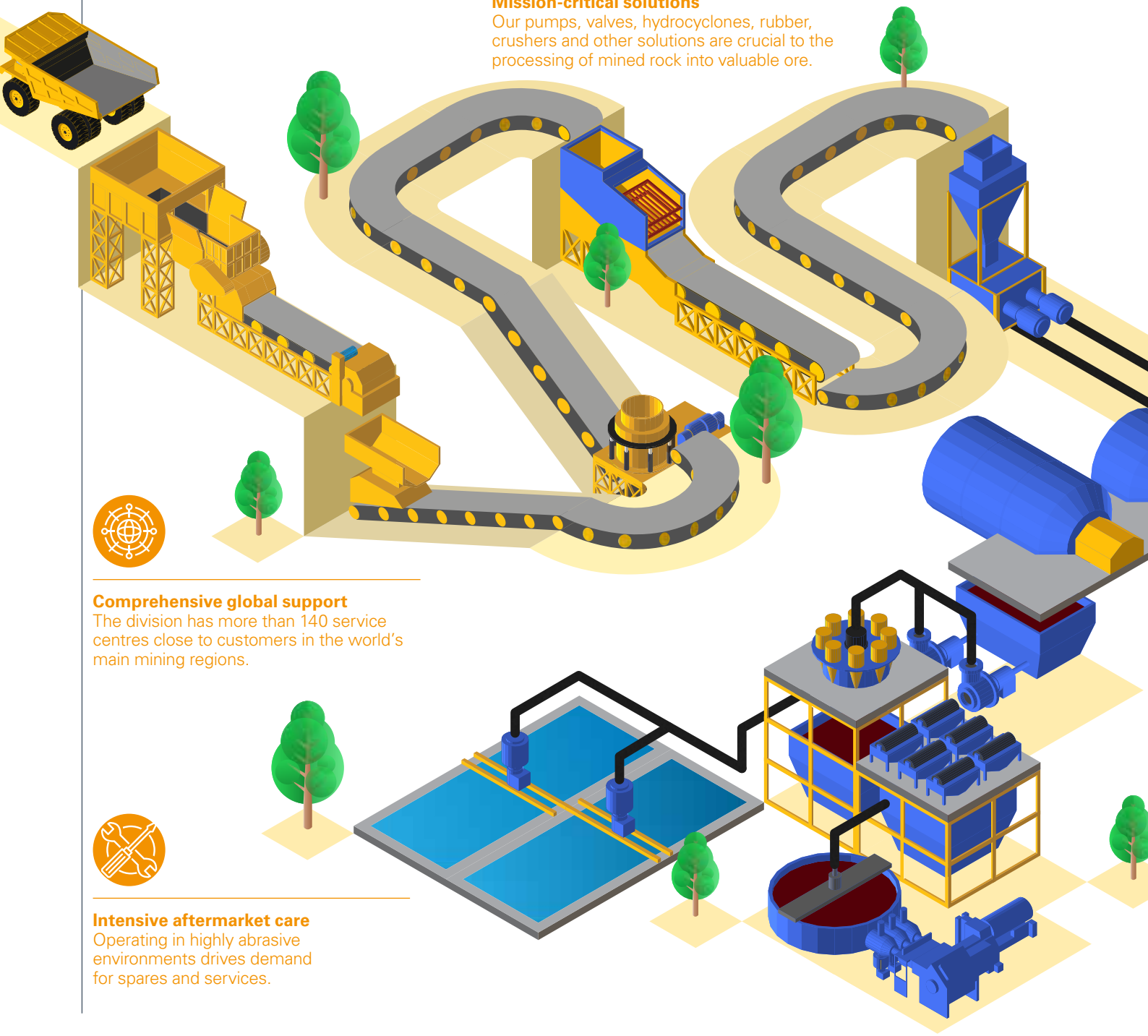
Operational Review

Weir Minerals

Building on our leadership positions in improving markets

What we do

Mission-critical solutions
Our pumps, valves, hydrocyclones, rubber, crushers and other solutions are crucial to the processing of mined rock into valuable ore.

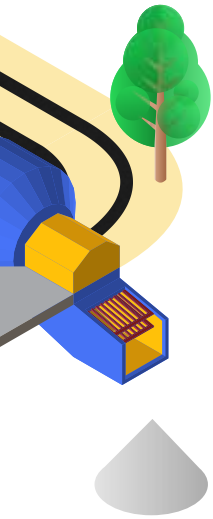


Comprehensive global support
The division has more than 140 service centres close to customers in the world's main mining regions.

Intensive aftermarket care
Operating in highly abrasive environments drives demand for spares and services.

Ricardo Garib
Division President of Weir Minerals

The division invested early to take advantage of increased market confidence and leverage its technology leadership and extensive service network.



