board Committees, in accordance with the provisions of the Code. The General Counsel and Company Secretary, on behalf of the Chairman, circulated a comprehensive questionnaire to members of the Board covering all issues related to the effective running of the Board and the functioning of the Committees. The responses were consolidated and anonymised and common themes identified in order for the Board to determine key actions and next steps for improving Board and Committee effectiveness and performance.

The internal effectiveness review supported the overall conclusion of the 2015 external evaluation that the Board is collegiate, transparent and effective. In particular, it was noted that the Board is well-balanced across skill sets and backgrounds, and has a good dynamic with open discussion and the ability to table challenging points of view.

The main recommendation, following the review, is to ensure that the business is prepared for the future through succession planning for key Board positions. This focus on enhanced succession is a priority for the Board with plans already well underway to ensure a smooth transition of Board members, as required.

Evaluation cycle – three year

2015 External (complete)

2016 Internal (complete)

2017 Internal

Next
external
evaluation
2018

In accordance with the Code an annual review of the effectiveness of the Board is undertaken with input from an independent external adviser every three years. The process used for the external evaluation is set out below.

 For further information see page 74.

External evaluation process

Stage 1

Briefing and Board observation

Stage 2

Results collected,
summarised
and evaluated

Stage 3

Feedback shared
with Chairmen
of Board
and Committees

Stage 4

Feedback to
Board and
Board discussion

Stage 5

Action plan
agreed

Meeting observation
Review of
information flow

2. EFFECTIVENESS

CONTINUED

Board evaluation findings

Summary of recommendations following external review in 2015	Summary of key actions and progress made following external review in 2015	Summary of recommendations following internal review in 2016	Summary of key actions following internal review in 2016
Refresh the Board succession plan	A specification, timetable and process has been developed setting out the key milestones to ensure the Board continues to be fully compliant with the Code	Board to ensure up-to-date succession plans are in place for the Group Chief Executive and key management roles	To be considered at a 2017 Board meeting
Review Board composition to ensure the right skills and experience exist to support the future strategy	The Nomination Committee has undertaken a rigorous review of Board and Committee composition and has developed a phased plan to ensure a smooth transition	Non-Executive Directors have requested increased contact with major shareholders	Board to facilitate contact, where appropriate
Forward planning of Nomination Committee meetings	Additional Nomination Committee meeting dates have been scheduled to ensure succession planning and Board composition is progressed in good time	Directors to be given sufficient opportunity to familiarise themselves with key aspects of the Group's businesses (processes, products, sales staff, customers and competitors)	One Board meeting per annum at an overseas operating company and one at a UK operation, including Board presentations from a broad range of senior managers
Increased visibility of Risk Management Committee activity	The Chairman of the Risk Management Committee provides an update on risk management work to the Board Risk Management Committee agendas and minutes are circulated to Non-Executive Directors The Audit Committee Chairman is invited to attend a Risk Management Committee meeting annually Non-Executive Directors fully involved on specific risks that need a "deep dive" analysis	Board to be given sufficient opportunity to update and refresh their skills and knowledge	Introduction of Governance training through the Deloitte Academy
Review the maturity of the internal audit function	PricewaterhouseCoopers LLP (PwC) has undertaken a review and has made recommendations to the Board and Audit Committee		

A number of the 2015/2016 actions are enduring themes which will continue to be pursued.

Director development



Training and development

The Board is regularly notified of changes to relevant laws and regulations, with a report at each Board meeting from the General Counsel and Company Secretary.

All the Directors are members of the Deloitte Academy, giving them access to a comprehensive programme of training and technical support on a wide range of corporate governance matters to enable the Directors to update their knowledge and keep them informed of their duties. Non-Executive Directors are invited to attend Group conferences, which provide

information on business strategy, new product development and sales and marketing initiatives. Business presentations are given at Board meetings to ensure the Directors are kept informed of new product development, regional operations, business strategies and employee development.

There is an annual visit by the Board to at least two Group operating companies. In February 2016, the Board visited WMFTG's operations in Falmouth and in June, the Board meeting was combined with a site visit to the Indian operating company in Chennai with a presentation by the management team.



Kevin Boyd, Group Finance Director, Spirax Sarco Steam Specialties manufacturing site, Cheltenham, UK



Board induction

On joining the Board, all new Directors receive a tailored and comprehensive induction programme, comprising a combination of briefings and meetings with the Directors, General Counsel and Company Secretary, corporate advisers and senior management. This covers Directors' duties and the UK listing regime, an overview of the business, its operations, risks and regulatory matters, governance, finance and investor relations.

In the case of an Executive Director, this will include visits to our principal overseas divisions and operating companies in the Group in order to understand the international nature of our business and, where appropriate, meetings with key shareholders and analysts. It is essential that our Directors have a solid grasp of our products and services and, in addition to product technical information and marketing brochures, inductees are given an in-depth tour of our manufacturing and R&D site in Cheltenham and are encouraged to take engineering courses at our UK Steam Technology Centre located at our Headquarters. Directors also visit WMFTG in Falmouth to gain an understanding of the fluid technology business.

3. ACCOUNTABILITY

AUDIT COMMITTEE



“The Committee provides crucial oversight of the Group’s financial affairs in order to monitor the integrity of its financial reporting and the effectiveness of its controls.”

Clive Watson,
Audit Committee Chairman

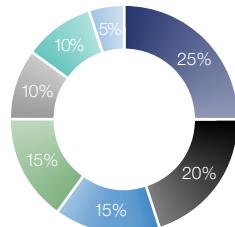
Membership and attendance*

NUMBER OF MEETINGS

3

Committee member	Attendance	Committee member	Attendance
C.G. Watson	3	J. Pike	3
J.S. Kingston ¹	1	G.E. Schoolenberg	3

How the Committee spent its time during the year



- Finance and tax reviews
- Risk management and controls
- Corporate governance
- Internal audit
- Results review
- External audit
- Whistle-blowing

The Terms of Reference for the Committee are set out in detail on the Group’s website, www.spiraxsarcoengineering.com, on the Policies and procedures page, within the Governance section. These terms were revised by the Committee in October 2014 to include an assessment of external audit effectiveness, and are subject to regular review.

¹ Appointed 1st September 2016

* K. Rajagopal attended 2 meetings prior to his death on 10th November 2016

Role of the Committee

The main role and responsibilities of the Committee include:

- monitoring the integrity of the Group’s Financial Statements and public announcements relating to the Company’s financial performance;
- reviewing the effectiveness of the internal and external audit process; and
- reviewing the effectiveness of the Group’s financial and internal controls and the process for the evaluation, assessment and management of risk.

Summary of the key Committee activities in 2016:

- Reviewed Financial Statements
- Reviewed external auditor effectiveness and audit process
- Assessed internal audit function
- Agreed Group Tax Policy
- Analysed and approved integrated risk assessment and management framework
- Reviewed risk management and controls



Read more on pages 77–78.

Summary of the key areas of focus for 2017:

- Financial Statements
- Promotion of independent whistle-blowing service
- Review of corporate structure
- On-going monitoring of risks
- Strengthening of internal audit function
- Group tax strategy
- Group treasury strategy

Matters considered

In 2016, the following matters were considered by the Committee and, where applicable, by the Board or other Committees:

Review of internal audit and effectiveness	The potential impact of Brexit	Review of principal risks and risk appetite	Risk Management Committee	Annual Report – fair, balanced and understandable
Litigation update	Annual forward plan	Group Tax Policy	Viability statement and going concern	Risk Appetite Statement
External auditor and Audit Committee effectiveness	Assessing future compliance with the UK Corporate Governance Code 2016	Whistle-blowing	Performance evaluation of the Committee	Anti-bribery and corruption

Review of 2016

The Committee met three times in 2016. Kevin Boyd, Group Finance Director, John Senior, Group Financial Controller (as head of the internal audit team), and the external auditor attend the meetings and have direct access to the Committee Chairman. Following the external Board evaluation, undertaken during 2015, it was recommended that the Group Chief Executive be invited to attend the Audit Committee from time-to-time and this has now been implemented.

As a safeguard, the Committee holds separate meetings with the external and internal auditors without management present to discuss their respective areas and any issues arising from their audits.

During the year the Committee received reports from external and internal auditors on the major findings of their work and the progress of management follow-up by way of management reports.

The Committee received assurance on going concern, viability, pension valuation, material litigation and risk management, and the Committee considered this assurance and concluded it was reliable.

This year the Committee approved the Group Tax Policy, reviewed by KPMG LLP, which clearly and transparently sets out the Group's tax strategy. This will be made available on our website, www.spiraxsarcoengineering.com, in compliance with the Finance Act 2016.

The Group has complied with the provisions of the Competition and Market Authority (CMA) Order, issued by the CMA in September 2014, for "The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities)".

Auditor

This is the third financial year in which the Annual Report and Financial Statements have been audited by Deloitte LLP following their appointment as the Company's external auditor as of 20th May 2014. This appointment is subject to on-going monitoring and will run for a maximum of 10 years before being tendered.

One of the primary responsibilities of the Committee is to assess the robustness of the external audit process and make recommendations to the Board in relation to the appointment, re-appointment or removal of the external auditor. The Committee took a number of factors into account when evaluating the effectiveness of the external audit including:

- the quality and scope of the planning of the audit (in October 2016, Deloitte LLP presented their plan for the 2016 audit to the Committee); and
- feedback from all audited operating units, the Group Finance team, senior management and Directors on the audit process and the quality and experience of the audit partners engaged in the audit.

During the year, the Committee reviewed and approved the proposed audit fees and terms of engagement for the 2016 audit and recommended to the Board that it proposes to shareholders that Deloitte LLP be re-appointed as the Group's external auditor for 2017 at the Annual General Meeting to be held on 9th May 2017.

The Committee recognises that the independence of the external auditor is an essential part of the audit framework and has adopted a policy which sets out a framework for determining whether it is appropriate to engage the Group's auditor for non-audit services. This policy states that any expenditure with the Group's auditor on non-audit fees should not exceed 70% of the average audit fees charged in the last three-year period. During the year, the Group spent £44,000 on non-audit services provided by Deloitte LLP (being 4% of the average of Group audit fees charged over the past three years). Further details can be found in Note 7 on page 134.

Internal audit

The Committee reviewed the schedule of planned internal audits undertaken in 2016 and assessed the robustness of the control framework that is in place to track and monitor progress in remedying any identified deficiencies. This review ensures that the Committee is able to give assurances that the Group has an effective and integrated risk management framework, in addition to the oversight provided by the Risk Management Committee. The internal audit process is explained on page 81. PwC was commissioned to undertake a review of the internal audit function. This review focused on validating the Committee's view of the strengths and weaknesses of the current approach and suggested other potential development areas in light of best practice. The PwC report has been received and the Committee is currently considering PwC's recommendations.

3. ACCOUNTABILITY

AUDIT COMMITTEE

CONTINUED

Significant issues in relation to the Financial Statements

During the year the Committee considered significant issues in relation to the Group's Financial Statements and disclosures relating to:

(i) Revenue recognition

In view of the profile of revenue and profit recognition in the final quarter of the year, the need to focus on any new contracts and revenue cut-off for certain businesses was highlighted to ensure the appropriate recognition of revenue for the year ended 31st December 2016.

(ii) Inventories

There are judgements required in assessing the proportion and value of slow-moving inventory that should be written down in value. The value of inventory was considered by the Committee to ensure that the accounting policy had been consistently applied and the level of inventory provision was appropriate.

(iii) Pensions

There are judgements and estimates made in selecting appropriate assumptions in valuing the Group's defined benefit pension obligations, including discount ratios, mortality, inflation and salary increases. The Committee considered reports by the Company, including those from independent external advisers, and is comfortable that the key assumptions are reasonable.

(iv) Ensuring the Annual Report is fair, balanced and understandable

The Committee carried out a full assessment and review to ensure the standard was satisfied.

(v) Other judgements in the Financial Statements

Viability and going concern have been assessed successfully.

Provisions and acquisitions, and in particular the Aflex Hose Limited acquisition, were also considered. After reviewing the presentations and reports from management and consulting with the auditor, the Committee is satisfied that the Financial Statements appropriately address the critical judgements

and key estimates, both in respect of the amounts reported and the disclosures. The Committee is also satisfied that the significant assumptions used for determining the value of assets and liabilities have been appropriately scrutinised, challenged and are sufficiently robust.

Review of the Financial Statements

During 2016 the Committee considered many components of business performance in order to ensure it has a full understanding of the operations of the Group.

Key matters considered by the Committee include:

- determining the position adopted in judgement areas such as pensions, inventories and business combinations;
- risk areas set out in the Risk Management Committee Report;
- receipt of regular strategy reports from the Group Chief Executive and operational reports from the Divisional Directors;
- requesting members of management to attend Committee meetings to provide updates on operational and strategic matters;
- reviews of the budget and operational plan; and
- consideration of judgements and estimates.

Through these processes and its monitoring of the effectiveness of controls, internal audit and risk management, the Committee is able to maintain a good understanding of business performance, key areas of judgement and decision-making processes within the Group.

Fair, balanced and understandable

One of the key governance requirements of the Committee is for the Annual Report to be fair, balanced and understandable. The co-ordination and review of the Group-wide input into the Annual Report is a significant exercise performed within an exacting time frame, which runs alongside the formal audit process undertaken by the external auditor.

To ensure the Annual Report is fair, balanced and understandable, the Committee assessed the consistency of the risks and judgements, reviewed the Board minutes to ensure issues of significance were given prominence and arrived at a position where initially the Committee, and then the Board, was satisfied with the overall fairness, balance and clarity of the document, which is underpinned by the following:

- comprehensive guidance for contributors at operational level;
- a verification process dealing with the factual content of the reports;
- a consideration of the appropriateness of alternative performance measures;
- comprehensive reviews undertaken at different levels in the Group that aim to ensure consistency and overall balance; and
- comprehensive review by the senior management team.

Committee evaluation

During the year the Committee undertook a self-assessment of its performance using an internal questionnaire. The key points from this evaluation were as follows:

- update on latest governance and accounting issues to be provided by Deloitte LLP through the Deloitte Academy;
- Committee to review the Group Management Code; and
- Committee to review materiality levels.



The Directors' fair, balanced and understandable statement on the Annual Report is set out on page 67.

3. ACCOUNTABILITY

RISK MANAGEMENT COMMITTEE



"A robust review of our risk appetite has been undertaken this year, developing both specific ratings for our principal risks as well as a comprehensive statement of the Group approach to risk appetite."

Nicholas Anderson,
Risk Management Committee Chairman

Membership and attendance*

NUMBER OF MEETINGS

3

Committee member	Attendance	Committee member	Attendance
N.J. Anderson	3	N.H. Daws	3
K.J. Boyd ¹	2	J.L. Whalen	3

¹ Appointed 11th May 2016

^{*} D.J. Meredith attended 1 meeting prior to his retirement on 10th May

The following executives are also members of the Committee:



Sheldon Banks
Divisional Director – Americas



Paul Lee Suay Wah
Divisional Director – Asia Pacific



Ashok D'Sa
Group Business Development Director



Jim Devine
Group Human Resources Director



Byron Thomas
Steam Finance Director



Ian Farnworth
Group Supply Chain Director



Jeremy Butterfield
Group Information Systems Director



Andy Robson
General Counsel and Company Secretary

In addition, the Chairman of the Audit Committee attends the Committee at least once per year.

Role of the Committee

The Committee ensures that the Group has risk management policies and procedures, including those covering project governance, sanctions and embargoes, human rights, business continuity and business management. The Committee is responsible for the management and control of significant risks affecting the Group.

Summary of the key Committee activities in 2016:

- Reviewed historical risks
- Assessed risk appetite
- Reviewed Group risk register and principal risks
- Produced Risk Appetite Statement
- Approved Ethics Overview Committee
- Appointed Divisional Ethics Officers



Read more on pages 80–81.

Summary of the key areas of focus for 2017:

- On-going monitoring of risk management and internal controls
- Anti-bribery and corruption, implementation of further enhancements including:
 - complete the roll-out of our biennial anti-bribery and corruption training refresher course across the Group
 - ensure that employees are properly using the online Global Gifts and Hospitality register

3. ACCOUNTABILITY

RISK MANAGEMENT COMMITTEE

CONTINUED

Responsibilities

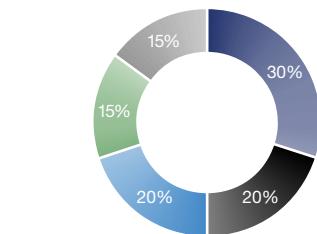
To identify and understand the risks facing the Group

To determine our appetite for risk

To accept and manage within the business those risks which our employees have the skills and expertise to understand and leverage

To identify appropriate risk mitigation techniques and countermeasures

How the Committee spent its time during the year



- Risk management framework (including appetite)
- Anti-bribery
- Review of principal risks
- Internal audit
- Internal controls

The reviews are consolidated into Group-wide risk reports which are maintained and reviewed by the Committee on a regular basis.

We have a robust risk management process in place through which we identify, evaluate and manage the principal risks that could impact the Group's performance.

To ensure that risk management is fully embedded into the Group culture, in 2016 we reviewed our assessment of the principal risks using top-down involvement from management. Our principal risks and the product of the 2016 review are set out on pages 28 to 31.

The Group's governance structure is set up so that there are three lines of defence within the risk management framework:

- **first line of defence** – the business is responsible for the identification, control and management of its own risks;
- **second line of defence** – the Risk Management Committee, with the Audit Committee, ensures that the risk and compliance framework is effective so as to facilitate the monitoring of risk management with on-going challenge and review of the risk profile in the business; and
- **third line of defence** – internal audits provide independent testing and verification of compliance with policies and procedures, and monitoring of follow up actions where required.

This approach ensures that senior management have full accountability for the management of risks in their specific areas.

Internal controls

The Board has ultimate responsibility for the effective management of risk across the Group and determining risk appetite.

The Board also has overall responsibility for the system of internal controls and for reviewing its effectiveness, whilst the role of management is to implement Board policies on risk and control.

An on-going review process for identifying and managing risks faced by the Group has been in place since 2013. The review covers and assesses the effectiveness of all material controls, including financial, operational and compliance controls and risk management systems. It ensures that proper accounting records have been maintained, that financial information used within the business is reliable and that the preparation of the consolidated and Company Financial Statements and the financial reporting process comply with all relevant regulatory reporting requirements. The system of internal controls is designed to manage, rather than eliminate, the risk of failure to achieve the business objectives.

All operating companies are required annually to complete self-certification questionnaires regarding compliance with the policies, procedures and minimum requirements for an effective system of internal controls. Self-certification is given by both the General Manager and the Finance Manager of each operation.

From its annual reviews, the Board believes that the system of internal controls is embedded in the business and that regular review allows for assessment of new and changing risks in the Group's business.

Internal controls can provide only reasonable and not absolute assurance against material misstatement or loss.

As required by the UK Listing Authority, the Group has complied throughout the year and up to the date of the publication of the Annual Report with the Code provisions on internal controls.

The risk review process

We have adopted an integrated approach to our risk management, independent assurance and internal controls to ensure greater linkage across our review and assessment of risk. Internal controls and risk management are designed to limit the chance of failure to achieve corporate objectives. Independent assurance is provided by the external auditor and internal audit.

The Committee has accountability for overseeing risk management processes and procedures, works with the Audit Committee and reports to the Board on the risks facing the Group. The Committee also monitors the mitigating actions put in place by the relevant divisions and Group companies to address the identified risks.

At least once a year at a local level, each operating company is required to undertake a formal review of the risks which impact, or have the potential to impact, its business.

Internal audit

The Board has an established internal audit function which allows each of the Group operating companies to be audited at least every three years and those judged to be in higher risk territories audited more frequently.

All businesses acquired by the Group are subject to internal audit within one year from the date of acquisition. Internal audit resource is supplemented by experienced, qualified accounting staff from principal Group operating companies and a professional auditing firm, BDO International. Reports are made to the Audit Committee and the Board as a whole. Whilst there were some areas for local improvement identified in the internal audit reports, no significant matters were raised in the reports on the operating companies audited during the year.

The Committee has now received and is considering the independent review of the internal audit process, undertaken by PwC, in respect of the most effective structure and process for the internal audit function.

Further work has been done to build on our strong anti-corruption culture and our Anti-Bribery and Corruption (ABC) Policy. We have supplemented our “anti-bribery@work” training programme, which includes testing, with biennial refresher training that is in the process of being rolled out to all employees. To date nearly 4,500 employees have completed the initial training and over 1,000 employees have taken the refresher course. The Group Legal function also makes face-to-face presentations throughout the Group on business ethics.

We have an independent whistle-blowing hotline to further strengthen our commitment to ethical business practices and this year we appointed divisional ethics officers to act as another conduit for ABC matters within the Group.

In respect of the Modern Slavery Act, we have undertaken the actions set out on page 29.

The Committee has ensured compliance with centrally documented control procedures on such matters as capital expenditure, information and technology security and legal and regulatory compliance.



Read more on pages 28–31.



Risk Appetite Statement

We recognise that risk is an inherent part of business and, in order to achieve our business aims, we must accept certain risks. We seek to implement a balanced approach to risk, ensuring that our resources are protected while still pursuing opportunities to accelerate and deliver growth.

The decision to take opportunity-based risks should, to the greatest extent possible, be deliberate and calculated. We aim to confirm that the level of risk is commensurate with the strategic and economic benefits the risk might bring; we evaluate our ability to control the risk or mitigate its effects, should that risk materialise; and we always assess the potential ethical considerations arising from knowingly accepting some level of risk.

An informed and well-considered process is crucial to any decision to accept risk. The Risk Management Committee has undertaken a thorough evaluation process to determine an appropriate risk appetite rating for each principal risk.

The risk appetite ratings for the Group's seven principal risks are set out on pages 30 to 31. In summary, the Group has a very low appetite for risks that could lead to violations of health, safety, and environmental legislation, or to breaches of legal and regulatory requirements. In contrast, the Group has a high risk appetite in relation to economic and political instability; with decades of experience in successfully managing operations in volatile markets, we have the control procedures in place to handle the challenges that come with those risks, and we appreciate that without taking risks in new, albeit sometimes unstable, territories we would miss out on valuable opportunities for growth. As a whole, we consider that the risk appetite ratings for the seven principal risks demonstrate that the Group has an appropriate and balanced risk appetite.

As an organisation we are risk aware, but not risk averse. We continually monitor and assess the risks facing the Group and evaluate our ability to control them and mitigate their effects. Focusing on our strategic objectives, we evaluate our risk appetite and decisions to accept risk in a way that will ensure the ongoing financial health of the Group.

4. RELATIONS WITH SHAREHOLDERS

Governance structure

We maintain an active dialogue with our principal investors, institutional shareholder advisers and the investment community. During 2016 we undertook a comprehensive calendar of events, as shown in the shareholder engagement calendar. By providing regular forums for meeting and communicating with shareholders, their advisers and the investment community we ensure that we understand the views and opinions of our investors and are kept informed of any concerns that may arise. We are also able to give updates on our results and developments within our business.

We communicate using a variety of forums including regulatory news announcements, interviews, investor and analyst calls, one-to-one meetings, roadshows, site tours and capital markets events. During the year Nicholas Anderson, Group Chief Executive, and David Meredith succeeded by Kevin Boyd, Group Finance Director, attended shareholder roadshows, across several key countries, including the UK, France, Germany, Switzerland, Canada and the USA.

At the AGM in 2016, shareholders were able to hear from and put questions to the Board on a range of matters.

In December 2016 we engaged with major shareholders and institutional shareholder advisers on the proposed changes to our Remuneration Policy 2017 to seek their views on those changes.

Our forthcoming AGM will take place on 9th May 2017 at our UK Head Office: Charlton House, Cheltenham. The Group Chief Executive will give a short presentation about the previous year and the Group's strategic progress. The presentation will be available on the Group's website, www.spiraxsarcoengineering.com, on the shareholder notices page, after the meeting. Following the AGM, the Board will be available to answer questions and meet informally with shareholders.

How our investors can find us:

Our Group website

www.spiraxsarcoengineering.com

Online 2016 Report

www.spiraxsarcoengineering.com/investors/pages/results-and-presentations.aspx

Shareholder engagement calendar 2016

 <ul style="list-style-type: none"> ✓ Shareholder visit hosted by Spirax Sarco China ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ Preliminary Results announcement, analyst meeting and shareholder roadshow, London ✓ Broker industrials conference, London ✓ Institutional meetings, Cheltenham ✓ Investor and analyst calls
 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ AGM and trading update ✓ Institutional meetings, London ✓ Investor and analyst calls following AGM and trading update 	 <ul style="list-style-type: none"> ✓ Investor and analyst calls
 <ul style="list-style-type: none"> ✓ Shareholder roadshow, Europe (France, Germany and Switzerland) ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ Half Year results announcement, analyst meeting and shareholder roadshow, London ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Shareholder roadshow, Scotland ✓ Shareholder roadshow, Canada and USA ✓ Shareholder visit hosted by Spirax Sarco France ✓ Investor and analyst calls
 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Institutional meetings, London 	 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Trading update ✓ Investor and analyst calls 	 <ul style="list-style-type: none"> ✓ Institutional meetings, Cheltenham ✓ Investor and analyst calls

5. REMUNERATION

REMUNERATION AT A GLANCE 2016

Our remuneration information is structured as follows:

Remuneration at a glance

- › Performance against our key performance indicators
- › How we performed against the FTSE 350 Industrial Goods & Services index
- › Executive Directors' single figure of remuneration
- › Executive Directors' shareholding (% of salary)
- › Executive Directors' Remuneration Policy overview

Remuneration Committee overview

- › Membership and attendance
- › How the Committee spent its time
- › Role of the Committee

Statement by the Chairman of the Committee

- › New Remuneration Policy
- › Shareholder engagement
- › 2016 remuneration implementation report

Annual Report on Remuneration 2016

- › Directors' remuneration
- › Directors' shareholdings
- › Directors' service agreements

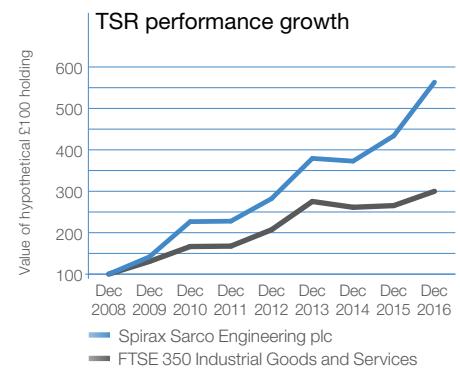
Remuneration Policy Report 2017

- › The proposed policy to be put to a shareholder vote at the AGM on 9th May 2017

How we performed

Key performance indicator	2016	2015
Organic revenue growth (%)	4.0	2.0
Adjusted operating profit (£m)	180.6	152.4
Operating profit margin (%)	23.8	22.8
Return on capital employed (ROCE) (%)	47.9	44.1
Basic earnings per share (EPS) (p)	171.5	142.6

 [For more information
see pages 26–27.](#)



 [For more information
see pages 87–99.](#)

Executive Directors' remuneration and shareholdings

Executive Director	Single total remuneration figure (£/\$000)			Value of shareholding vs shareholding policy (% of salary)
Nicholas Anderson Group Chief Executive	2016 667.8	638.6	302.1	£1,611
	2015 635.9	303.9	249.4	£1,191
Kevin Boyd* Group Finance Director	2016 289.3	221.5		£511
	2015 N/A			2016 2015
Neil Daws Executive Director, EMEA	2016 396.5	275.4	183.2	£858
	2015 385.3	195.8	262.5	£845
Jay Whalen Executive Director, WMFTG	2016 657.2	444.3	222.7	\$1,324
	2015 636.1	317.7	359.3	\$1,313

 Fixed

 Annual Bonus

 LTIP

* Remuneration calculated from date of appointment to the Board.

Overview of the Executive Directors' Remuneration Policy

 [For more information
see pages 100–103.](#)

Base salary	Benefits	Pension	Annual bonus award	Performance Share Plan (PSP)
<ul style="list-style-type: none"> – To enable the Group to attract retain and motivate high-performing Executive Directors of the calibre required to meet the Group's strategic objectives 	<ul style="list-style-type: none"> – To provide market competitive benefits – To enable the Executive Directors to undertake their roles through ensuring their wellbeing and security 	<ul style="list-style-type: none"> – To offer market competitive levels of pension – To attract and retain individuals with the personal attributes, skills and experience required to deliver Group strategy 	<ul style="list-style-type: none"> – To incentivise and reward performance against selected KPIs which are directly linked to business strategy – To ensure a significant proportion of Executive Director remuneration is directly linked to business performance 	<ul style="list-style-type: none"> – To incentivise and reward Executive Directors for delivering against long-term Group performance – To align Executive Directors' interests to those of shareholders – To retain key Executive talent

5. REMUNERATION

REMUNERATION COMMITTEE



“Our aim is to create a remuneration framework that is fair and proportionate whilst motivating and rewarding performance for the long-term success of the business.”

Jane Kingston,
Remuneration Committee Chairman

Membership and attendance*

NUMBER OF MEETINGS

3

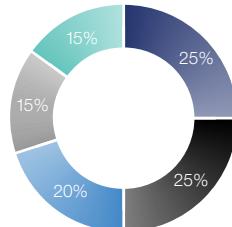
Committee member	Attendance	Committee member	Attendance
J.S. Kingston ¹	1	G.E. Schoolenberg	3
J. Pike ²	2	C.G. Watson	3

¹ Appointed 1st September 2016

² Absence due to prior commitment

* K. Rajagopal attended 2 meetings prior to his death on 10th November 2016

How the Committee spent its time during the year



- Bonus target setting
- PSP target setting
- Remuneration Policy 2017
- Bonus achievement
- PSP achievement

Role of the Committee

The Committee determines Executive remuneration policies and sets targets for short and long-term performance-based incentive schemes. It also monitors compliance with the presiding Remuneration Policy.

Summary of the key Committee activities in 2016:

- Updated Remuneration Policy and PSP rules for approval at the AGM 2017
- Updated Committee Terms of Reference
- Set bonus and LTIP performance targets
- Reviewed Executive Director pay and benefits
- Reviewed PSP post-vesting holding period



Read more on pages 85–107.

Summary of the key areas of focus for 2017:

- Review Executive Director pay and benefits
- Prepare for gender pay gap reporting requirements
- Monitor UK government proposals on executive pay

5. REMUNERATION

STATEMENT BY THE CHAIRMAN OF THE COMMITTEE

Dear Shareholder,

On behalf of the Board, I present my first Directors' Remuneration Report, for the period ended 31st December 2016. I would also like to take this opportunity to recognise the excellent work of the Committee under the leadership of Dr Krishnamurthy Rajagopal who sadly passed away in November 2016. I am pleased to be given the opportunity to join the Board of such a well-respected and high performing company as Spirax-Sarco Engineering plc and I look forward to leading the Remuneration Committee going forward.

This Remuneration Report has been split into two sections:

- the 2016 remuneration implementation report (Annual Report on Remuneration 2016), as set out on pages 87 to 99; and
- a new Directors' Remuneration Policy (Remuneration Policy Report 2017), as set out on pages 100 to 107.

A new Directors' Remuneration Policy

To set the background, there has been considerable improvement in the overall performance of the Group during the period covered by the existing Remuneration Policy (approved at the 2014 AGM) and our share price has increased from £29.76 on 2nd January 2014 to £44.49 on 28th February 2017. During this time, as our shareholders would expect, our executive compensation arrangements have fully complied with our existing Remuneration Policy. As part of the 2017 review, we commissioned our independent Remuneration Committee advisers, Willis Towers Watson, to undertake a detailed study of our peers and wider market practices to inform our thinking. This is the first external review since 2014 and the first to consider long-term incentive levels since 2007. Based on this, the Committee developed a Policy that fairly rewards performance and provides tailored incentives that will drive business performance rather than simply aligning with external benchmarks.

In reviewing the proposed changes to our Remuneration Policy, and its operation in 2017, we had the following key principles in mind:

- ensure we have the ability to remain competitive in the market for executive talent;
- provide future flexibility with respect to our variable compensation limits;
- have an appropriate balance between short-term and long-term incentives;
- allow for differentiation of variable compensation levels in the Executive Director team;
- ensure that share ownership levels continue to be meaningful and commensurate to the incentive opportunity; and
- introduce a post-vesting holding period to align with shareholders' interests.

The 2017 Remuneration Policy (2017 Policy) is substantially the same as the 2014 Remuneration Policy (2014 Policy) and I believe that the changes proposed are sensible, justified and in the best interests of shareholders.

I would like to explain each proposed change, in turn.

Annual Incentive Plan (AIP)

The 2014 Policy allows for the provision of a maximum bonus of 125% of salary, which is slightly above the lower quartile (120%) of our comparators. At present there is no flexibility to increase this maximum should the Committee wish to do so in the future. Therefore, we are proposing to increase the maximum under the 2017 Policy to 150%.

I would like to emphasise that this is the maximum for the next three years. In 2017 we are not proposing any change to the bonus opportunity for the Group Chief Executive (125%) or the other Executive Directors (100%).

Performance Share Plan (PSP)

The last change to executive award levels was made in 2008 and the Group Chief Executive and Executive Directors currently receive an annual grant under the PSP of 100% of salary. Our market review demonstrates that we are positioned below the lower quartile for this compensation element. An intrinsic part of our value to shareholders has been our ability to deliver long-term growth and we believe that our remuneration structures should reflect this by having an appropriate balance between long-term performance (through the PSP) and short-term performance (through the AIP).

I would like to emphasise that we will retain stringent performance criteria for all our PSP awards. Historically, this has meant that only a certain percentage of the awards made actually vest in accordance with the performance criteria. For example, in 2015 and 2016, 33.06% and 80.33% of the awards granted in 2012 and 2013 respectively vested.

The 2014 Policy allows for a maximum grant of 100% of base salary in normal circumstances and 150% in exceptional circumstances. We are proposing a revised maximum of 200% of salary in the 2017 Policy.

Given the time elapsed since the last change in Executive award levels, the corresponding changes in the Company since then, feedback from shareholders regarding our pay mix and external market data, we are proposing to increase the grant to the Group Chief Executive from 100% to 150% of salary and from 100% to 125% of salary for the other Executive Directors, for 2017.

We are also proposing the adoption of a post-vesting holding period of two years beyond the current three year PSP performance period for Executive Directors.

Share ownership requirements

We will be continuing with our requirement that Executive Directors accumulate, over a period of five years, a significant shareholding in the Company. In conjunction with the proposed changes in PSP award levels, there will be a corresponding increase in the share ownership requirements. The Group Chief Executive will now be expected to accumulate at least 200% of salary in Spirax Sarco shares and the other Executive Directors will be expected to accumulate shares worth 125% of salary.

Summary

A summary of the proposed changes is set out in the table on page 86.

5. REMUNERATION

STATEMENT BY THE CHAIRMAN OF THE COMMITTEE

CONTINUED

Shareholder engagement

As part of the policy formulation process we consulted with our largest shareholders and their representative bodies on our proposed changes. We welcomed the constructive feedback provided and have taken full account of it in our proposals.

