

Strategy at a Glance

Our vision

To be the most admired engineering business in our markets.

Our mission

To enable our customers to sustainably and efficiently deliver the energy and resources needed by a growing world.

Strategy in action

To achieve the Group's vision and mission, we leverage our business model and focus on four distinctive competencies: **People, Customers, Technology and Performance.**

 You can read more in Our Strategy in Action on page 14.

 You can read more in Principal Risks and Uncertainties on page 50.

 You can read more in KPIs on page 22.

Our four distinctive competencies



People

What we said we would do in 2017

- Implement a new safety charter and embed behavioural safety.
- Re-invest in leadership and development programmes.
- Improve diversity and conduct an employee engagement programme to support the We are Weir strategy.

What we achieved in 2017

- 20% improvement in total incident rate to 0.53 – implemented a new Safety Charter and rolled out a Group-wide behavioural safety programme.
- Increased female representation at both Board and senior management levels with every business developing diversity and inclusion improvement plans to widen the Group's talent pool.
- Refreshed leadership training and undertook a global programme of increased employee engagement to embed We are Weir.

Priorities for 2018

- We will develop best-in-class behavioural safety.
- We will build organisational capability.
- We will develop a culture of the future that inspires our people to build a personal legacy.

Medium term key performance indicators

- Improved sustainable engagement score and increased organisational effectiveness.

Associated principal risks

- Safety, Health and Environment.
- Staff recruitment, development and retention.
- Technology and innovation.
- Political and social risk.



Customers



Technology



Performance

- Pursue more long-term relationships with customers.
- Shift from product focus to solutions mindset.
- Improve customer insights into new product developments.

- Expand customer digital offering.
- Broaden skills base to reflect digitisation of industrial products.
- Embed new innovation framework throughout the organisation.

- Improve operational performance including on time delivery and inventory turns.
- Reinvigorate lean disciplines and simplify value chain excellence process.
- Embed customer and Weir sustainability goals in value chain improvements.

- Minerals grew orders ahead of sustaining capital spending and increased its order book by spending more time on customers' sites and investing in additional sales, project and product management experts in addition to opening eight new service centres.
- Oil & Gas leveraged its key account system to further embed Weir among Tier-1 oilfield service customers in North America and fully capture its share of the North American market upturn.
- Flow Control restructured its sales and marketing capability to better leverage its divisional product portfolio across a greater number of international markets and EPC customers delivering good aftermarket order growth.

- Completed a new technology roadmap to be implemented from 2018 with a focus on digital solutions, advanced manufacturing, materials science and water and energy efficiency.
- Deployed Synertrex®, the Group's Internet of Things (IoT) platform, to initial customer sites within the Minerals division to enable better monitoring and maintenance of assets.
- Oil & Gas introduced the Simplified Frac Iron System that increases safety and reduced downtime on frac sites.

- Minerals reconfigured its manufacturing facilities and supply chain to increase capacity ahead of the anticipated upturn in the mining capital cycle.
- Oil & Gas delivered an excellent operational performance, ramping up its supply chain and workforce to enable its main manufacturing facility to double manufacturing volumes while also delivering significant operating leverage.
- Baseline Value Chain Excellence scores were established for each business with improvement plans and training in place to further improve inventory turns and shorten lead times.

- Increase revenues from service centre networks.
- Increase number of customer partnerships on technology development and trials.
- Develop improved Voice of Customer.

- Progress commercialisation of Weir digital agenda.
- Further develop additive manufacturing capability.
- Develop Weir innovation framework.

- Improve VCE score.
- Progress IT infrastructure and systems development.
- Begin to implement sustainability strategy.

- Increased market share.

- Increased percentage of revenues from new solutions.

- Sustainably higher margins through the cycle.

- Market volatility.
- Contract risk.
- Political and social risk.
- Technology and innovation.

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- IT security and continuity.

- Ethics, governance and control.
- Value Chain Excellence.
- Market volatility.
- Contract risk.
- Safety, health and environment.
- Technology and innovation.
- IT security and continuity.
- Political and social risk.

