Spirax-Sarco Engineering plc
www.spiraxsarcoengineering.com

News Release

Wednesday 12th August 2020
2020 Half Year Results

Resilient trading performance in Q2, full year expectations unchanged

HIGHLIGHTS

Six months ended 30th June				
Adjusted*	**2020**	**2019**	**Reported**	**Organic⁺**
Revenue	£569.7m	£591.2m	-4%	-5%
Adjusted operating profit*	£119.0m	£129.2m	-8%	-7%
Adjusted operating profit margin*	20.9%	21.9%	-100 bps	-50 bps
Adjusted profit before taxation*	£114.5m	£124.6m	-8%	
Adjusted basic earnings per share*	111.6p	120.0p	-7%	
Cash conversion**	86%	67%		

Statutory	**2020**	**2019**	**Reported**
Revenue	£569.7m	£591.2m	-4%
Operating profit	£110.8m	£112.7m	-2%
Operating profit margin	19.4%	19.1%	+30 bps
Profit before taxation	£106.3m	£108.1m	-2%
Basic earnings per share	104.2p	102.4p	+2%
Dividend per share	33.5p	32.0p	+5%

- Reported revenue down 4%, down 5% organically; industrial production down 8%
- Adjusted operating profit margin of 20.9%
- Good organic sales and profit growth in Watson-Marlow
- Sales and profit down organically in Steam Specialties and Electric Thermal Solutions
- Recent acquisition, Thermocoax, performing strongly
- Net debt^ of £326.0 million, 1.1x EBITDA (2019: £391.5 million)
- Statutory operating profit down 2%; impact from closure of pensions to future accrual
- Interim dividend increased by 5% to 33.5p

Nicholas Anderson, Group Chief Executive, commenting on the results said:

"In the first half of 2020 we delivered a resilient trading performance, which although weaker than 2019 was stronger than originally feared. This was achieved thanks to the outstanding efforts and dedication of our employees all over the world, who continued supporting our customers despite the unprecedented circumstances arising from the COVID-19 pandemic.

Sales performance for the Group in the second quarter was in line with our expectations at the time of our AGM Statement in May, with adjusted operating profit ahead due to stronger than anticipated cost containment and efficiency improvement initiatives. As hopes of a V-shaped recovery recede, we now anticipate a lower rate of economic activity in the fourth quarter. As a result, we believe that organic revenue growth in the second half of the year will be lower than we anticipated in May. However, due to the operating profit being stronger than forecasted in the first half, our expectations for the full year adjusted operating profit remain unchanged."

All profit measures exclude certain items, which totalled a charge of £8.2 million (2019: £16.5 million), as set out in Note 2.
***Cash conversion measures the percentage of adjusted cash from operations to adjusted operating profit, as set out in Note 2.*
⁺Organic percentage growth measures are at constant currency and exclude contributions from M&A, as set out in Note 2.
^Net debt includes total borrowings, cash at bank and bank overdrafts but excludes IFRS 16 lease liabilities, as set out in Note 9.

For further information, please contact:

Nicholas Anderson, Group Chief Executive
Kevin Boyd, Chief Financial Officer
Shaun Laubscher, Investor Relations Officer
Tel: +44 (0)7545 942 738, via Citigate Dewe Rogerson, until 6.00 p.m.

Audio webcast
The meeting with analysts will be available as a live listen-only audio webcast at 9.00 a.m. on the Company's website at www.spiraxsarcoengineering.com or via the following link: https://edge.media-server.com/mmc/p/fq493pvm and a recording will be made available on the website shortly after the meeting.

Telephone dial-in
The meeting with analysts will also be available via a full conference call with Q&A facility, at 9.00 a.m., using the instructions provided below:

Location	***Purpose***	***Phone Type***	***Number***
UK Toll Free	*Participant*	*Local*	*0808 109 0700*
Standard International Access	*Participant*	*Local*	*+44 (0) 20 3003 2666*

1. *5-10 minutes prior to the call start time, call the participant dial-in number listed above.*
2. *Provide the audio operator with the Conference password: Spirax-Sarco.*

About Spirax-Sarco Engineering plc
Spirax-Sarco Engineering plc is a thermal energy management and niche pumping specialist. It comprises three world-leading businesses: Steam Specialties, for the control and management of steam; Electric Thermal Solutions, for advanced electrical process heating and temperature management solutions; and Watson-Marlow, for peristaltic pumping and associated fluid path technologies. The Steam Specialties and Electric Thermal Solutions businesses provide a broad range of fluid control and electrical process heating products, engineered packages, site services and systems expertise for a diverse range of industrial and institutional customers. Both businesses help their end users to improve production efficiency, meet their environmental sustainability targets, improve product quality and enhance the safety of their operations. Watson-Marlow provides solutions for a wide variety of demanding fluid path applications with highly accurate, controllable and virtually maintenance-free pumps and associated technologies.

The Group is headquartered in Cheltenham, UK, has strategically located manufacturing plants around the world and employs over 7,800 people, of whom 1,800 are direct sales and service engineers. Its shares have been listed on the London Stock Exchange since 1959 (symbol: SPX) and it is a constituent of the FTSE 100 and the FTSE4Good indices.
Further information can be found at www.spiraxsarcoengineering.com

RNS filter: Inside information prior to release

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Adjusted results quoted in the text below are referred to as "adjusted" (see Note 2). Organic measures, which also represent alternative performance measures, are at constant currency and exclude contributions from acquisitions and disposals.

REVIEW OF OPERATIONS

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£591.2m	(£9.5m)	(£27.2m)	£15.2m	£569.7m	-5%	-4%
Adjusted operating profit	£129.2m	(£4.5m)	(£8.8m)	£3.1m	£119.0m	-7%	-8%
Adjusted operating profit margin	21.9%				20.9%	-50 bps	-100 bps
Statutory operating profit	£112.7m				£110.8m		-2%
Statutory operating profit margin	19.1%				19.4%		+30 bps

Introduction
The Board would like to express its sincere appreciation to our 7,800 employees, in nearly 70 countries, who have worked tirelessly to maintain our service to customers. Our teams have pulled together, often in difficult personal circumstances, to meet the needs of our customers. It is their individual and collective efforts that have helped us achieve a robust set of results during these unprecedented times.

We have maintained a strong focus on the health and wellbeing of our employees. With rigorous health and safety measures in place we have been able to continue operating our manufacturing sites with only a few short-duration shutdowns. As a result of our extensive safety measures, infection rates amongst our employees have, thankfully, remained very low.

Despite the extreme impacts of the COVID-19 pandemic on the global economy and significant disruption in many of our markets, trading performance held up well during the six months to 30th June 2020. With over 50% of Group sales destined to critical sectors on the front line of the global pandemic, such as Hospitals & Healthcare, Pharmaceutical & Biotechnology, Food & Beverage, Power Generation and Water Treatment, and approximately 85% of Group revenue generated from customers' operational budgets, we have seen a good level of demand resilience during this challenging period. As a result, Group revenue contracted at a lower rate than the decline in industrial production. Strong cost containment measures, including the restriction of non-essential spending, a reduction in temporary staff as well as salary reductions for senior management and targeted areas of the Group, served to reduce the impact on adjusted operating profit. As a result, the adjusted operating profit margin remained above 20% at 20.9% (2019: 21.9%) in the first half of the year. The relatively strong performance of the business in the first half of the year and the outlook for the second half have allowed us to lift some temporary cost containment measures earlier than anticipated, such as a number of the voluntary salary reductions put in place in April, which will cease in August.

Board changes
In March we announced that Kevin Boyd, Chief Financial Officer and Executive Director, would retire from the Group before the end of 2020, following an orderly handover of duties to a successor. The following month, we announced that Nimesh Patel would join the Group in July 2020, to succeed Kevin as Chief Financial Officer and Executive Director, in September. We would like to express our thanks to Kevin for the significant contribution he has made to the growth of the Group during his tenure and we wish him all the best for his retirement. We would also like to welcome Nimesh to the Group. Nimesh has over 22 years of experience in senior finance roles and brings with him international experience, a strong intellect, energy and knowledge.

Market environment
During the first half of 2020, global industrial production fell by 7.9%, compared with growth of 1.4% in the first half of 2019, due to the COVID-19 pandemic.[1] All regions saw industrial production contract in the first six months of 2020, with Europe experiencing the worst impact, down 11.7%. Including the Middle East and Africa, EMEA saw industrial production fall by 9.1% for the first half of 2020. The Americas have also seen a significant decline in industrial production, with an 8.4% fall in North America and an 11.0% contraction in Latin America. Excluding China, industrial production in Asia Pacific contracted by 8.9%. Including China the fall was slightly less, although was still strongly negative at -6.8%. The latest Oxford Economics forecast for global industrial production for the whole of 2020 is -6.4%, a significant decline from the 0.9% growth seen in 2019.

Progress in the half year to 30th June 2020
As a critical supplier to front-line sectors such as Hospitals, Pharmaceutical & Biotechnology and Food & Beverage, all of our manufacturing facilities and warehouses have remained operational throughout the pandemic, with only a small number of very short-duration local shutdowns. With the outstanding support of our employees, and the additional health protection measures introduced, our businesses have been able to meet our key customers' many emergency needs. Despite varying levels of physical access to customer sites we have managed to offset much of the potential downturn through intensive virtual contact, increased use of digital technologies, targeted business recovery sales campaigns and web-based training programmes. Only the Oil & Gas sector declined markedly as the oil price halved and some customers' investments were suspended. Original Equipment Manufacturers were also impacted by the decline in industrial production.

In April 2020, we launched a Global Employee Assistance Programme in the local language of all 66 countries in which we operate, to support our employees with multiple issues, including mental wellbeing, during the pandemic.

Sales
Sales declined less than 4% in the first half of the year to £569.7 million (2019: £591.2 million).

Thermocoax, which was acquired on 13th May 2019, contributed an incremental £15.2 million, a little under 3%, to Group sales compared with the prior period, from an additional four and a half months in the Group.

On average in the first half of the year, sterling was slightly stronger against the basket of currencies that we trade in compared with the same period in 2019, creating a headwind that decreased Group sales on translation by £9.5 million, less than 2%.

Excluding the impacts of acquisitions, disposals and currency movements, the Group saw a less than 5% organic decline in sales.

Within the Steam Specialties business, which accounted for 58% of Group revenue in the first half of the year, sales were down 7% organically, with a decline in all geographic segments. A foreign exchange headwind resulted in reported sales declining 9%.

[1] Source for industrial production data: Oxford Economics, July 2020.

Sales in the Electric Thermal Solutions business, which accounted for 16% of Group revenue, were down 12% organically against the same period of 2019. Reported sales grew 7%, boosted by the additional four and a half months of Thermocoax and favourable exchange movements.

Watson-Marlow, which accounted for 26% of Group revenue in the period, had a strong start to the year and delivered sales growth of 5% on both an organic and reported basis.

Operating profit

Group adjusted operating profit was 7% behind that of the prior period on an organic basis and, at £119.0 million, was down 8% at reported exchange rates, positively impacted by £3.1 million from the acquisition of Thermocoax and negatively impacted by a £4.5 million exchange headwind. Statutory operating profit fell 2% benefiting from a credit of £10.4 million as a result of the closure of UK defined benefit pension schemes to future accrual.

In the Steam Specialties business, adjusted operating profit of £68.0 million was 15% lower than the same period in the prior year on an organic basis, with a decline seen in all three geographic segments. Exchange had a £4.3 million negative impact.

The Electric Thermal Solutions business delivered adjusted operating profit of £9.4 million, down 23% organically on the same period in the prior year. Thermocoax contributed an incremental £3.1 million to adjusted operating profit in the period, resulting in an increase in reported adjusted operating profit of 16% for the total Electric Thermal Solutions business.

Watson-Marlow had a good start to the year with adjusted operating profit of £48.6 million, 9% ahead on an organic basis and up 8% at reported exchange rates.

The Group adjusted profit before taxation reduced by 8% to £114.5 million (2019: £124.6 million). The profit before taxation for the first half on a statutory basis was £106.3 million (2019: £108.1 million). The reconciling items between the adjusted profit before taxation and the statutory profit before taxation are shown in Note 2. In the first half of 2020 the reconciling items primarily related to the amortisation of acquisition-related intangible assets, acquisition-related items, restructuring costs and the closure of defined benefit pension schemes to future accrual.

Adjusted operating profit margin

In the first half of 2020, the Group adjusted operating profit margin fell by 100 bps to 20.9% due to lower sales volumes and a negative exchange impact. On an organic basis, the Group margin decreased by 50 bps. As a result of swift action to contain costs, the drop-through to profit from lower sales volumes was well controlled. The Group statutory operating profit margin increased by 30 bps to 19.4%.

The Steam Specialties business delivered an adjusted operating profit margin of 20.5%, a reported decrease of 240 bps over the same period in the prior year, due to the impact of exchange and lower sales volumes. On an organic basis the margin decreased by 190 bps. The statutory operating profit margin for the Steam Specialties business increased by 10 bps to 22.3%.