Market review

In mining, ore production increased slightly by 1% while average ore yields continued to fall, requiring greater levels of processing to maintain the same volume of refined commodity to support aftermarket demand growth. While overall mining capital spending was stable, sustaining expenditure increased by 5% as miners sought to optimise production from existing assets.

Regionally, Australasia saw increased activity driven by gold and lithium markets while coal remained challenging. Similarly, Africa benefited from increased activity in gold and copper, although there was some disruption from government actions in East Africa in the second half of the year. North America and Europe benefited from improved sentiment and activity in hard rock mining markets, although North American general industrial and coal markets were relatively subdued.

In Latin America, mining activity remained robust despite the impact of industrial relations' issues in the first half for some of our customers.

In non-mining markets, aggregates demand remained supportive in most regions, with the US, in particular, increasing its investment in infrastructure. While there was no significant new investment in oil sands projects, production increased overall, supporting demand for aftermarket spares and services.

Operational review

As part of its continued focus on developing a broader solutions mindset, more time was spent by all levels of the organisation on customer sites. This close customer intimacy gave the division improved insight, allowing it to anticipate additional demand, particularly for integrated solutions that optimise production of existing assets.

Highly engineered equipment
Through its technology leadership, the division has built up a significant installed base of original equipment.

Operational Review: Weir Minerals continued

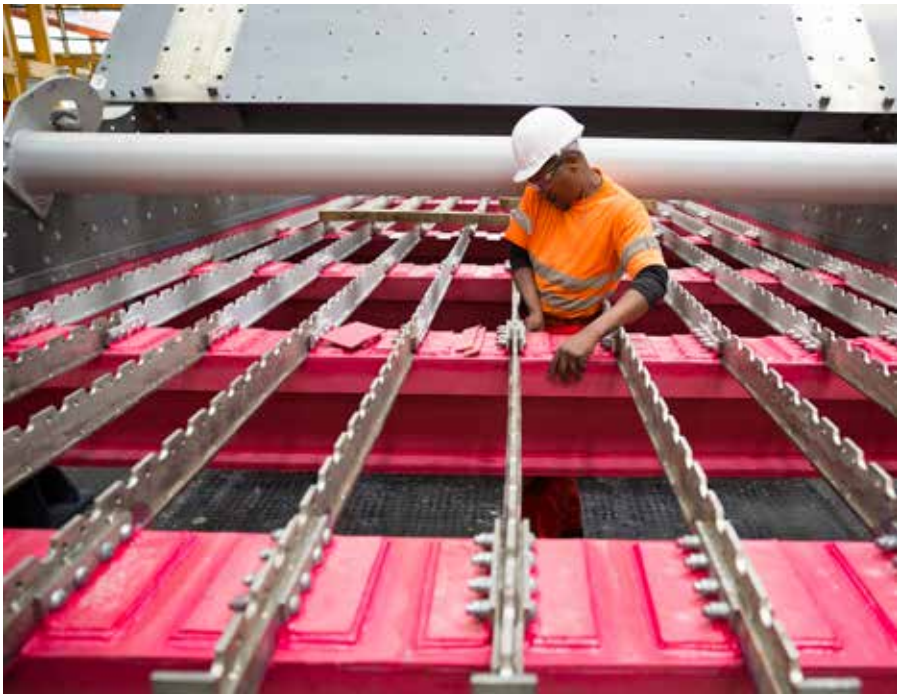
To take full advantage of these positive trends the division was proactive, investing in additional sales, engineering and project management capability. It also extended its global service centre network with new facilities in Canada, France, Poland, Sweden, the Dominican Republic and Russia, taking our total number of service centres to approximately 100. The division encountered some short-term operational challenges in North America and Europe as a result of plant and supply chain reconfigurations to meet demand growth, but these had been substantially remediated by the end of the year. Good progress was made globalising newer product lines such as the comminution offering and Delta Valves while new technology introductions included advanced spools for oil sands applications.

Key priorities in 2018

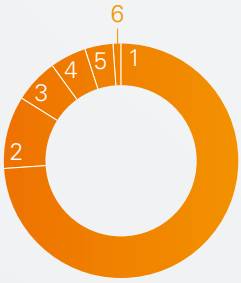
- Safety – continue our strong performance on safety and embed next phase of Weir Zero Harm programme.
- Strengthen our engineering presence at service centres and customer sites.
- Fully capture comminution, brownfield, tailings and spares opportunities.
- Execute operational excellence and internal efficiency projects.

Outlook for 2018

Miners are expected to increase sustaining capital expenditure in 2018, supporting global ore production growth. Assuming supportive market conditions continue, it is anticipated the division will deliver moderately higher constant currency revenues and slightly higher full year operating margins, with performance supported by both the strong order book and investment in growth initiatives in 2017.