Shareholders appreciated the:

- introduction of an additional two-year post-vesting holding period for PSP grants;
- rebalance of long-term and short-term compensation opportunities by way of the Director's PSP opportunity now being more substantive than under the AIP;
- increase in share ownership requirements to 200% for the Group Chief Executive and 125% for the other Executive Directors;
- removal of the Committee's discretion to grant one-off awards for recruitment or retention in exceptional circumstances;
- keeping of the PSP performance metrics under review, including the consideration of organic growth measures; and
- reserving of the Committee's right to adjust for the effects of divestments or major acquisitions from the EPS results, to ensure those results are in line with the primarily organic growth principles that support the EPS targets.

The 2016 remuneration implementation report

As noted in the Chairman's Statement on pages 2 and 3, the Company made further progress in 2016 with Group revenue up 4% and adjusted operating profit up 8%, both on an organic basis, contributing to adjusted earnings per share (EPS) growth of 20%, and a return on capital employed (ROCE) of 50.9% (as determined under the AIP rules). Over the three-year period ending in 2016, the Company delivered a total shareholder return (TSR) of 58.2% which is in the upper quartile of our comparator group. A 10.1% increase in the total dividend for the year extends our dividend record to 49 years.

As stated above, our Remuneration Policy is designed to ensure that a significant percentage of Executive Director pay is based on the achievement of demanding performance targets and is, therefore, "at risk". Maximum pay out in the AIP and PSP is only available as a result of significant outperformance by the business. The Committee considers that the remuneration paid to Executive Directors in 2016 (given as a single figure for each Director on page 87) reflects the progress made by the Company during 2016, as well as over the last three years.

Annual bonuses are based on adjusted operating profit, ROCE targets and personal strategic objectives. The Group profit achievement of £182.1 million (as determined under the AIP rules) was 6.9% above the plan target and the ROCE achieved of 50.9% was 4.5 percentage points above the 46.4% plan target. These achievements resulted in a 124.0% bonus award for the Group Chief Executive and 99.2% for the Group Finance Director. Other Executive Directors' targets have an additional divisional profit element and details of their bonus targets and level of achievement can be found on pages 89 and 90.

Continuing difficult macro-economic conditions have resulted in some of the demanding performance targets in the PSP being only partially met. Shares awarded in the 2014 PSP vest based on growth of two measures TSR (40%) and EPS (60%) over the three-year plan period. EPS performance resulted in a nil vesting. A 58.2% increase in TSR in the three years to 2017 triggered a 100% award for this element. The total number of shares vesting under both elements was therefore 40% of the total shares awarded. (Details of bonus and PSP awards can be found on pages 89 to 92.)

Executive Director salary increases, see page 98, were broadly in line with the relevant employee average increase, which was 2.5% in the UK. The Committee awarded Jay Whalen an increase of 5.8% compared to the average USA employee increase of 3.0%. This reflects the increasing significance of Watson-Marlow to the Group in addition to his individual performance for the year.

In 2016 we reported record levels of profit, a material increase in our share price and a dividend increase of 10.1%. Against this backdrop both AIP and PSP were below the permitted maximums allowable under our existing 2014 Policy, which demonstrates that we take our responsibility to set challenging targets for Directors very seriously indeed. We hope that this provides a useful overview of the decisions the Committee has taken this year. We trust that you will support our 2017 Policy, which we believe will provide the competitive remuneration packages required to attract, retain and incentivise top talent whilst ensuring accountability, transparency and linkage of rewards to performance.

Jane Kingston

Remuneration Committee Chairman
8th March 2017

Summary of proposed changes

Pay element	2016 actual	Proposed 2017 Policy	2017 implementation
AIP maximum	CEO Other EDs 125% 100%	Increase from 125% to 150% of salary.	No change. Same as 2016 Actual
PSP maximum	100%	Increase from 100-150% to 200% of salary	Increase to: CEO 150% Other EDs 125%
PSP holding period	None	Introduce a two-year post-vesting holding period	Apply the two-year post-vesting holding period to 2017 awards
Share ownership requirements	At least: CEO Other EDs 125% 100%	Increase to 200% for the Group Chief Executive and 125% for the other Executive Directors	Increase to: CEO 200% Other EDs 125%

5. REMUNERATION

ANNUAL REPORT ON REMUNERATION 2016

Strategic alignment

The Committee ensures that the remuneration paid to the Executive Directors is closely aligned to the Group strategy. In June 2016 the Board reviewed the Strategic Plan approved in 2014.

The Strategic Plan is used to set individual strategic objectives for the Executive Directors and, from this, bonus targets are agreed and approved by the Committee. This process forms part of the annual Board calendar, with the bonus targets approved in the early part of the financial year. The Group's strategic themes are set out on page 19.

1.0 Annual Report on Remuneration 2016

This section sets out the Directors' remuneration for the financial year ended 31st December 2016.

The following information has been audited by Deloitte LLP:

- Single total figure of remuneration;
- Pension;
- Scheme interests awarded between 1st January 2016 and 31st December 2016;
- Payments to past Directors;
- Loss of office payments; and
- Directors' shareholdings and share interests.

1.1 Single total figure of remuneration (audited)

	Salary/Fees		Benefits		Annual bonus		PSP ¹		Pension		ESOP ²		Total ³	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Executive Directors														
N.J. Anderson	£495,000	£515,000	£17,085	£24,000	£303,881	£638,600	£249,379	£302,082	£123,750	£128,750	£1,552	£2,459	£1,190,647	£1,610,891
K.J. Boyd ⁴	N/A	£223,333	N/A	£10,224	N/A	£221,546	N/A	N/A	N/A	£55,833	N/A	N/A	N/A	£510,936
N.H. Daws	£293,750	£302,500	£18,050	£18,378	£195,843	£275,448	£262,503	£183,177	£73,438	£75,625	£1,552	£2,459	£845,136	£857,587
J.L. Whalen ⁵	\$423,000	\$444,250	\$31,337	\$47,347	\$317,672	\$444,250	\$359,279	\$222,717	\$181,810	\$165,638	N/A	N/A	\$1,313,098	\$1,324,202
D.J. Meredith ⁶	£326,500	£120,709	£19,096	£7,269	£200,438	£120,709	£287,834	£122,648	£68,021	£30,117	£1,552	N/A	£903,441	£401,452
Chairman and Non-Executive Directors														
W.H. Whiteley	£157,500	£165,400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£157,500	£165,400
J.S. Kingston ⁴	N/A	£17,500	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£17,500
J. Pike	£49,000	£53,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£49,000	£53,000
K. Rajagopal ⁷	£55,700	£48,977	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£55,700	£48,977
G.E. Schoolenberg	£47,000	£48,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£47,000	£48,000
C.G. Watson	£55,700	£57,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£55,700	£57,000

¹ For N.J. Anderson, N.H. Daws and J.L. Whalen the 2016 column relates to vesting of the 2014 PSP award valued at 4568.0p. The value of D.J. Meredith's 2014 award is based on the share price on the date of vesting following his retirement from the Company (3450.0p). The 2015 column relates to the vesting of the 2013 PSP award and is restated to reflect the share price on vesting of 3052.0p (previously 3058.0p).

² Matching shares awarded during the year based on the mid-market price of the shares on the date of award (4553.0p).

³ The 2015 column reflects the restated PSP values explained in note 1.

⁴ Remuneration calculated from date of appointment to the Board. K.J. Boyd was appointed on 11th May 2016 and J.S. Kingston was appointed on 1st September 2016.

⁵ Paid in US dollars. All elements of J.L. Whalen's remuneration are shown in US dollars because he lives and works mostly in the USA. Furthermore, converting to sterling is misleading due to the large movement in exchange rates.

⁶ 2016 remuneration calculated to date of retirement from the Board on 10th May 2016.

⁷ 2016 remuneration calculated to 10th November 2016, when Dr Rajagopal passed away.

5. REMUNERATION
ANNUAL REPORT ON
REMUNERATION 2016
CONTINUED

Salary/Fees

The following table sets out the 2016 base salary with effect from 1st January 2016 for each of the Executive Directors compared to 2015.

Executive Directors	2016	2015	Increase
N.J. Anderson	£515,000	£495,000	4.0%
K.J. Boyd ¹	£335,000	N/A	N/A
N.H. Daws	£302,500	£293,750	3.0%
J.L. Whalen	\$444,250	\$423,000	5.0%

¹ Appointed to the Board 11th May 2016.

The Executive Directors' salaries increased by an average of 3.5% in 2016. Increases for the broader employee population were on average 2% in the UK, and 3% in the USA, increasing in accordance with internal guidelines for top performers. The increases for Executive Directors, like those for the broader employee population, took account of both individual performance and market data, to ensure that salaries remain competitively positioned in the market. Higher salary increases were awarded to Nicholas Anderson, in view of his performance and in recognition of the fact that his salary was below the market median on appointment, and Jay Whalen, in view of his performance and that of WMFTG.

The following table sets out the 2016 fees for the Chairman and Non-Executive Directors. Pay for the Chairman and Non-Executive Directors does not vary with performance. Fees for Non-Executive Directors are reviewed annually.

Chairman and Non-Executive Directors	Basic fees	Additional fees	2016 Total fees
W.H. Whiteley	£165,400	N/A	£165,400
J.S. Kingston ¹	£48,000	£9,000	£57,000
J. Pike ²	£48,000	£5,000	£53,000
G.E. Schoolenberg	£48,000	N/A	£48,000
C.G. Watson ¹	£48,000	£9,000	£57,000

¹ J.S. Kingston received £1,500 (pro-rated) in respect of her role as Chairman of the Remuneration Committee, with effect from 1st November 2016. C.G. Watson received £9,000 in respect of his role as Chairman of the Audit Committee.

² J. Pike received £5,000 in respect of his duties as Senior Independent Director.

The Chairman's fee was increased by 5% and the Senior Independent Director's fee was increased from £2,000 to £5,000 to address the below-market competitive levels and expectations of the roles.

Benefits (excluding pension)

Benefits	N.J. Anderson	K.J. Boyd	N.H. Daws	J.L. Whalen ¹	D.J. Meredith
Company car and associated running costs or cash alternative allowance	£23,664	£10,000	£17,484	\$25,008	£6,485
Private health insurance	£336	£224	£336	\$16,740	£140
Telecommunications and computer equipment	–	–	£558	\$5,599	£644
Mobility-related benefits:					
– Tax advice ²	£16,890	–	–	\$12,172	–
Life assurance ²	£661	£333	£388	\$492	£180
Long-term disability insurance ²	£1,864	£910	£1,095	\$1,387	£508

¹ Paid in US dollars. All elements of J.L. Whalen's remuneration are shown in US dollars because he lives and works mostly in the USA. Furthermore, converting to sterling is misleading due to the large movement in exchange rates.

² Not taxable therefore not included in the single total figure of remuneration.

Pension

Full details of the pension benefits are set out at section 1.2 on pages 92 and 93.

Annual bonus

Executive Directors participate in the annual bonus plan, which rewards them for financial performance both at Group level and, where relevant, the division for which they are responsible. Targets are reviewed annually to ensure continuing alignment with strategy and are agreed at the start of the year. Resulting awards are determined following the end of the financial year by the Committee, based on performance against these targets.

For the Group Chief Executive, achievement of target performance results in a bonus of 75% of salary, increasing to 125% of salary for maximum performance. For the other Executive Directors, achievement of target performance results in a bonus of 60% of salary, increasing to 100% of salary for maximum performance. The Group Chief Executive's annual bonus opportunity was increased to 125% of base salary, with effect from 1st January 2016. This change, in combination with the increase in salary, reflects the strong individual performance demonstrated by Nicholas Anderson since his appointment two years ago and the performance of the Group as a whole.

Bonus payments are subject to clawback or malus for up to three years following payment. Circumstances that may result in a clawback or malus include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.

The payment of up to 10% of an Executive Director's bonus opportunity, 12.5% for the Group Chief Executive, is based on individual strategic objectives, alongside the current financial measures. These strategic objectives are tailored to an individual's areas of responsibility and agreed at the start of the year. Each measure is subject to three possible achievement levels: fully achieved, partially achieved and not achieved.

The following is a summary of the personal objectives which applied in 2016 to each Executive Director. A full listing of personal performance objectives has not been provided owing to commercial sensitivities, but will be retrospectively reported in the Annual Report on Remuneration next year.

	Performance targets achievement			
	Fully achieved	Partly achieved	Not achieved	% of salary
N.J. Anderson	4	1	0	11.5%
K.J. Boyd ¹ /D.J. Meredith ²	4	1	0	9.2%
N.H. Daws	4	1	0	9.2%
J.L. Whalen	5	0	0	10.0%

¹ Appointed to the Board 11th May 2016.

² Retired from the Board 10th May 2016.

Nicholas Anderson:

Objectives included progressing the implementation of Customer First and corporate strategies for 2016; completion and start up of the new Indian operation; completion of the WMFTG global ERP system; establishment of the Spirax Sarco Academy and effective induction and integration of key senior appointments in the executive team.

Kevin Boyd (from 11th May 2016) / David Meredith (up to 10th May 2016):

Objectives included execution of induction and transition plan; improved financial reporting processes; review of Group Information Systems strategy and a full review of internal audit functional capability.

Neil Daws:

Objectives included progressing the implementation of Customer First strategy in EMEA, growth in sales of thermal energy management and control products; supporting the implementation of the Spirax Sarco Academy and continued territorial expansion into new markets.

Jay Whalen:

Objectives included fully integrating acquisitions; successful and timely launch of new products; completion of the global ERP system; continued investment in development activities of WMFTG personnel and implementation of the Group sustainability strategy.

5. REMUNERATION

ANNUAL REPORT ON REMUNERATION 2016

CONTINUED

The table below sets out the performance measures that each of the Executive Directors' bonus awards were subject to:

Executive Directors	2016 Measures (% of salary)
N.J. Anderson	Group operating profit (75%) Group ROCE (37.5%) Personal strategic objectives (12.5%)
K.J. Boyd	Group operating profit (60%)
D.J. Meredith	Group ROCE (30%) Personal strategic objectives (10%)
N.H. Daws	Group operating profit (30%)
J.L. Whalen	Group ROCE (30%) Divisional operating profit (30%) Personal strategic objectives (10%)

The performance measures are adjusted to reflect certain non-operating items including the amortisation of acquisition-related intangible assets and exceptional reorganisational costs and to exclude any profit contribution and other impacts of the start-up of the new operation in India.

2016 was a good year for the Group which delivered earnings growth, increased operating profit margin and dividend to shareholders. The annual bonus payments to Executive Directors ranged between 124.0% and 91.1% of salary. The bonus is payable in cash where the relevant Executive Director has met the share ownership requirement, otherwise that part of the bonus over 60% of base salary, 75% for the Group Chief Executive, net of tax, must be used to buy shares until the shareholding requirement has been met.

The table below summarises the achieved performance in 2016 in respect of each of the measures used in the determination of annual bonus, together with an indication of actual performance relative to target.

Performance assessment in 2016	Actual performance ¹	Threshold	Below target	Target	Above target	Maximum
Group operating profit	£182.1m	£163.5m	–	£170.3m	£11.8m	£178.8m
Group ROCE	50.9%	43.9%	–	46.4%	4.5%	48.9%
EMEA operating profit ²	£47.0m	£44.5m	–	£46.3m	£0.7m	£48.7m
Watson-Marlow operating profit	£66.0m	£56.0m	–	£58.3m	£7.7m	£61.3m

¹ To comply with the annual bonus plan rules these metrics use, as a base, the actual adjusted operating profit of £180,575 for divisional operating profit performance, and exclude centrally allocated overheads from both the target measure and actual performance.

² Excludes performance of the UK and French manufacturing units, for which N.H. Daws is not responsible, and the impact of the start-up of the new operation in India.

As a result of this performance in 2016, the following bonuses were achieved:

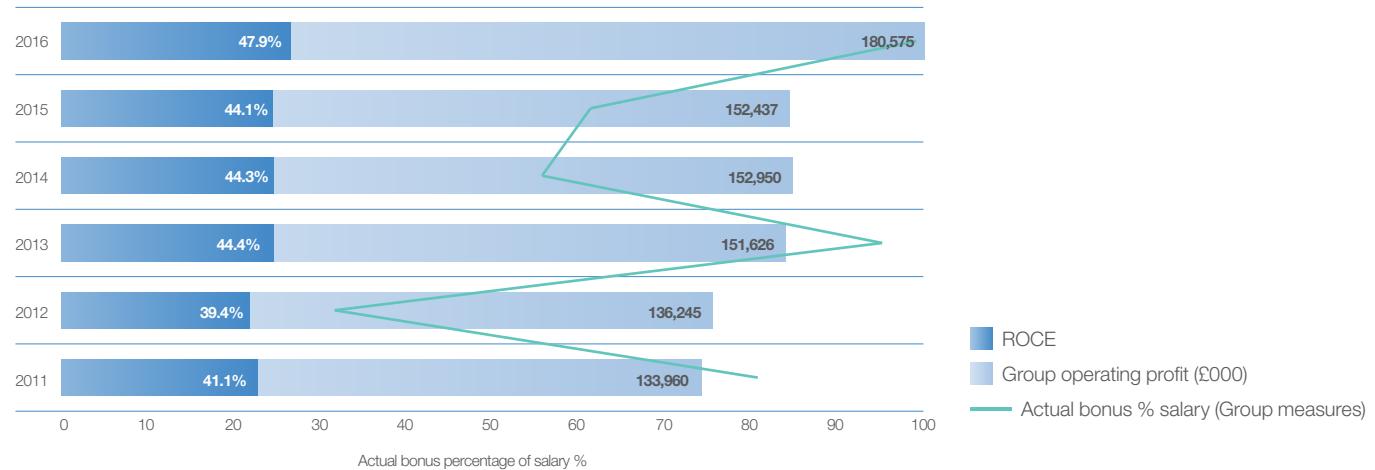
Executive Directors	Bonus achieved	Bonus (% of salary)
N.J. Anderson	£638,600	124.0%
K.J. Boyd ¹	£221,546	99.2%
N.H. Daws	£275,448	91.1%
J.L. Whalen	\$444,250	100.0%
D.J. Meredith ²	£120,709	100.0%

¹ Appointed to the Board 11th May 2016.

² Retired from the Board 10th May 2016.

Group operating profit/ROCE

The following graph provides a six-year summary of bonus outcomes against the performance of Group operating profit and ROCE. This illustrates the strong historical alignment between pay and performance.



Spirax-Sarco Performance Share Plan (PSP)

The Committee makes an annual conditional award of shares to each Executive Director under the PSP. Prior to award, the Committee reviews the performance targets for each measure to ensure they remain sufficiently stretching. For financial measures this includes a review of analysts' forecasts. PSP awards are subject to malus (reduction in the amount of deferred and as yet unpaid compensation) and clawback (reimbursement of compensation that has already been paid) for up to three years following the award, and can be applied during a holding period. Circumstances that may result in a clawback or malus adjustment include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.

In relation to PSP awards made prior to 2017, the maximum award under the PSP is 100% of base salary but, in exceptional circumstances, this may be increased to 150% of base salary. Vesting is based on two performance conditions measured over a three-year period, which have been chosen as they are aligned with our strategy:

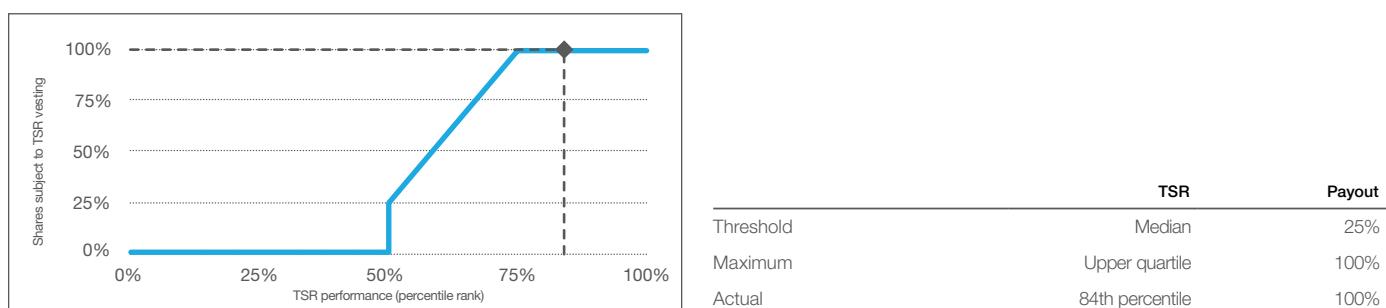
- TSR performance relative to a comparator group; and
- aggregate EPS.

PSP awards vesting over 2014–2016

In 2014 the Executive Directors received share awards under the PSP, with vesting subject to EPS growth and relative TSR performance. The following diagrams set out details of the performance measures and targets that applied, along with the actual performance during the period 1st January 2014 to 31st December 2016.

Relative TSR performance (40% of PSP award)

Over the three-year period to 31st December 2016, the Company delivered a TSR of 58.2%. This ranked above the upper quartile relative to the comparator group.



The comparator group for the purpose of measuring relative TSR performance is the FTSE 350 Industrial Goods and Services Supersector.

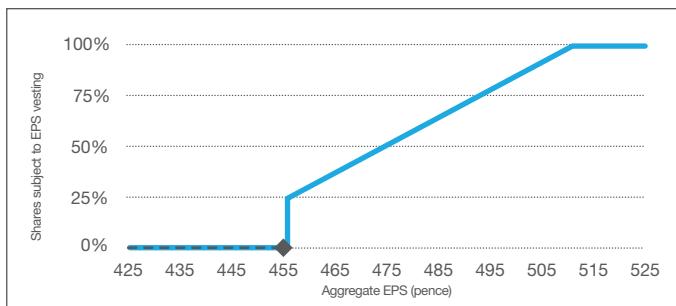
5. REMUNERATION

ANNUAL REPORT ON REMUNERATION 2016

CONTINUED

Aggregate EPS performance (60% of PSP award)

Over the three-year period to 31st December 2016, the Company delivered aggregate adjusted EPS of 454.5p. Adjusted EPS was 138.8p in 2013 (restated for IAS 19R) and so this equated to growth of approximately 7.3% per annum over the three years.



	Performance	Payout
Threshold	456.1p	25%
Maximum	511.3p	100%
Actual	454.5p	0%

EPS is derived from the audited Annual Report for the relevant financial year but adjusted to exclude any non-operating items shown separately on the face of the Company's profit and loss account.

In respect of the 2014 PSP awards, actual performance for the combined relative TSR and aggregate EPS resulted in 40% of shares vesting.

Executive Directors	Award	Vested	Lapsed	Value on vesting ¹
N.J. Anderson	16,533	6,613	9,920	£302,082
N.H. Daws	10,024	4,010	6,014	£183,177
J.L. Whalen	8,963	3,585	5,378	\$222,717
D.J. Meredith ²	11,034	3,555	7,479	£122,648

¹ Based on share price at date of vesting (4568.0p).

² D.J. Meredith retired as a Director on 10th May 2016. He remained an employee until 31st May 2016, the vesting date. The performance period was pro-rated to date of retirement, resulting in partial vesting. Based on share price at date of vesting (3450.0p).

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

Executive Directors (excluding Jay Whalen who is a US citizen) are eligible to participate in an HMRC approved Share Incentive Plan known as the ESOP. Kevin Boyd was not eligible to participate in the 2016 ESOP because the date on which he joined the Group was too late to allow him to participate. He will be eligible to participate in the 2017 ESOP.

The maximum annual investment in shares is £1,500 per Executive Director which can be matched by the Company on a one-for-one basis for each share that is purchased by an Executive Director and dividend shares can be reinvested.

No shares acquired under the ESOP are subject to performance measures as the aim of the ESOP is to encourage increased shareholding in the Company by all eligible UK employees.

1.2 Pension (audited)

In lieu of pension benefits, Nicholas Anderson received 25% of his basic salary in cash, which in the year ended 31st December 2016 amounted to £128,750.

David Meredith retired from the Board with effect 10th May 2016. In lieu of pension benefits, over the period 1st January 2016 to 10th May 2016, he received 25% of his basic salary in cash, which amounted to £30,117.

Kevin Boyd joined the Board with effect from 11th May 2016 as Group Finance Director and Executive Director. In lieu of pension benefits, he received 25% of his basic salary, which in the period 11th May 2016 to 31st December 2016 amounted to £55,833.

Neil Daws became a deferred member of an HMRC registered, contributory defined benefit scheme, the Spirax-Sarco Executives' Retirement Benefits Scheme, with effect from 31st December 2012, and is, therefore, no longer accruing any pension benefits within the defined benefit scheme. His defined benefit rights in the Scheme at 31st December 2016 were £4,180,000 and his normal retirement date is 1st January 2025. In lieu of pension benefits, he received 25% of his basic salary in cash, which in the year ended 31st December 2016 amounted to £75,625.

Jay Whalen is a member of the Spirax Sarco Inc. defined benefit plan. The benefit paid under normal retirement from the US defined benefit plan is a single life annuity equal to the number of years of service multiplied by the sum of 1.0% of pensionable salary up to social security covered compensation, plus 1.45% of pensionable salary in excess of social security covered compensation. Final average salary is the average of the highest pensionable pay for any five consecutive years prior to retirement up to a ceiling. Jay Whalen's final average salary is higher than the salary ceiling as at 31st December 2016.

Jay Whalen's defined benefit plan arrangements are as follows:

	Age attained at 31.12.16	Accrued pension at 31.12.15	Accrued pension at 31.12.16	Change in accrued pension during the year	Change in accrued pension during the year ¹	Change in the value ² of accrued pension over the year net of inflation ¹ and Director's own contributions ³
J.L. Whalen	60	\$81,380	\$86,161	\$4,782	\$3,590	\$71,800

¹ Net of inflation, limited to 0% ie at a rate of 1.46% per annum.

² This year the value of pension has been calculated based on a factor of 20 in line with that required under the disclosure regulations.

³ This is a non-contributory plan so J.L. Whalen paid zero contributions into the defined benefit plan over the year.

The following additional information is provided:

- Upon death in service: a spouse's pension equal to one-half of the member's pension, based on pensionable service to the date of death, is payable. After payment of the pension commences the accrued pension shown has no attaching spouse's pension. However, at retirement there is an option to reduce the member's pension to provide for a spouse's pension after death.
- Early retirement rights: after leaving the service of the Company, Jay Whalen has the right to draw his accrued pension at any time after his 65th birthday with no reduction. In addition, he has the right to commence his pension earlier if he meets the age and service requirements, with the pension being reduced. The annual reductions for early retirement are 3% for each year from age 65 to age 60.
- Pension increases: the pension has no guaranteed increases. Spirax Sarco Inc. has the discretion to provide increases.
- Other discretionary benefits: additionally, Jay Whalen benefited from Company contributions to a personal plan (choice of a personal US defined contribution pension plan or cash in lieu of pension benefits) and to a 401k plan. The total amount contributed by the Group was \$93,838.

1.3 Scheme interests awarded during the financial year (audited)

Spirax-Sarco Performance Share Plan (PSP)

All awards were granted under the PSP as a contingent right to receive shares, with the face value calculated as a percentage (100%) of base salary, using the share price at date of award (3550.0p for Nicholas Anderson, Neil Daws and Jay Whalen and 3557.0p for Kevin Boyd). Awards were made on 5th April 2016 and 11th April 2016 (Kevin Boyd's date of employment) respectively.

Executive Director	PSP award	Face value	Last day of the performance period	Vesting at threshold performance
N.J. Anderson	14,507 shares	£514,999	31.12.18	25%
K.J. Boyd	9,418 shares	£334,998	31.12.18	25%
N.H. Daws	8,521 shares	£302,496	31.12.18	25%
J.L. Whalen	7,933 shares	\$383,006	31.12.18	25%

In respect of the PSP awards made to Executive Directors in 2016, vesting is dependent on the following TSR and EPS performance measures.

Relative TSR performance (40% of PSP award)	Performance	Payout
Threshold	Median	25%
Maximum	Upper quartile	100%

For awards made in 2016 the comparator group is the constituents of the FTSE 350 Industrial Goods and Services Supersector at the start of the performance period.

Aggregate EPS performance (60% of PSP award)	Performance	Payout
Threshold	Global Industrial Production +2%	25%
Maximum	Global Industrial Production +8%	100%

5. REMUNERATION

ANNUAL REPORT ON REMUNERATION 2016

CONTINUED

With effect from 2016, the EPS element of the PSP is based on growth in excess of global industrial production growth rates, often referred to in our industry as "Global IP", rather than UK RPI. Global IP* is a measure that the Board and management have used for some time as there is well documented evidence that it is the best predictor of the global and industrial markets within which the Group operates. For these reasons, IP was used in the formulation of the long-term strategic plan and targets for EPS growth approved by the Board. As a result, the Committee was of the view it made sense to incorporate Global IP into our PSP, as a means of better aligning the assessment of performance against our long-term strategic plan and market dynamics within our industry. The Committee reviewed the historical and projected data (2007-2020), including the Group's performance, market benchmarks and analysts' consensus to determine a performance range associated with this benchmark growth rate that remains sufficiently challenging across various market environments. Accordingly, threshold vesting will occur for exceeding Global IP by 2% per annum, increasing on a straight line basis to full vesting for exceeding Global IP by 8% per annum.

* The Global IP data source is the CHR Metals Global IP Index, providing data, that incorporates over 90% of global industrial output.

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

Nicholas Anderson and Neil Daws are participants in the HMRC approved ESOP. During the year ended 31st December 2016 they each purchased 54 partnership shares and so were each awarded 54 matching shares. They received seven and 37 dividend shares respectively. Further information is set out in the table on page 96.

1.4 Payments to past Directors (audited)

Former Group Finance Director, David Meredith, received a payment related to his bonus entitlement as set out on pages 89 and 90.

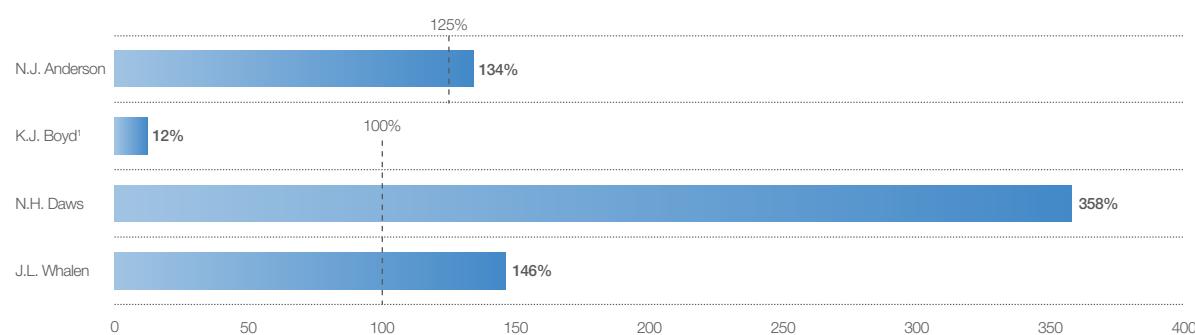
1.5 Payments for loss of office (audited)

There were no payments made to Directors for loss of office during the year ended 31st December 2016.

1.6 Statement of Directors' shareholding and share interests (audited)

Progress towards share ownership guideline

The following chart sets out the Executive Directors' progress towards the Company's share ownership guidelines that applied in 2016, which required Executive Directors to hold shares in the Company with a value of not less than 100% of base salary, over a maximum period of five years from date of appointment to the Board. Nicholas Anderson's share ownership guideline was 125% of base salary. The value of the shareholding is taken at 30th December 2016 as a percentage of 2016 base salary.



¹ Appointed to the Board 11th May 2016.

In accordance with Policy, Executive Directors must use the part of bonus over 60% of base salary, 75% of base salary for the Group Chief Executive, net of tax, to buy shares until their shareholding guideline has been met.

Outstanding share interests

The following table summarises the total interests of the Directors in shares of the Company as at 31st December 2016. These cover beneficial and conditional interests. No Director had any dealing in the shares of the Company between 31st December 2016 and 8th March 2017.

	Beneficial ¹	PSP awards ²	PSP nil-cost options ³	ESOP shares ⁴	Total 31.12.16	Total 08.03.17 ⁵
W.H. Whiteley	11,034	N/A	N/A	N/A	11,034	11,034
N.J. Anderson	16,075	45,404	0	478	61,957	52,037
K.J. Boyd	1,000	9,418	0	N/A	10,418	10,418
N.H. Daws	23,856	27,069	16,735	2,042	69,702	63,687
J.L. Whalen	9,828	24,680	0	N/A	34,508	29,130
J.S. Kingston ⁶	0	N/A	N/A	N/A	0	0
J. Pike	2,820	N/A	N/A	N/A	2,820	2,820
G.E. Schoolenberg	1,854	N/A	N/A	N/A	1,854	1,854
C.G. Watson	2,446	N/A	N/A	N/A	2,446	2,446

¹ Shares include any owned by connected persons.

² Subject to the performance measures as set out on page 91 and 92.

³ Explained in table below.

⁴ Not subject to performance measures.

⁵ The decrease in shareholding at 8th March 2017 for N.J. Anderson, N.H. Daws and J.L. Whalen is a result of 40% of the 2014 PSP award vesting and the balance of the award therefore lapsing. Full details are set out on page 92.

⁶ Appointed 1st September 2016 and has indicated a firm intention to purchase shares.

Spirax-Sarco Engineering plc Share Option Schemes (Option Schemes)

No Directors had interests under the Option Schemes.

Spirax-Sarco Performance Share Plan (PSP)

The interests of Executive Directors in the PSP are set out below.

	Date of award			Balance 01.01.16	Vested 29.02.16 ¹	Lapsed 29.02.16 ¹	Awarded 05/11.04.16 ²	Balance 31.12.16
	08.03.13 ³	14.03.14 ²	11.06.15 ³					
N.J. Anderson	10,172	16,533	14,364	41,069	8,171	2,001	14,507	45,404
K.J. Boyd	0	0	0	0	0	0	9,418	9,418
N.H. Daws	10,707	10,024	8,524	29,255	8,601	2,106	8,521	27,069
J.L. Whalen	9,560	8,963	7,784	26,307	7,679	1,881	7,933	24,680
D.J. Meredith ⁵	11,740	11,034	9,475	32,249	9,431	2,309	–	–

¹ The mid-market price of the shares on 8th March 2013 was 2615.0p. 80.33% of the PSP award vested on 29th February 2016 as the performance measures applicable were partly met. During the performance period 1st January 2013 to 31st December 2015, the TSR performance of the Company resulted in 100.0% vesting of this element. The EPS performance of the Company resulted in 50.8% vesting of this element. The PSP award vested in the form of shares. The mid-market price of the shares on 29th February 2016 was 3145.0p. The 2013 awards vested in the form of whole shares.

² The mid-market price of the shares on 14th March 2014 was 2873.0p. The period over which performance measures are measured is 1st January 2014 to 31st December 2016. Details of the performance measures attached to these PSP awards are set out on page 91 and 92.