The Electric Thermal Solutions business' adjusted operating profit margin increased by 90 bps to 10.6%, buoyed by an additional four and a half months' contribution from higher-margin Thermocoax that was acquired in May 2019. On an organic basis the margin decreased by 130 bps, as underlying performance improvements in Chromalox were more than offset by lower sales volumes. The statutory operating profit margin for the Electric Thermal Solutions business fell by 550 bps to -3.5%.

Watson-Marlow's adjusted operating profit margin was ahead 100 bps to 32.6% and on an organic basis the margin was also up 100 bps. Watson-Marlow's statutory operating profit margin increased by 330 bps to 31.5%.

Financing expense

Net financing expense fell slightly from £4.6 million to £4.4 million. It consists of net bank interest of £3.1 million (2019: £2.8 million), interest on net pension liabilities of £0.7 million (2019: £1.2 million) and interest on lease liabilities of £0.6 million (2019: £0.6 million).

Bank interest charges have increased due to the refinancing of the Revolving Credit Facility and issuing of a private placement bond in the second quarter; we anticipate a full year charge in the region of £9 million.

Taxation

The Group adjusted effective tax rate, which is based on the expected full year rate, has decreased slightly to 28.0% compared with the full year 2019 (28.5%). This is as a result of changes in the forecast mix of adjusted profits, a decrease in the forecast withholding taxes associated with repatriating profits to the UK and changes in statutory tax rates.

The effective tax rate on statutory profit reduced to 27.7% (2019: 30.1%) as a result of the release of a deferred tax asset following the closure of the UK defined benefit pension schemes to future accrual.

Earnings per share

Adjusted basic earnings per share fell by 7% to 111.6 pence (2019: 120.0 pence), broadly in line with the fall in adjusted operating profit. Basic earnings per share on a statutory basis was 104.2 pence (2019: 102.4 pence).

Currency impacts

On average during the first half of 2020, sterling was slightly stronger against the basket of currencies that we trade in, compared with the same period in the prior year. Reported sales saw a less than 2% decline as a result of translation. Including transactional effects the effect on profit was more significant at over 3%. Note 14 includes a table of the Group's significant exchange rates.

Dividends

The Board has declared an interim dividend of 33.5 pence (2019: 32.0 pence) per ordinary share, an increase of 5%. The dividend will be paid on 6th November 2020 to shareholders on the register at the close of business on 9th October 2020. The final dividend of 78.0 pence per share in respect of 2019 was paid on 22nd May 2020 at a cash cost of £57.5 million.

Strategy for growth

The six key themes of our strategy for organic growth remain unchanged:

- Increase direct sales effectiveness through sector focus;
- Develop the knowledge and skills of our expert sales and service teams;
- Broaden our global presence;
- Leverage our R&D investments;
- Optimise supply chain effectiveness; and
- Operate sustainably and help improve our customers' sustainability.

The successful implementation of our strategy in recent years has helped to strengthen our businesses, increasing our resiliency during economic downturns and positioning us well to outperform our markets.

Strategic implementation

During the first six months of 2020 we continued to invest in the implementation of our strategy and benefited from the progress made in previous years, which has strengthened our organisation and therefore helped to mitigate some of the impacts of the economic downturn and disruption associated with the pandemic.

The first half of the year saw the rapid production, rollout and adoption of new curricula within the Spirax Sarco Academy to help us respond to new ways of working, such as “Remote Consultative Selling” and “Wellbeing”. The materials for our Blue and Purple belts were also fast-tracked and made available in a basic form, while the interactive content is still being produced, to enable our sales and service engineers to accelerate their learning, particularly while access to customer sites is limited (the programmes of the Spirax Sarco Academy are structured into levels called “belts”, with each belt representing an increasing level of expertise).

The first half of the year saw the successful release of a number of new products across the Group. For example, within the Steam Specialties business, Spirax Sarco expanded its range of Clean Steam Generators (CSG) with the launch of a CSG designed specifically for the Food & Beverage industry, with specific features to ensure compliance with food contact materials standard EC1935/2004. Within the Electric Thermal Solutions business, Chromalox expanded its DirectConnect™ MV Boiler product line and Thermocoax developed seven bespoke heating solutions to meet demand in the Semiconductor industry. Watson-Marlow released a number of new products including the 530En, 630En and 730En pumps with EtherNet/IP™ control, a range of digitally connected pumps providing users with real-time access to accurate performance data.

June 2020 saw the targeted launch by Watson-Marlow of the ground-breaking Qdos pump head using Conveying Wave Technology (CWT), following the acquisition of Qonqave, a small pre-revenue company in 2018. The new, highly innovative and patented technology employs proven peristaltic principals but with a low stress and low friction pumping element instead of using a tube. Qdos CWT delivers all of the benefits of a peristaltic pump, with extended service life and superior accuracy in chemical metering and dosing applications, and expands our addressable market in sectors requiring higher flow, pressure and enhanced chemical resistance.

While some geographical expansion has been temporarily put on hold until the global situation stabilises, a new Watson-Marlow operating company began trading in Hungary in January 2020, as part of our plan to increase our global presence.

In the second quarter of the year, we reviewed our Sustainability structure, strategy and performance to date and appointed a Group Head of Sustainability. This is a new role within the Group and reflects our commitment to accelerate the Group’s Sustainability agenda and performance.

In June, our Group CEO, Nicholas Anderson, participated in a virtual Business Leaders Event that was attended by over 200 business leaders from the UK’s largest companies, as well as government representatives, which aimed to put environmental sustainability at the top of the agenda for businesses and the UK government in the run-up to the UN climate change talks (COP26), scheduled to now take place in November 2021. Ahead of that event we made a number of environmental commitments, including to achieve net-zero greenhouse gas emissions by the end of 2040 and to establish a 2030 biodiversity net gain target. These are just some of the commitments we will make in the coming years to make our Company more sustainable and help improve the sustainability of our customers' operations.

Restructuring and disposal

In February 2020 we announced to our workforce in Chromalox France the intention to reorganise the operation to reduce losses and help bring the European operation of Chromalox to break-even by the end of 2021. This will entail a restructuring of the supply chain to reduce manufacturing activity in France, which will result in a reduction of the workforce of fewer than 40 employees in the second half of the year. Also, in early March we divested Chromalox's small Canadian subsidiary, ProTrace, which made a loss of £0.2 million in 2019. The combined cost of these two projects, £4.2 million, has been taken as an adjusting item. The annualised benefit is in the region of £1.2 million and should begin to be seen from August 2020.

Financial position and cash flow

Capital employed (Note 2) increased by 7% from the beginning of the year, to a reported £594.9 million at 30th June 2020. Investment in fixed assets was ahead of the prior year; while we postponed some non-essential capital expenditure in the second quarter, we continued with a number of strategically-important programmes, not least the continuation of work on the new facility for Aflex in Yorkshire. We expect spend in the full year to be similar to that of last year.

Adjusted cash conversion in the first half improved from 67% to 86% primarily due to reduced working capital outflow. We continue to focus on maintaining a strong balance sheet. Net debt, excluding leases, at 30th June 2020 was £326.0 million compared with net debt of £295.2 million at 31st December 2019, the increase due primarily to foreign exchange movements. Total committed debt facilities at 30th June amounted to £809.0 million, giving headroom of c. £500 million. Net debt equated to 1.1 times trailing twelve months' EBITDA, which compares to our debt covenant of 3.5 times.

Adjusted free cash flow of £68.4 million was 44% higher than the prior year. The usual first half increase in working capital was less marked this year as the reduction due to sales decline being countered by an increase in inventory, both in preparation for the second half but also as a defence against any weaknesses in the supply chain due to COVID-19 and the deferral of £6.3 million of tax payments. Of this, £5.0 million will be paid in the second half. At constant currency, working capital as a percentage of the last twelve months' sales decreased by 170 bps to 22.9%, compared with June 2019.

The defined benefit pension deficit increased in the half year and was, before any associated deferred tax assets, £94.9 million at 30th June 2020, compared with £71.3 million at 31st December 2019, as a reduction in the corporate bond rate used as a discount rate increased liabilities. On 30th June 2020 the UK defined benefit pension schemes were closed to future accrual resulting in a £10.4 million credit to the Income Statement, which has been taken as an adjusting item.

Adjusted cash flow	**30th June 2020 £m**	**30th June 2019 £m**
Adjusted operating profit	119.0	129.2
Depreciation and amortisation (excluding IFRS 16)	18.0	17.0
Depreciation of leased assets	6.0	5.4
Cash payments to pension schemes more than the charge to adjusted operating profit	(1.3)	(2.4)
Equity-settled share plans	2.8	3.2
Working capital changes	(12.6)	(40.9)
Repayments of principal under lease liability	(5.9)	(5.3)
Capital additions (including software and development)	(25.3)	(21.1)
Capital disposals	1.5	1.8
Adjusted cash from operations	**102.2**	**86.9**
Net interest	(3.7)	(3.2)
Income taxes paid	(30.1)	(36.2)
Adjusted free cash flow	**68.4**	**47.5**
Net dividends paid	(57.8)	(52.6)
Purchase of employee benefit trust shares/Proceeds from issue of shares	(3.0)	(7.5)
(Acquisitions)/Disposals of subsidiaries (including costs)	(5.1)	(137.7)
Cash flow for the period	**2.5**	**(150.3)**
Exchange movements	(33.3)	(5.4)
Opening net debt	(295.2)	(235.8)
Net debt at 30th June (excluding IFRS 16) (Note 2)	**(326.0)**	**(391.5)**
IFRS 16 lease liability	(37.2)	(41.3)
Net debt and lease liability at 30th June (Note 2)	**(363.2)**	**(432.8)**

Outlook

With 85% of our demand coming from customers' operating rather than capital budgets and a high proportion of our revenues from sectors less impacted by COVID-19 such as Food & Beverage, Pharmaceutical & Biotechnology, Healthcare, Medical Devices, Power Generation and Water Treatment, we remain confident of our ability to progress in these unprecedented times.

Foreign currency exchange rates provided a small headwind in the first half of the year. If July's month-end exchange rates were to prevail for the remainder of the year there would be a 2% headwind on the translation of sales for the full year and a 4% impact on operating profit.

Sales performance for the Group in the second quarter was in line with our expectations at the time of our AGM Statement in May, with adjusted operating profit ahead due to stronger than anticipated cost containment and efficiency improvement initiatives. As hopes of a V-shaped recovery recede, we now anticipate a lower rate of economic activity in the fourth quarter. As a result, we believe that organic revenue growth in the second half of the year will be lower than we anticipated in May. However, due to the operating profit being stronger than forecasted in the first half, our expectations for the full year adjusted operating profit remain unchanged.

Steam Specialties

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£365.7m	(£9.6m)	(£24.4m)	-	£331.7m	-7%	-9%
Adjusted operating profit	£83.9m	(£4.3m)	(£11.6m)	-	£68.0m	-15%	-19%
Adjusted operating profit margin	22.9%				20.5%	-190 bps	-240 bps
Statutory operating profit	£81.1m				£73.9m		-9%
Statutory operating profit margin	22.2%				22.3%		+10 bps

Market overview
The impact of COVID-19 and the associated social and economic impacts it has brought about have been felt across the world. Global industrial production rates continued the downward trend seen in 2018 and 2019 into the first quarter of 2020, with an acceleration during the second quarter to an 11.8% contraction, well below forecasters' earlier projections.

EMEA saw a sharp decline in industrial production in the second quarter, averaging 9.1% lower for the half year than the same period in the prior year. Italy, which was one of the first European nations to feel the effects of the pandemic, saw the greatest contraction, down 20.1% for the first six months of 2020, but France, Germany, Spain and the UK also suffered considerable declines. During the second quarter all of our European markets experienced significantly lower levels of industrial production. Brexit also remained a cloud of uncertainty in the region throughout the period, albeit overshadowed by the global pandemic.

Industrial production output for Asia Pacific was down 6.8% in the first half, compared with the same period in the prior year. As the first country subject to the restrictions brought about by COVID-19, industrial production in China fell sharply in the first quarter of 2020 to -9.6%, but the speed with which the outbreak was brought under control resulted in a return to growth of 4.6% in the second quarter, averaging -2.5% for the first half of 2020. Our second largest market in the region, Korea, saw robust growth of 4.7% in the first quarter of the year, but fell to -5.2% in the second quarter, resulting in average industrial production contraction of -0.3% for the first half of the year, compared with the same period last year. Elsewhere within the region, India suffered the greatest decline with an average contraction of 20.1% for the first half of the year.

Within the Americas, both North and Latin America saw sharp declines in industrial production during the first half, averaging -8.4% and -11.0% respectively, with the greatest impact in the second quarter of 2020. All our key markets felt the effects of COVID-19 with significant contractions to industrial production during the first half of 2020, including the USA (-8.0%), Canada (-11.4%), Argentina (-16.8%), Brazil (-10.4%) and Mexico (-12.2%). The Americas as a whole saw a 9.1% contraction in industrial production during the first half of the year.