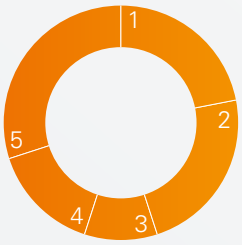


Divisional orders by end market



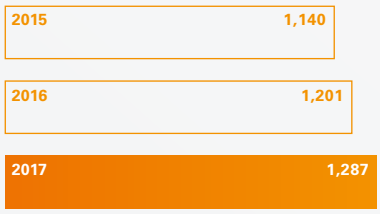
1 Mining	74%
2 General Industrial	10%
3 Oil & Gas	6%
4 Sand & Aggregates	5%
5 Power	4%
6 Other	1%

Divisional orders by geography

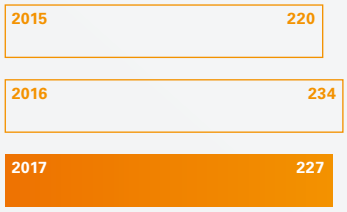


1 North America	22%
2 Latin America	23%
3 Europe	10%
4 Africa and Middle East	15%
5 Asia-Pacific	30%

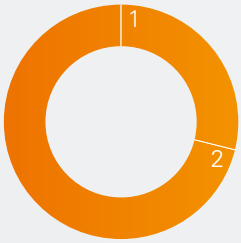
Revenue[1] £m



Operating profit[1,2] £m

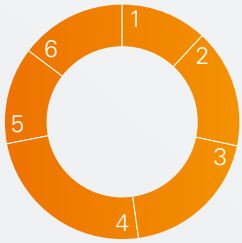


Revenue by original equipment/aftermarket



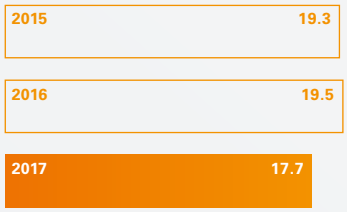
1 Original Equipment	29%
2 Aftermarket	71%

Number of facilities

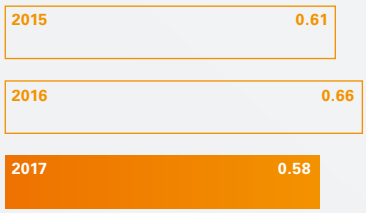


1 Africa and Middle East	20
2 Australia	27
3 Asia-Pacific	32
4 Europe	40
5 Latin America	22
6 North America	24

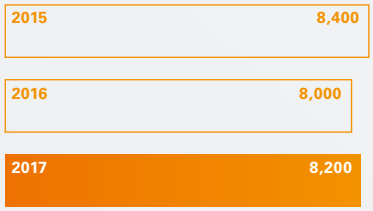
Margin (%)



Total incident rate



Headcount



1. 2015 and 2016 are restated at 2017 average exchange rates.
2. Adjusted to exclude exceptional items and intangibles amortisation.

Operational Review: Weir Minerals continued

Integrated solutions: a win-win strategy

Weir Minerals has the most extensive service centre network in the minerals processing industry with facilities located in major mining regions around the world. This enables our engineers to spend more time on customer sites and gives the division early exposure to emerging market trends, such as the drive by miners to increase the productivity of their current 'brownfield' assets to take advantage of favourable commodity prices. In 2017, the division invested in an integrated solutions strategy that fully leverages its engineering expertise and extensive product portfolio to help the division outperform its markets.

GEHO®

GEHO® piston and piston diaphragm pumps are designed and manufactured for slurry, paste and tailings applications. These hardworking pumps can handle a range of applications including mine dewatering and backfill; tailings disposal; autoclave, gasifier, digester and reactor feed types; and long distance slurry pipelines of ores and minerals.

Warman®

Our Warman® range of pumps is a comprehensive collection of centrifugal slurry pumps for use in mining, chemical and industrial applications. The horizontal and vertical slurry pumps are designed for ultra-heavy-duty applications such as mill discharge, process plant and tailings, pipelines as well as special applications.

Delta Industrial™ Knife Gate Valve

Designed to withstand the most extreme, abrasive and corrosive applications, our Delta Industrial™ range of valves are manufactured using a range of superior materials suited for mining, oil sands, chemical, power and general industries.