³ The average mid-market price of the shares on 8th June, 9th June and 10th June 2015 was 3446.0p. The period over which performance measures are measured is 1st January 2015 to 31st December 2017. There are two performance measures governing vesting of this PSP award: 40% of the PSP award is subject to a TSR performance measure which requires the Company to rank at median relative to a comparator group of the constituents of the FTSE 350 Industrial Goods and Services Supersector for 25% of this portion of the PSP award to vest, increasing to full vesting for ranking at the upper quartile; 60% of the PSP award is subject to an EPS performance measure which requires growth of RPI +3% CAGR per annum for 25% of this portion of the PSP award to vest, increasing to full vesting for growth of RPI +9% CAGR per annum.

⁴ The mid-market price of the shares on 5th April 2016 and 11th April 2016 was 3550.0p and 3557.0p respectively. These were applied in determining the number of shares subject to the PSP awards granted on 5th April 2016 and 11th April 2016. The period over which performance measures are measured is 1st January 2016 to 31st December 2018. Details of the performance measures attached to these PSP awards are set out on page 93 and 94.

⁵ In accordance with the PSP rules, D.J. Meredith's retirement triggered the vesting of the 2014 and 2015 awards, with the performance period being pro-rated to date of retirement. This resulted in a 40% vesting of the 2014 award (3,555 shares) and a 56.7% vesting of the 2015 award (2,538 shares).

5. REMUNERATION

ANNUAL REPORT ON REMUNERATION 2016

CONTINUED

As noted in previous years, the 2010 and 2011 awards that vested in 2013 and 2014 respectively took the form of nil-cost options. The following table summarises the outstanding options.

	Balance at 31.12.15	Exercised	Balance at 31.12.16	2015 gain arising on exercise (£)	Date from which first exercisable	Expiry date
N.J. Anderson	—	—	—	—	—	—
D.J. Meredith	—	—	—	—	—	—
N.H. Daws	12,740	—	12,740	—	05.03.13	05.03.20
	<u>3,995</u>	—	<u>3,995</u>	—	04.03.14	04.03.21
Sub total for N.H. Daws	16,735	—	16,735	—	—	—
J.L. Whalen	—	—	—	—	—	—

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

The interests of eligible Executive Directors are set out below.

	Balance 01.01.16	Partnership shares purchased ¹	Matching shares awarded ¹	Dividend shares ²	Balance 31.12.16	Period of qualifying conditions ³
N.J. Anderson	363	54	54	7	478	3 years
N.H. Daws	1,897	54	54	37	2,042	3 years

¹ Partnership shares were purchased, at a price of 2797.0p, and matching shares were awarded on 12th October 2016. The mid-market price of the shares on that date was 4553.0p.

² 32 dividend shares were received on 27th May 2016, on which date the mid-market price of the shares was 3445.0p. 12 dividend shares were received on 11th November 2016, on which date the mid-market price of the shares was 4205.0p.

³ Partnership shares are not subject to qualifying conditions. No matching shares or dividend shares were released from the ESOP or forfeited during the year ended 31st December 2016.

1.7 Directors' service agreements and letters of appointment

Chairman and Non-Executive Directors

The Chairman and Non-Executive Directors have letters of appointment with the Company for a period of three years, subject to annual re-election at the AGM. Appointments may be terminated by the Company or individual with one month's notice. The appointment letters for the Chairman and Non-Executive Directors provide that no compensation is payable on termination, other than accrued fees and expenses.

Directors' terms of service

The tables below set out the dates on which each Director was initially appointed, their latest service agreement or letter of appointment and their notice period. All Directors are subject to re-election at the AGM, with the exception of Kevin Boyd and Jane Kingston who are subject to election for the first time, following their appointment, at the AGM on 9th May 2017.

Executive Director	Original appointment date	Current agreement	Expiry date	Notice period
N.J. Anderson	15.03.12	13.12.13	16.01.26	12 months
K.J. Boyd	11.05.16	26.10.15	02.09.29	12 months
N.H. Daws	01.06.03	25.09.12	01.07.27	12 months
J.L. Whalen	15.03.12	17.04.12	28.05.21	12 months

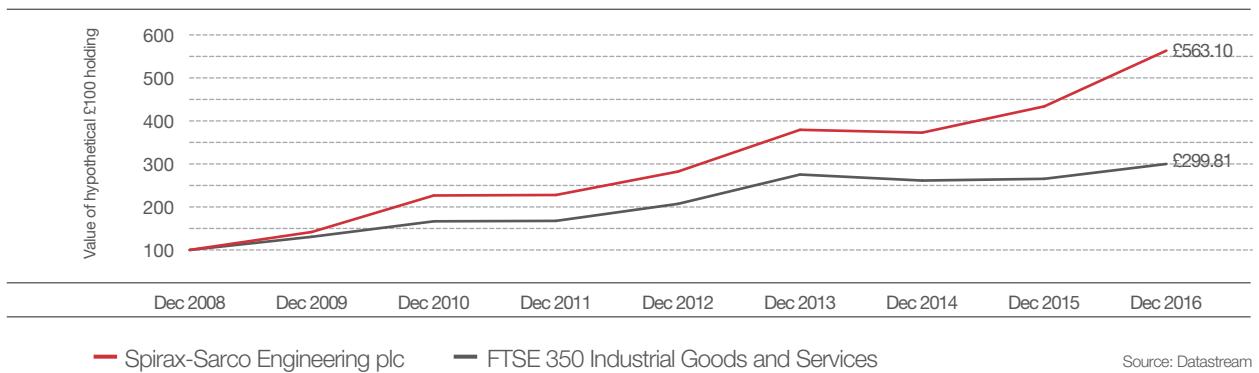
Chairman and Non-Executive Directors	Original appointment date	Appointment/ Re-appointment letter	Expiry date	Notice period
W.H. Whiteley	26.07.02	30.06.15	30.06.18	1 month
J.S. Kingston	01.09.16	16.08.16	31.08.19	1 month
J. Pike	01.05.14	06.03.17	30.04.20	1 month
G.E. Schoolenberg	01.08.12	03.08.15	31.07.18	1 month
C.G. Watson	17.07.09	03.08.15	16.07.18	1 month

1.8 External directorships

Kevin Boyd served as a Non-Executive Director at EMIS Group plc during 2016, for which he received and retained total fees of £25,692 from his date of appointment to the Board on 11th May 2016.

1.9 TSR performance graph

This graph demonstrates the growth in value of a £100 investment in the Company compared to the FTSE 350 Industrial Goods and Services Supersector over the last eight years. This comparison is chosen as it is the supersector within which the Company is classified and it is a broad equity market index including companies of a similar size, complexity and sector.



The table below shows the historic levels of the Group Chief Executive's pay (single figure of total remuneration) and annual variable and PSP awards as a percentage of maximum.

	Single figure of annual remuneration	Annual variable pay as a percentage of maximum	Value of vested PSP awards as a percentage of maximum
2016	£1,610,891	99.20%	40.00%
2015	£1,191,137	61.39%	80.33%
2014 ¹	£1,000,115	55.76%	33.06%
2013	£1,593,150	95.24%	29.93%
2012	£1,402,668	31.69%	74.60%
2011	£1,516,798	80.08%	100.00%
2010	£1,720,765	100.00%	100.00%
2009	£1,092,229	37.00%	100.00%

¹N.J. Anderson appointed Group Chief Executive in January 2014.

1.10 Percentage change in remuneration of the Group Chief Executive

The following table provides a summary of the 2016 increase in base salary, benefits and bonus for the Group Chief Executive compared to the average increase for the general employee population across the Group in the same period.

	2016 change	2015 change
Salary	Group Chief Executive	4.1%
	General employee population	2.0%
Benefits	Group Chief Executive	8.5%
	General employee population	2.0%
Bonus	Group Chief Executive	110.1%
	General employee population	49.7%

5. REMUNERATION
ANNUAL REPORT ON
REMUNERATION 2016
CONTINUED

1.11 Relative importance of spend on pay

The table below demonstrates the relative importance of total remuneration spend relative to total employee numbers, profit before tax and dividends payable in respect of the year.

	2016	2015	Change
Total pay spend	£264m	£232m	14%
Group average headcount	4,998	4,790	4%
Profit before tax	£171m	£140m	22%
Dividends payable	£56m	£51m	10%

1.12 Changes for 2017

Executive Director remuneration

With effect from 1st January 2017, the Executive Directors' salaries have been increased by an average of 3.3%. Increases for the broader UK employee population were on average 2.5%, increasing in accordance with internal guidelines for top performers. The increases for Executive Directors, like those for the broader UK employee population, took account of both individual performance and market data, to ensure that salaries remain competitively positioned in the market.

Base salaries:

- N.J. Anderson: £528,000 (2.5%)
- K.J. Boyd: £344,000 (2.6%)
- N.H. Daws: £312,000 (3.0%)
- J.L. Whalen: \$470,000 (5.8%)

Bonus targets for 2017 are not disclosed because they are considered by the Board to be commercially sensitive. The targets will be retrospectively reported in the Annual Report on Remuneration next year.

Chairman and Non-Executive Director fees

Effective from 1st January 2017, the Non-Executive Director basic fee was increased by 2.1% which is in line with the average UK employee salary increase of 2.5%. The fee for Committee chairmanship was increased by £1,000 to £10,000 and the Senior Independent Director's fee from £5,000 to £8,000. The Chairman's fee was increased by 5.8% to continue addressing the asymmetries to our Group policy and the below-market competitiveness of the Chairman's fee.

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

In 2017 the eligible UK Executive Directors, along with eligible UK employees, will benefit from an increase in the maximum annual investment from £1,500 to £1,800 in line with the HMRC limit.

Other aspects of remuneration

There are no other planned or implemented changes of note for remuneration in 2017.

1.13 Consideration by the Directors of matters relating to Directors' remuneration

Operation of the Remuneration Committee in 2016

Membership and attendance

Each of the Committee members is an independent Non-Executive Director and thus bring independence to all aspects of Board remuneration and the application of professional advice to matters relating to remuneration.

From 1st January 2016 to 31st October 2016, the Committee was chaired by Krishnamurthy Rajagopal, and the members comprised: Jamie Pike, Trudy Schoolenberg and Clive Watson. Jane Kingston joined the Committee on 1st September 2016.

From 1st November to 31st December 2016, the Committee was chaired by Jane Kingston, and the members comprised: Jamie Pike, Trudy Schoolenberg and Clive Watson. Krishnamurthy Rajagopal was a member until he passed away on 10th November 2016.

In 2016 the Committee met three times. Jane Kingston attended one meeting, following her appointment on 1st September 2016. Jamie Pike was unable to attend one meeting due to a prior commitment, but reviewed all the papers and provided his views in advance to the Committee Chairman. Trudy Schoolenberg and Clive Watson attended all three meetings. Krishnamurthy Rajagopal attended two meetings prior to 10th November 2016.

Advisers to the Committee

During 2016, the Committee sought advice and information from Bill Whiteley, the Chairman, Nicholas Anderson, the Group Chief Executive, and Frank Richardson, succeeded by Jim Devine, the Group Human Resources Director. None of the invitees participated in any discussions regarding their own remuneration or fees. The General Counsel and Company Secretary acts as Secretary to the Committee.

In addition, the Committee received external advice from Willis Towers Watson, who was appointed by the Committee and provided material advice to the Committee on various matters such as Executive remuneration levels and structure, performance updates in respect of the PSP, the Remuneration Report and attendance at Committee meetings. Willis Towers Watson's fees in respect of these services totalled £58,000 in 2016. In addition, Willis Towers Watson work with management on other matters relating to remuneration with the approval of the Committee. A separate advisory team within Willis Towers Watson provides support and advice to management on pensions and other employee benefit-related matters. The Committee is of the opinion that the advice received is objective and independent, given that Willis Towers Watson are a signatory to the Remuneration Consultants Group Code of Conduct, the manner in which advice is delivered and the separate teams that advise management more generally.

In 2016, Baker & McKenzie LLP provided legal advice to the Company (which was available to the Committee). Legal fees relate to advice provided to the Company and not the Committee, and are charged on a time-cost basis.

1.14 Statement of voting at general meeting

At the AGM in 2016, shareholders approved the 2015 Annual Report on Remuneration. The Remuneration Policy was approved by shareholders at the AGM in 2014. The table below shows the results in respect of these resolutions, which required a simple majority (ie 50%) of the votes to be cast to be in favour for the resolution to be passed.

	Votes for	%	Votes against	%	Votes withheld
2015 Annual Report on Remuneration (2016 AGM)	57,183,669	97.2	1,643,333	2.79	2,465,129
Remuneration Policy (2014 AGM)	56,203,099	98.5	880,848	1.54	3,834,218

Approval

This Annual Report on Remuneration 2016 has been approved by the Board of Directors of Spirax-Sarco Engineering plc and signed on its behalf by:

Jane Kingston

Remuneration Committee Chairman

8th March 2017

5. REMUNERATION

REMUNERATION POLICY REPORT 2017

2.1 Remuneration Policy

The table below summarises the Remuneration Policy which will take effect, if approved, from the AGM to be held on 9th May 2017.

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Fixed elements of Executive Director remuneration				
Base salary	To enable the Group to attract, retain and motivate high-performing Executive Directors of the calibre required to meet the Group's strategic objectives.	<p>Reviewed annually by the Committee, taking into account:</p> <ul style="list-style-type: none"> – scale, scope and complexity of the role; – skills and experience of the individual; – wider workforce comparisons; and – market benchmarking, within a defined external comparator group. The Committee uses this information with caution, given the limited number of direct comparators and to avoid remuneration inflation as a result of benchmarking exercises with no corresponding improvement in performance. <p>The Committee considers the impact of any base salary increase on the total remuneration package.</p>	<p>Reviews take into account Company and individual performance.</p>	<p>Ordinarily, salary increases will not exceed the average increase awarded to other Group employees. The maximum value of any annual increase in Executive Director salaries will be capped at country of residence inflation plus 5%.</p> <p>The Committee may award increases above this level, subject to a maximum of country of residence inflation plus 10%, in circumstances such as (i) where a new recruit or promoted Executive Director's salary has been set lower than the market level for such a role, or (ii) where there is a significant increase in the size and responsibilities of the Executive Director's role.</p>
Pension	To offer market competitive levels of pension and benefit. To attract and retain individuals with the personal attributes, skills and experience required to deliver Group strategy.	<p>For eligible Executive Directors who joined the UK Company before 2001 the Company provides a UK defined benefits pension scheme (DB scheme) or cash alternative allowance.</p> <p>For UK nationals who joined the UK Company after 2001 the Company provides a defined contribution pension arrangement (DC plan) and/or contributions to a private pension and/or a cash allowance.</p> <p>Executive Directors who have transferred internally from overseas may continue to participate in home country pension arrangements and/or receive a cash allowance.</p>	N/A	<p>For DB scheme as per actuarial value.</p> <p>For all other arrangements the total contribution to all pension arrangements will comprise no more than 25% of base salary.</p> <p>No element other than base salary is pensionable.</p>
Common benefits	To provide market competitive benefits.	<p>The Company provides common benefits including:</p> <ul style="list-style-type: none"> – Company car and associated running costs or cash alternative allowance; – private health insurance; – telecommunications and computer equipment; – life assurance; and – long-term disability insurance. 	N/A	<p>The aggregate maximum cash value of providing all common benefits will not exceed 20% of base salary.</p>

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Variable elements of Executive Director remuneration				
Mobility-related benefits	To ensure that Executive Directors who have relocated nationally or internationally are compensated for costs incurred.	<p>The Company will pay all reasonable expenses for the Executive Director to relocate on appointment. Costs will primarily be dependent on geographical location and family size.</p> <p>The Company will pay all reasonable expenses for repatriation of the Executive Director and his/her family to the original home country at the end of their assignment and/or employment.</p> <p>Executive Directors are personally responsible for all taxes and social charges incurred in the home and host locations as a result of their appointment. To ensure that Executive Directors who relocate internationally are able to fulfil their tax obligations in the home and host countries the Company will pay for reasonable tax advice and filing support in relation to work-related income for international Executive Directors.</p> <p>Executive Directors are reimbursed under a Tax Treaty Adjustment for any double tax they might be liable for as a result of being subject to home country and host country taxation typically for days worked in the home location.</p> <p>Executive Directors are not entitled to tax equalisation.</p>	N/A	<p>Based on individual circumstances and subject to written agreement.</p> <p>Maximum values will not exceed the normal market practice of companies of a similar size and nature at the time of relocation.</p>
Annual bonus	<p>To incentivise and reward performance against selected KPIs which are directly linked to business strategy.</p> <p>To recognise performance through variable remuneration and enable the Company to flexibly control its cost base and react to events and market circumstances.</p> <p>To ensure a significant proportion of Executive Director remuneration is directly linked to business performance.</p>	<p>Measures, targets and their relative weightings are reviewed regularly by the Committee to ensure continuing alignment with strategic objectives and will be detailed in the relevant Annual Report on Remuneration.</p> <p>Bonus is based largely or entirely on the achievement of challenging financial performance measures, which have been selected to ensure the Company is focused on its strategic objectives.</p> <p>Bonus is delivered in cash. Executive Directors must use that part of the bonus over target (net of tax) to buy shares until the shareholding guidelines have been met. Purchase to be made within 12 months of bonus receipt.</p> <p>Bonus is subject to clawback or malus for up to three years following payment. Circumstances include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.</p> <p>The Committee can adjust some performance targets to reflect certain non-operating items such as the amortisation of acquisition-related intangible assets and exceptional reorganisational costs, and to reflect the inclusion of Associate companies. These adjustments are mechanical rather than discretionary.</p>	<p>Subject to the Committee's judgement, performance measures and their respective targets are set at a Group or divisional level depending on the Executive Director's role.</p> <p>Any measure can be incorporated at the Committee's discretion provided it is clearly aligned to the Group's strategic objectives, subject to a maximum of 10% of bonus opportunity.</p> <p>The weighting of each component will be chosen specifically to reflect the Executive Director's role.</p>	150% of salary.

5. REMUNERATION
REMUNERATION POLICY
REPORT 2017
 CONTINUED

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Variable elements of Executive Director remuneration				
Performance Share Plan (PSP)	<p>To incentivise and reward Executive Directors for delivery against long-term Group performance.</p> <p>To align Executive Directors' interests to those of shareholders.</p> <p>To drive sustainable Company performance.</p> <p>To retain key executive talent.</p>	<p>The Committee makes an annual conditional award of shares to each Executive Director. Annual participation is subject to Committee approval.</p> <p>Measures, targets and their relative weightings are reviewed regularly by the Committee to ensure continuing alignment with strategic objectives and will be detailed in the relevant Annual Report on Remuneration.</p> <p>Performance is measured over a three-year period, starting at the beginning of the financial year in which awards are granted.</p> <p>An additional two-year post-vesting holding period will apply.</p> <p>Awards can vest in the form of shares, a nil-cost option or cash.</p> <p>Share awards made from 2012 are subject to clawback or malus for up to three years following award. Circumstances include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.</p> <p>Dividends are not payable on PSP awards prior to vesting.</p>	<p>Vesting is currently based on two performance measures, which have been chosen as they are clearly aligned with our strategic objectives:</p> <ul style="list-style-type: none"> – TSR; and – EPS growth. <p>To ensure continued alignment with the Company's strategic priorities, the Committee may, at its discretion, vary the measures and their weightings from time-to-time including the consideration of organic growth measures.</p> <p>The Committee reserves the right to adjust for the effects of divestments or major acquisitions from the EPS results, to ensure those results are in line with the primarily organic growth principles that support the EPS targets.</p>	200% of salary.
Employee Share Ownership Plan (ESOP)	<p>To offer all eligible UK-based employees the opportunity to build a shareholding in a tax-efficient way.</p> <p>To align Executive Director interests to those of shareholders.</p>	<p>Eligible UK Executive Directors are entitled to participate in an HMRC approved Share Incentive Plan known as the ESOP.</p> <p>Whilst not currently operated, if in the future employee share plans are offered outside the UK, eligible Executive Directors will be entitled to participate on the same basis as all other eligible employees.</p> <p>Awards granted under the ESOP are not subject to clawback or malus.</p> <p>The ESOP operates over a five-year period.</p>	N/A	<p>Maximum annual investment subject to HMRC limits or such lower sum as determined by the Board.</p> <p>Potential 1:1 matching share award from the Company and dividend shares (can be reinvested).</p> <p>If the ESOP (or an approved sub-plan) is offered outside the UK, Executive Directors will be subject to the same limitations as all other participants.</p>
Share ownership guidelines	To provide alignment with shareholder interests.	Executive Directors are required to accumulate, over a maximum period of five years, a shareholding in the Company worth 200% for the Group Chief Executive, and 125% for the other Executive Directors, and to maintain this level of shareholding whilst the Executive Director remains on the Board. The five-year accumulation period is reset if a higher maximum share ownership requirement is introduced but only in respect of such increased amount.	N/A	N/A

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Chairman and Non-Executive Directors				
Fees	To attract and retain high-calibre individuals, with appropriate experience or industry-related skills, by offering market competitive fee levels.	The Chairman is paid a single fee for all responsibilities. The Non-Executive Directors are paid a basic fee. The Chairmen of the main Board Committees and the Senior Independent Director are paid an additional fee to reflect their extra responsibilities. Fees for the Chairman and the Non-Executive Directors are reviewed annually by the Board, with reference to any change in the time commitment required, UK market levels and the average base salary increase across the wider workforce. The Chairman and the Non-Executive Directors do not participate in any annual bonus or incentive plans, pension schemes, healthcare arrangements, the Company's PSP or ESOP. The Company repays the reasonable expenses that the Chairman and the Non-Executive Directors incur in carrying out their duties as Directors.	N/A	The aggregate value of fees paid to the Chairman and Non-Executive Directors will not exceed the amount set out in the Articles of Association.

2.2 Notes to the Policy table

Changes to the Remuneration Policy

The proposed changes to the Remuneration Policy are as follows:

- AIP award: increase potential maximum award from 125% to 150% of salary;
- PSP award: increase potential maximum award from 100%-150% of salary to 200% of salary;
- PSP holding period: introduce a two-year post-vesting holding period (currently there is no holding period);
- share ownership requirements: increase share ownership requirements from at least 125% of salary for the Group Chief Executive and at least 100% of salary for the other Executive Directors to 200% of salary for the Group Chief Executive and 125% of salary for the other Executive Directors; and
- remove the Committee's discretion to grant one-off awards for recruitment or retention in exceptional circumstances; and
- reserve the Committee's right to adjust for the effects of divestments or major acquisitions from the EPS results, to ensure those results are in line with the primarily organic growth principles that support the EPS targets.

Additional details and an explanation of the changes can be found in the Statement by the Chairman of the Committee on pages 85 and 86.

Outstanding incentive awards

Details of outstanding incentive awards granted to Executive Directors prior to the Policy coming into force, including awards granted in 2016, and details of the performance targets are set out on pages 89 to 92 of the Annual Report on Remuneration 2016.

All incentive awards granted prior to this Policy coming into force will continue on their existing terms including the exercise of discretion to amend such awards.

Remuneration policy for other employees

The Company's approach to annual salary reviews is consistent across the Group, with consideration given to the scope of the role, level of experience, responsibility, individual performance and market pay levels. The most senior managers in the business (approximately 80 people globally) participate in bonus arrangements with similar targets, measures and relative weightings to the Executive Directors. Target and maximum potential values are lower and determined by the grade of the manager's role. Performance targets are based on an appropriate combination of Group, divisional and local operating company financial measures. Contractual terms and benefits for the wider workforce are subject to local employment legislation and best practice.

Measure selection and the target setting process

Measures are selected taking into account the key strategic priorities of the Company, shareholder expectations and factors that sit within an individual's span of control.

5. REMUNERATION

REMUNERATION POLICY REPORT 2017

CONTINUED

Targets are set with reference to internal and external forecasts to ensure that they are realistic, yet sufficiently stretching. An appropriate mix of long and short-term targets will be used, informed by the nature of the measure.

2.3 External directorships

Directors are permitted to hold external directorships in order to broaden their experience, to the benefit of the Company. Such appointments are subject to approval by the Board and the Director may retain any fees paid in respect of such directorships. The Board ensures compliance by Directors with Code provision B.3.

2.4 Approach to recruitment and promotion remuneration

When appointing external hires, promoting executives, or an Executive Director internally, the Committee will continue to act in the best interests of shareholders when determining remuneration, in line with the stated policy. The main elements of the Remuneration Policy for Executive Director appointments are:

- Base salary will be set on appointment taking into account the factors set out in the Policy table, but also the individual's experience. Depending on an individual's prior experience, the Committee may set salary below market norms, with the intention that it is realigned over time, typically two to three years, subject to performance in the role. In this situation, the Committee is permitted to exceed the "normal" rate of annual salary increase set out in the Policy table.
- On-going annual incentive pay opportunity will not exceed 350% of salary, in line with the maximums stated in the Policy table (up to 150% of salary for annual bonus and an award of up to 200% of salary under the PSP). In the year of appointment an off-cycle award under the PSP may be made by the Committee to ensure an immediate alignment of individual interests.
- In addition to the standard elements of remuneration, on the appointment of an external candidate, the Committee reserves the right to buy-out incentive awards that the individual has foregone by accepting the appointment, if appropriate. The terms of such awards would be informed by the amounts being forfeited and the associated terms (for example the extent to which the outstanding awards were subject to performance, the vehicles and the associated time horizons). Awards would be made either through the existing share plans or in accordance with the relevant provisions contained within the Listing Rules.
- When an internal appointment to the Board is made, any pre-existing obligations may be honoured by the Committee and payment will be permitted under this Remuneration Policy.
- For internal promotions, salary will be capped at that of the incumbent Group Chief Executive.

Details of the remuneration for any new Chairman or Executive Director appointed to the Board will be disclosed on the Group's website, www.spiraxsarcoengineering.com.

2.5 Service agreements and termination policy

The Company's policy on service agreements and termination arrangements for Executive Directors is set out below. Service agreements are designed to reflect the interests of the Company, as well as the individual concerned. Executive Directors' service agreements are kept at the Company's headquarters in Cheltenham.

In accordance with the Code and guidelines issued by institutional investors, Executive Directors have service agreements that are terminable by either the Company or the Executive Director on 12 months' notice. In the event of termination or resignation, and subject to business reasons, the Company would not necessarily hold the Executive Director to his or her full notice period. All Directors are subject to election (if newly appointed in the year) or re-election at the AGM.

Service agreements set out restrictions on the ability of the Executive Director to participate in businesses competing with those of the Group or to entice or solicit away from the Group any senior employees or to solicit/deal with clients of the Group or interfere with supply, in the 12 months following the cessation of employment.

Salary, pension and benefits are included in the agreements and are treated as described in the policy table on pages 100 to 103. There is no contractual entitlement to payment of an annual bonus or granting of an award under the PSP, until individual participation, level of award, measures and targets have been set for a particular year.

The Chairman and Non-Executive Directors do not have service agreements but serve the Company under letters of appointment, for an initial period of three years, subject to annual re-election at the AGM. Appointments may be terminated by the Company or individual with one month's notice.

Group Chief Executive and new appointments from 1st January 2013

The details of the service agreements of the Group Chief Executive and for new appointments to the Board are outlined below and comply with best practice. In the event of a material change in role, function or responsibilities, Executive Directors' agreements will be reviewed and will be expected to be updated to meet the requirements outlined below.

Notice period	12 months by the Executive Director and 12 months by the Company
Termination	<p>No payment if Executive Director commits a repudiatory breach of the service agreement or for gross misconduct or in certain circumstances.</p> <p>No additional termination payment if notice worked.</p> <p>If notice only part worked/part on garden leave, payment in respect of unexpired period of notice, otherwise 12 months' base salary only.</p> <p>Company discretion to pay in lieu of notice in lump sum or monthly except within 12 months of a change of control, when a lump sum will be paid.</p> <p>If paid monthly, payment will be reduced by the value of any salary, fees and benefits, excluding long-term incentives, earned in new paid employment in that period.</p> <p>No automatic entitlement to payments under the annual bonus or PSP. See page 106.</p> <p>Garden leave clause.</p> <p>Robust post-termination restrictions on confidentiality, non-compete, non-solicitation and non-interference with customers or suppliers.</p> <p>Service agreements may be terminated without notice and without payment of compensation on the occurrence of certain events, such as gross misconduct or financial misstatement.</p>
Clawback or malus	<p>Bonus payments and PSP awards are subject to clawback or malus for up to three years following award.</p> <p>Circumstances include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.</p>

Executive Directors' legacy agreements

Within the legacy agreements of Executive Directors, termination of agreements is subject to a 12 month notice period. Where payment is made in lieu of notice on termination, the payment of a sum in respect of lost future bonus opportunity (based on an average of the preceding three years' bonus payments) is subject to the Committee's discretion. The Committee has the power to reduce the amount to reflect performance on the part of the Executive Director that is considered by the Committee to be unsatisfactory. On termination of such an Executive Director's service agreement, the Committee will take into account the departing Executive Director's need to mitigate his or her loss when determining the amount of bonus. Payment will only be made at the discretion of the Committee after taking into account individual performance in order to ensure that there will be no "payments for failure". In any event, payments will be subject to clawback or malus provisions.

Executive Directors' service agreements may be terminated without notice and without payment of compensation on the occurrence of certain events, such as termination for gross misconduct or financial misstatement.

While the Executive Directors' service agreements include a provision to deal with termination on a change of control, in the event of an offer being made, shareholders have discretion to accept the offer or not. The decision to recommend acceptance, or not, is a matter for the Board, and the Committee is of the clear view that the change of control provision within the Executive Directors' service agreements would have no influence on the voting pattern of those Executive Directors. Executive Directors' legacy agreements are summarised in the table below.

Notice Period	12 months by the Executive Director and 12 months by the Company
Termination	<p>No payment if Executive Director commits a repudiatory breach of the service agreement or for gross misconduct or in certain circumstances.</p> <p>No additional termination payment if notice worked.</p> <p>If notice only part worked/part on garden leave, payment in respect of unexpired period of notice.</p> <p>Otherwise 12 months' base salary, the value of other benefits, plus the cost of pension credits or contributions for the period plus the average of the prior three years' annual bonus payments, with Committee discretion to reduce the amount of the bonus that would otherwise be calculated, to reflect performance on the part of the Executive Director that is considered by the Committee to be below the required standards, provided that termination by the Company does not occur within 12 months of a change of control.</p> <p>Committee discretion to pay in lump sum or monthly except within 12 months of a change of control when a lump sum will be paid.</p> <p>If paid monthly, payment will be reduced by the value of any salary, fees and benefits excluding long-term incentives, earned in new paid employment in that period.</p> <p>No automatic entitlement to payments under the current annual bonus or PSP. See page 106.</p> <p>Garden leave clause.</p> <p>Robust post-termination restrictions on confidentiality, non-compete, non-solicitation and non-interference with customers or suppliers.</p>
Clawback or malus	<p>Bonus payments and PSP awards are subject to clawback or malus for up to three years following award.</p> <p>Circumstances include financial misstatement, erroneous calculations determining bonus payments or gross misconduct.</p>

5. REMUNERATION

REMUNERATION POLICY REPORT 2017

CONTINUED

Treatment of leavers under the incentive plans

Whilst it is not an entitlement, it is expected that where an Executive Director is a “good leaver” (ie where the cessation of employment is due to death, disability, redundancy, retirement or the company business in which he/she works being disposed of or where the ending of employment is instigated by the Company and is not for cause), payments will be made under the annual bonus plan if performance targets are met subject to, and in accordance with, the plan rules. If the Executive Director is not a “good leaver” it is expected that no bonus will be paid.

The treatment of leavers under the PSP is determined in accordance with the shareholder approved PSP rules. Any awards granted within six months prior to termination (or the giving or receiving of notice) will lapse. Any awards granted six months or longer prior to termination of employment (but prior to the end of the performance period) will lapse unless the Executive Director is considered to be a “good leaver”.

In the case of a “good leaver” the award will vest on the termination date, or the normal vesting date, at the Committee’s discretion. This is subject to the satisfaction of the performance targets at that date and a pro-rata reduction in the number of shares to take account of the shortening of the performance period.

For awards granted on or after 1st March 2012, if the Executive Director is a “good leaver” where the ending of employment is not for cause, the number of shares vested may be reduced (including to zero) by the Committee in its absolute discretion.

If an Executive Director ceases employment (or notice is given) on or after the end of the performance period but prior to the date on which the Committee has determined the extent to which the award has vested, if the Executive Director is a “good leaver”, his/her award will be preserved and will be treated in the same way as if his/her employment had continued, whereas if the Executive Director is not a “good leaver”, his/her award will lapse on the earlier of his/her cessation of employment and the giving of notice.

In relation to the ESOP, as an HMRC approved plan, where an Executive Director leaves the treatment will be in line with the approved plan rules and HMRC guidance.

Change of control

Bonus: if termination occurs within 12 months of a change of control, the Executive Director is entitled to (i) a lump sum payment in lieu of notice and (ii) receive a full bonus payment calculated by reference to the average of the preceding three years’ bonus payments (without any reduction for performance).

PSP: the rules provide that in the event of a change of control, outstanding share-based awards will vest to the extent that performance targets are met at the date of the event. Any such vesting would generally be on a time pro-rated basis. The Committee may, at its discretion, increase the level of vesting if it believes that exceptional circumstances warrant such treatment.

2.6 Illustrations of application of the Remuneration Policy

Under the Remuneration Policy, a significant portion of remuneration is variable and depends on the Company’s performance. Below and overleaf we illustrate how the total pay opportunity for the Executive Directors varies under three performance scenarios: maximum, on target, and below threshold.

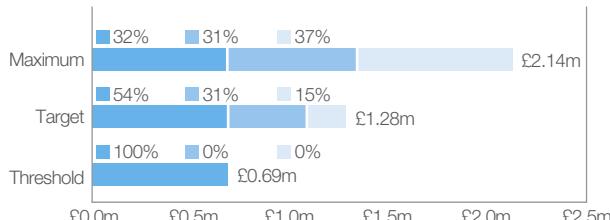
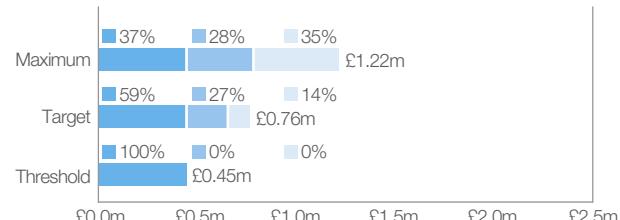
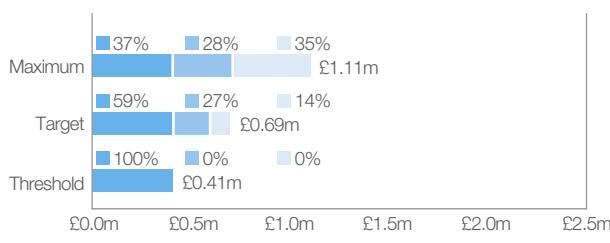
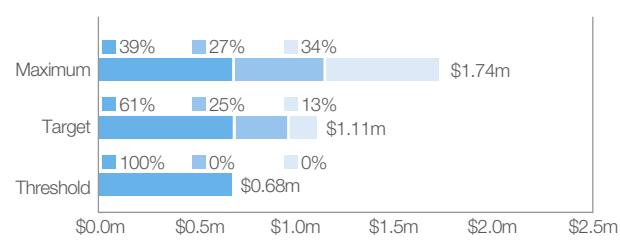
The scenarios for 2017, informed by the current application of our pay policy, are as follows:

Element

Fixed pay, benefits and ESOP	Fixed pay and ESOP does not vary with performance and comprises: – base salary effective 1st January 2017; – benefits value based on 2016 disclosure; – pension value (DB 2016: as reported; cash allowance: rate applied to 2017 salary); and – ESOP participation of up to £1,500 1:1 matching shares for eligible Executive Directors.
------------------------------	---

	Percentage of base salary		
	Below threshold	On target	Maximum
Annual bonus (% of salary)	0%	75% CEO / 60% ED	125% CEO / 100% ED
PSP ¹ (% of salary at award)	0%	37.5% CEO / 31.25% ED	150% CEO / 125% ED

¹ A level of 25% vesting for “on target” performance is equivalent to threshold performance under the PSP, which the Committee believes to be a fair assumption for on target performance given the approach taken to setting performance targets.