Progress in the half year
Steam Specialties business sales of £331.7 million were 7% down against the same period in 2019 on an organic basis and 9% down on a reported basis, reflecting the extreme contraction of industrial production in our global markets. In the first quarter of 2020 the effects of COVID-19 were predominantly felt in China, with Italy also experiencing a sharp contraction. During the second quarter, sales were held at the same level as the first quarter, despite the impact of the pandemic expanding across the rest of the world.

Asia Pacific, the first region to experience the virus, saw the greatest organic decline in sales, closely followed by EMEA. There have been encouraging signs of trading levels recovering in China in the second quarter, with business broadly returning to pre-COVID levels in June as most of our customers returned to work. Throughout much of Asia and Europe, sales were significantly impacted from March to May as countries implemented COVID-19 restrictions. However, the decline in sales appears to have bottomed out with early signs of improvement in June as infection rates were brought under control and restrictions began to be relaxed. Sales in the Americas were the least affected by COVID-19 in the half year as the virus took longer to take hold. However, with infection rates still rising and in some cases passing their previous infection peak, we expect to see a similar impact on sales in the Americas in the second half as seen earlier by other countries and regions.

Our supply chain experienced challenges as a result of the impact of COVID-19 lockdowns, with a number of our suppliers temporarily closing. Alternative plans were quickly enacted to secure the timely continuity of supply of components and raw materials. Despite many of our suppliers being shut for periods of time, we managed to improve our Steam Specialties Supply on-time-to-request customer service measure in both the first and second quarters of 2020. Close collaboration and increased communication with our customers has allowed us to respond to their changing needs. This has been further enabled through our commitment to maintaining our inventory standards using our IQM (Inventory Quality Management) tools.

At £68.0 million, adjusted operating profit was 15% lower than in the same period last year on an organic basis and, due to an exchange headwind, down 19% on a reported basis. At 20.5% the adjusted operating margin was down 190 bps on an organic basis and 240 bps on a reported basis, compared with the same period in 2019. The impact of lower sales volumes and temporarily-inflated logistics costs was partially offset by cost containment actions, careful price management and an improved sales mix resulting from fewer lower-margin capital projects.

The cost containment measures employed have been very effective at reducing fixed costs in the first six months of the year, and we have focused on cost reduction initiatives that are enabling us to manage the impacts of the pandemic without damaging our ability to respond quickly to the recovery. As such we have continued to invest in digital technologies, new product development, expanding our direct sales coverage in the USA and our Sustainability Strategy.

Steam Specialties: Europe, Middle East and Africa (EMEA)

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£166.6m	(£1.5m)	(£12.8m)	-	£152.3m	-8%	-9%
Adjusted operating profit	£34.3m	(£0.6m)	(£7.8m)	-	£25.9m	-23%	-25%
Adjusted operating profit margin	20.6%				17.0%	-340 bps	-360 bps
Statutory operating profit	£32.4m				£32.5m		0%
Statutory operating profit margin	19.4%				21.3%		+190bps

Progress in the half year

Against a backdrop of strongly negative industrial production across the EMEA region, we delivered sales of £152.3 million. Although we experienced an organic revenue contraction of 8%, we performed slightly ahead of our markets which saw industrial production fall by 9.1% in the first half of the year. At reported exchange rates, sales were down 9%. The differing speed and scope of each government's response to

COVID-19, such as containment actions and fiscal stimulation, has impacted local business confidence levels. Subsequently, we have seen a variation in business impact. The sales decline in Northern Europe was less intense than Southern Europe, where countries have been more adversely affected. Sales in the Middle East and Africa were significantly down.

At the start of the pandemic, service revenue in the region initially decreased as customers limited site access. However, we adapted our offering to provide remote service support and developed new audit solutions to prepare customers for their return to work. Service levels subsequently improved during June. Critical sectors such as Food & Beverage and Healthcare have remained positive as they continued serving the needs of their communities. A decrease in the oil price between the start of the year and April impacted project business, with a subsequent decline in sales into the Oil & Gas industry.

Gestra maintained sales at levels close to the first half of 2019, with a small single-digit contraction in the second quarter due to the impact of COVID-19. Gestra Germany performed ahead of its markets as sales of boiler house control products, including the new SPECTORconnect range that was launched in 2019, remained robust. The Chemical industry has been fairly resilient to the downturn, with increased demand for sterilisers, for example, offsetting reduced demand elsewhere. The Power Generation sector also remained relatively robust.

At £25.9 million, adjusted operating profit was down 25% on a reported basis. The adjusted operating margin was 17.0%, 360 bps lower on a reported basis than the prior period, as lower sales volumes were only partially offset by a favourable product mix and cost containment actions. Statutory operating profit was in line with the same period last year at £32.5 million.

Steam Specialties: Asia Pacific

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£116.8m	(£2.1m)	(£9.3m)	-	£105.4m	-8%	-10%
Adjusted operating profit	£33.6m	(£1.0m)	(£4.2m)	-	£28.4m	-13%	-16%
Adjusted operating profit margin	28.8%				26.9%	-150 bps	-190 bps
Statutory operating profit	£33.6m				£28.4m		-16%
Statutory operating profit margin	28.8%				26.9%		-190 bps

Progress in the half year

Sales in Asia Pacific were down 10% to £105.4 million, an organic decline of 8%. Sales in China, our largest market, were down 15% organically against a particularly strong compare. Sales were down 35% in the first quarter as measures were enacted to control the virus and many businesses temporarily closed, but the Chinese government's quick containment actions rapidly brought the outbreak under control and, as a result, we saw trading conditions improve from April, with sales in the second quarter 7% above the prior year. Korea, our second largest market in the region, saw 9% sales growth as quick government action averted the spread of the virus and we benefited from the shipment of several large Electronics and Oil & Gas projects carried over from 2019. The impact of the pandemic was relatively limited in Australasia, where sales were marginally down in the first half of the year.

Across the rest of the region, many of our smaller markets experienced significant negative impacts from the virus, with lower sales in Japan, Southeast Asia and India. The situation in India remains concerning as the number of cases continues to rise.

Gestra performed well in Asia Pacific, with our recently established company in China achieving significant growth, despite the challenging market conditions, as a result of the investments we made in 2019.

Across the region, our customers were cautious, with cost-cutting taking priority over investment, especially on capital projects, resulting in a decline in large project sales. However, ensuring plant reliability and maintaining process productivity have remained key priorities of customers, especially in essential industries such as Food & Beverage and Pharmaceutical & Biotechnology, which has presented opportunities for the supply of critical spares and an increased demand from these industries.

Adjusted operating profit was down 16% at £28.4 million, an organic decline of 13%, compounded by an exchange headwind. At 26.9% the adjusted operating margin was down 190 bps on a reported basis, and 150 bps lower on an organic basis, compared with the same period in the prior year. A significant drop in sales volumes was partially offset by cost containment measures, a positive product mix from fewer lower-margin large projects in the first six months of the year and strategic, value-based pricing on small improvement projects. Statutory operating profit fell by 16% to £28.4 million.

Steam Specialties: The Americas

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£82.3m	(£6.0m)	(£2.3m)	-	£74.0m	-3%	-10%
Adjusted operating profit	£16.0m	(£2.7m)	£0.4m	-	£13.7m	+3%	-14%
Adjusted operating profit margin	19.4%				18.5%	+110 bps	-90 bps
Statutory operating profit	£15.1m				£13.0m		-14%
Statutory operating profit margin	18.3%				17.6%		-70 bps

Progress in the half year

Sales of £74.0 million were 10% lower than the first half of 2019, down 3% on an organic basis, impacted by a strong currency headwind. All countries in the region have been impacted by COVID-19, with the effects differing between and within countries as the pace and scale of the pandemic, as well as the nature and duration of restrictions, affected market conditions. Nevertheless, our business has demonstrated resilience. Our diverse market portfolio, combined with a high proportion of sales coming from critical industries, and a high proportion of customer spend coming from maintenance, repair and overhaul activities, has allowed us to remain open – and outperforming our markets – throughout these challenging circumstances.

Sales in North America were down 8% organically in the first half compared with the same period of the prior year, with the USA and Canada both impacted by the pandemic. Within the USA, our distribution business contracted quickly in response to plant closures and a fall in industrial production, but sales to end users fared much better as we found innovative ways to support our customers remotely, visited their facilities safely, provided critical advice, service, equipment and solutions, and assisted with restarting plants following periods of shutdown.

Sales grew 8% organically in Latin America in the first half of the year. While we remained open to serve our customers and the number of infections escalated in the second quarter, we increasingly experienced challenges shipping to customers who were running with reduced staffing levels or who would not accept deliveries during lockdown. Nevertheless, as a local manufacturer in Mexico, Brazil and Argentina, we are well positioned to serve our customers in Latin America, where currency devaluations have made importers increasingly uncompetitive.

Across the Americas, the collapse in the oil price further compounded the effects of COVID-19 on our markets and weighed heavily on the Oil & Gas industry. All countries in the region have been affected to a greater or lesser extent by the fall in the oil price, with the USA, Canada and Brazil in particular feeling the impact of a lack of investment activities.

Gestra, which has a small local presence in the Americas, saw a decline compared with the first half of 2019.

Adjusted operating profit of £13.7 million was down 14% on a reported basis, with a significant negative impact from currency movements, however it was up 3% organically. Cost containment measures and swift action to manage increasing freight, logistics and import costs, as well as our agile purchasing and pricing activities helped to offset the worst effects of these increases. As a result, the adjusted operating margin was 18.5%, 110 bps higher on an organic basis than the same period in the prior year. Statutory operating profit declined by 14% to £13.0 million.

Steam Specialties business strategy update

Despite the effects of COVID-19, swift adoption of technology has enabled us to stay connected with our customers, with remote support and consultative selling occurring via various means of telecommunication. In response to the circumstances, we developed several new sales campaigns that were born out of understanding our customers' issues at this time, for example focusing on critical spares and start-up support. An e-commerce platform is being accelerated to enable customers to self-serve replacement products remotely through a customer web portal.

The first six months of the year were productive for new product launches. We expanded our range of Clean Steam Generators (CSG), launching a CSG specifically developed to meet the needs of customers in the Food & Beverage industry, we extended our range of manifolds and introduced a state-of-the-art steam trap survey tool to be used by our service and survey engineers. The new Gestra technology for boiler controls, SPECTORconnect, which was launched in 2019 has been successfully introduced into the market as a new standard.

We have temporarily paused our plans for further geographic expansion, but we expect this to pick up again once we see a stable return to more normal customer demand-levels.

We have continued to focus on the execution of our Sustainability Strategy, with a particular focus on accelerating our offering to customers to help them manage their environmental impacts, as well as activities to improve our own energy efficiency and reduce our greenhouse gas emissions.

Steam Specialties outlook

Absent a significant resurgence of the virus, we expect a smaller sales decline in Asia Pacific in the second half of the year as that region begins to return to a more "normal" business environment, having been the first region affected in the early part of the year. In EMEA, we believe that the twin issues of COVID-19 and Brexit will continue to suppress business sentiment while in the Americas the severity and potential duration of the pandemic suggests increased weakness in the second half of the year.

Electric Thermal Solutions

	HY 2019	Exchange	Organic	Acquisitions and disposals	HY 2020	Organic	Reported
Revenue	£83.1m	£1.0m	(£10.4m)	£15.2m	£88.9m	-12%	+7%
Adjusted operating profit	£8.1m	£0.1m	(£1.9m)	£3.1m	£9.4m	-23%	+16%
Adjusted operating profit margin	9.7%				10.6%	-130 bps	+90 bps
Statutory operating profit	£1.7m				(£3.1m)		-282%
Statutory operating profit margin	2.0%				-3.5%		-550 bps

Market overview
The widespread effects of COVID-19, and the related sharp decline in the price of oil, caused a significant deterioration in the Electric Thermal Solutions business' markets. The USA, Chromalox's core market that accounted for 63% of the Electric Thermal Solutions business' sales in the first half of the year, saw industrial production fall by 8.0%, while Europe, Thermocoax's core market, contracted by 11.7%.

While the Oil & Gas industry saw a significant decline in demand, some sectors, such as Semiconductor, Nuclear and parts of Aerospace, experienced limited impact from the pandemic or fall in oil prices. Growth in the Semiconductor sector in the USA and Europe was largely driven by new product launches from a number of Thermocoax's key customers. There was a temporary lull in the nuclear sector in China, but activity picked up once the peak of infection had passed, and Aerospace performed surprisingly well, largely driven by growth in space activities in the USA and demand for medical transportation. Within the Energy sector, particularly in Europe, increasing demand for electric heating solutions to help de-carbonise power generation processes has partly offset reduced investments triggered by the decrease in the oil price.