Operational Review

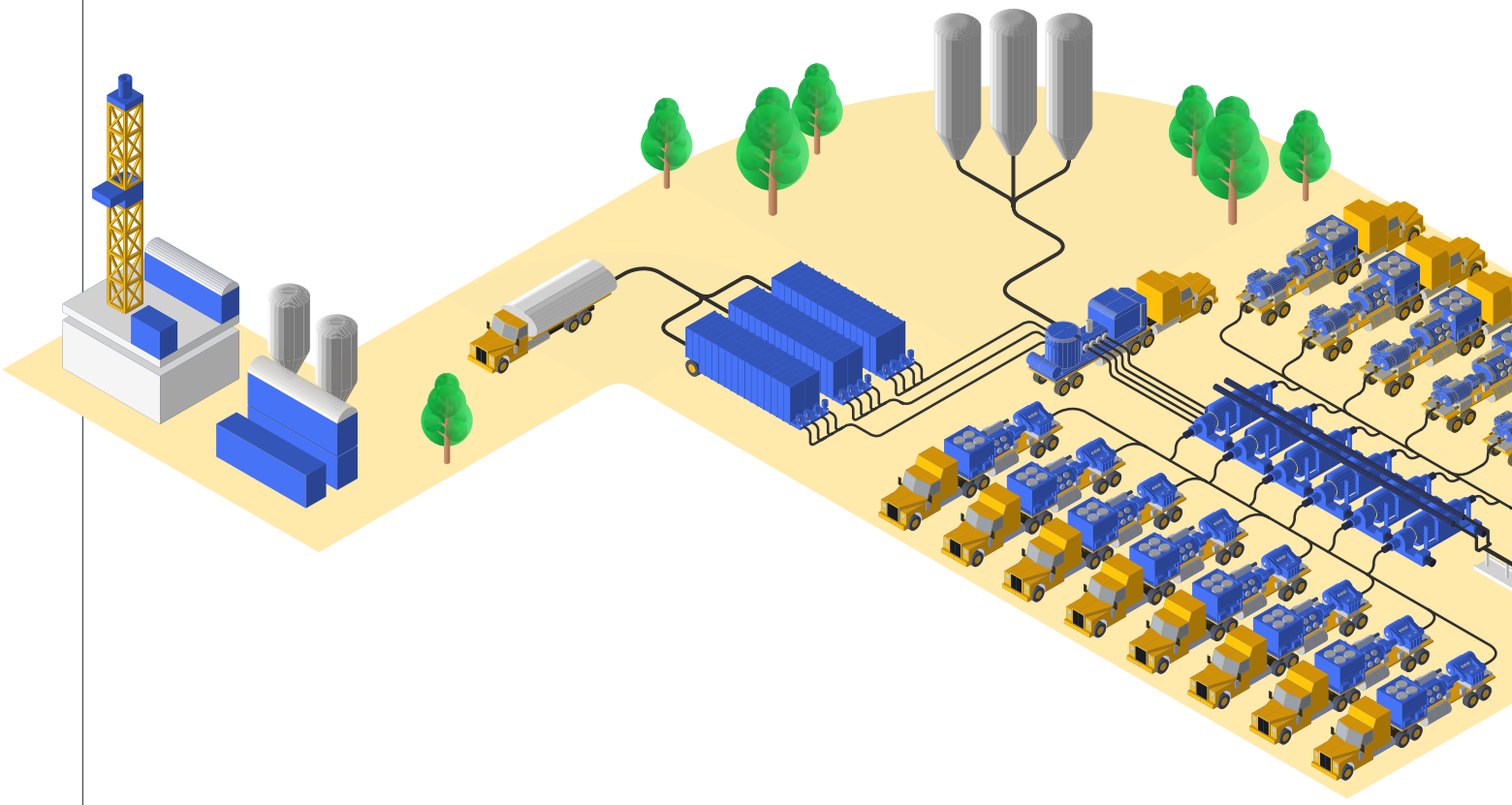
Oil & Gas

Rapidly responding to fast-moving markets

What we do

Mission-critical solutions
Our pressure pumping and pressure control solutions are essential to the successful extraction and processing of shale energy.

Highly engineered equipment
The division is a leader in the provision of pressure pumping solutions, delivering superior performance, increased safety and greater productivity.