Nicholas Anderson (Group Chief Executive)**Kevin Boyd (Group Finance Director)****Neil Daws (Executive Director, EMEA)****Jay Whalen (Executive Director, WMFTG)**

■ Fixed ■ Annual bonus ■ PSP

2.7 Statement of consideration of employment conditions elsewhere in the Group

When determining the remuneration of Executive Directors, the Committee considers the pay of employees across the Group. When conducting the annual salary review, the average base salary increase awarded to the UK workforce and senior managers across the Group provides a key reference point when determining levels of increase for Executive Director remuneration. The Remuneration Policy was drawn up by the Committee without the need for any consultation with employees.

The Committee also determines the principles and policy of remuneration which shall apply to the Group's senior managers. The responsibility for determining precise compensation packages that meet local practice and performance targets lies with the Group Chief Executive and the responsible Executive Director.

To ensure consistency in Remuneration Policy across the Group and to encourage a performance culture, senior managers participate in the PSP. The Board believes that share ownership is an effective way of aligning the interests of managers and shareholders and to strengthen the development of the business.

2.8 Statement of consideration of shareholder views

In developing and reviewing the Company's Remuneration Policy for Executive Directors and other senior executives, the Committee seeks and takes into account the range of views of shareholders and institutional shareholder advisers. The Committee Chairman actively engages with major shareholders and institutional shareholder advisers when appropriate and takes into account their views when reviewing and implementing the Company's Remuneration Policy.

The Committee considers shareholder feedback received in relation to the AGM each year and guidance from institutional shareholder advisers more generally. This feedback, plus any additional feedback received during the year at meetings with shareholders, is considered as part of the Company's annual Remuneration Policy review. At the AGM in 2016, the advisory vote on the 2015 Annual Report on Remuneration received 97.2% in favour. At the AGM in 2014 the Remuneration Policy received 98.5% in favour.

In finalising the 2017 Remuneration Policy the views of shareholders and institutional shareholder advisers have shaped the:

- introduction of an additional two-year post-vesting holding period for PSP grants;
- rebalance of long-term and short-term compensation opportunities by way of the Director's PSP opportunity now being more substantive than the AIP;
- agreement to disclose AIP targets retrospectively;
- increase in share ownership requirements;
- removal of the Committee's discretion to grant one-off awards for recruitment or retention in exceptional circumstances;
- keeping of the PSP performance metrics under review, including the consideration of organic growth measures; and
- reserving of the Committee's right to adjust for the effects of divestments or major acquisitions from the EPS results, to ensure those results are in line with the primarily organic growth principles that support the EPS targets.

REGULATORY DISCLOSURES



**"At the heart of sustainable business practice and corporate responsibility
is compliance with both the letter and spirit of the law."**

Andy Robson,
General Counsel and Company Secretary

Principal activities

Spirax-Sarco Engineering plc is a multi-national engineering group that is domiciled and incorporated in the UK under registration number 596337 and which is tightly focused on its two niche businesses of steam system specialties and peristaltic pumps and associated fluid path technologies. An overview of our principal activities, by business, is given on pages 4 and 5 of the Strategic Report.

Future development

An indication of likely future developments in the Group is given in the Strategic Report.

Strategic Report

This is set out on the inside front cover to page 61 of the Annual Report.

Risk management and principal risks

A description of risk management and the principal risks facing the business is on pages 28 to 31.

Constructive use of AGM

We are delighted when our shareholders attend our AGM. Those who are unable to attend are encouraged to vote online or using the proxy card mailed to them.

In 2016, 61.43% of the proxy votes received were lodged electronically through the CREST system.

At the AGM, the Group Chief Executive will give a short presentation about the previous year and, more generally, about current trading and the Group's future

plans. The Chairman and other Board members are available to answer questions raised by shareholders. Shareholders are invited to vote on the resolutions by way of a polled vote. The results are announced instantaneously at the AGM using the Equiniti "Vote Now" polling system, and on the London Stock Exchange and the Group's website, www.spiraxsarcoengineering.com, shortly after the conclusion of the meeting. Following the AGM the Board is available to answer questions and meet informally with individual shareholders.

The Notice of Meeting convening the AGM, to be held on Tuesday, 9th May 2017, and an explanation of the resolutions sought, is set out in the Circular posted on our website and sent to shareholders in the format selected by them.

Results

The Group's results for the year have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union. They are set out in the Consolidated Income Statement which appears on page 120.

Dividend

The Directors are proposing the payment of a final dividend of 53.5p (2015: 48.2p) which, together with the interim dividend of 22.5p (2015: 20.8p), makes a total distribution for the year of 76.0p (2015: 69.0p). If approved at the AGM, the final dividend will be paid on 26th May 2017 to shareholders on the register at the close of business on 28th April 2017.

Directors' interests

The interests of the Directors in the share capital of Spirax-Sarco Engineering plc as at 31st December 2016 are set out on page 95.

Substantial shareholdings

The voting rights in the table have been notified to the Company under the requirements of the UK Listing Authority's Disclosure and Transparency Rules DTR 5, which represent 3% or more of the voting rights attached to issued shares in the Company as at 17th February 2017 and 31st December 2016. So far as can be ascertained, the holdings are beneficially held. There are no Controlling Founder Shareholders.

Directors' and Officers' insurance

The Company provides Directors' and Officers' Insurance for Board members, Directors of the Group's operating companies and senior officers.

The Company has also provided each Director with an indemnity to the extent permitted by law in respect of the liabilities incurred as a result of their holding office as a Director of the Company.

Substantial shareholdings	As at 31.12.16		As at 17.02.17	
	Number of Ordinary shares	% of issued share capital	Number of Ordinary shares	% of issued share capital
MFS Investment Management	6,437,780	8.8%	6,401,377	8.7%
APG Asset Management NV	4,000,000	5.4%	4,000,000	5.4%
Schroders plc	2,889,709	3.9%	3,143,744	4.3%
Mondrian Investment Partners Ltd	2,645,630	3.6%	2,728,778	3.7%
Allianz Global Investors	2,316,706	3.2%	2,301,690	3.1%
Fiera Capital Corporation	2,146,541	2.9%	2,254,103	3.1%
Fidelity Management & Research Company	2,172,118	3.0%	1,629,514	2.2%

Appointment and replacement of Directors

The appointment and replacement of Directors is governed by the Company's Articles of Association, the Code, the Companies Act 2006 and related legislation. As previously announced, David Meredith retired as Group Finance Director on 10th May 2016 and was succeeded by Kevin Boyd on 11th May 2016, Jane Kingston was appointed as an independent Non-Executive Director on 1st September 2016, and Remuneration Committee Chairman on 1st November 2016, and Krishnamurthy Rajagopal passed away on 10th November 2016.

All Directors will seek election or re-election (as the case may be) at the AGM. The Directors stand for election or re-election on an annual basis at each AGM, in accordance with the Code. The Board considers that all Directors standing for election or re-election continue to perform effectively and demonstrate commitment to their roles. In addition, the Board considers that all Directors have the necessary skills and experience, as set out in their biographies on pages 64 and 65.

Conflicts of interest

Under the Companies Act 2006 and the provisions of the Company's Articles of Association, the Board is required to consider potential conflicts of interest. The Company has established formal procedures for the disclosure and review of any conflicts, or potential conflicts, of interest which the Directors may have and for the authorisation of such matters of conflict by the Board. To this end the Board considers and, if appropriate, authorises any conflicts, or potential conflicts, of interest as they arise and reviews any such authorisation annually. New Directors are required to declare any conflicts, or potential conflicts, of interest to the Board at the first Board meeting after his or her appointment. The Board believes that the procedures established to deal with conflicts of interest are operating effectively.

Articles of Association

The Company's Articles of Association are available from Companies House in the UK or by writing to the General Counsel and Company Secretary at the Group's registered office in Cheltenham. Amendments to the Articles of Association can only be made by means of a special resolution at a general meeting of the shareholders of the Company.

Share capital

As at 24th February 2017 there were no treasury shares held by the Company. Details of shares issued during the year are set out in Note 21 on page 144.

As at 31st December 2016 the Company's share capital was made up of Ordinary shares which each carry one vote at general meetings of the Company. Except as set out in the Articles of Association or in applicable legislation, there are no restrictions on the

transfer of shares in the Company and there are no restrictions on the voting rights in the Company's shares.

The Company is not aware of any agreements entered into between any shareholders in the Company which restrict the transfer of shares or the exercise of any voting rights attached to the shares.

Powers of the Directors and purchase of own shares

Subject to the provisions of the Articles of Association, the Directors may exercise all the powers of the Company. A shareholder's authority for the purchase by the Company of a maximum of 10% of its own shares was in existence during the year. However, the Company did not purchase any of its shares during that time. This authority expires at the forthcoming AGM and it is proposed that a similar authority be approved. The total number of shares in issue as at 31st December 2016 was 73,526,651.

PSP and Employee Benefit Trust

In December 2016 the Company instructed Computershare Trustees (Jersey) Limited, as trustee of the Spirax-Sarco Engineering Employee Benefit Trust (EBT), to purchase 40,000 shares for the purpose of satisfying the vesting of awards and options granted to employees under the various Company schemes. The number of shares held in the EBT at 31st December 2016 was 87,425.

Significant contracts

The Company is not a party to any significant agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid.

There are provisions in the Executive Directors' service agreements which state that following a takeover or change of control, if the Executive Director's employment is terminated then both salary/benefits and a sum in respect of lost future bonus opportunity become payable as a lump sum.

The Strategic Report contains all the information required to comply with Section 414(c) of the Companies Act 2006 and there are no contractual arrangements that need to be disclosed which are essential to the business of the Group.

Disclosure of information to the auditor

As at the date of the approval of this Annual Report, as far as each Director is aware, there is no relevant audit information of which the Company's auditor is unaware.

Each Director has taken all such steps as he or she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

Auditor

The Company's auditor throughout the period of this Annual Report was Deloitte LLP, who was appointed on 20th May 2014.

Deloitte LLP has expressed its willingness to continue in office as auditor and a resolution to re-appoint Deloitte LLP will be proposed at the forthcoming AGM.

Research and development

The Group continues to devote significant resources to the research and development and the updating and expansion of its range of products in order to remain at the forefront of its world markets. The Group Steam Specialties R&D function, which is based in Cheltenham, and the WMFTG R&D function, located in Falmouth, are tasked with improving the Group's pipeline of new products, decreasing the time to launch, expanding the Group's addressable market and realising additional sales. Further information on the expenditure on R&D is contained in Note 1 on page 126. The amount of R&D expenditure capitalised, and the amount amortised, in the year, are given in Note 14 on page 138.

Treasury and foreign exchange

The Group has in place appropriate treasury policies and procedures, which are approved by the Board. The treasury function manages interest rates for both borrowings and cash deposits for the Group and is also responsible for ensuring there is sufficient headroom against any banking covenants contained within its credit facilities, and for ensuring there are appropriate facilities available to meet the Group's strategic plans.

In order to mitigate and manage exchange rate risk, the Group routinely enters into forward contracts and continues to monitor exchange rate risk in respect of foreign currency exposures.

All these treasury policies and procedures are regularly monitored and reviewed. It is the Group's policy not to undertake speculative transactions which create additional exposures over and above those arising from normal trading activity.

Political donations

The Group has a policy of not making political donations and no political donations were made during the year (2015: nil).

Greenhouse gas emissions

Details of our greenhouse gas emissions can be found on page 59 of the Sustainability Report.

Going concern

The Group's business activities, together with the main trends and factors likely to affect its future development, performance and position, and the financial position of the Group, its cash flows, liquidity position and borrowing facilities, are set out in the Financial Review on pages 48 to 51. In addition Note 28 on page 153 includes the Group's objectives, policies

REGULATORY DISCLOSURES

CONTINUED

and processes for managing its capital, its financial risk management objectives, its financial instruments and hedging activities, its exposures to credit risk and liquidity risk.

The Group has considerable financial resources together with contracts with a diverse range of customers and suppliers across different geographic areas and industries. No one customer accounts for more than 1% of Group turnover.

As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully despite the current uncertain economic outlook.

The Directors, having made appropriate enquiries, consider that the Company and the Group have adequate resources to continue in operational existence and that the Directors intend to do so, for at least one year from the date the Financial Statements were signed, and that therefore it is appropriate to adopt the going concern basis in preparing the Annual Report.

Pages 108 to 110 form the Directors' Report for the purposes of the Companies Act 2006.

The Strategic Report and the Directors' Report were approved by the Board on 8th March 2017.

Viability statement

In accordance with provision C.2.2 of the UK Corporate Governance Code 2016, the Directors have assessed the viability of the Group over a three-year period, taking into account the Group's current financial position, business strategy, the Board's risk appetite and the potential impacts of the principal risks, outlined on pages 28 to 31 of the Strategic Report, and the Risk Appetite Statement on page 81. Based on this assessment, the

Directors confirm that they have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31st December 2019.

The Board believes that a three-year viability assessment period is appropriate as the timeframe is covered by the Group's strategic plan; takes into account the nature of the Group's principal risks, a number of which are external and have the potential to impact over short time periods; and is in alignment with the Group's bank loan terms. While the Board has no reason to believe that the Group will not be viable over a longer period, given the inherent uncertainty involved, the Board believes that a three-year period presents readers of the Annual Report with a reasonable degree of confidence while still providing a longer-term perspective.

In making their assessment, the Directors completed a robust assessment of the principal risks facing the Group, as set out on pages 30 and 31, including those that would threaten its business model, future performance, solvency or liquidity, and undertook sensitivity and stress testing to determine the potential impacts of the occurrence of one or more of the principal risks on sales, profit, margin and cash. In addition to completing an impact assessment of the principal risks, the Directors considered the probability of occurrence of the principal risks, the Company's ability to control them and the effectiveness of mitigating actions.

The Group's resilient business model has proven strong and defensive in the long term and has enabled the business to prosper, even in challenging market conditions. The diversity

of our end user markets and customers, broad product range, wide geographic spread, high replacement revenue streams and large base of installed equipment worldwide, together with our effective direct sales business model, enhances the viability of the Group in the face of adverse economic conditions and/or political uncertainty, as does our ability to self-generate business through identifying solutions to our customers' difficult process challenges and our ability to adjust our cost base.

Whilst no Board can ever fully foresee all possible risks facing the business in the future, the Directors are of the view that a robust assessment was undertaken of the severe but plausible scenarios that may feasibly impact upon the business over the next three years. Furthermore, the Board remains confident in the Group's risk management process and the risk mitigation actions taken to address identified risks.

Scope of the reporting in this Annual Report

The Board has prepared a Strategic Report (including the Chairman's Statement and the Group Chief Executive's Report) which provides an overview of the development and performance of the Company's business in the year ended 31st December 2016 and its position at the end of that year, and which covers likely future developments in the business of the Company and the Group.

For the purposes of compliance with DTR 4.1.5 R(2) and DTR 4.1.8 R, the required content of the management report can be found in the Strategic Report and these Regulatory disclosures, including the sections of the Annual Report incorporated by reference.

For the purposes of LR 9.8.4C R, the information required to be disclosed by LR 9.8.4 R can be found in the following locations:

Section	Topic	Location
(1)	Interest capitalised	Not applicable
(2)	Publication of unaudited financial information	Not applicable
(4)	Details of long-term incentive schemes	Remuneration Report, pages 91 and 92
(5)	Waiver of emoluments by a Director	Not applicable
(6)	Waiver of future emoluments by a Director	Not applicable
(7)	Non pre-emptive issues of equity for cash	Not applicable
(8)	Item (7) in relation to major subsidiary undertakings	Not applicable
(9)	Parent participation in a placing by a listed subsidiary	Not applicable
(10)	Contracts of significance	Regulatory Disclosures, page 109
(11)	Provision of services by a controlling shareholder	Not applicable
(12)	Shareholder waivers of dividends	Regulatory Disclosures, page 109
(13)	Shareholder waivers of future dividends	Not applicable
(14)	Agreements with controlling shareholders	Not applicable

Andy Robson

General Counsel and Company Secretary

8th March 2017

Spirax-Sarco Engineering plc

Registered no. 596337

STATEMENT OF DIRECTORS' RESPONSIBILITIES



"Our Annual Report is fair, balanced and understandable and provides a true and fair view of our Group."

Kevin Boyd,
Group Finance Director

Board of Directors

The Directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare consolidated Group and Parent Company Financial Statements for each financial year in accordance with IFRS as adopted by the EU and applicable law.

In addition, by law the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of their profit or loss for that period. In preparing these Financial Statements, the Directors are required to:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Company's ability to continue as a going concern.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its Financial Statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Group's website, www.spiraxsarcoengineering.com. Legislation in the UK governing the preparation and dissemination of Financial Statements may differ from legislation in other jurisdictions.

Cautionary statement

All statements other than statements of historical fact included in this document, including those regarding the financial condition, results, operations and businesses of Spirax-Sarco Engineering plc (its strategy, plans and objectives), are forward-looking statements. These forward-looking statements, reflect management's assumptions made on the basis of information available to it at this time. They involve known and unknown risks, uncertainties and other important factors which could cause the actual results, performance or achievements of Spirax-Sarco Engineering plc to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Spirax-Sarco Engineering plc and its Directors accept no liability to third parties in respect of this Report save as would arise under English law.

Any liability to a person who has demonstrated reliance on any untrue or misleading statement or omission shall be determined in accordance with schedule 10A of the Financial Services and Markets Act 2000. Schedule 10A contains limits on the liability of the Directors of Spirax-Sarco Engineering plc and their liability is solely to Spirax-Sarco Engineering plc.

Responsibility statement

We confirm that to the best of our knowledge:

- the Financial Statements, prepared in accordance with IFRS as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole;
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- the Annual Report 2016 taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's performance, business model and strategy.

This responsibility statement was approved by the Board of Directors on 8th March 2017 and is signed on its behalf by:

Kevin Boyd
Group Finance Director



FINANCIAL STATEMENTS

Independent Auditor's Report	114
Consolidated Statement of Financial Position	119
Consolidated Income Statement	120
Consolidated Statement of Comprehensive Income	121
Consolidated Statement of Changes in Equity	121
Consolidated Statement of Cash Flows	123
Notes to the Consolidated Financial Statements	124
Company Statement of Financial Position	160
Company Statement of Changes in Equity	161
Notes to the Company Financial Statements	162



Kevin Boyd, Group Finance Director and
John Senior, Group Financial Controller

INDEPENDENT AUDITOR'S REPORT

to the members of Spirax-Sarco Engineering plc only

Opinion on Financial Statements of Spirax-Sarco Engineering plc

In our opinion:

- the Financial Statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31st December 2016 and of the Group's profit for the year then ended;
- the Group Financial Statements have been properly prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union;
- the Parent Company Financial Statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including FRS 101 "Reduced Disclosure Framework"; and
- the Financial Statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group Financial Statements, Article 4 of the IAS Regulation.

The Financial Statements that we have audited comprise:

- the Consolidated Income Statement;
- the Consolidated Statement of Comprehensive Income;
- the Consolidated and Company Statements of Financial Position;
- the Consolidated Cash Flow Statement;
- the Consolidated and Company Statements of Changes in Equity;
- the Statement of Accounting Policies; and
- the related Notes 1 to 28 to the Consolidated Financial Statements and 1 to 10 for the Company Financial Statements.

The financial reporting framework that has been applied in the preparation of the Group Financial Statements is applicable law and IFRS as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the Parent Company Financial Statements is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 101 "Reduced Disclosure Framework".

Summary of our audit approach

Key risks

The key risks that we identified in the current year were:

- Revenue recognition
- Inventory obsolescence
- Defined benefit pension liability valuation

Materiality

We determined materiality for the Group to be £7.8m (2015: £7.0m), which is 5% (2015: 5%) of statutory profit before tax.

Scoping

We focused our Group audit scope primarily on the audit work at 21 (2015: 24) components. These components represent the principal business units and account for 90% (2015: 85%) of the Group's total assets, 69% (2015: 73%) of the Group's revenue and 71% (2015: 75%) of the Group's profit before tax.

Significant changes in our approach

Last year our Report included a goodwill impairment risk in respect of key assumptions and assertions used by management to support their assessment of the carrying value of goodwill. Whilst still an area of audit focus, this risk is not included in our Report this year. There is sufficient headroom in management's impairment calculations to reduce the sensitivity of key assumptions and therefore the risk of impairment is not considered to be a key risk for the Group Financial Statements.

Going concern and the Directors' assessment of the principal risks that would threaten the solvency or liquidity of the Group

As required by the Listing Rules we have reviewed the Directors' Statement regarding the appropriateness of the going concern basis of accounting contained within Regulatory Disclosures section of the Governance Report to the Financial Statements and the Directors' Statement on the longer-term viability of the Group contained within Regulatory Disclosures section of the Governance Report on pages 108 to 110.

We are required to state whether we have anything material to add or draw attention to in relation to:

- the Directors' confirmation on page 109 to 111 that they have carried out a robust assessment of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity;
- the disclosures on pages 28 to 31 that describe those risks and explain how they are being managed or mitigated;
- the Directors' statement in Note 1 to the Financial Statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's ability to continue to do so over a period of at least 12 months from the date of approval of the Financial Statements; and
- the Directors' explanation on page 109 to 110 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We confirm that we have nothing material to add or draw attention to in respect of these matters.

We agreed with the Directors' adoption of the going concern basis of accounting and we did not identify any such material uncertainties. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's ability to continue as a going concern.

Independence

We are required to comply with the Financial Reporting Council's Ethical Standards for Auditors and confirm that we are independent of the Group and we have fulfilled our other ethical responsibilities in accordance with those standards.

We confirm that we are independent of the Group and we have fulfilled our other ethical responsibilities in accordance with those standards. We also confirm we have not provided any of the prohibited non-audit services referred to in those standards.

Our assessment of risks of material misstatement

The assessed risks of material misstatement described below are those that had the greatest effect on our audit strategy, the allocation of resources in the audit and directing the efforts of the engagement team.

Revenue recognition

Risk description	<p>There is significant volume of trade in the final quarter of the year in certain components. The risk in revenue recognition focuses on the recognition of revenue in reference to contracted shipping terms and the transfer of ownership for product despatch and delivery spanning the year end.</p> <p>There is also a focus on any significant new contracts to determine whether any specific alternative revenue recognition policies are required.</p> <p>Refer to Note 1 for the Group's revenue recognition policy and the significant issues section of the Audit Committee Report.</p>
How the scope of our audit responded to the risk	<p>We performed walkthroughs to understand the adequacy of the design and implementation of the controls relating to the revenue cycle. At significant components, we map the end-to-end controls and processes in place.</p> <p>We reviewed the product despatch cycle and revenue recognition profile across the year-end period and sampled a selection of items confirming the date of transfer of ownership was in line with the revenue recognition date in accordance with the terms of trade with customers. We focused our procedures on those components with a significant volume of trade in the final quarter.</p> <p>We reviewed a sample of material new contracts to determine the appropriateness of the revenue recognition.</p>
Key observations	From the work performed above we are satisfied revenue recognition for trade in the month of December and significant new contracts is appropriate.

INDEPENDENT AUDITOR'S REPORT

continued

Inventory obsolescence

Risk description	Inventory of £112.5m at 31st December 2016 (31st December 2015: £92.5m) is a material balance for the Group. There is risk surrounding the obsolescence of inventory in niche markets and industries where local demand fluctuates over periods. There are judgements required in determining inventory provisions as they require assessment based on past and future product usage and whether the provision is adequate to cover any obsolescence. The risk has been focused, for those components with the most significant inventory balances, on the accuracy of the calculation, the accuracy and appropriateness of the policy rates and the appropriateness of any manual adjustments.
	Refer to Note 1 for the Group's inventory policy, Note 16 for the financial disclosure and the significant issues section of the Audit Committee Report.
How the scope of our audit responded to the risk	We compared the methodology applied in calculating the inventory obsolescence provisions to the Group's policy and we challenged management's judgement of the adequacy of the policy by reviewing the level of provision held across the Group. We tested a sample of provision calculations by recalculating the provision, and verified the accuracy of usage data in the calculation to underlying documentation. We investigated manual override to the mechanical application of the Group inventory obsolescence provisioning policy and, where applicable, obtained evidence such as the order book or post year-end orders or sales to support any significant adjustments. We also considered the historical accuracy of management's provisioning for inventory through a retrospective review of the level of provision recorded in prior years compared to the actual levels of stock written off. We performed additional analytical procedures over the component with the highest inventory balance.

Key observations

From the work performed above we concur that the level of inventory provisions is appropriate.

Defined benefit pension liability valuation

Risk description	At 31st December 2016 the retirement benefit liability recognised in the Statement of Financial Position was £520.3m (2015: £419.6m). There is a risk relating to the judgements made by management in valuing the defined benefit pension liabilities including the use of key model input assumptions specifically the discount rate, mortality assumption and inflation level. These variables can have a material impact in calculating the quantum of the retirement benefit liability.
	Refer to Note 1 for the Group's policy on defined benefit plans, Note 24 for the financial disclosure including the key assumptions used in the defined benefit pension plan valuation and the significant issues section of the Audit Committee Report.
How the scope of our audit responded to the risk	We used our internal actuarial experts to assess the key assumptions applied in determining the pension obligations for the five main schemes, and determined whether the key assumptions are reasonable. Testing covered 97% of defined benefit pension liabilities. Our assessment included reviewing available yield curves and inflation and mortality data to recalculate a reasonable benchmark for the key assumptions. For the UK schemes, we challenged management to understand the sensitivity of changes in key assumptions and quantify the impact of illustrative benchmark rates that could be used in their calculation. Additionally we benchmarked the key assumptions against other listed companies to check for any outliers in the data used.

Key observations

From the work performed above we are satisfied that the key assumptions applied in respect of the valuation of the scheme assets and liabilities are appropriate.

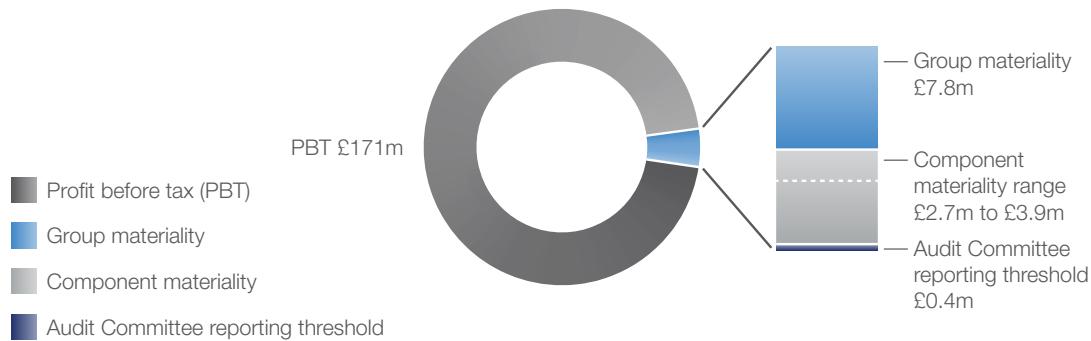
These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Our application of materiality

We define materiality as the magnitude of misstatement in the Financial Statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the Financial Statements as a whole as follows:

Group materiality	£7.8m (2015: £7.0m).
Basis for determining materiality	Less than 5% of statutory pre-tax profit for both 2016 and 2015.
Rationale for the benchmark applied	Statutory profit before tax was used as the benchmark for determining materiality as this is considered to be a key benchmark used by investors.



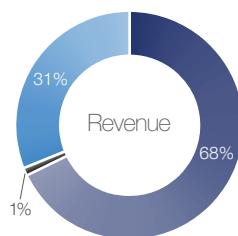
We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £390,000 (2015: £139,000), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We revised the level at which we report to the Audit Committee in line with market practice. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the Financial Statements.

An overview of the scope of our audit

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including Group-wide controls, and assessing the risks of material misstatement at the Group level. Based on that assessment, we focused our Group audit scope primarily on the audit work at 21 (2015: 24) components. 20 (2015: 20) of these were subject to a full audit, whilst the remaining component (2015: 4 components) was subject to specified audit procedures where the extent of our testing was based on our assessment of the risks of material misstatement and of the materiality of the Group's operations at those components. These components represent the principal business units and account for 90% (2015: 88%) of the Group's total assets, 69% (2015: 74%) of the Group's revenue and 71% (2015: 75%) of the Group's profit before tax. They were also selected to provide an appropriate basis for undertaking audit work to address the risks of material misstatement identified above. Our audit work at the components was executed at levels of materiality applicable to each individual entity which were lower than Group materiality and ranged from £2.7m to £3.9m (2015: £2.4m to £3.5m).

At the Parent entity level we also tested the consolidation process and carried out analytical procedures to confirm our conclusion that there were no significant risks of material misstatement of the aggregated financial information of the remaining components not subject to audit or audit of specified account balances.

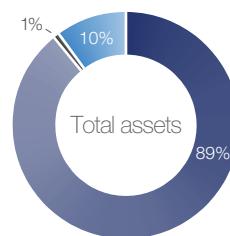
The Group audit team continued to follow a programme of planned visits that has been designed so that a senior member of the Group audit team visits each of the key components where the Group audit scope was focused at least once every three years and the most significant of them at least once a year. In the current year and prior year we visited the UK, USA, China and Korean components. In the current year we visited Italy and France and in the prior year we visited Germany, Brazil and Argentina. As part of these visits meetings were held with both component management and the component audit team.



- Full audit scope
- Specified audit procedures
- Review at Group level



- Full audit scope
- Specified audit procedures
- Review at Group level



- Full audit scope
- Specified audit procedures
- Review at Group level

INDEPENDENT AUDITOR'S REPORT

continued

Opinion on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006;
- the information given in the Strategic Report and the Directors' Report for the financial year for which the Financial Statements are prepared is consistent with the Financial Statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report and the Directors' Report.

Matters on which we are required to report by exception

Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company Financial Statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of Directors' remuneration have not been made or the part of the Directors' Remuneration Report to be audited is not in agreement with the accounting records and returns.

We have nothing to report arising from these matters.

Corporate Governance Statement

Under the Listing Rules we are also required to review part of the Corporate Governance Statement relating to the Company's compliance with certain provisions of the UK Corporate Governance Code.

We have nothing to report arising from our review.

Our duty to read other information in the Annual Report

Under International Standards on Auditing (UK and Ireland), we are required to report to you if, in our opinion, information in the Annual Report is:

We confirm that we have not identified any such inconsistencies or misleading statements.

- materially inconsistent with the information in the audited Financial Statements; or
- apparently materially incorrect based on, or materially inconsistent with, our knowledge of the Group acquired in the course of performing our audit; or
- otherwise misleading.

In particular, we are required to consider whether we have identified any inconsistencies between our knowledge acquired during the audit and the Directors' statement that they consider the Annual Report is fair, balanced and understandable and whether the Annual Report appropriately discloses those matters that we communicated to the Audit Committee which we consider should have been disclosed.

Respective responsibilities of Directors and Auditor

As explained more fully in the Directors' Responsibilities Statement, the Directors are responsible for the preparation of the Financial Statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the Financial Statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). We also comply with International Standard on Quality Control 1 (UK and Ireland). Our audit methodology and tools aim to ensure that our quality control procedures are effective, understood and applied. Our quality controls and systems include our dedicated professional standards review team and independent partner reviews.

This Report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an Auditor's Report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this Report, or for the opinions we have formed.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the Financial Statements sufficient to give reasonable assurance that the Financial Statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Group's and the Parent Company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Directors; and the overall presentation of the Financial Statements. In addition, we read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited Financial Statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our Report.

Mark Mullins FCA (Senior Statutory Auditor)

for and on behalf of Deloitte LLP

Chartered Accountants and Statutory Auditor

London, United Kingdom

8th March 2017

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
at 31st December 2016

	Notes	2016 £m	2015 £m
Assets			
Non-current assets			
Property, plant and equipment	13	201.8	169.9
Goodwill	14	88.5	54.1
Other intangible assets	14	81.2	54.8
Prepayments		5.9	5.5
Investment in Associate	12	—	0.1
Deferred tax assets	15	36.5	33.0
		413.9	317.4
Current assets			
Inventories	16	112.5	92.5
Trade receivables	28	185.5	152.1
Other current assets	17	21.7	20.4
Taxation recoverable		11.2	9.5
Cash and cash equivalents	25	119.2	99.8
		450.1	374.3
Total assets		864.0	691.7
Equity and liabilities			
Current liabilities			
Trade and other payables	18	107.8	84.3
Provisions	20	2.2	—
Bank overdrafts	25	0.4	3.9
Short-term borrowings	25	33.0	10.1
Current portion of long-term borrowings	25	0.2	0.3
Current tax payable		18.6	21.1
		162.2	119.7
Net current assets		287.9	254.6
Non-current liabilities			
Long-term borrowings	25	58.2	80.7
Deferred tax liabilities	15	21.5	17.7
Post-retirement benefits	24	94.2	73.7
Provisions	20	2.0	1.2
Long-term payables		1.5	0.4
		177.4	173.7
Total liabilities		339.6	293.4
Net assets	2/3	524.4	398.3
Equity			
Share capital	21	19.8	19.7
Share premium account		72.7	69.7
Other reserves	21	44.6	(18.7)
Retained earnings		386.3	326.8
Equity shareholders' funds		523.4	397.5
Non-controlling interest		1.0	0.8
Total equity		524.4	398.3
Total equity and liabilities		864.0	691.7

These Financial Statements of Spirax-Sarco Engineering plc, company number 00596337 were approved by the Board of Directors and authorised for issue on 8th March 2017 and signed on its behalf by:

N.J. Anderson K.J. Boyd Directors

CONSOLIDATED INCOME STATEMENT
for the year ended 31st December 2016

	Notes	Adjusted 2016 £m	Adjustments 2016 £m	Total 2016 £m	Adjusted 2015 £m	Adjustments 2015 £m	Total 2015 £m
Revenue	3	757.4	–	757.4	667.2	–	667.2
Operating costs	4	(576.8)	(6.5)	(583.3)	(514.8)	(9.6)	(524.4)
Operating profit	2/3	180.6	(6.5)	174.1	152.4	(9.6)	142.8
Financial expenses		(4.0)	–	(4.0)	(3.6)	–	(3.6)
Financial income		1.4	–	1.4	2.1	–	2.1
Net financing expense	6	(2.6)	–	(2.6)	(1.5)	–	(1.5)
Share of profit of Associates		(0.1)	–	(0.1)	0.2	(1.8)	(1.6)
Profit before taxation	7	177.9	(6.5)	171.4	151.1	(11.4)	139.7
Taxation	9	(51.8)	1.7	(50.1)	(45.0)	2.0	(43.0)
Profit for the period		126.1	(4.8)	121.3	106.1	(9.4)	96.7
Attributable to:							
Equity shareholders		125.9	(4.8)	121.1	105.9	(9.4)	96.5
Non-controlling interest		0.2	–	0.2	0.2	–	0.2
Profit for the period		126.1	(4.8)	121.3	106.1	(9.4)	96.7
Earnings per share	2/10						
Basic earnings per share		171.5p		165.0p	142.6p		129.9p
Diluted earnings per share		171.0p		164.5p	141.9p		129.4p
Dividends	11						
Dividends per share				76.0p			69.0p
Dividends paid during the year (per share)				70.7p			185.8p

Adjusted figures exclude certain non-operational items, as set out and explained in the Financial Review and as detailed in Notes 2 and 3.
All amounts relate to continuing operations.