Progress in the half year
Sales of £88.9 million were 7% higher on a reported basis than during the same period in 2019. A 12% organic decline was offset by an incremental £15.2 million contribution to sales from Thermocoax, which was acquired on 13th May 2019, and a small positive impact from exchange. The organic sales decline was driven mostly by market weakness in the USA, triggered by the COVID-19 pandemic and oil price decline, affecting both base and project business.

As with the Steam Specialties business, distribution sales in the USA contracted sharply as distributors took steps to reduce inventories and preserve cash, with HVAC and Process Heating seeing the biggest fall. Sales to end users showed greater resilience. Throughout the second quarter in particular, Chromalox experienced challenges shipping its backlog as customers delayed shipments, often in response to partial or full site closures. Disruption to the supply chain and restructuring activities in Chromalox France – compounded by a temporary shutdown in response to COVID-19 restrictions – also caused further delays.

Thermocoax experienced strong, double-digit, sales and profit growth on a like-for-like basis, compared with the first half of last year, benefiting from a sectorised and targeted customer sales approach, and supported by market share gains in the Semiconductor sector.

The Electric Thermal Solutions business' £9.4 million adjusted operating profit was 16% up on a reported basis. The adverse profit impact from the 12% organic sales decline was offset by a £3.1 million incremental contribution to profit from an additional four and a half months of Thermocoax, performance improvements in Chromalox, cost containment measures and a positive mix from the higher-margin Thermocoax. As a result, the adjusted operating margin of 10.6% was 90 bps higher than the same period in the prior year. Statutory operating profit for the Electric Thermal Solutions business fell to a £3.1 million loss due to increased amortisation of intangible assets and costs associated with the restructuring in Chromalox France and disposal of ProTrace Engineering.

Strategy update

During the first half of the year we carried out a strategic review for the Electric Thermal Solutions business, and the resulting five year "Engineering Premium Solutions" strategic plan was reviewed and approved by the Board in June. Key elements of this plan include a drive towards total customer solutions, sectorisation and sustainability – all of which are designed to deliver value to customers and stakeholders, while enhancing our own operating efficiency and profitability. To support the deployment and implementation of the strategy we have strengthened our senior and executive leadership teams, recruiting a new Vice President of Global Sales, Global IT Director, French Manufacturing Leader, EH&S Leader and Global Vice President of Human Resources.

Following a comprehensive consultation period with employees, we agreed a restructuring programme at our loss-making Chromalox manufacturing facility in Soissons, France, which will result in a reduction of fewer than 40 primarily direct production roles, from August. The restructuring negotiations were completed amicably and with limited disruption. Going forward, the site will continue to manufacture complex engineered solutions for European markets, with heating elements and components sourced from Chromalox's manufacturing facilities in the Americas. By restructuring the manufacturing facility we will significantly reduce its cost base and create a more appropriately sized production facility, which will significantly improve the site's efficiency and secure its long-term profitability. We remain on-course to bring the European operation of Chromalox to break-even by the end of 2021.

In March 2020, we completed the sale of ProTrace Engineering, a loss-making, small, non-core electrical engineering services business in Canada to the existing management team, for a nominal value of $1.

We continue to invest in new product development. During the first half of the year Chromalox released its new ChromaTrace™ for Buildings 1.0 design software to the public. This free heat tracing system design programme is specially created for the Building & Construction market, architects and engineers. Chromalox also expanded its DirectConnect™ MV Boiler product line to 11MW, offering the advantages of electric process heat while delivering emissions-free operation and significant cost savings over low-voltage, higher installation cost designs. Thermocoax developed seven new, bespoke heating solutions for use in the Semiconductor industry, in response to customer needs.

Outlook

In our Electric Thermal Solutions business, we experienced a strong build-up of the order book in the first half of the year. The unwinding of this order book, combined with on-going performance improvements in Chromalox and sustained good performance from Thermocoax should result in an improved second half operating margin.

Watson-Marlow

	HY 2019	Exchange	Organic	Acquisitions & disposals	HY 2020	Organic	Reported
Revenue	£142.4m	(£0.9m)	£7.6m	-	£149.1m	+5%	+5%
Adjusted operating profit	£45.0m	(£0.3m)	£3.9m	-	£48.6m	+9%	+8%
Adjusted operating profit margin	31.6%				32.6%	+100 bps	+100 bps
Statutory operating profit	£40.2m				£47.0m		+17%
Statutory operating profit margin	28.2%				31.5%		+330 bps

Market overview
The first half of 2020 was dominated by COVID-19, which impacted Watson-Marlow's customers, suppliers and operations across the world. As with the Steam Specialties business, the phasing and severity of the impact on Watson-Marlow varied by geography and sector with the industrial side of the business suffering from the general downturn in industrial production. However, the Pharmaceutical & Biotechnology industry, which accounted for over half of Watson-Marlow's sales in the first half of 2020, remained strong, reflecting the critical role that this sector is playing in fighting the pandemic.

Progress in the half year
Watson-Marlow achieved sales of £149.1 million, an organic and reported increase of 5%. The Pharmaceutical & Biotechnology sector accounted for 53% of sales and expanded by a strong 18%, partially aided by an unseasonal order book reduction in the second quarter of the year, while sales to the other industrial sectors declined by 6%. Asia Pacific achieved significant growth with a strong performance across the region driven by the Pharmaceutical & Biotechnology and Medical Device sectors, with China, Japan and Singapore especially strong. Good growth was seen in the Americas. There was a strong performance in Latin America, where Brazil and Argentina achieved good growth in the Pharmaceutical & Biotechnology and Food & Beverage sectors, in particular. North America delivered solid growth in the Pharmaceutical & Biotechnology sector, against a very strong comparison period, largely offset by a slowdown in the general industrial sectors. EMEA delivered very strong growth in the Pharmaceutical & Biotechnology industries with Ireland, Switzerland and Russia especially resilient, while the general industrial sectors were down, against a tough compare.

Serving so many critical customers on the front line of the pandemic, it has been essential for Watson-Marlow's supply locations to remain fully operational. Having implemented rigorous health and safety processes on site, we have been able to operate our manufacturing sites at close to normal capacity, with minimum disruption throughout the height of the pandemic, with no production stoppages linked to suppliers and all suppliers remaining in business.

Adjusted operating profit for the first half of 2020 of £48.6 million was 8% ahead of the same period in 2019 on a reported basis and 9% higher on an organic basis, reflecting the combined impact of sales growth and prudent cost controls. As a result, the adjusted operating margin increased 100 bps on both an organic and reported basis. Statutory operating profit increased by 17% to £47.0 million.

Strategy update
Watson-Marlow began trading through a new operating company in Hungary in the first quarter of 2020. The second quarter of the year saw the first production output from our new £23 million, 16,200m^2, state-of-the-art manufacturing facility for Aflex in Yorkshire. The facility will consolidate our current five sites into one, transitioning over the next 12 months, increasing our production capability and improving efficiency.

Since joining the Group in 2014, BioPure, which designs and manufactures advanced single-use connector systems for the Biopharmaceutical industry, has achieved excellent sales growth and has outgrown its current manufacturing facility. The Board has approved a £24 million investment to construct a new manufacturing facility in Horndean, Portsmouth, which is scheduled to be operational in late 2021. The new site will be five times the size of BioPure's current site, with a six-fold increase in machines and a five-fold increase in cleanrooms. This significant investment will further support Watson-Marlow's strength and growth in the Pharmaceutical & Biotechnology sector.

A number of new products were launched by Watson-Marlow during the first half of the year including the 530En, 630En and 730En EtherNet/IP™ Watson-Marlow pumps, as well as a range of extensions for the MasoSine Certa™ pump. June 2020 saw the targeted launch of a new patented-technology pump head, the ReNu 30 CWT (Conveying Wave Technology), which fits onto existing Qdos pumps. This revolutionary new pump head gives superior accuracy in chemical metering and dosing applications, expanding our addressable market in sectors requiring higher flow, pressure and enhanced chemical resistance.

During the first half of the year, Watson-Marlow also undertook a comprehensive strategic review and the refreshed business strategy was approved by the Board in June. With a strong history of profitable growth, a comprehensive change of direction was not needed. Therefore, the refreshed strategy focuses on further strengthening the business to sustain its profitable growth, prioritising key industries and markets where we have the potential to increase our addressable market, accelerating people development, driving technical innovation, achieving excellence in the supply chain and delivering improvements in our sustainability performance.

Outlook
Watson-Marlow's performance in the first half was buoyed by strong demand from its Biopharmaceutical customers who in some cases pulled orders forward from the third quarter to the second quarter to protect their supply chain. As a result, we would expect sales growth to be lower in the second half.

PRINCIPAL RISKS AND UNCERTAINTIES

The Group has processes in place to identify, evaluate and mitigate the principal risks that could have an adverse impact on the Group's performance. The principal risks, together with a brief description of why they are relevant, are set out below. Details of how we mitigate risk is included in the Group's 2019 Annual Report on pages 22 to 25. The Risk Management Committee reviewed these risks in the first half of the year and concluded that they represent the current position and remain relevant for the second half of the financial year.

A summary of the Group's key risks and uncertainties is:

1) Economic and political instability

Economic and political instability, including the impacts derived from major public health crises and from regime changes, creates risks for our locally-based direct operations.

2) Significant exchange rate movements

The Group reports its results and pays dividends in sterling, while its operating and manufacturing companies trade in local currency. The nature of the Group's business necessarily results in exposure to exchange rate volatility.

3) Cybersecurity

A significant cybersecurity breach could result in a loss of important information and prevent the Group operating at maximum efficiency.

4) Failure to realise acquisition objectives

Failure to realise acquisition objectives would impact the financial performance of the Group.

5) Loss of manufacturing output at any Group factory

Loss of manufacturing output at any important plant risks serious disruption to sales operations.

6) Breach of legal and regulatory requirements (including ABC laws)

The Group is subject to many different laws and regulations, including the General Data Protection Regulation and anti-bribery and corruption legislation. Breaching laws or regulations could have serious consequences for the Group.

7) Inability to identify and respond to changes in customer needs

A failure to respond rapidly to changes in the needs of customers or technology shifts could lead to a loss of business.

8) Solution specification failure

A loss of output at a customer plant due to an underperforming solution specified by our engineers could potentially lead to customer product contamination and/or customer loss of manufacturing output and thereby contractual liability and loss of business.

COVID-19

The Board and Risk Management Committee have reviewed the potential impact of COVID-19 and concluded that, while COVID-19 should not be considered a Principal Risk it should be assessed, monitored and managed as a contributor to and exacerbator of the following Principal Risks: Risk #1 – Economic and political instability; Risk #2 – Significant exchange rate movements; Risk #3 – Cybersecurity and Risk #5 – Loss of manufacturing output at any Group factory. In each case, where possible, we have implemented measures to mitigate the increased risk. Examples of such mitigating actions include increased cybersecurity to counteract an increased risk as a result of the large number of employees working from home and, in manufacturing facilities, the use of split shifts, personal protective equipment and social distancing discipline to ensure the safety of our employees.

While our businesses are not immune to the effects of COVID-19, to date we have proven resilient to the worst effects of the pandemic. The Board, Group Executive Committee and Risk Management Committee are continuing to carefully monitor the impact of the pandemic. We currently anticipate that the Group will experience the biggest impact of the pandemic in the second quarter of the year and, assuming no widespread resurgence of the virus, conditions should then start to improve in the second half of 2020. In light of the ongoing challenges, we continue to carefully manage costs and serve our customers well to minimise the impacts of the pandemic on our business.

Brexit

The UK is in an 11-month transition period after leaving the European Union on 31st January 2020. Uncertainty surrounding Brexit continues, with a "no deal" exit from the European Union remaining a possibility, especially with negotiations being overshadowed by the COVID-19 pandemic. The Group Executive Committee continues to monitor the situation carefully, and the plans put into place, as outlined in the 2019 Annual Report on page 21, are still relevant and applicable as we go into the second half of 2020.

We are well prepared and well placed to take on the challenges and identify the opportunities resulting from a "no deal" exit from the EU. We have navigated periods of economic and political uncertainty in many different places around the world, and have a long and successful history of doing so.

INDEPENDENT REVIEW REPORT TO SPIRAX-SARCO ENGINEERING PLC

We have been engaged by the Company to review the condensed set of Financial Statements in the Half Year Financial Report for the six months ended 30th June 2020, which comprises the Condensed Consolidated Statement of Financial Position, the Condensed Consolidated Income Statement, the Condensed Consolidated Statement of Comprehensive Income, the Condensed Consolidated Statement of Changes in Equity, the Condensed Consolidated Statement of Cash Flows and related Notes 1 to 14. We have read the other information contained in the Half Year Financial Report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of Financial Statements.