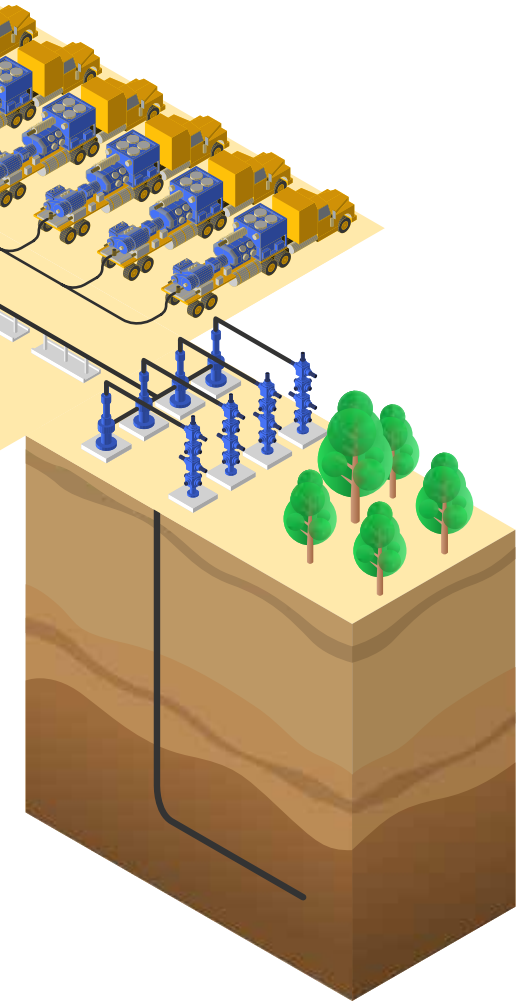


Intensive aftermarket care
Wells can be fracked at pressures of around 15,000psi using a mixture of water, sand and chemicals. This intense operating environment drives demand for aftermarket spares and services.

Comprehensive global support
The division has extensive service facilities close to its customers in North America, Europe, the Middle East and South East Asia.

Paul Coppinger
Division President of Weir Oil & Gas

The division delivered excellent financial and operational performance as demand for our solutions increased significantly.



Market review

Activity in North American upstream markets was supported by increasing oil prices through the year. This led to increased industry investment, with the US land rig count averaging 852, a 74% increase on 2016. Oilfield service companies responded by refurbishing frac fleets with effective utilisation of the active US fleet running at approximately 80%. Production methods continued to intensify with the number of frac stages and volume of proppant used increasing and driving increased demand for aftermarket spares and services. As the market tightened during 2017 there was a modest improvement in pricing.

Later cycle international markets entered the downturn after North America and conditions remained challenging. While the international rig count increased 2%, new investment was subdued, with continued pricing pressure and project delays.

Operational review

The division delivered an excellent operating performance as demand for its solutions increased rapidly in North America. The divisional workforce grew by approximately 1,000 with its main manufacturing facility in Fort Worth, Texas, moving from one shift to three. Operating leverage benefited from previous cost reductions and good supply chain management. The division continued to innovate including introducing the simplified frac system, which reduces the amount of iron required on a frac site, improving safety and uptime.

Internationally, the division continued to develop its pressure control offering in challenging market conditions with the acquisition of KOP Surface Products extending its geographical reach into South East Asia and accelerating its Middle East wellhead penetration strategy.

Operational Review: Weir Oil & Gas continued

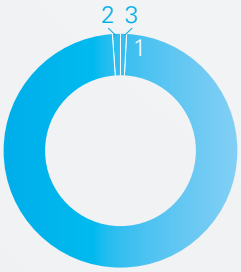
Key priorities for 2018

- Further embed improved safety culture and developing future leaders.
- Global expansion of capabilities to further strengthen customer partnerships.
- Develop technically advanced solutions and strategic technology roadmaps.
- Use VCE to enhance customer experience and key operational metrics.

Outlook for 2018

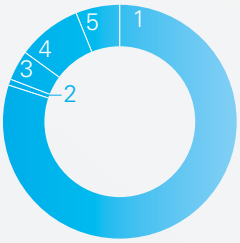
Assuming market conditions remain supportive at or around current levels, exploration and production (E&P) and service companies are expected to increase capital spending in North American upstream markets. It is anticipated international markets will continue their modest recovery. In this context, the division is expecting a strong increase in constant currency revenues and profits, driven by higher North American completions activity levels.

Divisional orders by end market



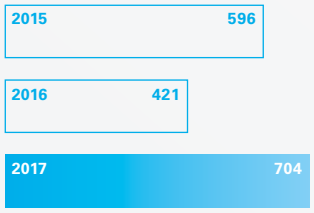
1 General Industrial	1%
2 Oil & Gas	98%
3 Power	1%

Divisional orders by geography



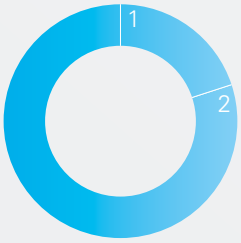
1 North America	80%
2 Latin America	1%
3 Europe & Russia	4%
4 Africa & Middle East	9%
5 Asia-Pacific	6%