The Notes on pages 124 to 158 form an integral part of the Financial Statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
for the year ended 31st December 2016

	Notes	2016 £m	2015 £m
Profit for the year		121.3	96.7
Items that will not be reclassified to profit or loss:			
Remeasurement (loss)/gain on post-retirement benefits	24	(10.0)	5.7
Deferred tax on remeasurement (gain)/loss on post-retirement benefits	24	1.9	(0.6)
		(8.1)	5.1
Items that may be reclassified subsequently to profit or loss:			
Foreign exchange translation differences	21	61.6	(14.1)
Non-controlling interest foreign exchange translation differences		0.2	–
Profit on cash flow hedges net of tax	28	0.4	–
		62.2	(14.1)
Total comprehensive income for the year		175.4	87.7
Attributable to:			
Equity shareholders		175.0	87.5
Non-controlling interest		0.4	0.2
Total comprehensive income for the year		175.4	87.7

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
for the year ended 31st December 2016

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
Balance at 1st January 2016	19.7	69.7	(18.7)	326.8	397.5	0.8	398.3
Profit for the year	–	–	–	121.1	121.1	0.2	121.3
Other comprehensive (expense)/income:							
Foreign exchange translation differences	–	–	61.6	–	61.6	0.2	61.8
Remeasurement loss on post-retirement benefits	–	–	–	(10.0)	(10.0)	–	(10.0)
Deferred tax on remeasurement loss on post-retirement benefits	–	–	–	1.9	1.9	–	1.9
Profit on cash flow hedges reserve	–	–	0.4	–	0.4	–	0.4
Total other comprehensive income/(expense) for the year	–	–	62.0	(8.1)	53.9	0.2	54.1
Total comprehensive income for the year	–	–	62.0	113.0	175.0	0.4	175.4
Contributions by and distributions to owners of the Company:							
Dividends paid	–	–	–	(51.9)	(51.9)	(0.2)	(52.1)
Equity settled share plans net of tax	–	–	–	(1.6)	(1.6)	–	(1.6)
Issue of share capital	–	3.0	–	–	3.0	–	3.0
Employee Benefit Trust shares	0.1	–	1.3	–	1.4	–	1.4
Balance at 31st December 2016	19.8	72.7	44.6	386.3	523.4	1.0	524.4

Other reserves represent the Group's Translation, Cash flow hedges, Capital redemption and Employee Benefit Trust reserves (see Note 21).

The non-controlling interest is a 2.5% share of Spirax-Sarco (Korea) Ltd held by employee shareholders.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
for the year ended 31st December 2015

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Equity shareholders' funds £m	Non- controlling interest £m	Total equity £m
Balance at 1st January 2015	19.6	65.1	(6.5)	362.8	441.0	0.9	441.9
Profit for the year	–	–	–	96.6	96.6	0.1	96.7
Other comprehensive (expense)/income:							
Foreign exchange translation differences	–	–	(14.1)	–	(14.1)	–	(14.1)
Remeasurement profit on post-retirement benefits	–	–	–	5.7	5.7	–	5.7
Deferred tax on remeasurement profit on post-retirement benefits	–	–	–	(0.6)	(0.6)	–	(0.6)
Total other comprehensive income/(expense) for the year	–	–	(14.1)	5.1	(9.0)	–	(9.0)
Total comprehensive income/(expense) for the year	–	–	(14.1)	101.7	87.6	0.1	87.7
Contributions by and distributions to owners of the Company:							
Dividends paid	–	–	–	(140.3)	(140.3)	(0.2)	(140.5)
Equity settled share plans net of tax	–	–	–	2.6	2.6	–	2.6
Issue of share capital	0.1	4.6	–	–	4.7	–	4.7
Employee Benefit Trust shares	–	–	1.9	–	1.9	–	1.9
Balance at 31st December 2015	19.7	69.7	(18.7)	326.8	397.5	0.8	398.3

CONSOLIDATED STATEMENT OF CASH FLOWS
for the year ended 31st December 2016

	Notes	2016 £m	2015* £m
Cash flows from operating activities			
Profit before taxation		171.4	139.7
Depreciation, amortisation and impairment	3/4	33.1	29.3
Profit on disposal of fixed assets	7	(1.5)	(0.5)
Contribution from Associates		0.1	2.0
Cash payments to the pension schemes less than the charge to operating profit		1.6	1.2
Equity settled share plans	24	1.9	3.3
Net finance expense	6	2.6	1.5
Operating cash flow before changes in working capital and provisions		209.2	176.5
Change in trade and other receivables		(4.7)	(1.9)
Change in inventories		0.3	3.5
Change in provisions		2.3	0.7
Change in trade and other payables		8.7	(3.8)
Cash generated from operations		215.8	175.0
Interest paid		(1.4)	(1.3)
Income taxes paid		(56.5)	(43.4)
Net cash from operating activities		157.9	130.3
Cash flows from investing activities			
Purchase of property, plant and equipment		(28.1)	(26.0)
Proceeds from sale of property, plant and equipment		3.3	2.4
Sale of businesses		–	13.3
Purchase of software and other intangibles		(3.5)	(4.8)
Development expenditure capitalised		(3.0)	(2.4)
Acquisition of businesses		(66.5)	(23.6)
Bank deposits		–	24.3
Interest received		1.4	2.1
Net cash used in investing activities		(96.4)	(14.7)
Cash flows from financing activities			
Proceeds from issue of share capital		3.0	4.7
Employee Benefit Trust share purchase		(1.7)	–
Repaid borrowings		(20.4)	(79.4)
New borrowings		18.7	81.3
Change in finance lease liabilities	25	(0.1)	(0.4)
Dividends paid (including minorities)		(52.1)	(140.5)
Net cash used in financing activities		(52.6)	(134.3)
Net change in cash and cash equivalents		8.9	(18.7)
Net cash and cash equivalents at beginning of period		95.9	117.5
Exchange movement	25	14.0	(2.9)
Net cash and cash equivalents at end of period		118.8	95.9
Borrowings and finance leases	25	(91.4)	(91.1)
Net cash at end of period	25	27.4	4.8

* 2015 recategorised to be consistent with 2016. A cash inflow of £1.2m in 2015 has been recategorised from "change in trade and other payables" to "cash payments to the pension schemes less than the charge to operating profit".



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 Accounting policies

Basis of preparation

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) that have been adopted by the European Union (EU).

The preparation of Financial Statements in conformity with IFRS requires the Directors to apply IAS 1 and make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not apparent from other sources. The estimates and associated assumptions are based on historical experiences and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

The critical judgements, apart from those involving estimations (which are dealt with separately below) that the Directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the Financial Statements are outlined below:

(i) Post-retirement benefits

The Group's defined benefit obligation is discounted at a rate set by reference to market yields at the end of the reporting period on high quality corporate bonds. Significant judgement is required when setting the criteria for bonds to be included in the population from which the yield curve is derived. The most significant criteria considered for the selection of bonds include the issue size of the corporate bonds, quality of the bonds and the identification of outliers which are excluded. The assumptions selected and associated sensitivity analysis are disclosed in Note 24 on pages 145 to 148.

Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are outlined below.

(i) Post-retirement benefits

The Group's defined benefit obligation is assessed by selecting key assumptions. The selection of mortality rates, inflation and pay increases are key sources of estimation uncertainty which could lead to material adjustment in the defined benefit obligation within the next financial year. These assumptions are set with close reference to market conditions. The assumptions selected and associated sensitivity analysis are disclosed in Note 24 on pages 145 to 148.

Basis of preparation (continued)

The Group has considerable financial resources together with a diverse range of products and customers across wide geographic areas and industries. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully.

Further information on the Group's business activities, performance and position, together with the financial position of the Group, its capital structure and cash flow are included in the Strategic Report from the inside front cover to page 61. In addition, Note 28 to the Financial Statements discloses details of the Group's financial risk management and credit facilities.

The consolidated Financial Statements are presented in pounds sterling, which is the Company's functional currency, rounded to the nearest one hundred thousand.

The Group's Income Statement includes an adjustment column where certain non-operational items are included. The definition of non-operational items includes the amortisation and impairment of acquisition-related intangible assets, acquisition and disposal-related costs and exceptional restructuring costs. An analysis of non-operational items is detailed in Note 2.

New, revised and amendments to IFRS

In the current year the Group has applied a number of amendments to IFRS issued by the International Accounting Standards Board (IASB). Their adoption has not had a material impact on the disclosures or on the amounts reported in these Financial Statements. The following amendments were applied:

- IAS 1: Presentation of Financial Statements – Disclosure Initiative;
- IAS 16: Property Plant and Equipment, and IAS 38: Intangibles assets in relation to acceptable methods of depreciation and amortisation; and
- Annual improvements to IFRS 2012-2014 Cycle including the amendments to IAS 19 which clarify the rate to be used to discount post-employment benefit obligations.

Otherwise the accounting policies set out below have been applied consistently to both years presented in these consolidated Financial Statements.

At the date of authorisation of these Financial Statements, the Group has not applied the following new and revised IFRS that have been issued but are not yet effective (and in some cases had not yet been adopted by the EU):

- | | |
|-----------|---------------------------------------|
| – IFRS 15 | Revenue from Contracts with Customers |
|-----------|---------------------------------------|

IFRS 15 establishes a single model for recognising revenue arising from contracts with customers and supersedes IAS 18: Revenue and IAS 11: Construction Contracts. IFRS 15 introduces principles to recognise revenue by allocation of the transaction price to performance obligations. It applies to accounting periods beginning on or after 1st January 2018.

The Directors have initiated an assessment of the impact IFRS 15 will have on the Group. Based on the preliminary results of the assessment the Directors do not expect the adoption of IFRS 15 to have a material impact on the Financial Statements of the Group in future periods. However until our full assessment has been completed it is not practical to provide an estimate of the full impact of IFRS 15.

– IFRS 9	Financial Instruments
– IFRS 16	Leases
– IFRS 2 (amendments)	Classification and Measurement of Share-based Payment Transactions
– IAS 7 (amendments)	Disclosure Initiative
– IAS 12 (amendments)	Recognition of Deferred Tax Assets for Unrealised Losses
– IFRS 10 and IAS 28 (amendments)	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The Directors do not expect that the adoption of the Standards listed above will have a material impact on the Financial Statements of the Group in future periods, except as noted on the following page.

1 Accounting policies continued

An assessment of the impact of IFRS 16 (effective from 1st January 2019) has not yet been performed but it may have a material impact on the reported assets and liabilities of the Group but we do not expect it to have a material impact on the net assets, income statement and cash flows of the Group. Furthermore, extensive disclosures will be required by IFRS 16.

IFRS 16 eliminates the classification of leases as either operating leases or finance leases and, instead, introduces a single model of accounting for leases. Under IFRS 16 a lessee is required to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of a low value. The new standard also requires depreciation of the asset to be recognised separately from the interest expense on the lease liability. At 31st December 2016 the Group had total operating lease obligations of £19.2m and an operating lease charge of £5.7m for the year ended 31st December 2016. Beyond the information above, it is not practicable to provide a reasonable estimate of the effect of this standard until a detailed assessment has been completed.

Basis of accounting

(i) Subsidiaries

The Group Financial Statements include the results of the Company and all its subsidiary undertakings. Subsidiaries are entities controlled by the Group. Control exists when the Group has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable or convertible are taken into account. The Financial Statements of subsidiaries are included in the consolidated Financial Statements from the date that control commences until the date that control ceases.

(ii) Associates

Associates are those entities for which the Group has significant influence, but not control, over the financial and operating policies. The Financial Statements include the Group's share of the total recognised income and expense of Associates on an equity accounted basis, from the date that significant influence commenced until the date that significant influence ceases.

(iii) Transactions eliminated on consolidation

Intra Group balances, and any unrealised gains and losses or income and expenses arising from intra Group transactions, are eliminated in preparing the Group Financial Statements. Unrecognised gains arising from transactions with Associates are eliminated to the extent of the Group's interest in the entity.

Foreign currency

(i) On consolidation

The assets and liabilities of foreign operations are translated into sterling at exchange rates ruling at the Balance Sheet date. The revenues, expenses and cash flows of foreign operations are translated into sterling at average rates of exchange ruling during the year. Where the Notes to the Group Financial Statements include tables reconciling movements between opening and closing balances, opening and closing assets and liabilities are translated at Balance Sheet rates and revenue, expenses and all other movements translated at average rates, with the exchange differences arising being disclosed separately.

Exchange differences arising from the translation of the net investment in foreign operations are taken to a separate translation reserve within equity. They are recycled and recognised in the Income Statement upon disposal of the operation. In respect of all foreign operations, any differences that have arisen before 1st January 2004, the date of transition to IFRS, are not presented as a separate component of equity.

(ii) Foreign currency transactions

Transactions in foreign currencies are translated to the respective currencies of the Group entities at the foreign exchange rate at the date of the transaction. Monetary assets and liabilities at the Balance Sheet date denominated in a currency other than the functional currency of the entity are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the Income Statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated at foreign exchange rates ruling at the dates fair value was determined.

Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a highly probable forecasted transaction, the effective part of any gain or loss on the derivative financial instrument is recognised in other comprehensive income and presented in the cash flow hedges reserve. The associated gain or loss is removed from equity and recognised in the income statement in the period in which the transaction to which it relates occurs.

Property, plant and equipment

Items of property, plant and equipment are stated at cost or deemed cost, less accumulated depreciation.

Certain items of property, plant and equipment that had been revalued to fair value prior to 1st January 2004, the date of transition to IFRS, are measured on the basis of deemed cost, being the revalued amount at the date of that revaluation.

Depreciation is charged to the income statement on a straight-line basis at rates which write down the value of assets to their residual values over their estimated useful lives. Land is not depreciated. The principal rates are as follows:

Freehold buildings	1.5%
Plant and machinery	10–12.5%
Office furniture and fittings	10%
Office equipment	12.5–33.3%
Motor vehicles	20%
Tooling and patterns	10%

The depreciation rates are reassessed annually.

Intangible assets

(i) Goodwill

All business combinations after 1st January 2004 are accounted for by applying the acquisition method. Goodwill represents the difference between the cost of the acquisition and the fair value of the net identifiable assets acquired. Goodwill is stated at cost less any accumulated impairment losses. Goodwill is allocated to cash-generating units and is not amortised but is tested annually for impairment (see Note 14 for more detail). In respect of acquisitions prior to 1st January 2004, goodwill is included on the basis of its deemed cost, which represents the amount recorded under previous UK Generally Accepted Accounting Practice (GAAP).



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

continued

1 Accounting policies *continued*

(ii) R&D

Expenditure on R&D is charged to the income statement in the period in which it is incurred except that development expenditure is capitalised where the development costs relate to new or substantially improved products that are subsequently to be released for sale and will generate future economic benefits. The expenditure capitalised includes staff costs and related expenses. Capitalised development expenditure is stated at cost less accumulated amortisation (see below) and any impairment losses.

(iii) Other intangible assets

Intangible assets other than goodwill that are acquired by the Group are stated at cost less accumulated amortisation (see below) and any impairment losses. Annual impairment tests are performed on acquired intangible assets by comparing the carrying value with the recoverable amount, being the higher of the fair value less cost to sell and value in use, discounted at an appropriate discount rate, of future cash flows in respect of intangible assets for the relevant cash generating unit. More detail is given in Note 14.

(iv) Amortisation

Amortisation is charged to the Income Statement on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date they are available for use. Goodwill is tested for impairment annually. The principal amortisation rates are as follows:

Capitalised development costs	20%
ERP systems and software	12.5–20%
Brand names and trademarks	5–20%
Manufacturing designs and core technology	6–50%
Non compete undertakings	20–50%
Customer relationships	6–20%

Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity. Cost also includes transfers from equity of any gain or loss on qualifying cash flow hedges of foreign currency purchases of inventories.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with an original maturity usually of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the Cash Flow Statements.

Going concern

The statement on the going concern assumption is included within the Governance Report on pages 109 to 110.

Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution pension plans are recognised as an expense in the income statement as incurred.

(ii) Defined benefit plans

The costs of providing pensions under defined benefit schemes are calculated in accordance with the advice of qualified actuaries and spread over the period during which benefit is expected to be derived from the employees' services. The Group's net obligation or surplus in respect of defined benefit pensions is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. Past service costs are recognised straight away. That benefit is discounted at rates reflecting the yields on AA credit rated corporate bonds that have maturity dates approximating the terms of the Group's obligations to determine its present value. Pension scheme assets are measured at fair value at the Balance Sheet date. Actuarial gains and losses, differences between the expected and actual returns, and the effect of changes in actuarial assumptions are recognised in the Statement of Comprehensive Income in the year they arise. Any scheme surplus (to the extent it is considered recoverable) or deficit is recognised in full in the Balance Sheet.

The cost of other post-employment liabilities are calculated in a similar way to defined benefit pension schemes and spread over the period which benefit is expected to be derived from the employees' services, in accordance with the advice of qualified actuaries.

(iii) Employee share plans

Incentives in the form of shares are provided to employees under share option and share award schemes. The fair value of these options and awards at their date of grant is charged to the Income Statement over the relevant vesting periods with a corresponding increase in equity. The value of the charge is adjusted to reflect expected and actual levels of options and share awards vesting.

(iv) Long-term share incentive plans

The fair value of awards is measured at the date of grant and the cost spread over the vesting period. The amount recognised as an expense is not adjusted to reflect market based performance conditions, but is adjusted for non-market based performance conditions.

Revenue

Revenue is measured at the fair value of the consideration received or receivable and represents amounts receivable for goods and services provided in the normal course of business by subsidiary companies to external customers, net of discounts, Value Added Tax (VAT) and other sales-related taxes. Revenue is reduced for customer returns, rebates and other similar allowances.

Revenue from the sale of goods, which represent the significant majority of Group revenue, is recognised in the Income Statement when:

- the significant risks and rewards of ownership have been transferred to the buyer in accordance with the contracted terms of sale;
- the amount of revenue and costs can be measured reliably;
- the Group retains neither continuing managerial involvement nor effective control over the goods; and
- it is probable that the economic benefits associated with the transaction will flow to the Group.

This is typically on delivery or dispatch of the products.

1 Accounting policies continued

Revenue from projects and service contracts is recognised by reference to the stage of completion of the contract based on the fair value of goods and services provided at the Balance Sheet date. Judgements can be required to assess the stage of completion, although in the vast majority of projects the position is relatively easy to identify. The stage of completion of the contract is determined as follows:

- installation fees are recognised by reference to the stage of completion of the installation, determined as the proportion of the total time expected to install that has elapsed at the Balance Sheet date;
- service fees included in the price of products sold are valued by taking a proportion of the sales price (based on the cost of providing the servicing) and only recognised in revenue when the service is provided; and
- revenue from time and material contracts is recognised at the contractual rates as labour hours are delivered and direct expenses incurred.

As soon as the outcome of a project or service contract can be estimated reliably, revenue and expenses are recognised in the Income Statement in proportion to the stage of completion of the project or service contract. Where it is probable that total contract costs exceed total contract revenue, the expected loss on a project or service is recognised immediately.

Leases

(i) Operating leases

Payments made under operating leases are charged to the Income Statement on a straight-line basis over the term of the lease.

(ii) Finance leases

Leases where the Group assumes substantially all of the risks and rewards of ownership are classified as finance leases as if the asset had been purchased outright. Assets acquired under finance leases are recognised as assets of the Group and the capital and interest elements of the leasing commitments are shown as obligations in creditors. Depreciation is charged on a consistent basis with similar owned assets or over the lease term if shorter. The interest element of the lease payment is charged to the Income Statement on a basis which produces a consistent rate of charge over the period of the liability.

Taxation

The tax charge comprises current and deferred tax. Income tax expense is recognised in the Income Statement unless it relates to items recognised directly in equity or in other comprehensive income, when it is also recognised in equity or other comprehensive income respectively. Current tax is the expected tax payable on the profit for the year and any adjustments in respect of previous years using tax rates enacted or substantively enacted at the reporting date. Deferred tax is recognised using the balance sheet liability method, providing for temporary differences arising between the tax base of assets and liabilities, and their carrying amounts in the Financial Statements. Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax is provided using rates of tax that have been enacted or substantively enacted at the Balance Sheet date or the date that the temporary differences are expected to reverse. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Share capital and repurchased shares

When share capital recognised as equity is repurchased, the amount of the consideration paid, including directly attributable costs, is recognised as a deduction from equity. Repurchased shares are classified as treasury shares or placed in an Employee Benefit Trust and are presented as a deduction from total equity.

Share-based benefits granted to subsidiary employees

The Company grants share-based benefits over its own Ordinary shares directly to employees of subsidiary companies. These employees provide services to the subsidiary companies. The cost of these shares is not recharged and therefore the fair value of the share options granted is recognised as a capital contribution to the subsidiary companies. This is accounted for as an increase in investments with a corresponding increase in a non-distributable component of equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

2 Alternative performance measures

The Group reports under International Financial Reporting Standards (IFRS) and also uses alternative performance measures where the Board believe that they help to effectively monitor the performance of the Group, users of the Financial Statements might find them informative and an aid to comparison with our peers. A definition of the alternative performance measures included in the Annual Report and a reconciliation to the closest IFRS equivalent are disclosed below.

Adjusted operating profit

Adjusted operating profit excludes the amortisation and impairment of acquisition-related intangible assets and costs associated with acquisitions. A reconciliation between operating profit as reported under IFRS and adjusted operating profit is given below.

	2016 £m	2015 £m
Operating profit as reported under IFRS	174.1	142.8
Amortisation of acquisition-related intangible assets	6.0	4.7
Acquisition and disposal costs	0.5	0.8
Loss on closure of USA metering unit	–	3.8
Profit on disposal of M&M, less recycled exchange losses	–	0.3
Adjusted operating profit	180.6	152.4

Adjusted earnings per share

	2016	2015
Profit for the period attributable to equity holders as reported under IFRS (£m)	121.1	96.5
Non-operational items excluded from adjusted operating profit disclosed above (£m)	6.5	9.6
Non-operational items excluded from share of profit from Associates (see Note 3) (£m)	–	1.8
Tax effects on non-operational items (£m)	(1.7)	(2.0)
Adjusted profit for the period attributable to equity holders (£m)	125.9	105.9
Weighted average shares in issue (million)	73.4	74.3
Basic adjusted earnings per share	171.5p	142.6p
Diluted weighted average shares in issue (million)	73.6	74.6
Diluted adjusted earnings per share	171.0p	141.9p

Basic and diluted EPS calculated on an IFRS profit basis are included in Note 10.

Adjusted cash flow

A reconciliation showing the items that bridge between net cash from operating activities as reported under IFRS to an adjusted basis is given below.

	2016 £m	2015 £m
Net cash from operating activities as reported under IFRS	157.9	130.3
Acquisition and disposal costs	0.5	3.9
Capital expenditure excluding acquired intangibles from acquisitions	(32.8)	(33.2)
Profit on disposal of fixed assets	1.5	0.5
Movement in provisions	(2.3)	(0.7)
Tax paid	56.5	43.3
Interest paid	1.4	1.3
Other	–	0.1
Adjusted net cash from operating activities	182.7	145.5

Cash conversion in 2016 is 101% (2015: 95%). Cash conversion is calculated as adjusted net cash from operating activities divided by adjusted operating profit.

The adjusted cash flow is included in the Financial Review on page 51.

2 Alternative performance measures *continued*

Return on capital employed (ROCE)

This is an important key performance indicator and forms a meaningful element of Executive Directors' annual bonuses but is a non-statutory measure. ROCE measures effective management of fixed assets and working capital relative to the profitability of the business. ROCE is calculated as adjusted operating profit divided by average capital employed. Average capital employed is based on capital employed at 31st December 2016 and 31st December 2015 at reported exchange rates. More information on ROCE can be found in the Capital Employed and ROCE sections of the Financial Review on page 50.

An analysis of the components is as follows:

	2016 £m	2015 £m
Property, plant and equipment	201.8	169.9
Prepayments	5.9	5.5
Inventories	112.5	92.5
Trade receivables	185.5	152.1
Other current assets	21.7	20.4
Tax recoverable	11.2	9.5
Trade, other payables and current provisions	(110.0)	(84.3)
Current tax payable	(18.6)	(21.1)
Capital employed	410.0	344.5
Average capital employed	377.3	345.4
Operating profit	174.1	142.8
Adjustments (see adjusted operating profit on page 128)	6.5	9.6
Adjusted operating profit	180.6	152.4
Return on capital employed	47.9%	44.1%

A reconciliation of capital employed to net assets as reported under IFRS and disclosed on the consolidated Statement of Financial Position is given below.

	2016 £m	2015 £m
Capital employed	410.0	344.5
Intangibles and investment in Associate	169.7	109.0
Post-retirement benefits	(94.2)	(73.7)
Deferred tax	15.0	15.3
Non-current provisions and long-term payables	(3.5)	(1.6)
Net cash	27.4	4.8
Net assets as reported under IFRS	524.4	398.3

Organic measures

As we are a multi-national group of companies, who trade in a large number of foreign currencies and regularly acquire and sometimes dispose of companies, we also refer to organic performance measures throughout the Annual Report. These strip out the effects of the movement of foreign currency exchange rates and of acquisitions and disposals. The Board believe that this allows users of the accounts to gain a further understanding of how the Group has performed.

The exchange movement is calculated as the difference between the prior period reported value translated at prior period exchange rates and translated at current period exchange rates.

Any acquisitions and disposals that occurred in either the current period or prior period are excluded from the results of both the prior and current period at current period exchange rates.

A reconciliation of the movement in revenue and adjusted operating profit compared to the prior period is given below.

	2015	Exchange	Organic	Acquisitions & Disposals	2016	Organic	Reported
Revenue	£667.2m	£52.6m	£30.3m	£7.3m	£757.4m	+4%	+14%
Adjusted operating profit	£152.4m	£14.5m	£13.2m	£0.5m	£180.6m	+8%	+18%
Adjusted operating margin	22.8%				23.8%	+80 bps	+100 bps

The reconciliation for each segment is included in the Strategic Report.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

3 Segmental reporting

As required by IFRS 8: Operating Segments, the following segmental information is presented in a consistent format with management information considered by the Board.

Analysis by location of operation 2016

	Gross revenue £m	Inter-segment revenue £m	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating margin %
Europe, Middle East & Africa	273.9	39.6	234.3	49.6	50.0	21.3%
Asia Pacific	197.7	4.4	193.3	49.3	49.9	25.8%
Americas	142.9	7.0	135.9	26.9	29.2	21.5%
Steam Specialties business	614.5	51.0	563.5	125.8	129.1	22.9%
Watson-Marlow	193.9	–	193.9	61.1	64.3	33.1%
Corporate expenses				(12.8)	(12.8)	
	808.4	51.0	757.4	174.1	180.6	23.8%
Intra Group	(51.0)	(51.0)				
Total	757.4	–	757.4	174.1	180.6	23.8%
Net finance expense				(2.6)	(2.6)	
Share of profit of Associates				(0.1)	(0.1)	
Profit before tax				171.4	177.9	

Analysis by location of operation 2015

	Gross revenue £m	Inter-segment revenue £m	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating margin %
Europe, Middle East & Africa	253.7	34.3	219.4	41.4	42.7	19.5%
Asia Pacific	176.3	4.5	171.8	44.2	44.7	26.0%
Americas	128.9	5.5	123.4	21.6	27.1	22.0%
Steam Specialties business	558.9	44.3	514.6	107.2	114.5	22.3%
Watson-Marlow	152.6	–	152.6	45.7	48.0	31.4%
Corporate expenses				(10.1)	(10.1)	
	711.5	44.3	667.2	142.8	152.4	22.8%
Intra Group	(44.3)	(44.3)				
Total	667.2	–	667.2	142.8	152.4	22.8%
Net finance expense				(1.5)	(1.5)	
Share of profit of Associates				(1.6)	0.2	
Profit before tax				139.7	151.1	

Net revenue generated by Group companies based in the USA is £146.3m (2015: £125.3m), in China is £90.6m (2015: £78.6m), in the UK £70.4m (2015: £66.5m), and the rest of the world £450.1m (2015: £396.8m).

3 Segmental reporting continued

The total operating profit for the period includes non-operational items, as analysed below:

2016

	Amortisation of acquisition- related intangible assets £m	Acquisition and disposal costs £m	Total £m
Europe, Middle East & Africa	(0.4)	–	(0.4)
Asia Pacific	(0.6)	–	(0.6)
Americas	(2.2)	(0.1)	(2.3)
Steam Specialties business	(3.2)	(0.1)	(3.3)
Watson-Marlow	(2.8)	(0.4)	(3.2)
Total non-operational items	(6.0)	(0.5)	(6.5)

2015

	Amortisation of acquisition-related intangible assets £m	Loss on closure of USA metering unit £m	Profit on disposal of M&M less recycled exchange losses £m	Acquisition and disposal costs £m	Total £m
Europe, Middle East & Africa	(0.6)	–	(0.3)	(0.4)	(1.3)
Asia Pacific	(0.5)	–	–	–	(0.5)
Americas	(1.7)	(3.8)	–	–	(5.5)
Steam Specialties business	(2.8)	(3.8)	(0.3)	(0.4)	(7.3)
Watson-Marlow	(1.9)	–	–	(0.4)	(2.3)
Total non-operational items	(4.7)	(3.8)	(0.3)	(0.8)	(9.6)

Share of profit of Associates

The share of profit of Associates analysed between adjusted income and total (including non-operational items) is as follows:

	2016 Adjusted £m	2016 Total £m	2015 Adjusted £m	2015 Total £m
Europe, Middle East & Africa	(0.1)	(0.1)	(0.1)	(0.3)
Asia Pacific	–	–	0.3	(1.3)
Americas	–	–	–	–
Steam Specialties business	(0.1)	(0.1)	0.2	(1.6)
Watson-Marlow	–	–	–	–
Total share of profit of Associates	(0.1)	(0.1)	0.2	(1.6)

In 2015 adjusted share of profit of Associates excludes amortisation and impairment of acquisition-related intangible assets of £0.2m, recycled exchange losses and a final adjustment to the date of sale to the impairment of tangible assets in respect of Spirax Marshall in India of £1.6m. No non-operational items occurred in 2016.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

3 Segmental reporting continued

Net financing income and expense

	2016 £m	2015 £m
Europe, Middle East & Africa	(1.5)	(1.4)
Asia Pacific	0.2	1.1
Americas	(0.7)	(0.2)
Steam Specialties business	(2.0)	(0.5)
Watson-Marlow	—	—
Corporate	(0.6)	(1.0)
Total net financing expense	(2.6)	(1.5)

Net assets

	2016 Assets £m	2016 Liabilities £m	2015 Assets £m	2015 Liabilities £m
Europe, Middle East & Africa	195.3	(106.8)	182.8	(91.2)
Asia Pacific	163.1	(38.5)	140.3	(30.4)
Americas	127.0	(38.6)	102.4	(24.0)
Watson-Marlow	211.7	(23.8)	123.9	(14.0)
	697.1	(207.7)	549.4	(159.6)
Liabilities	(207.7)		(159.6)	
Deferred tax	15.0		15.3	
Current tax payable	(7.4)		(11.6)	
Net cash	27.4		4.8	
Net assets	524.4		398.3	

Non-current assets in the UK were £156.5m (2015: £98.2m).

Capital additions, depreciation and amortisation

	2016 Capital additions £m	2016 Depreciation and amortisation £m	2015 Capital additions £m	2015 Depreciation and amortisation* £m
Europe, Middle East & Africa	11.1	12.4	13.0	11.2
Asia Pacific	12.6	6.9	11.0	5.6
Americas	8.0	5.9	10.4	5.1
Watson-Marlow	38.5	7.9	11.9	7.4
Group total	70.2	33.1	46.3	29.3

Capital additions include property, plant and equipment of £36.9m (2015: £26.3m) of which £9.0m (2015: £0.6m) was from acquisitions in the period and other intangible assets of £33.3m (2015: £20.0m) of which £26.8m (2015: £12.8m) relates to acquired intangibles from acquisitions in the period. Capital additions split between the UK and rest of the world are UK £41.9m (2015: £11.6m), rest of the world £28.3m (2015: £34.7m).

* Restated, to exclude profit on disposal of fixed assets (£0.5m), to be on a consistent basis as 2016.

4 Operating costs

	2016 Adjusted £m	2016 Total £m	2015 Adjusted £m	2015 Total £m
Change in stocks of finished goods and work in progress	12.2	12.2	(0.7)	(0.7)
Raw materials and consumables	179.1	179.1	161.9	161.9
Staff costs (Note 5)	263.9	263.9	231.9	231.9
Depreciation, amortisation and impairment*	27.1	33.1	24.6	29.3
Other operating charges	94.5	95.0	97.1	102.0
Total operating costs	576.8	583.3	514.8	524.4

Total depreciation and amortisation includes amortisation of acquisition-related intangible assets of £6.0m (2015: £4.7m). Operating costs include exchange difference benefits of £1.4m (2015: £0.2m). Total other operating charges include acquisition and disposal costs of £0.5m (2015: £0.8m), loss on closure of USA metering unit £nil (2015: £3.8m) and profit on disposal of M&M less recycled exchange losses £nil (2015: £0.3m).

* 2015 restated, to exclude profit on disposal of fixed assets (£0.5m), to be on a consistent basis as 2016.