Directors' responsibilities

The Half Year Financial Report is the responsibility of, and has been approved by, the Directors. The Directors are responsible for preparing the Half Year Financial Report in accordance with the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

As disclosed in Note 1, the annual Financial Statements of the Group are prepared in accordance with IFRS as adopted by the European Union. The condensed set of Financial Statements included in this Half Year Financial Report has been prepared in accordance with International Accounting Standard 34 (Interim Financial Reporting) as adopted by the European Union.

Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of Financial Statements in the Half Year Financial Report based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council for use in the United Kingdom. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of Financial Statements in the Half Year Financial Report for the six months ended 30th June 2020 is not prepared, in all material respects, in accordance with International Accounting Standard 34 as adopted by the European Union and the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Use of our Report

This Report is made solely to the Company in accordance with International Standard on Review Engagements (UK and Ireland) 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council. Our work has been undertaken so that we might state to the Company those matters we are required to state to it in an Independent Review 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, for our review work, for this Report, or for the conclusions we have formed.

Deloitte LLP
Statutory Auditor, London, United Kingdom
11th August 2020

CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	Notes	30th June 2020 £m (unaudited)	30th June 2019 £m (unaudited)	31st December 2019 £m (audited)
ASSETS				
Non-current assets				
Property, plant and equipment		267.3	238.6	251.2
Right-of-use assets		39.1	38.4	40.8
Goodwill		444.1	440.5	417.7
Other intangible assets		303.9	329.8	303.9
Prepayments		1.6	6.2	0.9
Investment in Associate		0.1	-	0.2
Deferred tax assets		47.6	44.3	40.8
		1,103.7	1,097.8	1,055.5
Current assets				
Inventories		202.3	193.9	185.9
Trade receivables		222.5	256.1	240.7
Other current assets		41.1	36.4	35.3
Taxation recoverable		7.7	4.3	8.4
Cash and cash equivalents*	9	320.0	287.6	330.6
		793.6	778.3	800.9
Total assets		**1,897.3**	**1,876.1**	**1,856.4**
EQUITY AND LIABILITIES				
Current liabilities				
Trade and other payables		153.3	161.3	174.8
Provisions		5.8	4.0	3.5
Bank overdrafts*	9	154.3	121.8	162.3
Short-term borrowings	9	-	41.3	-
Current portion of long-term borrowings	9	0.4	56.1	34.3
Short-term lease liabilities	9	10.6	11.4	11.1
Current tax payable		27.6	24.4	26.7
		352.0	420.3	412.7
Net current assets		**441.6**	**358.0**	**388.2**
Non-current liabilities				
Long-term borrowings	9	491.3	459.9	429.2
Long-term lease liabilities	9	26.6	29.9	27.8
Deferred tax liabilities		85.6	91.9	83.9
Post-retirement benefits	8	94.9	89.3	71.3
Provisions		1.5	3.7	1.3
Long-term payables		4.0	3.2	3.9
		703.9	677.9	617.4
Total liabilities		**1,055.9**	**1,098.2**	**1,030.1**
Net assets		**841.4**	**777.9**	**826.3**
Equity				
Share capital		19.9	19.8	19.8
Share premium account		81.4	78.6	81.0
Other reserves		17.8	19.3	(10.6)
Retained earnings		721.4	659.3	735.1
Equity shareholders' funds		840.5	777.0	825.3
Non-controlling interest		0.9	0.9	1.0
Total equity		**841.4**	**777.9**	**826.3**
Total equity and liabilities		**1,897.3**	**1,876.1**	**1,856.4**

** Both prior period comparatives for Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group.*

CONDENSED CONSOLIDATED INCOME STATEMENT

	Six months to 30th June 2020			Six months to 30th June 2019			Year ended 31st December 2019		
	Adjusted	**Adj't**	**Total**	**Adjusted**	**Adj't**	**Total**	**Adjusted**	**Adj't**	**Total**
	£m	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**	**£m**
	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
Revenue (Note 3)	**569.7**	**-**	**569.7**	**591.2**	**-**	**591.2**	**1,242.4**	**-**	**1,242.4**
Operating costs	(450.7)	(8.2)	(458.9)	(462.0)	(16.5)	(478.5)	(959.7)	(37.7)	(997.4)
Operating profit (Note 2/3)	**119.0**	**(8.2)**	**110.8**	**129.2**	**(16.5)**	**112.7**	**282.7**	**(37.7)**	**245.0**
Financial expenses	(4.9)	-	(4.9)	(5.3)	-	(5.3)	(9.9)	-	(9.9)
Financial income	0.5	-	0.5	0.7	-	0.7	1.5	-	1.5
Net financing expense (Note 4)	(4.4)	-	(4.4)	(4.6)	-	(4.6)	(8.4)	-	(8.4)
Share of (loss)/profit of Associate	(0.1)	-	(0.1)	-	-	-	0.2	-	0.2
Profit before taxation	**114.5**	**(8.2)**	**106.3**	**124.6**	**(16.5)**	**108.1**	**274.5**	**(37.7)**	**236.8**
Taxation (Note 5)	(32.1)	2.7	(29.4)	(36.1)	3.6	(32.5)	(78.3)	8.5	(69.8)
Profit for the period	**82.4**	**(5.5)**	**76.9**	**88.5**	**(12.9)**	**75.6**	**196.2**	**(29.2)**	**167.0**
Attributable to:									
Equity shareholders	82.2	(5.5)	76.7	88.4	(12.9)	75.5	195.8	(29.2)	166.6
Non-controlling interest	0.2	-	0.2	0.1	-	0.1	0.4	-	0.4
Profit for the period	**82.4**	**(5.5)**	**76.9**	**88.5**	**(12.9)**	**75.6**	**196.2**	**(29.2)**	**167.0**
Earnings per share									
Basic earnings per share (Note 2/6)	111.6p		104.2p	120.0p		102.4p	265.7p		226.2p
Diluted earnings per share (Note 2/6)	111.4p		103.9p	119.7p		102.2p	264.9p		225.5p
Dividends									
Dividends per share (Note 7)			33.5p			32.0p			110.0p
Dividends paid (per share) (Note 7)			78.0p			71.0p			103.0p

Adjusted figures exclude certain items as detailed in Notes 2 and 3. All amounts relate to continuing operations. The Notes on pages 28 to 44 form an integral part of the Interim Condensed Consolidated Financial Statements.

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Six months to 30th June 2020 £m (unaudited)	Six months to 30th June 2019 £m (unaudited)	Year ended 31st December 2019 £m (audited)
Profit for the period	**76.9**	**75.6**	**167.0**
Items that will not be reclassified to profit or loss:			
Remeasurement (loss)/gain on post-retirement benefits	(31.7)	(5.5)	9.0
Deferred tax on remeasurement loss/(gain) on post-retirement benefits	6.0	1.7	(1.4)
	(25.7)	(3.8)	7.6
Items that may be reclassified subsequently to profit or loss:			
Exchange gain/(loss) on translation of foreign operations and net investment hedges	41.4	(1.8)	(33.5)
Non-controlling interest foreign exchange translation differences	-	-	(0.1)
(Loss)/profit on cash flow hedges net of tax	(6.5)	(1.2)	3.3
	34.9	(3.0)	(30.3)
Total comprehensive income for the period	**86.1**	**68.8**	**144.3**
Attributable to:			
Equity shareholders	85.9	68.7	144.0
Non-controlling interest	0.2	0.1	0.3
Total comprehensive income for the period	**86.1**	**68.8**	**144.3**

CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the period ended 30th June 2020 (unaudited)	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 2020	**19.8**	**81.0**	**(10.6)**	**735.1**	**825.3**	**1.0**	**826.3**
Profit for the period	**-**	**-**	**-**	**76.7**	**76.7**	**0.2**	**76.9**
Other comprehensive (expense)/income:							
Exchange gain on translation of foreign operations and net investment hedges	-	-	41.4	-	41.4	-	41.4
Remeasurement loss on post-retirement benefits	-	-	-	(31.7)	(31.7)	-	(31.7)
Deferred tax on remeasurement loss on post-retirement benefits	-	-	-	6.0	6.0	-	6.0
Loss on cash flow hedges reserve	-	-	(6.5)	-	(6.5)	-	(6.5)
Total other comprehensive income/(expense) for the period	**-**	**-**	**34.9**	**(25.7)**	**9.2**	**-**	**9.2**
Total comprehensive income for the period	**-**	**-**	**34.9**	**51.0**	**85.9**	**0.2**	**86.1**
Contributions by and distributions to owners of the Company:							
Dividends paid	-	-	-	(57.5)	(57.5)	(0.3)	(57.8)
Equity-settled share plans net of tax	-	-	-	(7.2)	(7.2)	-	(7.2)
Issue of share capital	0.1	0.4	-	-	0.5	-	0.5
Employee Benefit Trust shares	-	-	(6.5)	-	(6.5)	-	(6.5)
Balance at 30th June 2020	**19.9**	**81.4**	**17.8**	**721.4**	**840.5**	**0.9**	**841.4**

Other reserves represent the Group's translation, net investment hedge, cash flow hedge, capital redemption and Employee Benefit Trust reserves. The non-controlling interest is a 2.5% share of Spirax-Sarco (Korea) Ltd held by employee shareholders.

For the period ended 30th June 2019 (unaudited)	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 2019	**19.8**	**77.8**	**22.2**	**646.0**	**765.8**	**1.1**	**766.9**
Adoption of IFRS 16	-	-	-	(2.9)	(2.9)	-	(2.9)
Balance at 1st January 2019 (restated)	**19.8**	**77.8**	**22.2**	**643.1**	**762.9**	**1.1**	**764.0**
Profit for the period	**-**	**-**	**-**	**75.5**	**75.5**	**0.1**	**75.6**
Other comprehensive (expense)/income:							
Exchange loss on translation of foreign operations and net investment hedges	-	-	(1.8)	-	(1.8)	-	(1.8)
Remeasurement loss on post-retirement benefits	-	-	-	(5.5)	(5.5)	-	(5.5)
Deferred tax on remeasurement loss on post-retirement benefits	-	-	-	1.7	1.7	-	1.7
Loss on cash flow hedges reserve	-	-	(1.2)	-	(1.2)	-	(1.2)
Total other comprehensive expense for the period	**-**	**-**	**(3.0)**	**(3.8)**	**(6.8)**	**-**	**(6.8)**
Total comprehensive (expense)/income for the period	**-**	**-**	**(3.0)**	**71.7**	**68.7**	**0.1**	**68.8**
Contributions by and distributions to owners of the Company:							
Dividends paid	-	-	-	(52.3)	(52.3)	(0.3)	(52.6)
Equity-settled share plans net of tax	-	-	-	(1.8)	(1.8)	-	(1.8)
Issue of share capital	-	0.8	-	-	0.8	-	0.8
Employee Benefit Trust shares	-	-	(1.3)	-	(1.3)	-	(1.3)
Transfer between reserves	-	-	1.4	(1.4)	-	-	-
Balance at 30th June 2019	**19.8**	**78.6**	**19.3**	**659.3**	**777.0**	**0.9**	**777.9**

For the year ended 31st December 2019 (audited)	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 2019	**19.8**	**77.8**	**22.2**	**646.0**	**765.8**	**1.1**	**766.9**
Adoption of IFRS 16				(2.4)	(2.4)	-	(2.4)
Balance at 1st January 2019 (restated)	**19.8**	**77.8**	**22.2**	**643.6**	**763.4**	**1.1**	**764.5**
Profit for the year	**-**	**-**	**-**	**166.6**	**166.6**	**0.4**	**167.0**
Other comprehensive (expense)/income:							
Exchange loss on translation of foreign operations and net investment hedges	-	-	(33.5)	-	(33.5)	(0.1)	(33.6)
Remeasurement gain on post-retirement benefits	-	-	-	9.0	9.0	-	9.0
Deferred tax on remeasurement gain on post-retirement benefits	-	-	-	(1.4)	(1.4)	-	(1.4)
Gain on cash flow hedges reserve	-	-	3.3	-	3.3	-	3.3
Total other comprehensive (expense)/income for the year	**-**	**-**	**(30.2)**	**7.6**	**(22.6)**	**(0.1)**	**(22.7)**
Total comprehensive (expense)/income for the year	**-**	**-**	**(30.2)**	**174.2**	**144.0**	**0.3**	**144.3**
Contributions by and distributions to owners of the Company:							
Dividends paid	-	-	-	(75.9)	(75.9)	(0.4)	(76.3)
Equity-settled share plans net of tax	-	-	-	(5.4)	(5.4)	-	(5.4)
Issue of share capital	-	3.2	-	-	3.2	-	3.2
Employee Benefit Trust shares	-	-	(4.0)	-	(4.0)	-	(4.0)
Transfer between reserves	-	-	1.4	(1.4)	-	-	-
Balance at 31st December 2019	**19.8**	**81.0**	**(10.6)**	**735.1**	**825.3**	**1.0**	**826.3**