Revenue[1] £m



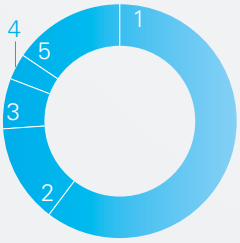
Operating profit (loss)[1,2] £m

Revenue by original equipment/aftermarket



1 Original Equipment	20%
2 Aftermarket	80%

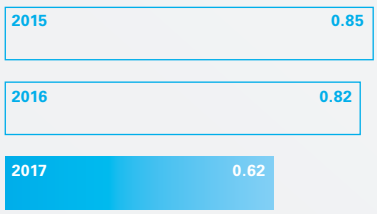
Number of facilities



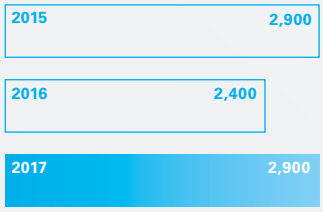
1 North America	35
2 Asia-Pacific	8
3 Europe	4
4 Latin America	2
5 Africa & Middle East	9

Margin (%)

Total incident rate



Headcount



1. 2015 and 2016 are restated at 2017 average exchange rates.
2. Adjusted to exclude exceptional items and intangibles amortisation.

Operational Review: Weir Oil & Gas continued

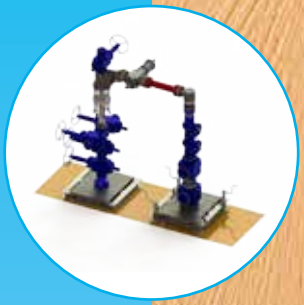
Reducing complexity to increase safety and productivity

Increased safety and productivity are key priorities for our customers and so, after extensive consultation, we designed the Simplified Frac System which significantly reduces the amount and complexity of iron on a frac site.

Our solution provides a more streamlined, fit-for-purpose system that can be tailored to any condition or basin. In addition to improving site safety, its linear flow-path design also prevents directional fluid changes that create accelerated wear, resulting in longer product life and extended productivity.

Seaboard™ One Straight Line (OSL) Frac Connection

Engineered for demanding frac applications, the Seaboard™ One Straight Line (OSL) Frac Connection significantly reduces the amount of iron and connections required on the wellsite. This means a corresponding reduction in non-productive time, rig-up time, labour costs, potential leak paths, and safety hazards.

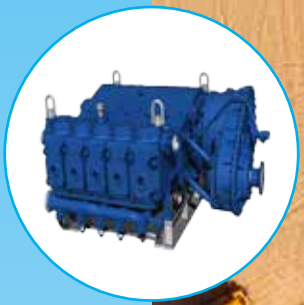


SPM® Swivels

Weir SPM® robust swivels enable the safe and efficient flow of fluids on a frac site at pressures of up to 15,000 psi. All SPM® swivels feature uniform wall thickness for consistent fluid flow and extended life. SPM® ball bearing connections combine strength and consistent rotation in the most severe applications.

SPM® QEM 3000 Frac Pump

The SPM® QEM 3000 is Weir's next generation frac pump. This continuous-duty pump delivers a 17% reduction in total cost of ownership through reduced downtime as fewer backup pumps are required on site.