5 Staff costs and numbers

The aggregate payroll costs of persons employed by the Group were as follows:

	2016 £m	2015 £m
Wages and salaries	207.9	181.8
Social security costs	37.8	33.7
Other pension costs	18.2	16.4
Total payroll costs	263.9	231.9

The average number of persons employed by the Group (including Directors) during the year was as follows:

	2016	2015
United Kingdom	1,349	1,302
Overseas	3,649	3,488
Group average	4,998	4,790

6 Net financing income and expense

	2016 £m	2015 £m
Financial expenses:		
Bank and other borrowing interest payable	(1.4)	(1.3)
Net interest on pension scheme liabilities	(2.6)	(2.3)
	(4.0)	(3.6)
Financial income:		
Bank interest receivable	1.4	2.1
Net financing expense	(2.6)	(1.5)
Net pension scheme financial expense	(2.6)	(2.3)
Net bank interest	—	0.8
Net financing expense	(2.6)	(1.5)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

7 Profit before taxation

Profit before taxation is shown after charging:

	2016 £m	2015 £m
Depreciation of owned tangible fixed assets	20.6	19.1
Depreciation of tangible fixed assets held under finance leases	0.3	0.3
Hire of plant and machinery	0.6	0.6
Profit on disposal of property, plant and equipment	1.5	0.5
Other operating leases	5.7	3.7
R&D	10.6	9.9

Auditor's remuneration	2016 £m	2015 £m
Audit of these Financial Statements	0.1	0.1
Amounts receivable by the Company's auditor and its Associates in respect of:		
Audit of Financial Statements of subsidiaries of the Company	1.1	0.9
Interim agreed upon procedures	–	–
Audit-related assurance services	–	0.1
Taxation compliance services	–	–
Other tax advisory services	–	0.1
All other services	–	0.1
Total auditor's remuneration	1.2	1.3

8 Directors' emoluments

Directors represent the key management personnel of the Group under the terms of IAS 24: Related Party Disclosures. Total remuneration is shown below.

Further details of salaries and short-term benefits, post-retirement benefits and share plans and long-term share incentive plans are shown in the Annual Report on Remuneration 2016 on pages 87 to 99. The share-based payments charge comprises a charge in relation to the Performance Share Plan and the Employee Share Ownership Plan (as described in Note 24).

	2016 £m	2015 £m
Salaries and short-term benefits	3.6	2.7
Post-retirement benefits	0.4	0.5
Share-based payments	0.2	0.7
Total Directors' remuneration	4.2	3.9

9 Taxation

	2016 £m	2015 £m
Analysis of charge in period		
UK corporation tax:		
Current tax on income for the period	3.2	2.0
Adjustments in respect of prior periods	(0.1)	(0.7)
	3.1	1.3
Double taxation relief	—	(0.4)
	3.1	0.9
Foreign tax:		
Current tax on income for the period	48.6	44.2
Adjustments in respect of prior periods	(0.8)	(0.6)
	47.8	43.6
Total current tax charge	50.9	44.5
Deferred tax – UK	0.8	1.1
Deferred tax – Foreign	(1.6)	(2.6)
Tax on profit on ordinary activities	50.1	43.0
Reconciliation of effective tax rate		
Profit before tax and share of profit of Associates	171.5	141.3
Expected tax at blended rate	48.3	39.9
Increased withholding tax on overseas dividends	2.0	3.7
Benefit of Financing structures	(1.5)	(1.6)
Associated companies	—	0.2
Non-deductible expenditure	1.5	2.7
Over provided in prior years	(0.7)	(1.7)
Other reconciling items	0.5	(0.2)
Total tax in income statement	50.1	43.0
Effective tax rate	29.2%	30.4%

The Group's tax charge in future years is likely to be affected by the proportion of profits arising and the effective tax rates in the various territories in which the Group operates.

The blended tax rate is calculated using each company's headline tax rate as a proportion of its respective profit.

The UK corporation tax rate reduced from 21% to 20% on 1st April 2015. Further reductions to 19% (effective from April 2017) and then 17% (effective from 1st April 2020) were substantively enacted on 15th September 2016. This will reduce the Company's future current tax charge accordingly. The UK deferred tax assets and liabilities at 31st December 2016 have been calculated based upon rates of 20%, 19% and 17% in respect of deferred tax expected to reverse before 1st April 2017, 1st April 2020 and after this date respectively.

No UK tax (after double tax relief for underlying tax) is expected to be payable on the future remittance of the retained earnings of overseas subsidiaries.

The effective tax rate is calculated as a percentage of profit before tax and share of profit of Associates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

10 Earnings per share

	2016	2015
Profit attributable to equity shareholders (£m)	121.1	96.5
Weighted average shares in issue (million)	73.4	74.3
Dilution (million)	0.2	0.3
Diluted weighted average shares in issue (million)	73.6	74.6
Basic earnings per share	165.0p	129.9p
Diluted earnings per share	164.5p	129.4p

Basic and diluted earnings per share calculated on an adjusted profit basis are included in Note 2.

The dilution is in respect of unexercised share options and the Performance Share Plan.

11 Dividends

	2016 £m	2015 £m
Amounts paid in the year:		
Final dividend for the year ended 31st December 2015 of 48.2p (2014: 45.0p) per share	35.4	34.1
Special dividend for the year ended 31st December 2015 of nil (2014: 120.0p) per share	–	91.0
Interim dividend for the year ended 31st December 2016 of 22.5p (2015: 20.8p) per share	16.5	15.2
Total dividends paid	51.9	140.3
Amounts arising in respect of the year:		
Interim dividend for the year ended 31st December 2016 of 22.5p (2015: 20.8p) per share	16.5	15.2
Proposed final dividend for the year ended 31st December 2016 of 53.5p (2015: 48.2p) per share	39.3	35.4
Total dividends arising	55.8	50.6

The proposed dividend is subject to approval in 2017. It is therefore not included as a liability in these Financial Statements. No scrip alternative to the cash dividend is being offered in respect of the proposed final dividend for the year ended 31st December 2016.

12 Investments in Associates

	Associate 2016 £m	Associate held for sale 2015 £m	Other Associate 2015 £m
Cost of investment	1.4	–	1.4
Share of equity	(1.4)	–	(1.3)
Total investment in Associate	–	–	0.1
Summarised financial information:			
Revenue	0.7	3.6	0.8
Profit/(loss) for the period	(0.2)	0.6	(0.3)
Current assets	0.4	–	0.3
Non-current assets	0.2	–	0.3
Current and non-current liabilities	0.6	–	0.4

Details of the Group's Associate at 31st December 2016 is as follows:

Name of Associate	Country of incorporation and operation	Proportion of ownership interest and voting power held	Principal activity
Econotherm (UK) Ltd	UK	38.9%	Manufacturing and selling

The sale of Spirax-Marshall Ltd was completed on 1st March 2015.

13 Property, plant and equipment

	Freehold land and buildings £m	Leasehold land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Total £m
Cost or deemed cost:					
At 1st January 2016	106.9	26.5	125.9	56.5	315.8
Exchange adjustments	10.3	4.0	13.6	6.1	34.0
	117.2	30.5	139.5	62.6	349.8
Additions	6.0	6.5	18.3	6.1	36.9
Disposals	(0.8)	(0.2)	(7.7)	(3.8)	(12.5)
At 31st December 2016	122.4	36.8	150.1	64.9	374.2
Depreciation:					
At 1st January 2016	22.8	3.4	81.9	37.8	145.9
Exchange adjustments	3.1	0.6	8.6	4.5	16.8
	25.9	4.0	90.5	42.3	162.7
Charged in year	2.0	1.0	11.2	6.7	20.9
Disposals	(0.5)	(0.1)	(6.9)	(3.7)	(11.2)
At 31st December 2016	27.4	4.9	94.8	45.3	172.4
Net book value:					
At 31st December 2016	95.0	31.9	55.3	19.6	201.8

Additions include £9.0m (2015: £0.6m) of property, plant and equipment from acquisitions.

	Freehold land and buildings £m	Leasehold land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Total £m
Cost or deemed cost:					
At 1st January 2015	111.0	24.0	137.6	63.0	335.6
Exchange adjustments	(3.4)	–	(3.3)	(1.7)	(8.4)
	107.6	24.0	134.3	61.3	327.2
Additions	4.1	5.4	11.6	5.3	26.4
Disposals	(4.8)	(2.9)	(20.0)	(10.1)	(37.8)
At 31st December 2015	106.9	26.5	125.9	56.5	315.8
Depreciation:					
At 1st January 2015	22.3	3.0	91.9	41.8	159.0
Exchange adjustments	(0.7)	(0.1)	(1.3)	(1.1)	(3.2)
	21.6	2.9	90.6	40.7	155.8
Charged in year	1.9	0.6	10.2	6.7	19.4
Disposals	(0.7)	(0.1)	(18.9)	(9.6)	(29.3)
At 31st December 2015	22.8	3.4	81.9	37.8	145.9
Net book value:					
At 31st December 2015	84.1	23.1	44.0	18.7	169.9

Included in the above are finance leases with a net book value of £0.4m (2015: £0.5m) and assets under construction of £11.3m (2015: £9.5m).

In 2015 leasehold disposals include £2.4m for land use rights in China reclassified to non-current prepayments.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

14 Goodwill and other intangible assets

	Acquired intangibles £m	Development costs £m	Computer software £m	Total intangibles £m	Goodwill £m
Cost or valuation:					
At 1st January 2016	51.6	22.1	43.3	117.0	55.0
Exchange and other adjustments	7.8	0.3	3.6	11.7	7.0
	59.4	22.4	46.9	128.7	62.0
Additions	26.8	3.0	3.5	33.3	27.6
Disposals	–	(0.8)	(0.5)	(1.3)	(0.2)
At 31st December 2016	86.2	24.6	49.9	160.7	89.4
Amortisation and impairment:					
At 1st January 2016	22.5	15.4	24.3	62.2	0.9
Exchange adjustments	3.4	0.4	2.5	6.3	–
	25.9	15.8	26.8	68.5	0.9
Amortisation and impairment	6.0	2.8	3.4	12.2	–
Disposals	–	(0.8)	(0.4)	(1.2)	–
At 31st December 2016	31.9	17.8	29.8	79.5	0.9
Net book value:					
At 31st December 2016	54.3	6.8	20.1	81.2	88.5

	Acquired intangibles £m	Development costs £m	Computer software £m	Total intangibles £m	Goodwill £m
Cost or valuation:					
At 1st January 2015	42.7	23.8	40.3	106.8	48.5
Exchange and other adjustments	(2.7)	(0.1)	(0.6)	(3.4)	(2.3)
	40.0	23.7	39.7	103.4	46.2
Additions	12.8	2.4	4.8	20.0	11.4
Disposals	(1.2)	(4.0)	(1.2)	(6.4)	(2.6)
At 31st December 2015	51.6	22.1	43.3	117.0	55.0
Amortisation and impairment:					
At 1st January 2015	20.2	15.6	22.9	58.7	0.8
Exchange adjustments	(1.2)	(0.1)	(0.5)	(1.8)	0.1
	19.0	15.5	22.4	56.9	0.9
Amortisation and impairment	4.7	2.4	2.8	9.9	–
Disposals	(1.2)	(2.5)	(0.9)	(4.6)	–
At 31st December 2015	22.5	15.4	24.3	62.2	0.9
Net book value:					
At 31st December 2015	29.1	6.7	19.0	54.8	54.1

Additions include an exchange benefit of £nil (2015: £0.5m) for acquired intangibles and £nil (2015: £0.2m) for goodwill being the difference between purchase cost and average exchange rates.

Development

All capitalised development costs arise from internal product development.

14 Goodwill and other intangible assets *continued*

Acquired intangibles

The disclosure by class of acquired intangibles assets is shown in the tables below.

	Customer relationships £m	Brand names and trademarks £m	Manufacturing designs and core technology £m	Non-compete undertakings and other £m	Total acquired intangibles £m
Cost or valuation:					
At 1st January 2016	28.6	7.3	7.2	8.5	51.6
Exchange and other adjustments	3.8	1.1	1.4	1.5	7.8
	32.4	8.4	8.6	10.0	59.4
Additions	5.9	6.9	11.2	2.8	26.8
At 31st December 2016	38.3	15.3	19.8	12.8	86.2
Amortisation and impairment:					
At 1st January 2016	11.4	4.1	3.6	3.4	22.5
Exchange adjustments	1.5	0.3	1.0	0.6	3.4
	12.9	4.4	4.6	4.0	25.9
Amortisation and impairment	2.7	0.6	1.0	1.7	6.0
At 31st December 2016	15.6	5.0	5.6	5.7	31.9
Net book value:					
At 31st December 2016	22.7	10.3	14.2	7.1	54.3

Additions comprise intangibles arising from acquisitions during the year.

	Customer relationships £m	Brand names and trademarks £m	Manufacturing designs and core technology £m	Non-compete undertakings and other £m	Total acquired intangibles £m
Cost or valuation:					
At 1st January 2015	25.1	7.0	7.0	3.6	42.7
Exchange and other adjustments	(1.4)	(0.4)	(0.5)	(0.4)	(2.7)
	23.7	6.6	6.5	3.2	40.0
Additions	5.1	1.1	1.3	5.3	12.8
Disposals	(0.2)	(0.4)	(0.6)	–	(1.2)
At 31st December 2015	28.6	7.3	7.2	8.5	51.6
Amortisation and impairment:					
At 1st January 2015	9.9	4.2	3.5	2.6	20.2
Exchange adjustments	(0.5)	(0.3)	(0.4)	–	(1.2)
	9.4	3.9	3.1	2.6	19.0
Amortisation and impairment	2.2	0.6	1.1	0.8	4.7
Disposals	(0.2)	(0.4)	(0.6)	–	(1.2)
At 31st December 2015	11.4	4.1	3.6	3.4	22.5
Net book value:					
At 31st December 2015	17.2	3.2	3.6	5.1	29.1

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

14 Goodwill and other intangible assets continued

Impairment

In accordance with the requirements of IAS 36: Impairment of Assets, goodwill is allocated to the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the business combination that gave rise to the goodwill as analysed in the table below.

	2016 Goodwill £m	2015 Goodwill £m
Aflex	27.1	-
Flexicon A/S Denmark	8.3	7.1
Spirax-Sarco Mexicana	7.4	7.4
MasoSine	7.2	6.2
Watson-Marlow Flow Smart, Inc, USA	4.4	3.7
Spirax Sarco Inc, USA	4.2	3.5
BioPure Technology Ltd	4.1	4.1
Asepco, USA	4.0	3.5
Spirax-Sarco Colombia SAS	3.4	2.2
Alitea product unit	2.6	2.4
Watson-Marlow Japan	2.2	1.8
UK Supply product unit	2.0	1.7
Spirax-Sarco SAS France	1.4	1.2
Spirax Inter Valf Turkey	1.3	1.3
Watson-Marlow South Africa	0.9	0.7
Other cash-generating units	8.0	7.3
Total goodwill	88.5	54.1

The goodwill balance has been tested for annual impairment on the following basis:

- the carrying values of goodwill have been assessed by reference to value in use. These have been estimated using cash flows based on forecast information for the next financial year and in the case of recent acquisitions on detailed five year forecasts. This information has been approved by the Board;
- the key assumptions on which the impairment tests are based are the discount and growth rates and the forecast cash flows;
- pre-tax discount rates range from 11–17% (2015: 10–17%);
- short-term growth rates vary between 2–26% depending on detailed forecasts (2015: 2–30%). The short-term is defined as not more than five years. The 26% rate is in respect of Spirax-Sarco Colombia SAS;
- long-term growth rates are set using IMF forecasts and vary between 0.8–5.0% (2015: 0.8–5.0%); and
- no impairments were identified as a result of this exercise.

The principal value in use assumptions for the three largest goodwill balances were as follows:

Cash-generating unit	Pre-tax discount rate	Short-term growth rate	Long-term growth rate
Aflex	11.2%	5-11%	2.5%
Flexicon A/S Denmark	11.1%	3.0%	2.0%
Spirax-Sarco Mexicana	14.8%	4.0%	2.8%

Sensitivity analysis shows that if long-term revenue growth assumptions are lowered by 1% and pre-tax discount rates raised by 1%, no impairment would arise. The 1% sensitivity threshold is considered a reasonable estimate of possible change.

15 Deferred tax assets and liabilities

Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

	2016 Assets £m	2015 Assets £m	2016 Liabilities £m	2015 Liabilities £m	2016 Net £m	2015 Net £m
Accelerated capital allowances	2.4	4.8	(4.5)	(5.2)	(2.1)	(0.4)
Provisions	2.8	3.5	—	—	2.8	3.5
Losses	1.0	1.5	—	—	1.0	1.5
Inventory	4.0	3.0	(2.3)	(2.1)	1.7	0.9
Pensions	24.3	20.0	(0.9)	(2.0)	23.4	18.0
Other temporary differences	2.0	0.2	(13.8)	(8.4)	(11.8)	(8.2)
Tax assets/(liabilities)	36.5	33.0	(21.5)	(17.7)	15.0	15.3

Movement in deferred tax during the year 2016

	1st January 2016 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	Acquisitions £m	31st December 2016 £m
Accelerated capital allowances	(0.4)	(0.8)	(0.9)	—	—	(2.1)
Provisions	3.5	0.6	(1.3)	—	—	2.8
Losses	1.5	(1.0)	0.5	—	—	1.0
Inventory	0.9	0.9	(0.1)	—	—	1.7
Pensions	18.0	0.9	4.5	—	—	23.4
Other temporary differences	(8.2)	0.2	1.0	—	(4.8)	(11.8)
Group total	15.3	0.8	3.7	—	(4.8)	15.0

Movement in deferred tax during the year 2015

	1st January 2015 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	Acquisitions £m	31st December 2015 £m
Accelerated capital allowances	(1.3)	1.8	(0.9)	—	—	(0.4)
Provisions	3.1	0.7	(0.3)	—	—	3.5
Losses	3.2	(1.8)	0.1	—	—	1.5
Inventory	0.9	—	—	—	—	0.9
Pensions	17.7	0.9	(0.6)	—	—	18.0
Other temporary differences	(5.1)	(0.1)	0.6	—	(3.6)	(8.2)
Group total	18.5	1.5	(1.1)	—	(3.6)	15.3

At the Balance Sheet date, the Group has deductible temporary differences, unused tax losses and unused tax credits of £2.7m (2015: £2.2m) available for offset against future profits. A deferred tax asset has been recognised in respect of £1.5m (2015: £1.5m). No deferred tax asset has been recognised in respect of the remaining £1.2m (2015: £0.7m) as it is not considered probable that there will be future taxable profits available. Included in unrecognised tax losses are losses of £0.1m (2015: £0.7m) that will expire by 2023. Other losses may be carried forward indefinitely.

Deferred tax of £4.5m recognised in the Consolidated Statement of Comprehensive Income (page 121) comprises £1.9m associated with the remeasurement of defined benefit obligations and £2.6m relating to exchange movements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

16 Inventories

	2016 £m	2015 £m
Raw materials and consumables	38.4	30.6
Work in progress	15.5	13.3
Finished goods and goods for resale	58.6	48.6
Total inventories	112.5	92.5

The write-down of inventories recognised as an expense during the year in respect of continuing operations was £4.0m (2015: £2.3m). This comprises a cost of £4.6m (2015: £3.4m) to write-down inventory to net realisable value reduced by £0.6m (2015: £1.1m) for reversal of previous write-down reassessed as a result of customer demand.

The value of inventories expected to be recovered after more than 12 months is £8.1m (2015: £14.3m).

There is no material difference between the Balance Sheet value of inventories and their replacement cost. None of the inventory has been pledged as security.

17 Other current assets

	2016 £m	2015 £m
Other receivables	12.3	10.4
Prepayments and accrued income	9.4	10.0
Total other current assets	21.7	20.4

18 Trade and other payables

	2016 £m	2015 £m
Trade payables	29.6	24.0
Social security	3.4	2.5
Other payables	36.9	27.5
Accruals	37.9	30.3
Total trade and other payables	107.8	84.3

19 Obligations under finance leases

	Minimum lease payments		Present value lease payment	
	2016 £m	2015 £m	2016 £m	2015 £m
Amount payable:				
Within 1 year	0.2	0.3	0.2	0.3
1–5 years inclusive	0.2	0.2	0.2	0.2
	0.4	0.5	0.4	0.5
Less future finance charges	–	–	–	–
Total obligations under finance leases	0.4	0.5	0.4	0.5

Finance lease obligations are further disclosed in Note 28.

20 Provisions

	Product warranty £m	Legal, contractual and other £m	Total £m
2016			
At 1st January 2016	0.5	0.7	1.2
Reclassification from accruals	0.7	1.3	2.0
Additional provision in the year	0.6	1.5	2.1
Utilised or released during the year	(0.2)	(1.4)	(1.6)
Exchange adjustments	0.4	0.1	0.5
At 31st December 2016	2.0	2.2	4.2

During the year a review of the accruals balance was performed resulting in reclassifications totalling £2.0 million from accruals.

	Product warranty £m	Legal, contractual and other £m	Total £m
2015			
At 1st January 2015	0.5	–	0.5
Additional provision in the year	–	0.7	0.7
Utilised or released during the year	–	–	–
Exchange adjustments	–	–	–
At 31st December 2015	0.5	0.7	1.2

	2016 £m	2015 £m
Current provisions	2.2	–
Non-current provisions	2.0	1.2
Total provisions	4.2	1.2

Product warranty

Product warranty provisions reflect commitments made to customers on the sale of goods in the ordinary course of business. These are expected to be incurred in the next three years.

Legal, contractual and other

Legal, contractual and other provisions mainly comprise amounts provided against open legal and contractual disputes arising from trade and employment. These costs are based on past experience of similar items and other known factors and represent management's best estimate of the likely outcome. The Group has taken action to enforce its rights and protect its intellectual property rights around the world.

Reflecting the inherent uncertainty within many legal proceedings, the timing and amount of the outflows could differ significantly from the amount provided. Management does not expect that the outcome of such proceedings, either individually or in aggregate, will have a material adverse effect on the Group's financial condition or results of operations.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

21 Called up share capital and reserves

	2016 £m	2015 £m
Ordinary shares of 26 12/13p (2015: 26 12/13p) each:		
Authorised 111,428,571 (2015: 111,428,571)	30.0	30.0
Allotted, called up and fully paid 73,439,226 (2015: 73,238,371)	19.8	19.7

In 2016 141,068 shares were issued with a nominal value of £0.1m were issued in connection with the Group's Employee Share Schemes for a consideration of £3.0m received by the Company.

At 31st December 2016 87,425 shares were held in an Employee Benefit Trust and available for use in connection with the Group's Employee Share Schemes.

164 senior employees of the Group have been granted options on Ordinary shares under the Share Option Scheme and Performance Share Plan (details in Note 24).

Other reserves in the Consolidated Statement of Changes in Equity on pages 121 to 122 are made up as follows:

	1st January 2016 £m	Change in year £m	31st December 2016 £m
Translation reserve	(15.5)	61.6	46.1
Cash flow hedges reserve	(0.5)	0.4	(0.1)
Capital redemption reserve	1.8	–	1.8
Employee Benefit Trust reserve	(4.5)	1.3	(3.2)
Total other reserves	(18.7)	63.3	44.6

Translation reserve

The foreign currency translation reserve is used to record exchange differences arising from the translation of the Financial Statements of foreign subsidiaries, including gains or losses on net investment hedges. On disposal accumulated exchange differences are recycled to the Income Statement.

Cash flow hedges reserve

The reserve records the cumulative net change in the fair value of forward exchange contracts where they are designated as effective cash flow hedge relationships.

Capital redemption reserve

This reserve records the historical repurchase of the Group's own shares.

Employee Benefit Trust reserve

The Group has an Employee Benefit Trust which is used to purchase, hold and issue shares in connection with the Group's employee share schemes. The shares held in Trust are recorded in this separate reserve.

22 Capital commitments and contingent liabilities

	2016 £m	2015 £m
Capital expenditure contracted for but not provided	3.6	7.4

All capital commitments are related to property, plant and equipment. The Group has no material contingent liabilities at 31st December 2016 (2015: £nil).

23 Operating lease obligations

	2016 £m	2015 £m
Commitments under non-cancellable leases due as follows:		
Within 1 year	6.1	4.2
1–5 years inclusive	11.9	10.1
After 5 years	1.2	0.7
Total operating lease obligations	19.2	15.0

Operating leases are primarily in respect of property, plant and equipment.

24 Employee benefits

Retirement benefit obligations

The Group operates a wide range of retirement benefit arrangements, which are established in accordance with local conditions and practices within the countries concerned. These include funded defined contribution and funded and unfunded defined benefit schemes.

Defined contribution arrangements

The majority of the retirement benefit arrangements operated by the Group are of a defined contribution structure, where the employer contribution and resulting Income Statement charge is fixed at a set level or is a set percentage of employee's pay. Contributions made to defined contribution schemes and charged to the Income Statement totalled £9.3m (2015: £8.0m). In the UK, following the closure of the defined benefit schemes to new entrants, the main scheme for new employees is a defined contribution scheme.

Defined benefit arrangements

The Group operates several funded defined retirement benefit schemes where the benefits are based on employees' length of service. Whilst the Group's primary schemes are in the UK, it also operates other material benefit schemes in the USA as well as less material schemes elsewhere. In funded arrangements, the assets of defined benefit schemes are held in separate trustee-administered funds or similar structures in the countries concerned.

UK defined benefit arrangements

The defined benefit schemes in the UK account for approximately half of the Group's net balance sheet liability for defined retirement benefit schemes. Spirax-Sarco operates three UK schemes: the Spirax-Sarco Employees Pension Fund, the Spirax-Sarco Executives' Retirement Benefits Scheme and the Watson-Marlow Pension Fund. These are all final salary pension schemes. The UK schemes are closed to new members but are open to future accrual. There is a mix of different inflation-dependent pension increases (in payment and deferment) which vary from member to member according to their membership history and which scheme they are a member of. All three schemes have been setup under UK law and are governed by a Trustee committee, which is responsible for the scheme's investments, administration and management. A funding valuation is carried out for the Trustees of each scheme every three years by an independent firm of actuaries. Depending on the outcome of that valuation a schedule of future contributions is negotiated with Spirax Sarco. Further information on the contribution commitments is shown in the Financial Review on pages 50 to 51.

US defined benefit schemes

The Group operates a pension scheme in the USA which is closed to new entrants but open to future accrual and defines the pension in terms of the highest average pensionable pay for any five consecutive years prior to retirement. No pension increases (in payment and deferment) are offered by this scheme. It also operates a post-retirement medical plan in the USA, which is unfunded, as is typical for these plans.

Principal risks

The pension schemes create a number of risk exposures. Annual increase in benefits are, to a varying extent from scheme to scheme, dependent on inflation so the main uncertainties affecting the level of benefits payable are future inflation levels (including the impact of inflation on future salary increases) and the actual longevity of the membership. Benefits payable will also be influenced by a range of other factors including member decisions on matters such as when to retire and the possibility to draw benefits in different forms. A key risk is that additional contributions are required if the investment returns fall short of those anticipated when setting the contributions to the pension schemes. All pension schemes are regulated by the relevant jurisdictions. These include extensive legislation and regulatory mechanisms that are subject to change and may impact on the Group's pension schemes. The IAS 19 liability measurement known as Defined Benefit Obligation (DBO) and the Service Cost are sensitive to the actuarial assumptions made on a range of demographic and financial matters that are used to project the expected benefit payments, the most important of these assumptions being the future inflation and salary growth levels and the assumptions made about life expectation. The DBO and Service Cost are also very sensitive to the IAS 19 discount rate, which determines the discounted value of the projected benefit payments. The discount rate depends on market yields on high-quality corporate bonds. Investment strategies are set with funding rather than IAS 19 considerations in mind and do not seek to provide a specific hedge against the IAS 19 measurement of DBO. As a result the difference between the market value of the assets and the IAS 19 DBO may be volatile.

Sensitivity analysis to changes in discount rate and inflation are included on page 148.

The financial assumptions used at 31st December were:

	Assumptions weighted by value of liabilities % per annum			
	UK pensions		Overseas pensions and medical	
	2016	2015	2016	2015
Rate of increase in salaries	2.7	3.5	3.3	3.3
Rate of increase in pensions	3.0	2.9	1.7	1.7
Rate of price inflation	3.2	3.0	2.3	2.3
Discount rate	2.6	3.8	3.6	3.6
Medical trend rate	n/a	n/a	5.0	5.0

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

24 Employee benefits *continued*

The mortality assumptions for the material defined benefit schemes at 31st December 2016 and 31st December 2015 were:

Spirax-Sarco Employees Pension Fund	SAPS S1 Series Normal tables, with 2015 CMI Core Projections from 2002, with a long-term trend of 1.50% p.a.
Spirax-Sarco Executives Retirement Benefits Scheme	SAPS S1 Series Light tables, with 2015 CMI Core Projections from 2002, with a long-term trend of 1.50% p.a.
Watson Marlow Pension Fund	120% of SAPS S2 Normal tables, with 2015 CMI Core Projections from 2007, subject to a long-term trend of 1.50% p.a.
US pension scheme	At 31st December 2016: RP-2014 Blue Collar x 110% adjusted back to 2006 with MP-16 Improvement Scale x 0.75 At 31st December 2015: RP-2014 Blue Collar x 110%. Improvement scale: MP-15 x 0.50

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions which, due to the timescale covered, may not necessarily be borne out in practice.

The amounts recognised in the consolidated Balance Sheet are determined as follows:

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Fair value of schemes' assets	375.8	306.9	50.3	39.0	426.1	345.9
Present value of funded schemes' liabilities	(426.1)	(345.0)	(73.0)	(57.3)	(499.1)	(402.3)
(Deficit) in the funded schemes	(50.3)	(38.1)	(22.7)	(18.3)	(73.0)	(56.4)
Present value of unfunded schemes' liabilities	–	–	(21.2)	(17.3)	(21.2)	(17.3)
Retirement benefit liability recognised in the balance sheet	(50.3)	(38.1)	(43.9)	(35.6)	(94.2)	(73.7)
Related deferred tax asset	9.2	6.9	14.2	11.1	23.4	18.0
Net pension liability	(41.1)	(31.2)	(29.7)	(24.5)	(70.8)	(55.7)

Fair value of scheme assets:

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Equities	159.5	151.2	29.0	22.3	188.5	173.5
Bonds	203.7	143.8	10.3	8.0	214.0	151.8
Other	12.6	11.9	11.0	8.7	23.6	20.6
Total market value in aggregate	375.8	306.9	50.3	39.0	426.1	345.9

At 31st December £100.4m (2015: £81.1m) of scheme assets have a quoted market price in an active market of which £52.2m (2015: £43.8m) relates to UK pensions and £48.2m (2015: £37.3m) relates to overseas pensions and medical.

The actual return on plan assets was £79.2 million (2015: £5.8 million).

The movements in the defined benefit obligation (DBO) recognised in the Balance Sheet during the year were:

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Defined benefit obligation at beginning of year	(345.0)	(351.3)	(74.6)	(75.6)	(419.6)	(426.9)
Current service cost	(6.2)	(6.1)	(2.7)	(2.3)	(8.9)	(8.4)
Interest cost	(12.7)	(12.7)	(3.1)	(2.6)	(15.8)	(15.3)
Contributions by members	(0.3)	(0.6)	–	–	(0.3)	(0.6)
Remeasurement gain/(loss)	(75.1)	8.3	(2.5)	2.3	(77.6)	10.6
Actual benefit payments	11.4	16.4	3.1	3.6	14.5	20.0
Disposal of M&M	–	–	–	0.5	–	0.5
Experience gain/(loss)	1.8	1.0	(0.2)	1.4	1.6	2.4
Currency loss	–	–	(14.2)	(1.9)	(14.2)	(1.9)
Defined benefit obligation at end of year	(426.1)	(345.0)	(94.2)	(74.6)	(520.3)	(419.6)

24 Employee benefits continued

The movements in the fair value of plan assets during the year were:

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Value of assets at beginning of year	306.9	313.5	39.0	37.6	345.9	351.1
Expected return on assets	11.4	11.4	1.8	1.6	13.2	13.0
Remeasurement gain/(loss)	64.4	(6.3)	1.6	(0.9)	66.0	(7.2)
Contributions paid by employer	4.1	4.1	3.2	3.1	7.3	7.2
Contributions paid by members	0.3	0.6	—	—	0.3	0.6
Actual benefit payments	(11.3)	(16.4)	(3.1)	(3.7)	(14.4)	(20.1)
Currency gain	—	—	7.8	1.3	7.8	1.3
Value of assets at end of year	375.8	306.9	50.3	39.0	426.1	345.9

The estimated employer contributions to be made in 2017 are £7.0m (2016: £7.3 million).

The history of experience adjustments is as follows:

	2016 £m	2015 £m	2014 £m	2013 £m	2012 £m
Defined benefit obligation at end of year	(520.3)	(419.6)	(426.9)	(385.9)	(353.3)
Fair value of schemes' assets	426.1	345.9	351.1	313.8	280.6
Retirement benefit liability recognised in the Balance Sheet	(94.2)	(73.7)	(75.8)	(72.1)	(72.7)
Experience adjustment on schemes' liabilities	1.6	2.4	11.0	(0.9)	(0.1)
As a percentage of schemes' liabilities	0.3%	0.6%	2.6%	0.2%	0.0%
Experience adjustment on schemes' assets	66.0	(7.2)	21.8	18.2	13.6
As a percentage of schemes' assets	15.5%	2.1%	6.2%	5.8%	4.8%

The expense recognised in the Group Income Statement was as follows:

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Current service cost	(6.2)	(6.1)	(2.7)	(2.3)	(8.9)	(8.4)
Past service cost	—	—	—	—	—	—
Net interest on schemes' liabilities	(1.3)	(1.3)	(1.3)	(1.0)	(2.6)	(2.3)
Total expense recognised in Income Statement	(7.5)	(7.4)	(4.0)	(3.3)	(11.5)	(10.7)

The expense is recognised in the following line items in the Group Income Statement:

	2016 £m	2015 £m
Operating costs	(8.9)	(8.4)
Net financing expense	(2.6)	(2.3)
Total expense recognised in Income Statement	(11.5)	(10.7)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

24 Employee benefits *continued*

Statement of Comprehensive Income (OCI)

	UK pensions		Overseas pensions and medical		Total	
	2016 £m	2015 £m	2016 £m	2015 £m	2016 £m	2015 £m
Remeasurement effects recognised in OCI:						
Due to experience on DBO	1.8	0.9	(0.2)	1.4	1.6	2.3
Due to demographic assumption changes in DBO	–	5.4	1.2	(0.5)	1.2	4.9
Due to financial assumption changes in DBO	(75.1)	2.9	(3.7)	2.8	(78.8)	5.7
Return on assets	64.4	(6.3)	1.6	(0.9)	66.0	(7.2)
Total remeasurement gain/(loss) recognised in OCI	(8.9)	2.9	(1.1)	2.8	(10.0)	5.7
Deferred tax on remeasurement gain or loss recognised in OCI	1.1	(0.8)	0.8	0.2	1.9	(0.6)
Cumulative loss recognised in OCI at beginning of year	(50.7)	(52.8)	(16.9)	(19.9)	(67.6)	(72.7)
Cumulative loss recognised in OCI at end of year	(58.5)	(50.7)	(17.2)	(16.9)	(75.7)	(67.6)

Sensitivity analysis

The effect on the defined benefit obligation at 31st December 2016 of an increase or decrease in key assumptions is as follows:

	UK pensions £m	Overseas pensions and medical £m	Total £m
Increase/(decrease) in pension deficit:			
Discount rate assumption being 0.25% higher	(18.2)	(3.1)	(21.3)
Discount rate assumption being 0.25% lower	24.1	3.9	28.0
Inflation assumption being 0.25% higher	13.9	1.2	15.1
Inflation assumption being 0.25% lower	(13.0)	(1.2)	(14.2)
Mortality assumption life expectancy at age 65 being 1 year higher	17.7	2.6	20.3

The average age of active participants in the UK schemes at 31st December 2016 was 51 years and in the overseas schemes 50 years.