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

	Notes	Six months to 30th June 2020 £m (unaudited)	Six months to 30th June 2019 £m (unaudited)	Year ended 31st December 2019 £m (audited)
Cash flows from operating activities				
Profit before taxation		106.3	108.1	236.8
Depreciation, amortisation and impairment		37.7	35.3	76.6
(Profit)/loss on disposal of fixed assets		(0.3)	(0.5)	0.4
Loss on disposal of subsidiary		0.3	-	-
Reversal of acquisition-related fair value adjustments to inventory		1.0	1.0	4.1
Cash payments to the pension schemes greater than the charge to operating profit		(11.9)	(2.4)	(5.2)
Equity-settled share plans		2.8	3.2	6.2
Net finance expense		4.4	4.6	8.4
Operating cash flow before changes in working capital and provisions		**140.3**	**149.3**	**327.3**
Change in trade and other receivables		21.0	(3.2)	2.4
Change in inventories		(9.7)	(17.1)	(23.8)
Change in provisions		2.3	(0.1)	(2.4)
Change in trade and other payables		(22.3)	(19.8)	2.3
Cash generated from operations		**131.6**	**109.1**	**305.8**
Income taxes paid		(30.1)	(36.2)	(78.4)
Net cash from operating activities		**101.5**	**72.9**	**227.4**
Cash flows from investing activities				
Purchase of property, plant and equipment		(21.7)	(14.6)	(50.9)
Proceeds from sale of property, plant and equipment		1.8	1.8	3.4
Purchase of software and other intangibles		(2.2)	(3.0)	(8.3)
Development expenditure capitalised		(1.4)	(3.5)	(3.2)
Disposal of subsidiary		(0.3)	-	-
Acquisition of businesses net of cash acquired	13	(4.8)	(117.6)	(117.9)
Interest received		0.5	0.7	1.5
Net cash used in investing activities		**(28.1)**	**(136.2)**	**(175.4)**
Cash flows from financing activities				
Proceeds from issue of share capital		0.2	0.8	2.1
Employee Benefit Trust share purchase		(3.2)	(8.2)	(14.7)
Repaid borrowings	9	(141.8)	(49.6)	(80.2)
New borrowings	9	137.4	165.1	129.8
Interest paid including interest on lease liabilities		(4.2)	(3.9)	(7.0)
Repayment of lease liabilities	9	(5.9)	(5.3)	(11.2)
Dividends paid (including minorities)		(57.8)	(52.6)	(76.3)
Net cash (used in)/from financing activities		**(75.3)**	**46.3**	**(57.5)**
Net change in cash and cash equivalents	9	**(1.9)**	**(17.0)**	**(5.5)**
Net cash and cash equivalents at beginning of period	9	168.3	186.7	186.7
Exchange movement	9	(0.7)	(3.9)	(12.9)
Net cash and cash equivalents at end of period	9	**165.7**	**165.8**	**168.3**
Borrowings	9	(491.7)	(557.3)	(463.5)
Net debt at the end of the period	9	**(326.0)**	**(391.5)**	**(295.2)**
Lease liabilities (including IFRS 16 transition adjustment)		(37.2)	(41.3)	(38.9)
Net debt and lease liabilities at end of period		**(363.2)**	**(432.8)**	**(334.1)**

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. BASIS OF PREPARATION

Spirax-Sarco Engineering plc is a company domiciled in the UK. The Condensed Consolidated Interim Financial Statements of Spirax-Sarco Engineering plc and its subsidiaries (the Group) for the six months ended 30th June 2020 have been prepared in accordance with IAS 34 (Interim Financial Reporting), as adopted by the European Union. The accounting policies applied are consistent with those set out in the Spirax-Sarco Engineering plc 2019 Annual Report.

These Condensed Consolidated Interim Financial Statements do not include all the information required for full annual statements and should be read in conjunction with the 2019 Annual Report. The comparative figures for the year ended 31st December 2019 do not constitute the Group's statutory Financial Statements for that financial year as defined in Section 434 of the Companies Act 2006. The Financial Statements of the Group for the year ended 31st December 2019 were prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union. The statutory Consolidated Financial Statements for Spirax-Sarco Engineering plc in respect of the year ended 31st December 2019 have been reported on by the Company's auditor and delivered to the registrar of companies. The report of the auditor was (i) unqualified, (ii) did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under Section 498 (2) or (3) of the Companies Act 2006.

The Consolidated Financial Statements of the Group in respect of the year ended 31st December 2019 are available upon request from Mr A. J. Robson, General Counsel and Company Secretary, Charlton House, Cheltenham, Gloucestershire, GL53 8ER, United Kingdom or on www.spiraxsarcoengineering.com.

The Condensed Consolidated Interim Financial Statements for the six months ended 30th June 2020, which have been reviewed by the auditor in accordance with International Standard on Review Engagements (UK and Ireland) 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council, were authorised by the Board on 11th August 2020.

The Half Year Report and Interim Financial Statements (Half Year Report) has been prepared solely to provide additional information to shareholders as a body to assess the Group's strategies and the potential for those strategies to succeed. This Half Year Report should not be relied upon by any other party or for any other purpose.

GOING CONCERN

Having made enquiries and reviewed the Group's plans and available financial facilities, the Board has a reasonable expectation that the Group has adequate resources to continue its operational existence for at least 12 months from the date of signing the 2020 Half Year Report. For this reason, it continues to adopt the going concern basis in preparing the Condensed Consolidated Interim Financial Statements.

The Directors have considered the impact of COVID-19 and a summary of the revenue implications, cost mitigations and the health and wellbeing of our employees is included in the Review of Operations. The Group has prepared cash flow forecasts, which reflect forecast changes in revenue and cash flows based on the current economic environment. Our financial position remains robust, with the Group holding committed total debt facilities of £809 million at 30th June 2020 giving headroom in excess of £500 million, with the earliest renewal on any facility not due until March 2022. Reasonably possible "stress testing" was performed on the forecast cash flows, considering potential scenarios arising from the COVID-19 pandemic and from the principal risks as set out on page 19-20. Under these scenarios, the Group remained considerably within its debt facilities and the associated financial covenants. Reverse "stress testing" was also performed to assess what level of under-performance would be required for a breach of the financial covenants to occur, results of which evidenced that no reasonably possible change in future forecast cash flows would cause a breach of these covenants.

NEW STANDARDS AND INTERPRETATIONS APPLIED FOR THE FIRST TIME

On 1st January 2020, the Group adopted the following new or amended IFRS and interpretations issued by the International Accounting Standards Board (IASB):

- Amendments to References to the Conceptual Framework in IFRS Standards
- Definition of a Business (Amendments to IFRS 3)
- Definition of Material (Amendments to IAS 1 and IAS 8)
- Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7).

Their adoption has not had a material impact on the Condensed Consolidated Financial Statements.

The economy in Argentina remains subject to high inflation. At 30th June 2020 we have concluded that applying IAS 29 (Financial Reporting in Hyperinflationary Economies) is not required as the impact of adopting is not material. We will continue to assess the position going forward.

NEW STANDARDS AND INTERPRETATIONS NOT YET APPLIED

At the date of approval of these Condensed Consolidated Financial Statements, there were no new or revised IFRSs, amendments or interpretations in issue but not yet effective that are potentially relevant for the Group and which have not yet been applied.

The transition away from London Inter-Bank Offered Rate (LIBOR), and other Inter-Bank Offered Rates (IBORs) (together "IBOR Reform") will remove IBOR as an interest rate benchmark for financial instruments including the floating rate debt held by the Group. There is uncertainty as to the timing and the methods of transition for replacing existing IBOR benchmark rates with alternative rates. The Group has considered whether hedge accounting relationships continue to qualify for hedge accounting as at 30th June 2020. IBOR continues to be used as a reference rate in financial markets and is used in the valuation of instruments with maturities that exceed the expected transition deadline. Therefore, the Group believes the current market structure supports the continuation of hedge accounting as at 30th June 2020. The changes proposed are not considered to have an immediate impact on the Group and we will continue to monitor developments of IBOR Reform throughout the remainder of 2020.

SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of Interim Financial Statements, in conformity with adopted IFRS, requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amount of assets and liabilities, income and expense. Actual results may differ from these estimates. In preparing these Condensed Consolidated Interim Financial Statements, the significant judgements made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were reviewed in the light of the COVID-19 pandemic, but concluded to be the same as those that applied to the Consolidated Financial Statements for the year ended 31st December 2019.

RECLASSIFICATION OF PRIOR PERIOD BALANCES

During the period, it was determined that the Group's cash and overdrafts with notional cash pooling arrangements did not meet the criteria for offsetting as set out in paragraph 42 of IAS 32 (Financial

Instruments: Presentation) and therefore cannot be presented net in the Statement of Financial Position. As a result, for presentation purposes, amounts have been reclassified in the comparative periods with the impact being an increase to both Cash and cash equivalents and Bank overdrafts of £162.1m as at 31st December 2019 and £121.4m as at 30th June 2019.

This change had no impact on the net assets of the Group.

CAUTIONARY STATEMENTS

This Half Year Report contains forward-looking statements. These have been made by the Directors in good faith based on the information available to them up to the time of their approval of this Report. The Directors can give no assurance that these expectations will prove to have been correct. Due to the inherent uncertainties, including both economic and business risk factors underlying such forward-looking information, actual results may differ materially from those expressed or implied by these forward-looking statements. The Directors undertake no obligation to update any forward-looking statements, whether as a result of new information, future events, or otherwise.

RESPONSIBILITY STATEMENT

The Directors confirm that to the best of their knowledge:

- This Condensed Consolidated set of Interim Financial Statements has been prepared in accordance with IAS 34 (Interim Financial Reporting), as adopted by the European Union;

- The interim management report includes a fair review of the information required by:

    a) DTR 4.2.7R of the Disclosure and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the Condensed Consolidated Financial Statements, and a description of the principal risks and uncertainties for the remaining six months of the financial year.
    b) DTR 4.2.8R of the Disclosure and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year that have materially affected the financial position or performance of the entity during that period, and any changes in the related party transactions described in the last Annual Report that could do so.

The Directors of Spirax-Sarco Engineering plc on 11th August 2020 are the same as those listed in the 2019 Annual Report on pages 74 and 75, with the exception of Jay Whalen, who retired from the Board as an Executive Director on 31st December 2019. Nimesh Patel joined the Group in July 2020 and will succeed Kevin Boyd as Chief Financial Officer and Executive Director in September.

N. J. Anderson
Group Chief Executive
11th August 2020

K. J. Boyd
Chief Financial Officer
11th August 2020

On behalf of the Board

2. ADJUSTED PERFORMANCE MEASURES

The Group reports under International Financial Reporting Standards (IFRS) and also uses adjusted performance measures where the Board believes that:

- they help to effectively monitor the performance of the Group;
- users of the Financial Statements might find them informative; and
- they act as an aid to comparison with our peers.

Certain adjusted performance measures also form a meaningful element of Executive Directors' annual bonuses. A definition of the adjusted performance measures and a reconciliation to the closest IFRS equivalent are disclosed below.

Adjusted operating profit

Adjusted operating profit excludes items that are considered to be significant in nature and/or quantum and where treatment as an adjusted item provides stakeholders with additional useful information to assess the period-on-period trading performance of the Group and an aid to comparison with our peers. The Group excludes such items, which management have defined as:

- amortisation and impairment of acquisition-related intangible assets;
- impairment of goodwill;
- costs associated with acquisition and disposal;
- reversal of acquisition-related fair value adjustments to inventory;
- changes in deferred consideration payable on acquisitions;
- profit or loss on disposal of subsidiary;
- significant restructuring costs;
- foreign exchange gains and losses on borrowings;
- significant profits or losses on disposal of property; and
- significant plan amendments and/or legal rulings requiring a past service cost or credit for post-retirement benefit plans.

A reconciliation between operating profit as reported under IFRS and adjusted operating profit is given below.

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Operating profit as reported under IFRS	**110.8**	**112.7**	**245.0**
Amortisation of acquisition-related intangible assets	13.4	13.0	26.8
Restructuring costs	4.2	-	-
Reversal of acquisition-related fair value adjustments to inventory	1.0	1.0	4.1
Post-retirement benefit plans in the UK being closed to future accrual	(10.4)	-	-
Impairment of goodwill	-	-	4.2
Acquisition-related items	-	2.5	2.6
Adjusted operating profit	**119.0**	**129.2**	**282.7**

Adjusted earnings per share

	Six months to 30th June 2020	Six months to 30th June 2019	Year ended 31st December 2019
Profit for the period attributable to equity holders as reported under IFRS (£m)	**76.7**	**75.5**	**166.6**
Items excluded from adjusted operating profit disclosed above (£m)	8.2	16.5	37.7
Tax effects on adjusted items (£m)	(2.7)	(3.6)	(8.5)
Adjusted profit for the period attributable to equity holders (£m)	**82.2**	**88.4**	**195.8**
Weighted average shares in issue (million)	73.7	73.7	73.7
Basic adjusted earnings per share	111.6p	120.0p	265.7p
Diluted weighted average shares in issue (million)	73.9	73.8	73.9
Diluted adjusted earnings per share	111.4p	119.7p	264.9p

Basic adjusted earnings per share is defined as adjusted profit for the period attributable to equity holders divided by the weighted average number of shares in issue. Diluted adjusted earnings per share is defined as adjusted profit for the period attributable to equity holders divided by the diluted weighted average number of shares in issue.