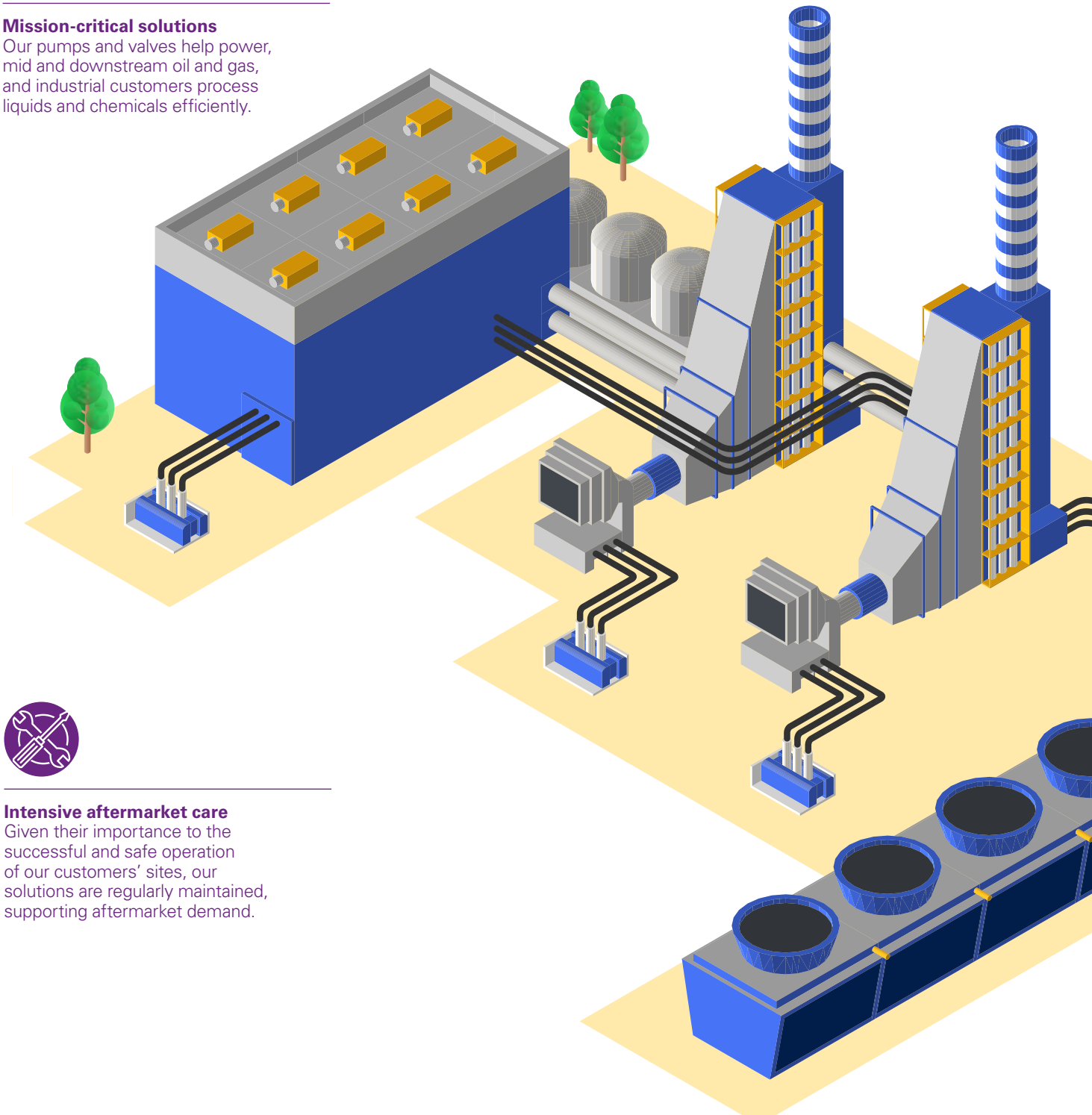
Operational Review

Flow Control

Preparing to capture future growth

What we do

Mission-critical solutions
Our pumps and valves help power, mid and downstream oil and gas, and industrial customers process liquids and chemicals efficiently.



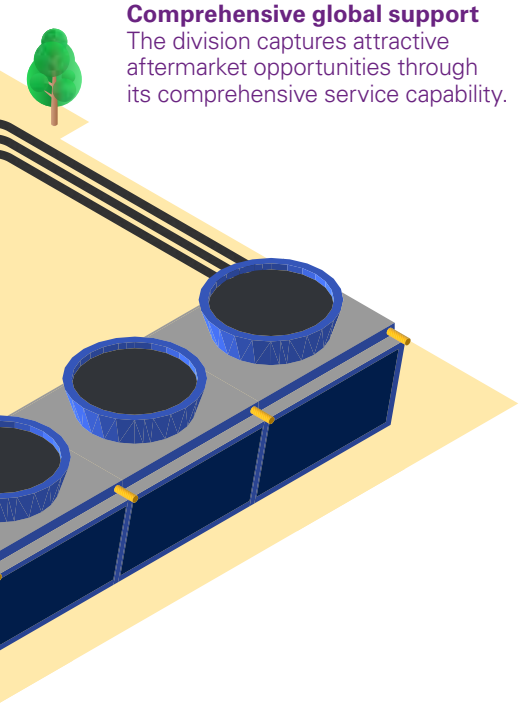
Intensive aftermarket care
Given their importance to the successful and safe operation of our customers' sites, our solutions are regularly maintained, supporting aftermarket demand.

David Paradis
Division President of Weir Flow Control

Highly engineered equipment
We have a significant installed base of original equipment including safety valves used in more than half of the world's nuclear power plants, where reliability and performance are crucial.

The division is moving towards a more global structure where we can better leverage our niche positions and build even closer relationships with customers around the world.

Comprehensive global support
The division captures attractive aftermarket opportunities through its comprehensive service capability.



Market review

Customers continued to be cautious in both power and downstream oil and gas markets. There was limited project activity with competitive market conditions and pricing pressure a common feature. Nuclear projects in China and South Korea continued to make progress, but sentiment in the United States and Europe was more subdued. Aftermarket demand was supported by ongoing maintenance schedules.

Downstream oil and gas markets, which were later to enter the downturn, remained challenging for original equipment and aftermarket demand, although there were signs of improvement towards the end of the year. Industrial markets were more positive, in line with global economic growth.