Share-based payments

Disclosures of the share-based payments offered to employees are set out below. More detail on each scheme is given in the Annual Report on Remuneration 2016 on pages 91 to 92. The charge to the Income Statement in respect of share-based payments is made up as follows:

	2016 £m	2015 £m
Performance Share Plan	1.0	2.5
Employee Share Ownership Plan	0.9	0.8
Total expense recognised in Income Statement	1.9	3.3

Share Option Scheme

The Group operates equity settled share option schemes for employees, although no grants have been made since 2011 because awards have been made using the Group's Performance Share Plan instead. Awards were determined by the Remuneration Committee whose objective was to align the interests of employees with those of shareholders by giving an incentive linked to added shareholder value. Options are subject to performance conditions, which if met make the options exercisable between the third and tenth anniversary of the date of grant. For options granted before 2007 the performance condition is an increase in earnings per share (EPS) of more than 9% greater than the increase in the UK Retail Price Index over a consecutive three-year period between grant and ten years from date of grant. From 2007 the performance condition needs to be met over the three-year period from 1st January prior to the date of the grant. If the condition is not met at the end of the three-year period the option will lapse.

The share options granted have been measured using the Present Economic Value (PEV) valuation methodology. The relevant disclosures in respect of the share option scheme grants are set out on the following page.

24 Employee benefits continued

	2009 Grant	2010 Grant	2011 Grant
Grant date	11th March	26th March	18th March
Exercise price	765.0p	1366.0p	1873.0p
Number of employees	70	75	87
Shares under option	223,500	290,000	350,000
Vesting period	3 years	3 years	3 years
Expected volatility	25%	25%	25%
Risk-free interest rate	2.5%	3.5%	3.1%
Expected dividend yield	3.5%	2.5%	2.5%
Fair value	145.5p	341.7p	442.9p

The number and weighted average exercise prices of share options are as follows:

Option (exercise price)	Outstanding at start of year	Granted during year	Exercised during year	Lapsed during year	Outstanding at end of year
2006 grant (960.0p)	10,375	–	(10,375)	–	–
2007 grant (1019.6p)	14,544	–	(3,500)	–	11,044
2008 grant (959.0p)	24,226	–	(8,086)	–	16,140
2009 grant (765.0p)	11,500	–	(4,425)	–	7,075
2010 grant (1366.0p)	38,500	–	(14,000)	–	24,500
2011 grant (1873.0p)	103,799	–	(31,798)	–	72,001
	202,944	–	(72,184)	–	130,760
Weighted average exercise price	£14.97		£14.32		£15.33
Weighted average contractual life remaining					3.2

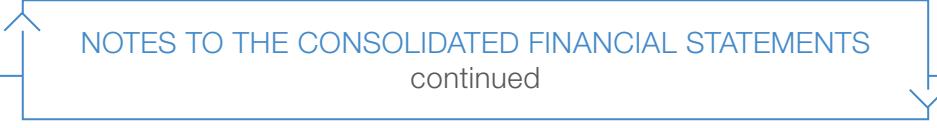
Performance conditions in respect of all exercisable shares have been met. The number of shares exercisable at 31st December 2016 is 130,760 (2015: 202,944). The weighted average share price during the period was £37.99 (2015: £32.07).

Performance Share Plan

Awards under the Performance Share Plan are made to Executive Directors and other senior managers and take the form of contingent rights to acquire shares, subject to the satisfaction of a performance target. To the extent that they vest, awards may be satisfied in cash, in shares or an option over shares. The performance criteria is split into two separate parts. For awards granted from 2014 40% of the award is based on a TSR measure where the performance target is based on the Company's total shareholder return (TSR) relative to the TSR of other companies included in the FTSE All-Share Industrial Engineering Sector over a three-year performance period where awards will vest on a sliding scale. All shares within an award will vest if the Company's TSR is at or above the upper quartile. 25% will vest if the TSR is at the median and the number of shares that will vest will be calculated pro-rata on a straight line basis between 25% and 100% if the Company's TSR falls between the median and the upper quartile. No shares will vest if the Company's TSR is below the median. For awards granted from 2014 the second part, amounting to 60% of the award, is subject to achievement of a target based on aggregate EPS over a three-year performance period. 25% will vest if the compound growth in EPS is equal to the growth in the UK Retail Price Index plus 3% and 100% will vest if the compound growth in EPS is equal to or exceeds the growth in the UK Retail Price Index plus 9%, there is pro-rata vesting for actual growth between these rates. Awards made prior to 2014 had a weighting of 60% TSR and 40% EPS. From 2015 a change has been made to measure EPS on a point to point basis over the three-year performance period. From 2016 EPS growth is measured against the growth of global industrial production (IP), as published by CHR Economics with thresholds of plus 2% and plus 8%.

Shares awarded under the Performance Share Plan have been valued using the Monte Carlo simulation valuation methodology. The relevant disclosures in respect of the Performance Share Plan grants are set out below.

	2012 Grant	2013 Grant	2014 Grant	2015 Grant	2016 Grant
Grant date	9th March	8th March	14th March	11th June	5th April
Mid market share price at grant date	2106.0p	2615.0p	2873.0p	3460.0p	3550.0p
Number of employees	89	105	124	101	141
Shares under scheme	179,980	168,708	170,521	140,090	152,440
Vesting period	3 years				
Probability of vesting	66.5%	62.5%	75.2%	71.5%	70.8%
Fair value	1400.5p	1634.4p	2160.5p	2473.9p	2513.4p



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

24 Employee benefits *continued*

Employee Share Ownership Plan

UK employees are eligible to participate in the Employee Share Ownership Plan (ESOP). The aim of the ESOP is to encourage increased shareholding in the Company by all UK employees and so there are no performance conditions. Employees are invited to join the ESOP when an offer is made each year. Individuals save for 12 months during the accumulation period and subscribe for shares at the lower of the price at the beginning and the end of the accumulation period under HMRC rules. The Company provides a matching share for each share purchased by the individual.

Shares issued under the ESOP have been measured using the Present Economic Value (PEV) valuation methodology. The relevant disclosures in respect of the Employee Share Ownership Plans are set out below.

	2012 Grant	2013 Grant	2014 Grant	2015 Grant	2016 Grant
Grant date	1st October				
Exercise price	2100.3p	3018.0p	2821.3p	2797.0p	4477.3p
Number of employees	1,017	1,015	1,064	1,038	1,040
Shares under scheme	41,703	29,610	34,204	34,449	22,173
Vesting period	3 years				
Expected volatility	25%	25%	20%	21%	21%
Risk free interest rate	0.2%	0.4%	0.6%	0.4%	0.1%
Expected dividend yield	2.5%	2.5%	2.5%	2.5%	2.5%
Fair value	2228.5p	3208.1p	2948.3p	2931.3p	4696.7p

The accumulation period for the 2016 ESOP ends in September 2017, therefore some figures are projections.

25 Analysis of changes in net cash

	At 1st January 2016 £m	Cash flow £m	Exchange movement £m	At 31st December 2016 £m
Current portion of long-term borrowings	(0.3)			(0.2)
Non-current portion of long-term borrowings	(80.7)			(58.2)
Short-term borrowings	(10.1)			(33.0)
Total borrowings	(91.1)			(91.4)
Comprising:				
Borrowings	(90.6)	1.7	(2.1)	(91.0)
Finance leases	(0.5)	0.1	–	(0.4)
	(91.1)	1.8	(2.1)	(91.4)
Cash at bank	99.8	5.0	14.4	119.2
Bank overdrafts	(3.9)	3.9	(0.4)	(0.4)
Net cash and cash equivalents	95.9	8.9	14.0	118.8
Net cash	4.8	10.7	11.9	27.4

The present value of finance lease payments are shown in Note 19 on page 142.

26 Related party transactions

	2016 £m	2015 £m
Sales to Associated companies	–	0.4

Transactions with Directors are disclosed separately in Note 8 and are shown in the Annual Report on Remuneration 2016 on pages 87 to 99.

27 Purchase of businesses

	Acquisitions		
	Book value £m	Fair value adj £m	Fair value £m
2016			
Non-current assets:			
Property, plant and equipment	6.9	2.1	9.0
Intangibles	—	26.8	26.8
	6.9	28.9	35.8
Current assets:			
Inventories	6.8	(0.3)	6.5
Trade receivables	3.8	—	3.8
Other receivables	0.4	—	0.4
Total assets	17.9	28.6	46.5
Current liabilities:			
Trade payables	2.3	—	2.3
Deferred tax	—	4.8	4.8
Total liabilities	2.3	4.8	7.1
Total net assets	15.6	23.8	39.4
Goodwill			27.1
Total			66.5
Satisfied by:			
Cash paid			66.5
Deferred consideration			—
			66.5
Cash outflow for acquired businesses in the Cash Flow Statements (page 123):			
Cash paid for businesses acquired in the period			66.5
Less cash acquired			—
Deferred consideration for businesses acquired in prior years			—
Net cash outflow			66.5

- 1 The acquisition of the assets of the process control valve manufacturer, Hiter Industria e Comercio de Controles Termo-Hidraulicos Ltda (Hiter) was completed on 1st July 2016. The acquisition method of accounting has been used. Consideration of £3.9m was paid on completion. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the opportunity to achieve synergies from being part of the Group and to sell to a wider customer base. Goodwill arising is not expected to be tax deductible. Hiter has generated £0.7m of revenue and a small pre-tax loss since acquisition. Had the acquisition been made on 1st January 2016, the revenue and pre-tax profit would have been approximately double the figures disclosed above.
- 2 The acquisition of 100% of the share capital of Aflex Hose Limited and its subsidiary Aflex Hose USA LLC was completed on 30th November 2016. The acquisition method of accounting has been used. Consideration of £62.5m was paid on completion. Separately identified intangibles are recorded as part of the provisional fair value adjustment. The goodwill recognised represents the skilled workforce acquired and the opportunity to achieve synergies from being part of a larger Group. Goodwill arising is not expected to be tax deductible. The acquisition has generated £2.0m of revenue and £0.5m of pre-tax profit since acquisition. Had the acquisition been made on 1st January 2016, the revenue and pre-tax profit would have been approximately twelve times the figures disclosed. Aflex is highly synergistic with, and a natural extension to, the Watson-Marlow Fluid Technology Group (WMFTG) fluid path product portfolio and further strengthens WMFTG's already strong global presence in the Biotechnology, Pharmaceutical, Industrial, Chemical and Food & Beverage sectors. Aflex's premium PTFE-lined hoses complement our FlowSmart silicone hoses and WMFTG's other fluid path products, as part of our strategy to provide a complete value-added hose and tubing range.
- 3 During the period the fair value of the assets acquired as part of the acquisition of the steam distribution business from Casaval S.A on 25th September 2015 were reassessed. The outcome of the reassessment was an increase to Goodwill of £0.5 million. This is not included in the table above but is shown as an addition to goodwill in Note 14 on page 138.
- 4 £0.5m of acquisition related costs were incurred during the year. The acquired intangibles relate to manufacturing designs and core technology, brand names and trademarks, customer relationships and non-compete undertakings.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

27 Purchase of businesses continued

	Book value £m	Acquisitions Fair value adj £m	Fair value £m
2015			
Non-current assets:			
Property, plant and equipment	0.6	–	0.6
Intangibles	–	12.3	12.3
	0.6	12.3	12.9
Current assets:			
Inventories	3.6	–	3.6
Trade receivables	0.8	–	0.8
Other receivables	0.4	–	0.4
Cash	0.4	–	0.4
Total assets	5.8	12.3	18.1
Current liabilities:			
Trade payables	0.4	–	0.4
Other payables and accruals	0.2	–	0.2
Deferred tax	–	3.6	3.6
Total liabilities	0.6	3.6	4.2
Total net assets	5.2	8.7	13.9
Goodwill			11.2
Total			25.1

Satisfied by

Cash paid	23.8
Deferred consideration	1.3
	25.1
Cash outflow for acquired businesses in the Cash Flow Statements (page 123):	
Cash paid for businesses acquired in the period	23.8
Less cash acquired	(0.4)
Deferred consideration for businesses acquired in prior years	0.2
Net cash outflow	23.6

- The acquisition of the Asepco Corporation, a company specialising in the design and production of high purity tank and process valves and magnetically driven mixers for the Biopharmaceutical industry, based in the USA, was completed on 8th April 2015. The acquisition method of accounting has been used. Consideration of £7.0m was paid on completion with a further £0.2m deferred. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the skilled workforce acquired and the synergies that can be achieved by being part of the Spirax Group. 100% of voting rights were acquired. Goodwill arising is not expected to be tax deductible. Asepco has generated £4.3m of revenue and £0.7m of pre-tax profit since acquisition. Had the acquisition been made on the 1st January 2015, the revenue and pre-tax profit would have been approximately a third higher than the figures disclosed above.
- The acquisition of Valve and Control Engineering Ltd., specialising in boiler services and certifications, based in the UK, was completed on 14th April 2015. The acquisition method of accounting has been used. Consideration of £0.4m was paid during the year with a further £350,000 deferred. This payment is dependent on future performance. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the skilled workforce acquired and the opportunity to sell to a wider customer base. Goodwill arising is not expected to be tax deductible. Following purchase, the business has been incorporated within the UK Sales Steam Specialties operation and made a positive but immaterial contribution to revenue and profit.
- The acquisition of manufacturing and distribution rights of MasoSine pumps in Japan was completed on 1st July 2015. The acquisition method of accounting has been used. Consideration of £2.1m was paid on completion with a further £0.8m deferred. This payment is dependent on satisfactory compliance with agreed conditions. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the skilled workforce acquired and the opportunity to sell direct to the Japanese market. Goodwill arising is not expected to be tax deductible. The acquisition has generated £0.9m of revenue and £0.1m of pre-tax profit since acquisition. Had the acquisition been made on 1st January 2015, the revenue and pre-tax profit would have been approximately double the figures disclosed above.
- The acquisition of the steam distribution business from our Colombian distributor Casaval S.A. was completed on 25th September 2015. The acquisition method of accounting has been used. Consideration of £6.6m was paid on completion for the distribution rights and a further £1.9m for inventory. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the opportunity to sell a wider range of the Group's products direct to the Colombian market and the opportunity to cooperate with Casaval in the future for mutual benefit. Goodwill arising is not expected to be tax deductible. The business was merged with our existing export business in Colombia and additional sales and pre-tax profit were immaterial in 2015.

27 Purchase of businesses *continued*

- 5 The acquisition of the business and assets of Flow Smart Inc., a company specialising in the design and manufacture of high purity sanitary gaskets, silicone transfer tubing and reinforced silicone hoses for the Bioprocessing and Pharmaceutical industries was completed on 24th November 2015. The acquisition method of accounting has been used. Consideration of £5.7m was paid on completion. Separately identified intangibles are recorded as part of the fair value adjustment. The goodwill recognised represents the skilled workforce and the opportunity to achieve synergies from being part of a larger Group. Goodwill arising is not expected to be tax deductible. The acquisition has generated £0.3m of revenue and £0.1m of pre-tax profit since acquisition. Had the acquisition been made on 1st January 2015, the revenue and pre-tax profit would have been approximately 12 times the figures disclosed above.
- 6 £0.5m of acquisition costs were incurred in relation to these acquisitions. The acquired intangibles relate to customer relations, technology based assets and marketing based assets.

28 Derivatives and other financial instruments

The Group does not enter into significant derivative transactions. The Group's principal financial instruments comprise bank loans, cash and short-term deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial instruments such as trade debtors and trade creditors, which arise directly from its operations. It is, and has been throughout the period under review, the Group's policy that no trading in financial instruments shall be undertaken.

The main risks arising from the Group's financial instruments are credit risk, interest rate risk, liquidity risk and foreign currency risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below.

Credit risk

The Group sells products and services to customers around the world and its customer base is extremely varied in size and industry sector. The Group operates credit control policies to assess customers' credit ratings and provides for any debt that is identified as non-collectable.

Interest rate risk

The Group borrows in desired currencies at both fixed and floating rates of interest as appropriate to the purposes of the borrowing.

Liquidity risk

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of overdrafts, loans, facilities and finance leases as appropriate.

Foreign currency risk

The Group has operations around the world and therefore its Balance Sheet can be affected significantly by movements in the rate of exchange between sterling and various other currencies particularly the US dollar and euro. The Group seeks to mitigate the effect of this structural currency exposure by borrowing in these currencies where appropriate while maintaining a low cost of debt.

The Group also has transactional currency exposures principally as a result of trading between Group companies. Such exposures arise from sales or purchases by an operating unit in currencies other than the unit's functional currency. Net cash flows between any two currencies of less than £1.0 million per annum would not usually be considered sufficiently material to warrant forward cover. Forward cover is not taken out more than 24 months in advance or for more than 90% of the next 12 months and 60% of the following 12 months' forecast exposure.

Fair values

The following table compares amounts and fair values of the Group's financial assets and liabilities:

	2016 Carrying value £m	2016 Fair value £m	2015 Carrying value £m	2015 Fair value £m
Financial assets				
Cash and cash equivalents	119.2	119.2	99.8	99.8
Trade and other receivables	197.8	197.8	162.5	162.5
Total financial assets	317.0	317.0	262.3	262.3

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

28 Derivatives and other financial instruments *continued*

	2016 Carrying value £m	2016 Fair value £m	2015 Carrying value £m	2015 Fair value £m
Financial liabilities				
Bank loans	91.0	91.0	90.6	90.6
Finance lease obligations	0.4	0.4	0.5	0.5
Bank overdrafts	0.4	0.4	3.9	3.9
Trade payables	29.6	29.6	24.0	24.0
Other payables	36.9	36.9	27.5	27.5
Total financial liabilities	158.3	158.3	146.5	146.5

There are no other assets or liabilities measured at fair value on a recurring or non-recurring basis for which fair value is disclosed.

Derivative financial instruments are measured at fair value. Fair value of derivative financial instruments are calculated based on discounted cash flow analysis using appropriate market information for the duration of the instruments.

Financial instruments fair value disclosure

Fair value measurements are classified into three levels, depending on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices in active markets for identical assets and liabilities;
- Level 2 fair value measurements are those derived from other observable inputs for the asset or liability; and
- Level 3 fair value measurements are those derived from valuation techniques using inputs that are not based on observable market data.

We consider that the derivative financial instruments fall into Level 2.

Interest rate risk profile of financial liabilities

The interest rate profile of the financial liabilities of the Group as at 31st December was as follows:

	Total £m	Fixed rate financial liabilities £m	Floating rate financial liabilities £m	Financial liabilities on which no interest is paid £m
2016				
Euro	18.3	5.0	–	13.3
US dollar	5.7	–	2.3	3.4
Sterling	74.2	–	66.3	7.9
Renminbi	31.6	17.5	–	14.1
Other	28.5	0.6	5.2	22.7
Group total	158.3	23.1	73.8	61.4
2015				
Euro	13.8	0.2	0.3	13.3
US dollar	2.9	–	–	2.9
Sterling	93.4	0.4	85.8	7.2
Other	36.4	1.1	7.8	27.5
Group total	146.5	1.7	93.9	50.9

28 Derivatives and other financial instruments continued

Terms and debt repayment schedule

The terms and conditions of outstanding loans were as follows:

	Currency	Nominal interest rate	Year of maturity	2016 Carrying value £m	2015 Carrying value £m
Unsecured bank facility	Won	2.6%	2017	0.6	1.1
Secured bank facility	Won	2.8%	2017	–	3.1
Unsecured bank facility	YEN	1.2%	2017	5.2	4.2
Secured bank facility	£	1.4%	2017	7.5	5.9
Unsecured bank facility	€	1.3%	2017	0.4	0.2
Secured bank facility	£	1.0%	2018	58.0	80.0
Unsecured bank facility	CNY	4.1%	2017	17.5	–
Unsecured bank facility	\$	2.1%	2017	2.2	–
Finance leases	CAD	4.0%	2017-2020	0.1	–
Finance leases	IDR	21.0%	2017-2019	0.1	–
Finance leases	S\$	2.8%	2017-2021	0.1	0.1
Finance leases	£	–	2017-2017	0.1	0.4
Total outstanding loans				91.8	95.0

The £58 million bank facility maturing in 2018 is secured on the assets of various Group companies. Covenant tests are performed twice annually at 30th June and 31st December. The Directors have prepared an analysis and conclude that the covenants are met.

The weighted average interest rate paid during the year was 1.6% (2015: 1.1%).

Interest rate risk profile of financial assets

The interest rate profile of the financial assets of the Group as at 31st December was as follows:

2016	Total £m	Fixed rate financial assets £m	Floating rate financial assets £m	Financial assets on which no interest is earned £m
Sterling	20.8	–	0.9	19.9
Euro	78.6	–	12.1	66.5
US dollar	54.5	0.1	9.1	45.3
Renminbi	40.3	0.9	15.9	23.5
Other	122.8	7.7	14.7	100.4
Group total	317.0	8.7	52.7	255.6

2015	Total £m	Floating rate financial assets £m	Financial assets on which no interest is earned £m
Sterling	11.6	2.0	9.6
Euro	64.0	22.0	42.0
US dollar	41.9	5.1	36.8
RMB	49.9	28.9	21.0
Other	94.9	24.5	70.4
Group total	262.3	82.5	179.8

Financial assets on which no interest is earned comprise trade and other receivables and cash in hand.

Floating and fixed rate financial assets comprise cash at bank or placed on money market deposit mainly at call and three month rates. The average rate of interest received on sterling deposits during the year was £nil (2015: £nil).



NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS continued

28 Derivatives and other financial instruments *continued*

Currency exposures

As explained on the previous page, the Group's objectives in managing the currency exposures arising from its net investment overseas (in other words, its structural currency exposures) are to maintain a low cost of debt while partially hedging against currency depreciation. All gains and losses arising from these structural currency exposures are dealt within the Statement of total Comprehensive Income.

Transactional (or non-structural) exposures give rise to net currency gains and losses that are recognised in the Income Statement. Such exposures include the monetary assets and monetary liabilities in the Group Balance Sheet that are not denominated in the operating (or "functional") currency of the operating unit involved. At 31st December 2016 the currency exposures in respect of the euro was a net monetary asset of £3.4m (2015: £2.3m net monetary asset) and in respect of the US dollar a net monetary asset of £16.6m (2015: net monetary asset £5.5m).

At 31st December 2016, the percentage of debt to net assets, excluding debt was 3% (2015: nil) for the Chinese renminbi, 1% (2015: 1%) for Japanese yen, nil (2015: nil) for the euro and nil (2015: nil) for the US dollar.

Maturity of financial liabilities

The Group's financial liabilities at 31st December mature in the following periods:

2016	Trade and other payables £m	Overdrafts £m	Short-term borrowings £m	Finance leases £m	Long-term borrowings £m	Total £m
In six months or less, or on demand	65.6	0.4	27.2	0.1	0.1	93.4
In more than six months but no more than 12	0.8	–	5.8	0.1	0.1	6.8
In more than one year but no more than two	0.1	–	–	0.1	58.2	58.4
In more than two years but no more than three	–	–	–	0.1	–	0.1
In more than three years but no more than four	–	–	–	–	–	–
In more than four years but no more than five	–	–	–	–	–	–
In more than five years	–	–	–	–	–	–
Total contractual cash flows	66.5	0.4	33.0	0.4	58.4	158.7
Balance sheet values	66.5	0.4	33.0	0.4	58.0	158.3

2015	Trade and other payables £m	Overdrafts £m	Short-term borrowings £m	Finance leases £m	Long-term borrowings £m	Total £m
In six months or less, or on demand	51.0	0.2	4.2	0.2	–	55.6
In more than six months but no more than 12	0.4	3.7	5.9	0.2	–	10.2
In more than one year but no more than two	0.1	–	–	0.1	80.6	80.8
In more than two years but no more than three	–	–	–	–	–	–
In more than three years but no more than four	–	–	–	–	–	–
In more than four years but no more than five	–	–	–	–	–	–
In more than five years	–	–	–	–	–	–
Total contractual cash flows	51.5	3.9	10.1	0.5	80.6	146.6
Balance sheet values	51.5	3.9	10.1	0.5	80.5	146.5

Cash flow hedges

The Group uses forward currency contracts to manage its exposure to movements in foreign exchange rates. The forward contracts are designated as hedging instruments in a cash flow hedging relationship. At 31st December 2016 the Group had contracts outstanding to purchase £nil (2015: £7.3m), and €nil (2015: €2.4m) with US dollars, £1.0m (2015: £1.0m) with Danish krone, £8.4m (2015: £13.1m) with euros, £0.3m (2015: £0.7m) with Japanese yen, £0.2m with Korean won, £0.1m with Canadian dollars and £0.1m with Czech koruna. The fair values at the end of the reporting period were an asset of £0.2m (2015: £0.2m liability). The fair value of cash flow hedges falls into the Level 2 category of the fair value hierarchy in accordance with IFRS 7.

The fair value of derivative financial instruments is estimated by discounting the future contracted cash flow using readily available market data.

The contractual cash flows on forward currency contracts at the reporting date are shown on page 157, classified by maturity. The cash flows shown are on a gross basis and are not discounted.

28 Derivatives and other financial instruments *continued*

	Less than 6 months £m	6 to 12 months £m	More than 12 months £m	Total £m
				2016
(Sale)/purchase contracts:				
Sterling	5.6	4.5	–	10.1
Euro	(4.5)	(3.9)	–	(8.4)
US Dollar	–	–	–	–
Danish Krone	(0.5)	(0.5)	–	(1.0)
Other	(0.6)	(0.1)	–	(0.7)
Total contractual cash flows	–	–	–	–
	Less than 6 months £m	6 to 12 months £m	More than 12 months £m	Total £m
2015				2015
(Sale)/purchase contracts:				
Sterling	10.8	11.4	–	22.2
Euro	(5.8)	(5.5)	–	(11.3)
US Dollar	(4.2)	(5.0)	–	(9.2)
Other	(0.8)	(0.9)	–	(1.7)
Total contractual cash flows	–	–	–	–

It is anticipated that the cash flows will take place at the same time as the corresponding forward contract matures. At this time the amount deferred in equity will be reclassified to profit or loss.

All forecast transactions which have been subject to hedge accounting during the year have occurred or are still expected to occur.

A profit on derivative financial instruments of £0.4m (2015: £nil) was recognised in other comprehensive income during the period.

No amount (2015: £nil) was removed from equity during the period and included in the initial cost or other carrying amount of a non-financial asset or non-financial liability whose acquisition or incurrence was a hedged highly probable forecast transaction.

As at 31st December 2016 no ineffectiveness has been recognised in profit or loss arising from hedging foreign currency transactions.

Borrowing facilities

The Group has various borrowing facilities available to it. The undrawn committed facilities available at 31st December in respect of which all conditions precedent had been met at that date were as follows:

	2016 £m	2015 £m
Expiring in one year or less	14.6	14.9
Expiring in more than one year but no more than two years	52.0	30.0
Expiring in more than two years but no more than three years	–	–
Expiring in more than three years	–	–
Total Group undrawn committed facilities	66.6	44.9

Fair values of financial assets and financial liabilities

Fair values of financial assets and liabilities at 31st December 2016 are not materially different from book values due to their size or the fact that they were at short-term rates of interest. Fair values have been assessed as follows:

– Derivatives

Forward exchange contracts are marked to market by discounting the future contracted cash flows using readily available market data.

– Interest-bearing loans and borrowings

Fair value is calculated based on discounted expected future principal and interest cash flows.

– Finance lease liabilities

The fair value is estimated as the present value of future cash flows, discounted at market interest rates for homogeneous lease agreements.

The estimated fair values reflect change in interest rates.

– Trade and other receivables/payables

For receivables/payables with a remaining life of less than one year, the notional amount is deemed to reflect the fair value.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
continued

28 Derivatives and other financial instruments *continued*

Sensitivity analysis

In managing interest rate and currency risks, the Group aims to reduce the impact of short-term fluctuations on the Group's earnings. Over the longer term, however, permanent changes in foreign exchange and interest rates would have an impact on consolidated earnings. At the year end borrowings totalled £91.8m (2015: £95.0m). At 31st December 2016, it is estimated that a general increase of one percentage point in interest rates would increase the Group's profit after tax and equity by approximately £nil (2015: £0.6m reduction).

For the year ended 31st December 2016, it is estimated that a decrease of one percentage point in the value of sterling weighted in relation to the Group's profit and trading flows would have increased the Group's profit before tax by approximately £1.5m (2015: £1.5m). The effect can be very different between years due to the weighting of different currency movements. Forward exchange contracts have been included in this calculation.

The credit risk profile of trade receivables

The ageing of trade receivables at the reporting date was:

	Gross 2016 £m	Impairment 2016 £m	Gross 2015 £m	Impairment 2015 £m
Not past due date	124.1	(0.3)	89.7	(0.2)
0–30 days past due date	35.5	–	30.2	–
31–90 days past due date	19.1	(0.4)	17.8	(0.3)
91 days to one year past due date	10.8	(3.3)	16.1	(1.2)
More than one year	8.2	(8.2)	8.6	(8.6)
Group total	197.7	(12.2)	162.4	(10.3)

Based on past experience, the Group believes no further impairment allowance is required for receivables that are past their due date. Other than trade receivables there are no financial assets that are past their due date at 31st December 2016.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2016 £m	2015 £m
Balance at 1st January	10.3	9.9
Additional impairment	1.9	1.7
Amounts written off as uncollectable	(1.0)	(0.9)
Amounts recovered	(0.4)	(0.4)
Impairment losses reversed	(0.3)	(0.4)
Exchange differences	1.7	0.4
Balance at 31st December	12.2	10.3

COMPANY FINANCIAL STATEMENTS

Company Statement of Financial Position	160
Company Statement of Changes in Equity	161
Notes to the Company Financial Statements	162

Spirax-Sarco Engineering plc
head office, Cheltenham, UK

COMPANY STATEMENT OF FINANCIAL POSITION
at 31st December 2016

	Notes	2016 £m	2015 £m
Assets			
Non-current assets			
Property, plant and equipment	10	8.2	8.3
Investment in subsidiaries	2	217.3	216.7
Investment in Associate		0.9	1.4
Deferred tax assets	6	0.9	0.9
Post-retirement benefits	7	4.7	3.6
		232.0	230.9
Current assets			
Due from subsidiaries	9	186.3	148.3
Other current assets	4	5.3	4.2
Cash and cash equivalents		0.4	0.9
		192.0	153.4
Total assets		424.0	384.3
Equity and liabilities			
Current liabilities			
Trade and other payables	5	3.8	2.2
Short-term borrowings		7.5	5.9
		11.3	8.1
Net current assets		180.7	145.3
Non-current liabilities			
Long-term borrowings		58.0	80.0
Deferred tax liabilities	6	0.8	0.6
Due to subsidiaries	9	16.5	6.2
		75.3	86.8
Total liabilities		86.6	94.9
Net assets		337.4	289.4
Equity			
Share capital	8	19.8	19.7
Share premium account		72.7	69.7
Other reserves	8	8.2	6.3
Retained earnings		236.7	193.7
Equity shareholders' funds		337.4	289.4
Total equity		337.4	289.4
Total equity and liabilities		424.0	384.3

The loss before dividends received was £10.4m (2015: £0.6m). Dividends from subsidiary undertakings of £107.1m (2015: £162.2m) and dividends from Associate companies of £nil (2015: £nil) are excluded from this amount.

These Financial Statements of Spirax-Sarco Engineering plc, company number 00596337 were approved by the Board of Directors and authorised for issue on 8th March 2017 and signed on its behalf by:

N.J. Anderson K.J. Boyd Directors

COMPANY STATEMENT OF CHANGES IN EQUITY
for the year ended 31st December 2016

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
Balance at 1st January 2016	19.7	69.7	6.3	193.7	289.4
Profit for the year	–	–	–	96.7	96.7
Other comprehensive (expense)/income:					
Remeasurement gain on post-retirement benefits	–	–	–	1.0	1.0
Deferred tax on remeasurement gain on post-retirement benefits	–	–	–	(0.1)	(0.1)
Total other comprehensive income for the year	–	–	–	0.9	0.9
Total comprehensive income for the year	–	–	–	97.6	97.6
Contributions by and distributions to owners of the Company:					
Dividends paid	–	–	–	(51.9)	(51.9)
Equity settled share plans net of tax	–	–	–	(2.7)	(2.7)
Issue of share capital	–	3.0	–	–	3.0
Employee Benefit Trust shares	0.1	–	1.3	–	1.4
Investment in subsidiaries in relation to share options granted	–	–	0.6	–	0.6
Balance at 31st December 2016	19.8	72.7	8.2	236.7	337.4

For the year ended 31st December 2015

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
Balance at 1st January 2015	19.6	65.1	3.1	170.7	258.5
Profit for the year	–	–	–	161.5	161.5
Other comprehensive (expense)/income:					
Remeasurement gain on post-retirement benefits	–	–	–	0.9	0.9
Deferred tax on remeasurement gain on post-retirement benefits	–	–	–	(0.1)	(0.1)
Total other comprehensive income for the year	–	–	–	0.8	0.8
Total comprehensive income for the year	–	–	–	162.3	162.3
Contributions by and distributions to owners of the Company					
Dividends paid	–	–	–	(140.3)	(140.3)
Equity settled share plans net of tax	–	–	–	1.0	1.0
Issue of share capital	0.1	4.6	–	–	4.7
Employee Benefit Trust shares	–	–	1.9	–	1.9
Investment in subsidiaries in relation to share options granted	–	–	1.3	–	1.3
Balance at 31st December 2015	19.7	69.7	6.3	193.7	289.4

Other reserves represent the Company's share-based payments, capital redemption and Employee Benefit Trust reserves (see Note 8).

The Notes on pages 162 to 167 form an integral part of the Financial Statements.