Basic and diluted EPS calculated on an IFRS profit basis are included in Note 6.

Adjusted cash flow

A reconciliation showing the items that bridge between net cash from operating activities as reported under IFRS to adjusted cash from operations is given below.

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Net cash from operating activities as reported under IFRS	**101.5**	**72.9**	**227.4**
Acquisition and disposal costs	-	2.5	2.5
Capital expenditure excluding acquired intangibles from acquisitions	(23.5)	(19.3)	(59.0)
Movement in provisions	-	(0.1)	-
Tax paid	30.1	36.2	78.4
Repayments of principal under lease liabilities	(5.9)	(5.3)	(11.2)
Adjusted cash from operations	**102.2**	**86.9**	**238.1**

Adjusted cash conversion in the first half was 86% (2019: 67%). Cash conversion is calculated as adjusted cash from operations divided by adjusted operating profit. The adjusted cash flow is included in the Review of Operations on page 9.

Capital employed

This is an important non-statutory measure that the Board uses to help it effectively monitor the performance of the Group. More information on Capital employed can be found in the Review of Operations on page 8.

An analysis of the components is as follows:

	30th June 2020 £m	30th June 2019 £m	31st December 2019 £m
Property, plant and equipment	267.3	238.6	251.2
Right-of-use assets (IFRS 16)	39.1	38.4	40.8
Non-current prepayments	1.6	6.2	0.9
Inventories	202.3	193.9	185.9
Trade receivables	222.5	256.1	240.7
Other current assets	41.1	36.4	35.3
Tax recoverable	7.7	4.3	8.4
Trade, other payables and current provisions	(159.1)	(165.3)	(178.3)
Current tax payable	(27.6)	(24.4)	(26.7)
Capital employed	**594.9**	**584.2**	**558.2**

A reconciliation of capital employed to net assets as reported under IFRS and disclosed in the Consolidated Statement of Financial Position is given below.

	30th June 2020 £m	30th June 2019 £m	31st December 2019 £m
Capital employed	**594.9**	**584.2**	**558.2**
Goodwill and other intangible assets	748.0	770.3	721.6
Investment in Associate	0.1	-	0.2
Post-retirement benefits	(94.9)	(89.3)	(71.3)
Net deferred tax	(38.0)	(47.6)	(43.1)
Non-current provisions and long-term payables	(5.5)	(6.9)	(5.2)
Lease liabilities	(37.2)	(41.3)	(38.9)
Net debt	(326.0)	(391.5)	(295.2)
Net assets as reported under IFRS	**841.4**	**777.9**	**826.3**

Net debt including IFRS 16

A reconciliation between net debt and net debt including IFRS 16 is given below. A breakdown of the balances that are included within net debt is given in Note 9. Net debt excludes IFRS 16 lease liabilities to enable comparability with prior years.

	30th June 2020 £m	30th June 2019 £m	31st December 2019 £m
Net debt	(326.0)	(391.5)	(295.2)
IFRS 16 lease liabilities	(37.2)	(41.3)	(38.9)
Net debt and IFRS 16 lease liabilities	**(363.2)**	**(432.8)**	**(334.1)**

Earnings before interest, tax, depreciation and amortisation (EBITDA)

EBITDA is calculated by adding back depreciation and amortisation of property, plant and equipment, software and development to adjusted operating profit. When calculated at a half year it is based on the results for the last 12 months all translated at the exchange rate used for the half year period.

Net debt to EBITDA

To assess the size of the net debt balance relative to the size of the earnings for the Group, we analyse net debt as a proportion of EBITDA.

Organic measures

As we are a multi-national Group, with companies that trade in a diverse range of currencies and because we regularly acquire and sometimes dispose of companies, we also refer to organic performance measures throughout the half year results. Organic measures are at constant currency and exclude contributions from acquisitions or disposals. The Board believes that this allows users of the accounts to gain a further understanding of how the Group has performed.

Exchange translation movements are assessed by re-translating prior period reported values to current period exchange rates. Exchange transaction impacts on operating profit are assessed on the basis of transactions being at constant currency between years.

The incremental impact of 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:

	Six months to 30th June 2019	Exchange	Organic	Acquisitions and disposals	Six months to 30th June 2020	Organic	Reported
Revenue	£591.2m	(£9.5m)	(£27.2m)	£15.2m	£569.7m	-5%	-4%
Adjusted operating profit	£129.2m	(£4.5m)	(£8.8m)	£3.1m	£119.0m	-7%	-8%
Adjusted operating profit margin	21.9%				20.9%	-50 bps	-100 bps

The reconciliation for each segment is included in the Review of Operations.

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 operating segment

Six months to 30th June 2020	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating profit margin %
Steam Specialties	331.7	73.9	68.0	20.5%
Electric Thermal Solutions	88.9	(3.1)	9.4	10.6%
Watson-Marlow	149.1	47.0	48.6	32.6%
Corporate expenses		(7.0)	(7.0)	
Total	**569.7**	**110.8**	**119.0**	**20.9%**
Net finance expense		(4.4)	(4.4)	
Share of loss of Associate		(0.1)	(0.1)	
Profit before taxation		**106.3**	**114.5**	

Six months to 30th June 2019	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating profit margin %
Steam Specialties	365.7	81.1	83.9	22.9%
Electric Thermal Solutions	83.1	1.7	8.1	9.7%
Watson-Marlow	142.4	40.2	45.0	31.6%
Corporate expenses		(10.3)	(7.8)	
Total	**591.2**	**112.7**	**129.2**	**21.9%**
Net finance expense		(4.6)	(4.6)	
Share of profit of Associate		-	-	
Profit before taxation		**108.1**	**124.6**	

Year ended 31st December 2019	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating profit margin %
Steam Specialties	755.4	172.6	177.9	23.6%
Electric Thermal Solutions	186.1	7.9	24.7	13.3%
Watson-Marlow	300.9	82.7	95.8	31.8%
Corporate expenses		(18.2)	(15.7)	
Total	**1,242.4**	**245.0**	**282.7**	22.8%
Net finance expense		(8.4)	(8.4)	
Share of profit of Associate		0.2	0.2	
Profit before taxation		**236.8**	**274.5**	

The following table details the split of revenue by geography for the combined Group:

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Europe, Middle East and Africa	248.0	249.5	518.7
Asia Pacific	129.6	139.3	296.0
Americas	192.1	202.4	427.7
Total revenue	**569.7**	**591.2**	**1,242.4**

The total operating profit for each period includes certain items, as analysed below:

Six months to 30th June 2020	Amortisation of acquisition-related intangible assets £m	Restructuring costs £m	Reversal of acquisition-related fair value adjustments to inventory £m	UK pension plans closed to future accrual £m	Total £m
Steam Specialties	(2.6)	-	-	8.5	5.9
Electric Thermal Solutions	(7.3)	(4.2)	(1.0)	-	(12.5)
Watson-Marlow	(3.5)	-	-	1.9	(1.6)
Corporate expenses	-	-	-	-	-
Total	(13.4)	(4.2)	(1.0)	10.4	(8.2)

Six months to 30th June 2019	Amortisation of acquisition-related intangible assets £m	Acquisition-related items £m	Reversal of acquisition-related fair value adjustments to inventory £m	Total £m
Steam Specialties	(2.8)	-	-	(2.8)
Electric Thermal Solutions	(5.4)	-	(1.0)	(6.4)
Watson-Marlow	(4.8)	-	-	(4.8)
Corporate expenses	-	(2.5)	-	(2.5)
Total	(13.0)	(2.5)	(1.0)	(16.5)

Year ended 31st December 2019	Amortisation of acquisition-related intangible assets £m	Acquisition-related items £m	Impairment of goodwill £m	Reversal of acquisition-related fair value adjustments to inventory £m	Total £m
Steam Specialties	(5.3)	-	-	-	(5.3)
Electric Thermal Solutions	(12.7)	-	-	(4.1)	(16.8)
Watson-Marlow	(8.8)	(0.1)	(4.2)	-	(13.1)
Corporate expenses	-	(2.5)	-	-	(2.5)
Total	**(26.8)**	**(2.6)**	**(4.2)**	**(4.1)**	**(37.7)**

Net financing income and expense

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Steam Specialties	(0.8)	(0.8)	(2.2)
Electric Thermal Solutions	(0.1)	(0.2)	(0.2)
Watson-Marlow	(0.2)	(0.2)	(0.4)
Corporate expenses	(3.3)	(3.4)	(5.6)
Total net financing expense	**(4.4)**	**(4.6)**	**(8.4)**

Net assets

	30th June 2020		30th June 2019		31st December 2019	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Steam Specialties	671.2	(187.0)	710.4	(183.5)	669.4	(176.3)
Electric Thermal Solutions	576.6	(33.9)	584.6	(36.7)	552.0	(36.3)
Watson-Marlow	274.2	(38.6)	244.9	(41.3)	255.2	(42.2)
	1,522.0	(259.5)	1,539.9	(261.5)	1,476.6	(254.8)
Liabilities	(259.5)		(261.5)		(254.8)	
Net deferred tax	(38.0)		(47.6)		(43.1)	
Net current tax payable	(19.9)		(20.1)		(18.3)	
Net debt including lease liabilities	(363.2)		(432.8)		(334.1)	
Net assets	**841.4**		**777.9**		**826.3**	

Capital additions, depreciation, amortisation and impairment

	Six months to 30th June 2020		Six months to 30th June 2019		Year ended 31st December 2019	
	Capital additions £m	Depreciation, amortisation and impairment £m	Capital additions £m	Depreciation, amortisation and impairment £m	Capital additions £m	Depreciation, amortisation and impairment £m
Steam Specialties	15.1	18.4	35.0	17.8	57.7	35.8
Electric Thermal Solutions	2.0	10.4	79.3	7.9	81.6	18.4
Watson-Marlow	11.4	8.9	19.0	9.6	40.6	22.4
Total	**28.5**	**37.7**	**133.3**	**35.3**	**179.9**	**76.6**

Capital additions include property, plant and equipment at 30th June 2020 of £21.7m; at 30th June 2019 of £22.7m; and at 31st December 2019 of £59.0m; of which at 30th June 2020 £nil; at 30th June 2019 £8.1m and 31st December 2019 £8.1m was from acquisitions in the period. Capital additions also include other intangible assets at 30th June 2020 of £3.6m; at 30th June 2019 of £67.1m; and at 31st December 2019 of £72.0m of which at 30th June 2020 £nil; at 30th June 2019 £60.2m and at 31st December 2019 £60.2m relates to acquired intangibles from acquisitions in the period. Right-of-use asset additions of £3.2m occurred during the six month period to 30th June 2020.

4. NET FINANCING INCOME AND EXPENSE

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Financial expenses:			
Bank and other borrowing interest payable	(3.6)	(3.5)	(6.4)
Interest expense on lease liabilities	(0.6)	(0.6)	(1.3)
Net interest on pension scheme liabilities	(0.7)	(1.2)	(2.2)
	(4.9)	(5.3)	(9.9)
Financial income:			
Bank interest receivable	0.5	0.7	1.5
Net financing expense	**(4.4)**	**(4.6)**	**(8.4)**
Net pension scheme financial expense	(0.7)	(1.2)	(2.2)
Interest expense on lease liabilities	(0.6)	(0.6)	(1.3)
Net bank interest	(3.1)	(2.8)	(4.9)
Net financing expense	**(4.4)**	**(4.6)**	**(8.4)**

5. TAXATION

Taxation has been estimated at the rate expected to be incurred in the full year.

	Six months to 30th June 2020			Six months to 30th June 2019			Year ended 31st December 2019		
	Adjusted £m	Adj't £m	Total £m	Adjusted £m	Adj't £m	Total £m	Adjusted £m	Adj't £m	Total £m
UK corporation tax	1.2	-	1.2	2.7	-	2.7	13.0	-	13.0
Foreign tax	31.4	(1.0)	30.4	32.9	-	32.9	56.8	-	56.8
Deferred tax	(0.5)	(1.7)	(2.2)	0.5	(3.6)	(3.1)	8.5	(8.5)	-
Total taxation	**32.1**	**(2.7)**	**29.4**	**36.1**	**(3.6)**	**32.5**	**78.3**	**(8.5)**	**69.8**
Effective tax rate	**28.0%**	**32.9%**	**27.7%**	**29.0%**	**21.6%**	**30.1%**	**28.5%**	**22.6%**	**29.5%**

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 countries in which the Group operates.