Operational Review: Flow Control continued

Operational review

In challenging market conditions, the division successfully maximised aftermarket opportunities and expanded the geographic reach of its wider product portfolio. Sales and marketing operations were reconfigured to support new global and application-based initiatives while competitiveness was enhanced by Value Chain Excellence initiatives and best-cost sourcing. While one-off charges in the first half of £13m, relating to legacy contract challenges at Gabbioneta, impacted overall performance, the division delivered a better second half supported by higher volumes and good operating leverage. The division also made good strategic progress in the development of new technologies and the expansion of its e-commerce offering.

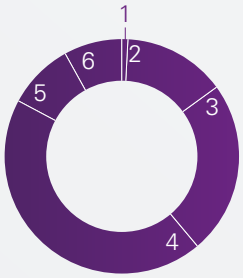
Key priorities for 2018

- Improve safety performance and embed safety culture.
- Globalise product portfolio.
- Expand aftermarket sales and capabilities.
- Continue to drive Value Chain Excellence.

Outlook for 2018

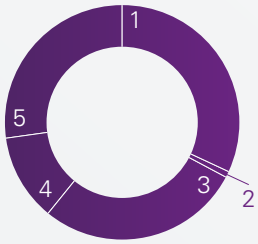
The division's main power and downstream oil and gas markets have stabilised with some early signs of improvement. The division entered the year with a lower order book, but is expected to deliver broadly stable constant currency revenues for the full year as it benefits from its new sales and marketing structure. Operating profits and margins are expected to increase, with a return to mid single-digit operating margins for the full year.

Divisional orders by end market



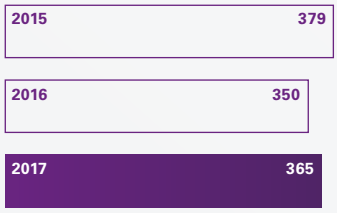
1 Mining	1%
2 General Industrial	14%
3 Oil & Gas	24%
4 Power	44%
5 Other	9%
6 Water and wastewater	8%

Divisional orders by geography

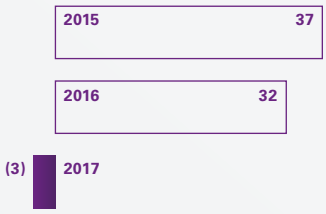


1 North America	32%
2 Latin America	1%
3 Europe & Russia	28%
4 Africa & Middle East	12%
5 Asia-Pacific	27%

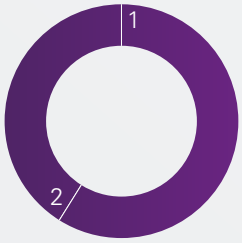
Revenue[1] £m



Operating profit (loss)[1,2] £m

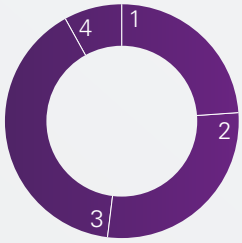


Revenue by original equipment/aftermarket



1 Original Equipment	59%
2 Aftermarket	41%

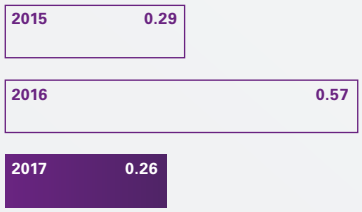
Number of facilities



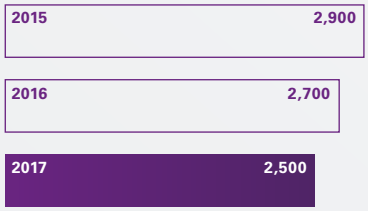
1 North America	6
2 Asia-Pacific	7
3 Europe	10
4 Africa & Middle East	2

Margin (%)

Total incident rate



Headcount



1. 2015 and 2016 are restated at 2017 average exchange rates.
2. Adjusted to exclude exceptional items and intangibles amortisation.

Operational Review: Flow Control continued

Providing solutions for the most extreme conditions in record-breaking time

Weir Flow Control was recently awarded the contract to engineer and supply critical service safety valves for Yamal LNG, a major LNG project in northern Russia. The project will develop one of the largest natural gas reserves in the world which, following the construction of an LNG plant, will supply energy to Europe and Asia. The valves developed by Weir for this project are amongst some of the most advanced designs ever produced by the business. A total of 638 highly specialised fast-track safety valves were supplied, 185 of which were 'superfast-track' deliveries, to meet critical installation and start-up schedules.

Starflow Spring Loaded Valves

These safety relief valves feature a wide range of material options and trim designs to meet the demands of many processes and applications. They are used in vapour, gas, liquid or steam applications in the oil and gas industry as well as cryogenics and the power industry. The valves are designed to provide high integrity performance.

Sarasin-RSBD™ 76 Series

The Sarasin-RSBD Pressure Relief Valve is designed to meet the rigorous process conditions which are mandated by the power industry. The valves are designed to operate in high pressure and high temperature environments.