NOTES TO THE COMPANY FINANCIAL STATEMENTS

1 Accounting policies

The separate Financial Statements of the Company are presented as required by the Companies Act 2006. The Company meets the definition of a qualifying entity under FRS 100. Accordingly, in the year ended 31st December 2016 the Company has decided to adopt FRS 101: *Reduced Disclosure Framework*. The Financial Statements of the Company were prepared in accordance with IFRS in previous years, the transition has not had any effect on the Financial Statements. However, as permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to share-based payments, financial instruments and the presentation of a Cash Flow Statement. Where relevant, equivalent disclosures have been given in the consolidated Financial Statements.

Under section 408 of the Companies Act 2006 the Company is exempt from the requirement to present its own Income Statement. As permitted by the audit fee disclosure regulations, disclosure of non-audit fees information is not included in respect of the Company.

The Company's accounting policies are the same as those set out in Note 1 of the consolidated Financial Statements, except as noted below.

The Company's critical judgements and key sources of estimation uncertainty are consistent with those disclosed in Note 1 of the consolidated Financial Statements and relate to the selection of key assumptions for assessing post-retirement benefit defined benefit obligations.

Investments in subsidiaries are stated at cost less, where appropriate, provisions for impairment.

Loans to or from other Group undertakings and all other payables and receivables are initially recorded at fair value, which is generally the proceeds received. They are then subsequently carried at amortised cost.

2 Investments in subsidiaries

	2016 £m	2015 £m
Cost:		
At 1st January	216.7	160.6
Share options issued to subsidiary company employees	0.6	1.3
New investment	–	54.8
At 31st December	217.3	216.7

Investments are stated at cost less provisions for any impairment in value.

Details relating to subsidiary undertakings are given on pages 169 to 171. Except where stated all classes of shares were 100% owned by the Group at 31st December 2016. The country of incorporation of the principal Group companies is the same as the country of operation with the exception of companies operating in the United Kingdom which are incorporated in Great Britain. All are in the fluid control business except Spirax-Sarco Investments Ltd, Spirax-Sarco Overseas Ltd, Spirax-Sarco America Ltd, Sarco International Corp, Watson-Marlow Bredel Holdings BV, Spirax-Sarco Engineering SLU, Spirax-Sarco Engineering BV, Spirax-Sarco Germany Holdings GmbH, Spirax-Sarco Netherlands Holdings Cooperative WA, Spirax-Sarco Investments BV, Spirax Sarco Energy Solutions LLC, Inversiones Spirax-Sarco Chile Ltd, Watson-Marlow Bredal Holdings II BV and Spirax Sarco Investment Limited which are investment holding companies.

3 Loans to subsidiaries

	2016 £m	2015 £m
Cost:		
At 1st January	–	37.5
Repayment	–	(37.5)
At 31st December	–	–

4 Other current assets

	2016 £m	2015 £m
Prepayments and accrued income	5.3	4.2
Total other current assets	5.3	4.2

5 Trade and other payables

	2016 £m	2015 £m
Accruals	3.8	2.2
Total trade and other payables	3.8	2.2

6 Deferred tax assets and liabilities

Movement in deferred tax during the year 2016

	1st January 2016 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	31st December 2016 £m
Other temporary differences (asset)	0.9	–	–	–	0.9
Pensions (liability)	(0.6)	(0.1)	(0.1)	–	(0.8)
Company total	0.3	(0.1)	(0.1)	–	0.1

Movement in deferred tax during the year 2015

	1st January 2015 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	31st December 2015 £m
Other temporary differences (asset)	0.9	–	–	–	0.9
Pensions (liability)	(0.5)	–	(0.1)	–	(0.6)
Company total	0.4	–	(0.1)	–	0.3

7 Employee benefits

Pension plans

The Company is accounting for pension costs in accordance with International Accounting Standard 19.

The disclosures shown here are in respect of the Company's defined benefit obligations. Other plans operated by the Company were defined contribution plans.

The total expense relating to the Company's defined contribution pension plans in the current year was £0.4m (2015: £0.1m).

The post-retirement mortality assumptions in respect of the Company Defined Benefit Scheme follows the SAPS Light tables, with improvements based on the 2015 CMI Core Projections from 2002 with a 1.5% long-term trend. These assumptions are regularly reviewed in light of scheme specific experience and more widely available statistics.

NOTES TO THE COMPANY FINANCIAL STATEMENTS
continued

7 Employee benefits *continued*

The financial assumptions used at 31st December were:

	Assumptions weighted by value of liabilities % per annum	
	2016	2015
Rate of increase in salaries	2.7	3.5
Rate of increase in pensions	3.0	2.8
Rate of price inflation	3.2	3.0
Discount rate	2.6	3.8

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions, which due to the timescale covered, may not necessarily be borne out in practice.

Fair value of scheme assets:

	2016 £m	2015 £m
Equities	16.4	19.4
Bonds	38.3	28.1
Other	4.1	4.2
Total market value in aggregate	58.8	51.7

£14.3m (2015: £8.1m) of scheme assets have a quoted market price in an active market.

The actual return on plan assets was £9.5m (2015: £0.8m).

The amounts recognised in the Company Statement of Financial Position are determined as follows:

	2016 £m	2015 £m
Fair value of scheme's assets	58.8	51.7
Present value of funded scheme's liabilities	(54.1)	(48.1)
Retirement benefit asset recognised in the Statement of Financial Position	4.7	3.6
Related deferred tax	(0.8)	(0.6)
Net pension asset	3.9	3.0

The movements in the Defined Benefit Obligation (DBO) recognised in the Statement of Financial Position during the year were:

	2016 £m	2015 £m
Defined benefit obligation at beginning of year	(48.1)	(54.4)
Current service cost	(0.1)	(0.1)
Interest cost	(1.8)	(1.9)
Contributions from members	–	–
Remeasurement gain/(loss)	(7.1)	1.1
Actual benefit payments	2.5	6.2
Experience (loss)/gain	0.5	1.0
Defined benefit obligation at end of year	(54.1)	(48.1)

7 Employee benefits continued

The movements in the fair value of plan assets during the year were:

	2016 £m	2015 £m
Value of assets at beginning of year	51.7	57.0
Expected return on assets	1.9	2.0
Remeasurement gain/(loss)	7.6	(1.2)
Contributions paid by employer	0.1	0.1
Contributions from members	–	–
Actual benefit payments	(2.5)	(6.2)
Value of assets at end of year	58.8	51.7

The estimated employer contributions to be made in 2017 are £0.1m.

The history of experience adjustments is as follows:

	2016 £m	2015 £m	2014 £m	2013 £m	2012 £m
Defined benefit obligation at end of year	(54.1)	(48.1)	(54.4)	(51.7)	(49.7)
Fair value of scheme's assets	58.8	51.7	57.0	53.8	49.6
Retirement benefit (liability) recognised in the Balance Sheet	4.7	3.6	2.6	2.1	(0.1)
Experience adjustment on scheme's liabilities	0.5	1.0	0.7	0.5	–
As a percentage of scheme's liabilities	0.9%	2.0%	1.3%	1.0%	0.0%
Experience adjustment on scheme's assets	7.6	(1.2)	3.1	2.7	2.3
As a percentage of scheme's assets	13.0%	2.3%	5.4%	5.0%	4.5%

The expense recognised in the Company Income Statement was as follows:

	2016 £m	2015 £m
Current service cost	(0.1)	(0.1)
Net interest on scheme's assets/(liabilities)	0.1	0.1
Total expense recognised in Income Statement	–	–

Statement of Comprehensive Income (OCI)

	2016 £m	2015 £m
Remeasurement effects recognised in OCI:		
Due to experience on DBO	0.5	1.0
Due to demographic assumption changes in DBO	–	0.8
Due to financial assumption changes in DBO	(7.1)	0.3
Return on assets	7.6	(1.2)
Total remeasurement gain recognised in OCI	1.0	0.9
Deferred tax on remeasurement amount recognised in OCI	(0.1)	(0.1)
Cumulative loss recognised in OCI at beginning of year	(11.7)	(12.5)
Cumulative loss recognised in OCI at end of year	(10.8)	(11.7)

Sensitivity analysis

The effect on the defined benefit obligation at 31st December 2016 of an increase or decrease in key assumptions is as follows:

Increase/(decrease) in pension defined benefit obligation	£m
Discount rate assumption being 0.25% higher	(1.6)
Discount rate assumption being 0.25% lower	1.9
Inflation assumption being 0.25% higher	0.9
Inflation assumption being 0.25% lower	(0.9)
Mortality assumption life expectancy at age 65 being 1 year higher	2.2

NOTES TO THE COMPANY FINANCIAL STATEMENTS
continued

7 Employee benefits *continued*

Share-based payments

Disclosures of the share-based payments offered to employees of the Company are set out below. The description and operation of each scheme is the same as outlined in the Group disclosure set out above.

Share Option Scheme

The equity settled share options issued to employees of the Company are charged in the Company's Income Statement. The relevant disclosures in respect of the share option scheme grants are set out below. No options have been granted since 2011.

	2009 Grant	2010 Grant	2011 Grant
Grant date	11th March	26th March	18th March
Exercise price	765.0p	1366.0p	1873.0p
Number of employees	1	1	5
Shares under option	2,500	4,000	19,000
Vesting period	3 years	3 years	3 years
Expected volatility	25%	25%	25%
Risk-free interest rate	2.5%	3.5%	3.1%
Expected dividend yield	3.5%	2.5%	2.5%
Fair value	145.5p	341.7p	442.9p

The number and weighted average exercise prices of share options are as follows:

	Outstanding at start of year	Granted during year	Exercised during year	Lapsed during year	Outstanding at end of year
2008 grant (959.0p)	1,228	–	(1,228)	–	–
2009 grant (765.0p)	–	–	–	–	–
2010 grant (1366.0p)	4,000	–	(4,000)	–	–
2011 grant (1873.0p)	5,399	–	(3,000)	(2,399)	–
	10,627	–	(8,228)	(2,399)	–
Weighted average exercise price	£15.77		£14.90	£18.73	
Weighted average contractual life remaining					0 years

Performance conditions in respect of all exercisable shares have been met. The number of shares exercisable at 31st December 2016 is nil (2015: 10,627).

Performance Share Plan

The relevant disclosures in respect of the Performance Share Plan grants are set out below.

	2012 Grant	2013 Grant	2014 Grant	2015 Grant	2016 Grant
Grant date	9th March	8th March	14th March	11th June	5th April
Mid market share price at grant date	2106.0p	2615.0p	2873.0p	3460.0p	3550.0p
Number of employees	9	12	11	15	13
Shares under scheme	84,230	69,174	61,154	70,290	69,890
Vesting period	3 years				
Probability of vesting	66.5%	62.5%	75.2%	71.5%	70.8%
Fair value	1400.5p	1634.4p	2160.5p	2473.9p	2513.4p

8 Called up share capital and reserves

	2016 £m	2015 £m
Ordinary shares of 26 1/13p (2015: 26 1/13p) each		
Authorised 111,428,571 (2015: 111,428,571)	30.0	30.0
Allotted, called up and fully paid 73,439,226 (2015: 73,238,371)	19.8	19.7

141,068 shares with a nominal value of £0.1m were issued in connection with the Group's Employee Share Schemes for a consideration of £3.0m received by the Company.

In December 2016 the Parent Company purchased 40,000 shares representing 0.05% of called up share capital with a nominal share value of £10,769 for consideration of £1,683,599. The shares were placed in an Employee Benefit Trust (EBT) to be used in connection with the Group's Employee Share Scheme.

At 31st December 2016 87,425 shares were held in an EBT and available for use in connection with the Group's Employee Share Schemes.

15 senior employees of the Company have been granted options on Ordinary shares under the Share Option Scheme and Performance Share Plan (details in Note 7).

Other reserves in the Company Statement of Changes in Equity on page 161 are made up as follows:

	1st January 2016 £m	Change in year £m	31st December 2016 £m
Share-based payments reserve	9.0	0.6	9.6
Capital redemption reserve	1.8	–	1.8
Employee Benefit Trust reserve	(4.5)	1.3	(3.2)
Total other reserves	6.3	1.9	8.2

9 Related party transactions

	2016 £m	2015 £m
Dividends received from subsidiaries	107.1	162.2
Loans and amounts due from subsidiaries at 31st December	186.3	148.3
Amounts due to subsidiaries at 31st December	16.5	6.2

10 Other information

Dividends

Dividends paid by the Company are disclosed in Note 11 of the consolidated Financial Statements.

Property, plant and equipment

The Company holds freehold property with a cost of £9.3m (2015: £9.3m), accumulated depreciation of £1.1m (2015: £1.0m) and a net book value of £8.2m (2015: £8.3m).

Employees

The total number of employees of the Company at 31st December 2016 was 39 (2015: 31).

Directors' remuneration

The remuneration of the Directors of the Company is shown in the Annual Report on Remuneration on pages 87 to 99.

Auditor's remuneration

Auditor's remuneration in respect of the Company's annual audit has been disclosed on a consolidated basis in the Company's consolidated Financial Statements as required by Section 494(4)(a) of the Companies Act 2006.

Contingent liabilities and capital commitments

The Company has no contingent liabilities or capital commitments at 31st December 2016 (2015: £nil).


CONSOLIDATED FINANCIAL SUMMARY 2007–2016

	2007 £m	2008 £m	2009 £m	2010 £m	2011 £m	2012 [†] £m	2013 £m	2014 £m	2015 £m	2016 £m
Revenue	417.3	502.3	518.7	589.7	650.0	661.7	689.4	678.3	667.2	757.4
Operating profit	68.3	81.0	76.5	121.4	129.5	125.7	147.0	148.1	142.8	174.1
Operating profit* (adjusted)	68.7	85.7	89.9	119.1	134.0	136.2	151.6	153.0	152.4	180.6
Operating profit margin (adjusted)*	16.5%	17.1%	17.3%	20.2%	20.6%	20.6%	22.0%	22.5%	22.8%	23.8%
Profit before taxation	72.2	85.2	76.4	123.5	132.3	124.1	145.7	144.8	139.7	171.4
Profit before taxation* (adjusted)	72.8	90.1	90.2	121.6	137.2	134.9	151.1	151.1	151.1	177.9
Profit after taxation	49.2	59.8	53.1	86.7	93.2	87.6	102.3	100.6	96.7	121.3
Dividends in respect of the year	22.8	25.7	27.6	52.6	38.1	119.5	44.5	139.9	50.6	55.8
Net assets	243.0	296.0	307.4	379.5	400.1	436.5	403.5	441.9	398.3	524.4
Earnings per share (basic)	64.7p	78.0p	69.6p	112.5p	120.0p	112.2p	133.4p	132.8p	129.9p	165.0p
Earnings per share* (adjusted)	65.5p	83.4p	82.2p	109.5p	124.8p	122.2p	138.8p	140.4p	142.6p	171.5p
Dividends in respect of the year (per share)	29.9p	33.3p	36.1p	43.0p	49.0p	53.0p	59.0p	64.5p	69.0p	76.0p
Special dividend (per share)	—	—	—	25.0p	—	100.0p	—	120.0p	—	—
Return on capital employed (Note 2)	33.6%	35.5%	33.3%	42.1%	41.1%	39.4%	44.4%	44.3%	44.1%	47.9%

* Adjusted items exclude non-operating items. See Note 2 on page 128.

[†] The results for 2012 have been restated to reflect IAS 19(R), prior years have not been restated.

OUR GLOBAL OPERATIONS

Spirax Sarco Steam Specialties

EMEA

Country	Company Name	Registered Office address
Belgium	Spirax Sarco NV**	Industrielaan 5, B-9052 Zwijnaarde, Belgium
Czech Republic	Spirax Sarco spol sro**	Prazska 1455, 102 00 Praha, Hostivar, Czech Republic
Egypt	Spirax Sarco Egypt**	33 Mourad Bek, Heliopolis, Cairo, Egypt
	Spirax Sarco Energy Solutions LLC** (H)	33 Mourad Bek, Heliopolis, Cairo, Egypt
Finland	Spirax Oy**	Niittytie 25 A 24, 01300 Vantaa, Finland
France	Spirax Sarco SAS**	8 Avenue le Verrier, 78190 Trappes, France
Germany	Spirax Sarco GmbH Regelapparate**	Reichenaustr. 210, 78467 Konstanz, Germany
	HygroMatik GmbH**	Lise-Meitner-Str. 3, 24558 Henstedt-Ulzburg, Germany
	Spirax-Sarco Germany Holdings GmbH** (H)	Reichenaustr. 210, 78467, Konstanz, Germany
Italy	Spirax Sarco Srl**	Via Per Cinisello 18, 20834 Nova Milanese, Italy
	Colima Srl**	Via Mestre 11, 20063 Cernusco Sul Naviglio, Milano, Italy
Kenya	Spirax Sarco East Africa Ltd**	Clifton Park, Mombasa Road, Nairobi, Kenya
Morocco	Spirax Sarco Maghreb**	159 Boulevard de la Résistance, 3eme etage Mob 20.20000, Casablanca, Morocco
Netherlands	Spirax-Sarco Netherlands BV**	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Engineering BV** (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Investments BV** (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Netherlands Holdings Coöperative WA** (H)	Sluisstraat 7, 7491 GA Delden, Delden, Netherlands
Norway	Spirax Sarco AS**	Vestvollveien 14A, N-2019 Skedsmokorset, Norway
Poland	Spirax Sarco Sp Zoo**	Jutrzenki 98, 02-230, Warszawa, Poland
Portugal	Spirax Sarco Equipamentos Ind Lda**	Rua Quinta do Pinheiro, No 8 & 8A, 2794-058 Carnaxide, Portugal
Russia	Spirax-Sarco Engineering LLC**	198188, Russian Federation, St. Petersburg, Vozrozhdeniya Street, The House 20a, lit.A. Russian Federation
South Africa	Spirax Sarco Services South Africa (Pty) Ltd**	Corner Brine Avenue and Horn Street, Chloorkop Ext 23, Gauteng 1624, South Africa
	Spirax Sarco South Africa (Pty) Ltd**	Corner Brine Avenue and Horn Street, Chloorkop Ext 23, Gauteng 1624, South Africa
Spain	Spirax-Sarco SAU**	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
	Especialidades Hydra SLU**	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
	Spirax-Sarco Engineering SLU (H)**	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
Sweden	Spirax Sarco AB**	Teléfonvägen 30, SE-126 37 Hagersten, Sweden
Switzerland	Spirax Sarco AG**	Gustav-Maurer-Strasse 9, 8702 Zollikon, Switzerland
Turkey	Spirax Inter Valf Sanayi ve Ticaret Ltd Şirketi**	Serifali Mevkii, Edep Sok No 27, 34775 Yukari Dudullu - Ümraniye, Istanbul, Turkey

Country	Company Name	Registered Office address
United Arab Emirates	Spirax Sarco Middle East Ltd**	Warehouse No A4-005, PO Box 120546, Sharjah Airport International Free Zone (SAIF Zone), Sharjah, United Arab Emirates
United Kingdom	Spirax-Sarco Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	V.C.E. Ltd**	Block 2, Unit 5 Threave Court, Castlehill Industrial Estate, Carlisle, ML8 5UF
	Spirax-Sarco America Ltd** (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Spirax-Sarco Investments Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Spirax-Sarco Overseas Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom

Asia Pacific

Country	Company Name	Registered Office address
Australia	Spirax Sarco Pty Ltd**	14 Forge St., Blacktown, NSW 2148, Australia
China	Spirax-Sarco Engineering (China) Ltd**	No 800 XinJun Ring Road, Pujian Hi Tech Park, Shanghai, China
	Spirax Sarco Trading (Shanghai) Co Ltd**	Shanghai City Minhang District, New Chun Loop 800 blocks in the fifth, China
Hong Kong	Spirax Sarco Hong Kong Co Ltd**	Unit 1507, 15th Floor, Prosperity Center, 25 Chong Yip Street, Kwun Tong, Kowloon, Hong Kong
India	Spirax-Sarco India Private Ltd**	Plot No. 6, Central Avenue, Mahindra World City, Chengalpattu Taluk, Kancheepuram District 603004, India
Indonesia	PT Spirax-Sarco Indonesia*	No 16, Jalan Saujana 1, Golf West Precinct, Horizon Hills, Nusajaya 79100, Johor, Malaysia
Malaysia	Spirax Sarco Sdn Bhd**	No 10, Temasya 18, Jalan Pelukis U1/46A, 40150 Shah Alam, Selangor, Malaysia
	Spirax Sarco Investment Limited** (H)	6th Floor, Akademi Etiqa, No23 Jalan Melaka, 50100 Kuala Lumpur, Malaysia
New Zealand	Spirax Sarco Ltd**	6 Nandina Avenue, East Tamaki, Auckland 213, New Zealand
Philippines	Spirax-Sarco Philippines Inc**	2308 Natividad Building, Chino Roces Avenue Extension, Makati City, Philippines
Singapore	Spirax Sarco Pte Ltd**	464 Tagore Avenue, Upper Thomson Road, Singapore 787833, Singapore
South Korea	Spirax Sarco Korea Ltd**	Steam People House, 99 Sadangro 30gil, Dongjak-gu, Seoul, Korea, Republic of Korea
Taiwan	Spirax Sarco Co Ltd**	No.9 Lane 270 Sec. Beishen Road, Shenkeng District, New Taipei City 222, Taiwan
Thailand	Spirax Sarco (Thailand) Ltd**	95 Rama 9 Road, Soi 59, Kwang Suanluang, Khet Suanluang, Bangkok 10250, Thailand
Vietnam	Spirax Sarco Vietnam Co Lts**	4th Floor, 180 Nguyen Van Troi Street, Ward 8, Phu Nhuan District, Ho Chi Minh City, Vietnam



OUR GLOBAL OPERATIONS

CONTINUED

Americas

Country	Company Name	Registered Office address
Argentina	Spirax Sarco SA**	866 Paraguay St., 3rd Floor, Buenos Aires (1057), Argentina
Brazil	Spirax Sarco Ind e Com Ltda**	Avenida Manoel Lages do Chão, 268, Bairro Portão, Cotia, São Paulo, 06705-050, Brazil
	Spirax-Sarco Servicos de Engenharia Ltda**	Avenida Manoel Lages do Chão, 268, Bairro Portão, Cotia, São Paulo, 06705-050, Brazil
	Hiter Controls Engenharia Ltda**	Av. Jerome Case, No 2600, Hangers B19, B20 and B21, Éden, Sorocaba, São Paulo, 18087 220, Brazil
Canada	Spirax Sarco Canada Ltd**	383 Applewood Crescent, Concord, ON L4K 4J3, Canada
Chile	Spirax-Sarco Chile Ltda**	Las Garzas 930, Galpón D, Quilicura, Santiago de Chile, Chile
	Inversiones Spirax-Sarco Chile Ltda** (H)	Las Garzas 930, Galpón D, Quilicura, Santiago de Chile, Chile
Colombia	Spirax Sarco Colombia SAS**	Carretera Panamericana No 3-150, Jamundi, Valle del Cauca, Cali, Colombia
Mexico	Spirax Sarco Mexicana, SAPI DE CV**	Boulevard Allianz 30B, Parque Industrial CPA, Ciénega de Flores Nuevo León, CP 65550, Mexico
Peru	Spirax Sarco Peru SAC**	Guillermo Marconi 451, San Isidro, Lima, Perú
United States	Spirax Sarco Inc**	1150 Northpoint Blvd., Blythewood, SC 29016, United States
	Sarco International Corp** (H)	2711 Centerville Road, Suite 400, Wilmington, DE 19808, United States

Watson-Marlow Fluid Technology Group

Country	Company Name	Registered Office address
Australia	Watson-Marlow Pty Ltd**	Unit 15, 19-26 Durian Place, Wetherill Park, NSW 2164, Australia
Austria	Watson-Marlow Austria GmbH**	3 OG/Top D 34, Leopold - Böhm - Strasse 12, 1030, Wien, Austria
Belgium	Watson-Marlow NV**	Industriepark 5, B-9052 Zwijnaarde, Belgium
Brazil	Watson-Marlow Bredel Ind e Com de Bombas Ltda	Alameda Juari, 559–Centro Empresarial Tamboré, Barueri – SP, CEP: 06460-090, Brazil
Canada	Watson-Marlow Canada Inc**	383 Applewood Crescent, Concord, ON L4K 4J3, Canada
Chile	Watson-Marlow Bombas Chile Ltda**	Las Garzas 930, Galpón D, Quilicura, Santiago de Chile, Chile
Denmark	Watson-Marlow Flexicon A/S**	Frejavej 2, 4100 Ringsted, Denmark
France	Watson-Marlow SAS**	9 Route De Galluis, Zi Les Croix, 78940 La Queue Lez Yvelines, France
Germany	Watson-Marlow GmbH**	Muehlenweg 9, 41569 Rommerskirchen, Germany
India	Watson-Marlow India Private Ltd**	Survey No. 81/7, Pune-Mumbai Bypass Road, Tathawade, Pune – 411 033, Maharashtra State, India
Ireland	Watson-Marlow Ltd**	2 Georges Quay, Cork, Ireland
Italy	Watson-Marlow Srl**	Via Padana Superiore 74/D, 25080 Mazzano, Brescia, Italy
Japan	Watson-Marlow Co Ltd**	4-23-21 Ukimura Kita-ku, Tokyo 115-0051, Japan

Country	Company Name	Registered Office address
Mexico	Watson-Marlow S de RL de CV**	Boulevard Allianz 30B, Parque Industrial CPA, Ciénega de Flores Nuevo León, CP 65550, Mexico
Netherlands	Watson-Marlow BV**	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Watson-Marlow Bredel BV**	Sluisstraat 7, 7491 GA, Delden, Netherlands
	Watson-Marlow Bredel Holdings BV** (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Watson-Marlow Bredel Holdings II BV** (H)	Sluisstraat 7, 7491 GA, Delden, Netherlands
New Zealand	Watson-Marlow Ltd**	Unit F, 6 Polaris Place, East Tamaki, Auckland 2013, New Zealand
Poland	Watson-Marlow Sp Zoo**	Ul. Fosa 25, 02-768 Warszawa, Poland
Russia	Watson-Marlow LLC**	Room 19, Premises I, Shosse Entuziastov, 34, Moscow, 105118, Russian Federation
Singapore	Watson-Marlow Pte Ltd**	464 Tagore Avenue, Upper Thomson Road, Singapore 787833, Singapore
South Africa	Watson-Marlow Bredel SA (Pty) Ltd**	Unit 5 Industrial Park, Citrus Street, Honeydew, Johannesburg, South Africa
Sweden	W-M Alitea AB**	Hammarby Fabriksväg 29-31, SE-120 30 Stockholm, Sweden
Taiwan	Watson-Marlow Co Ltd**	No.9 Lane 270 Sec. Beishen Road, Shenkeng District, New Taipei City 222, Taiwan
United Kingdom	Aflex Hose Ltd**	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
	BioPure Technology Ltd**	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
	Watson-Marlow Ltd*	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
United States	Aflex Hose USA LLC**	32 Appletree Lane, Pipersville, PA 18947, United States
	ASEPCO**	355 Pioneer Way, Suite B, Mountain View, CA 94041 United States
	Watson Marlow Inc**	37 Upton Technology Park, Wilmington, MA 01887, United States
	Watson-Marlow Flow Smart Inc**	1675 South State St., Suite B, Dover, DE 19901 United States

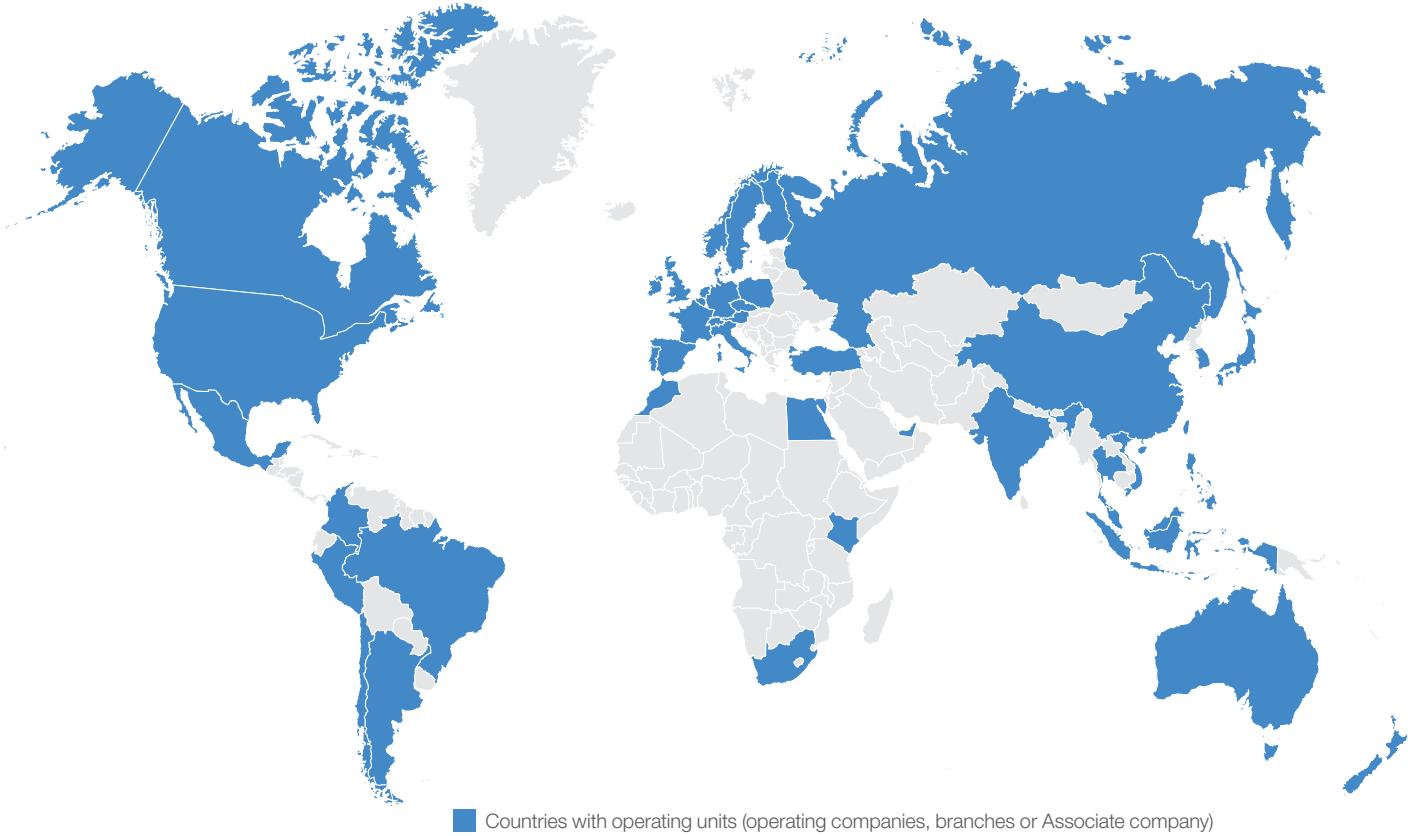
The global operations listed on pages 169 to 170 are registered companies. In addition to these operations we have a number of other operating entities, including branches of the Spirax Sarco Steam Specialties business; Watson-Marlow entities that operate via Spirax Sarco Steam Specialties business companies; and an Associate company.



For more information
see page 171.

Key

- * Direct subsidiary owned by Spirax-Sarco Engineering plc
- ** Indirect subsidiary
- (H) Holding company



Notes

All subsidiaries in the tables on pages 169 to 170 are 100% owned except Spirax Sarco Korea Ltd which is 97.5% owned by the Group.

In addition to the subsidiaries in the tables on pages 169 to 170 we have the following operations:

- Steam Specialties businesses in Ireland, Japan and Denmark operating as branches of Spirax-Sarco Limited.
- Watson-Marlow Fluid Technology Group businesses in Switzerland operating as a branch of Watson-Marlow Limited, Watson-Marlow Argentina operating via Spirax Sarco S.A., Watson-Marlow China operating via Spirax-Sarco Engineering (China) Ltd., Watson-Marlow Malaysia operating via Spirax-Sarco Sdn Bhd, Watson-Marlow Korea operating via Spirax-Sarco Korea Ltd.
- An Associate, Econotherm (UK) Limited, 38.9% owned by Spirax-Sarco Engineering plc. The registered office of Econotherm (UK) Limited is Unit F1, Waterton Road, Bridgend, Wales, CF31 3YY, United Kingdom.
- Three new businesses commenced direct selling in January 2017: Watson-Marlow Indonesia operating via PT Spirax-Sarco Indonesia, Watson-Marlow Thailand operating via Spirax Sarco (Thailand) Ltd and Watson-Marlow Vietnam operating via Spirax Sarco Vietnam Co Ltds.

This complete list of our global operations, including subsidiaries, forms part of the audited Financial Statements. For more information see Note 2 in the Company Financial Statements.

Dormant companies

Country	Company Name	Registered Office address
United Kingdom	Standard Hose Ltd**	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
	Gervase Instruments Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	SARCO Ltd**	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Sarco Thermostats Ltd**	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Spirax Manufacturing Co Ltd**	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Spirax-Sarco Europe Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom
	Spirax-Sarco International Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom

Key

- * Direct subsidiary owned by Spirax-Sarco Engineering plc
- ** Indirect subsidiary
- (H) Holding company

OFFICERS AND ADVISERS

Secretary and registered office

A.J. Robson
General Counsel and Company Secretary
Spirax-Sarco Engineering plc
Charlton House
Cirencester Road
Cheltenham
Gloucestershire GL53 8ER
Telephone: 01242 521361
Facsimile: 01242 581470
Email: company.secretary@uk.spiraxsarco.com
Website: www.spiraxsarcoengineering.com

Auditor

Deloitte LLP

Financial adviser

Rothschild

Financial PR

Citigate Dewe Rogerson

Bankers

Barclays Bank PLC
HSBC Bank PLC

Corporate brokers

Bank of America Merrill Lynch

Registrars

Equiniti
Aspect House
Spencer Road
Lancing
West Sussex BN99 6DA

Telephone: 0371 384 2349* (UK)
or +44 (0)121 415 7047 (overseas)

* Lines open 8.30 am to 5.30 pm, Monday to Friday, excluding English public holidays

Website: www.shareview.co.uk

Solicitors

Baker & McKenzie LLP

Important dates

Annual General Meeting 9th May 2017

Final dividend**

Ordinary shares quoted ex-dividend	27th April 2017
Record date for final dividend	28th April 2017
Final dividend payable	26th May 2017

** Subject to shareholder approval at the AGM.

This document is printed on Cocoon 50 Silk; a paper containing 50% recycled fibre from genuine waste paper and 50% virgin fibre sourced from well managed, responsible, FSC® certified forests. The factory that printed this document is an EMAS certified company and its Environmental Management System is certified to ISO 14001. 100% of the inks used are vegetable oil based, 95% of press chemicals are recycled for further use and, on average, 99% of any waste associated with this production will be recycled.



Spirax-Sarco Engineering plc

Charlton House
Cirencester Road
Cheltenham
Gloucestershire
GL53 8ER
UK

www.spiraxsarcoengineering.com

Cover image: Vicky Ming, Training Executive, Technical Sustainability Department, in Spirax Sarco's Steam Training Centre, China.