The Group's tax charge for the six months ended 30th June 2020 included a credit of £2.7m in relation to certain items (as disclosed in Note 2). The tax impacts of these items are:

- Amortisation of acquisition-related intangible assets (£3.2m credit);
- Release of fair value adjustment on acquisition-related inventory (£0.3m credit);
- Costs related to the restructuring of Chromalox (£1.0m credit); and
- Closure of defined benefit UK pension schemes to future accrual (£1.8m debit).

In October 2017, the European Commission opened a formal State Aid investigation into an exemption within the UK's current Controlled Foreign Company (CFC) regime for certain finance income. On 2nd April 2019, the European Commission published its final decision that the UK CFC Finance Company Partial Exemption (FCPE) constituted State Aid in certain circumstances. In common with a number of other UK Groups, the Spirax-Sarco Group has benefited from the FCPE and the total benefit is approximately £8.5m including compound interest. On 12th June 2019 the UK Government submitted an application for annulment to the EU General Court appealing the decision of the European Commission. Similar to other UK Groups, on 31st October 2019 the Spirax-Sarco Group submitted an application for annulment to the EU General Court in its own right, appealing the decision of the European Commission. As a result, no provision has been recognised at the half year Statement of Financial Position date. The Spirax-Sarco Group acknowledges that a cash payment for the amount that HM Revenue & Customs seeks to recover may be required in the future, which we would expect to be refundable in the event of a successful appeal.

6. EARNINGS PER SHARE

	Six months to 30th June 2020	Six months to 30th June 2019	Year ended 31st December 2019
Profit attributable to equity shareholders (£m)	76.7	75.5	166.6
Weighted average shares in issue (million)	73.7	73.7	73.7
Dilution (million)	0.2	0.1	0.2
Diluted weighted average shares in issue (million)	73.9	73.8	73.9
Basic earnings per share	104.2p	102.4p	226.2p
Diluted earnings per share	103.9p	102.2p	225.5p

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.

7. DIVIDENDS

	Six months to 30th June 2020 £m	Six months to 30th June 2019 £m	Year ended 31st December 2019 £m
Amounts paid in the period:			
Final dividend for the year ended 31st December 2019 of 78.0p (2018: 71.0p) per share	57.5	52.3	52.3
Interim dividend for the year ended 31st December 2019 of 32.0p (2018: 29.0p) per share	-	-	23.6
Total dividends paid	**57.5**	**52.3**	**75.9**
Amounts arising in respect of the period:			
Interim dividend for the year ending 31st December 2020 of 33.5p (2019: 32.0p) per share	24.7	23.6	23.6
Final dividend for the year ended 31st December 2019 of 78.0p (2018: 71.0p) per share	-	-	57.5
Total dividends arising	**24.7**	**23.6**	**81.1**

The interim dividend for the year ending 31st December 2020 was approved by the Board after 30th June 2020. It is therefore not included as a liability in these Interim Condensed Consolidated Financial Statements. No scrip alternative to the cash dividend is being offered in respect of the 2020 interim dividend.

8. POST-RETIREMENT BENEFITS

The Group is accounting for pension costs in accordance with IAS 19. The disclosures shown here are in respect of the Group's Defined Benefit Obligations. Other plans operated by the Group were either Defined Contribution plans or were deemed immaterial for the purposes of IAS 19 reporting. Full IAS 19 disclosure for the year ended 31st December 2019 is included in the Group's Annual Report.

On 30th June 2020 the UK defined benefit pension schemes were closed to future accrual resulting in a £10.4 million credit to the income statement, which has been taken as an adjusting item as disclosed in Note 2.

The amounts recognised in the Consolidated Statement of Financial Position are as follows:

	30th June 2020 £m	30th June 2019 £m	31st December 2019 £m
Post-retirement benefits	(94.9)	(89.3)	(71.3)
Related deferred tax asset	22.3	20.2	16.8
Net pension liability	**(72.6)**	**(69.1)**	**(54.5)**

9. ANALYSIS OF CHANGES IN NET DEBT, INCLUDING CHANGES IN LIABILITIES ARISING FROM FINANCING ACTIVITIES

	1st January 2020 £m	Cash flow £m	Acquired debt* £m	Exchange £m	Reclassification^ £m	30th June 2020 £m
Current portion of long-term borrowings	(34.3)					(0.4)
Non-current portion of long-term borrowings	(429.2)					(491.3)
Short-term borrowings	-					-
Total borrowings	**(463.5)**					**(491.7)**
Comprising:						
Borrowings	(463.5)	4.4	-	(32.6)	-	(491.7)
Changes in liabilities arising from financing	(463.5)	4.4	-	(32.6)	-	(491.7)
Cash at bank	330.6	23.3	-	0.2	(34.1)	320.0
Bank overdrafts	(162.3)	(25.2)	-	(0.9)	34.1	(154.3)
Net cash and cash equivalents	**168.3**	**(1.9)**	-	**(0.7)**	-	**165.7**
Net debt	**(295.2)**	**2.5**	**-**	**(33.3)**	**-**	**(326.0)**
Lease liability	(38.9)	5.9	(2.5)	(1.7)	-	(37.2)
Net debt and lease liability	**(334.1)**	**8.4**	**(2.5)**	**(35.0)**	-	**(363.2)**

** Debt acquired comprises debt recognised on the Statement of Financial Position due to entry into new leases under IFRS 16.*
^ Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group

The cash flow for borrowings included a repayment on the US dollar term loan of $25.8m (£20.3m) during the period, £32.0m of new drawings against a revolving credit facility, a repayment of €96.2m (£83.9m) against a revolving credit facility, a repayment on the €50m euro term loan of €41.7m (£36.3m), a new drawdown on a Private Placement Shelf Facility of €120m (£104.7m), a repayment on the €160m euro term loan of €160m (£139.6m) and a new drawdown on a €160m term loan of €160m (£139.6m).

	1st January 2019 £m	Cash flow £m	Acquired debt* £m	Exchange £m	Reclassification^ £m	30th June 2019 £m
Current portion of long-term borrowings	(41.5)					(56.1)
Non-current portion of long-term borrowings	(365.3)					(459.9)
Short-term borrowings	(15.7)					(41.3)
Total borrowings	**(422.5)**					**(557.3)**
Comprising:						
Borrowings	(422.2)	(115.4)	(18.2)	(1.5)	-	(557.3)
Finance leases	(0.3)	-		-	0.3	-
Changes in liabilities arising from financing	(422.5)	(115.4)	(18.2)	(1.5)	0.3	(557.3)
Cash at bank	324.6	(17.0)	-	(3.9)	(16.1)	287.6
Bank overdrafts	(137.9)	-	-	-	16.1	(121.8)
Net cash and cash equivalents	**186.7**	**(17.0)**	-	**(3.9)**	**-**	**165.8**
Net debt	**(235.8)**	**(132.4)**	**(18.2)**	**(5.4)**	**0.3**	**(391.5)**
Lease liability (including IFRS 16 transition adjustment)	(40.0)	5.3	(6.4)	0.1	(0.3)	(41.3)
Net debt and lease liability	**(275.8)**	**(127.1)**	**(24.6)**	**(5.3)**	**-**	**(432.8)**

	1st January 2019 £m	Cash flow £m	Acquired debt* £m	Exchange £m	Reclassification^ £m	31st December 2019 £m
Current portion of long-term borrowings	(41.5)					(34.3)
Non-current portion of long-term borrowings	(365.3)					(429.2)
Short-term borrowings	(15.7)					-
Total borrowings	**(422.5)**					**(463.5)**
Comprising:						
Borrowings	(422.2)	(49.6)	(18.2)	26.5	-	(463.5)
Finance Leases	(0.3)	-	-	-	0.3	-
Changes in liabilities arising from financing	(422.5)	(49.6)	(18.2)	26.5	0.3	(463.5)
Cash at bank	324.6	(5.7)	-	(12.9)	24.6	330.6
Bank overdrafts	(137.9)	0.2	-	-	(24.6)	(162.3)
Net cash and cash equivalents	**186.7**	**(5.5)**	-	**(12.9)**	-	**168.3**
Net debt	**(235.8)**	**(55.1)**	**(18.2)**	**13.6**	**0.3**	**(295.2)**
Lease liability (including IFRS 16 transition adjustment)	(39.0)	11.2	(12.6)	1.8	(0.3)	(38.9)
Net debt and lease liability	**(274.8)**	**(43.9)**	**(30.8)**	**15.4**	**-**	**(334.1)**

** Debt acquired includes both debt acquired due to acquisition and debt recognised on the Statement of Financial Position due to entry into new leases under IFRS 16.*

^ Prior period comparatives for Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group.

10. RELATED PARTY TRANSACTIONS

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this Note. Full details of the Group's other related party relationships, transactions and balances are given in the Group's Financial Statements for the year ended 31st December 2019. There have been no material changes in these relationships in the period up to the end of this Report.

No related party transactions have taken place in the first half of 2020 that have materially affected the financial position or the performance of the Group during that period.

11. FAIR VALUE OF FINANCIAL INSTRUMENTS

The following table compares the carrying and fair values of the Group's financial assets and liabilities:

	30th June 2020		30th June 2019		31st December 2019	
	Carrying value £m	Fair value £m	Carrying value £m	Fair value £m	Carrying value £m	Fair value £m
Financial assets:						
Cash and cash equivalents	320.0	320.0	287.6	287.6	330.6	330.6
Trade, other receivables and contract assets	248.9	248.9	276.5	276.5	263.4	263.4
Total financial assets	**568.9**	**568.9**	**564.1**	**564.1**	**594.0**	**594.0**
Financial liabilities:						
Loans	491.7	491.7	557.3	557.3	463.5	463.5
Lease liabilities	37.2	37.2	41.3	41.3	38.9	38.9
Bank overdrafts	154.3	154.3	121.8	121.8	162.3	162.3
Trade payables	53.6	53.6	55.0	55.0	57.9	57.9
Other payables and contract liabilities	43.2	43.2	48.4	48.4	46.5	46.5
Total financial liabilities	**780.0**	**780.0**	**823.8**	**823.8**	**769.1**	**769.1**

There are no other assets or liabilities measured at fair value on a recurring or non-recurring basis for which fair value is disclosed.

Fair values of financial assets and financial liabilities

Fair values of financial assets and liabilities at 30th June 2020 are not materially different from book values due to their size, the fact that they were at short-term rates of interest or for borrowings at long-term rates of interest where the rate of interest is not materially different to the current market rate. 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 using a current market rate of interest.

Lease liabilities

The fair value is estimated as the present value of future cash flows, discounted at the incremental borrowing rate for the related geographical location, unless the rate implicit in the lease is readily determinable.

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.

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 30th June

2020 the Group had contracts outstanding to economically hedge or to purchase £30.8m with US dollars, £61.8m with euros, £9.7m with Korean won, £11.4m with Chinese renminbi, £6.4m with Singapore dollars, €14.0m with US dollars, €5.1m with Korean won and €8.2m with Chinese renminbi. Derivative financial instruments are measured at fair value. The fair value at the end of the reporting period is a £3.2m liability (31st December 2019: £3.4m asset).

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. There have been no transfers between levels during the period.

12. CAPITAL COMMITMENTS

Capital expenditure contracted for but not provided for at 30th June 2020 was £4.6m (31st December 2019: £8.5m; 30th June 2019: £24.0m). All capital commitments related to property, plant and equipment.

13. PURCHASE AND DISPOSAL OF BUSINESSES

During the first quarter of 2020 the deferred consideration payable for the acquisition of Qonqave, a small German pre-revenue company, within the Watson-Marlow Fluid Technology business in 2018 was paid, for a value of €5.8m (£4.8m).

During the period the fair value of the assets acquired as part of the acquisition of Thermocoax Developpement and its related group companies was reassessed. The outcome of this reassessment was an increase to goodwill of £0.6m.

On 5th March 2020, we completed the sale of ProTrace Engineering, a small, non-core electrical engineering services business in Canada to the existing management team, for a nominal value of $1. The total impact of this in the Consolidated Income Statement was a cost of £0.4m which has been shown as an adjusting item as disclosed in Note 2, included within restructuring costs.

14. EXCHANGE RATES

Set out below is an additional disclosure (not required by IAS 34) that highlights movements in a selection of average exchange rates between half year 2019 and half year 2020.

	Average half year 2020	**Average half year 2019**	**Change %**
US dollar	1.27	1.29	+2%
Euro	1.15	1.14	-1%
Renminbi	8.94	8.78	-2%
Won	1,531	1,479	-4%
Real	6.21	4.96	-25%
Argentine peso	82.01	53.28	-54%

A negative movement indicates a strengthening in sterling versus that currency. When sterling strengthens against other currencies in which the Group operates, the Group incurs a loss on translation of the financial results into sterling.

On a translation basis, sales decreased by 1.6% and adjusted operating profit decreased by 2.9%, while transaction also decreased profit, giving a total reduction to profit from currency movements of 3.6%.