Strategy in Action:**People**

The Group is committed to delivering a zero-harm workplace for all our people. Everyone has the right and responsibility to stop operations if they have any safety concerns.

Keeping our people safe**Overview**

The Group is committed to delivering a zero-harm workplace for all our people. This means ensuring they have a safe journey to work, care for each other and return to their families safe and healthy each day. A safe Weir is ultimately a more efficient and productive organisation generating value for all our stakeholders.

To achieve this we have a comprehensive strategy based around our Weir Zero Harm programme, which started in 2011 and since then has continually evolved, delivering year-on-year improvements in safety for all our people.

Progress achieved in 2017 was enhanced by a focus on behaviours. This saw a concerted Group-wide effort to encourage people at every level of the organisation to look for, demonstrate and promote the behaviours that keep them and their colleagues safe.

Overall, this emphasis on behavioural safety helped achieve a 20% improvement in total incident rate to 0.53.



Roberto Kuahara, Divisional Vice President of Operations and Value Chain Excellence at Weir Oil & Gas, led the team that delivered behavioural safety training to 90% of Weir Pressure Pumping.





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Changing behaviours

In 2017, our new health and safety charter and programme was rolled out across all businesses. One of our units, Weir Pressure Pumping, based in Fort Worth, Texas, is our largest facility and over the course of the year they have delivered marked improvements across a number of areas.

This was achieved by moving to a more proactive approach when dealing with health and safety issues, with all employees empowered to call out safety concerns to colleagues and managers.

To achieve a change in behaviour and attitude within the business, it was essential that all employees were given the training and tools needed to improve their safety and the welfare of their colleagues.

Sharing best practice

In early February 2017, Weir Pressure Pumping rolled out initial pilot training across a number of functional areas including Supply Chain and Operations, with the aim of embedding a new behavioural approach within the business towards health and safety and hazard perception.

It was seen as critical that every person in the business unit understood the Company's health and safety roadmap and what role they could play in improving their own working space and environment. Part of this training included teaching managers to seek mentoring opportunities that are designed to enable comfortable conversations between colleagues about reducing risk.

Around 90% of the workforce were trained in 2017, and by the end of the year, 694 mentoring opportunities had been recorded, each one providing a unique opportunity for management to speak with an employee and discuss potential improvements. The more of these discussions that take place, the less likelihood there is of an injury or accident occurring. The business is also ensuring that all observations are shared globally online to allow the wider Group visibility and the opportunity to learn from these procedures.

Strategy in Action:**Customers**

The Group is moving from a traditional focus on selling individual products to a solutions mindset across our new and established markets. This means more deeply embedding Weir into the operations of our customers to better understand their challenges and help them meet their objectives.

Increasing customer productivity**Overview**

Part of the Group's strategy has been to extend into adjacent markets where we can leverage our technology leadership and materials science expertise. Comminution (crushing, grinding and screening) is a process common to both mining and sand and aggregates markets. Since the acquisition of Trio Engineered Products in 2014, the Minerals division has developed new crusher products and globalised Trio's offering, leveraging its customer relationships in markets around the world.

This approach, combined with the division's integrated solutions strategy to focus on helping customers improve the productivity of their existing or brownfield assets, has increased Weir's installed base of original equipment in markets that generate significant aftermarket demand for spares and services.



CNC owner Carl Crous at his plant in South Africa.



The challenge

Weir Minerals customer CNC Crushers (Pty) Ltd operates a crushing and screening plant in the North West province of South Africa. The aggregates plant, which has been operating since 2006, used older model crushers and screens with outdated technology. This led to high wear on crusher liners, increased oil consumption and costly unplanned downtime, that all impacted productivity.

Our solution

The Weir Minerals team proposed upgrading the secondary cone crusher from an old technology to a new Trio® TC51 standard hydraulic cone crusher.

The tertiary cone crusher was also changed to a Trio® TC36 standard hydraulic cone crusher. The new technology Trio® cone crushers feature a hydraulically adjusted closed side setting and relief, allowing for quick adjustment and providing added protection by preventing uncrushable material from entering the crusher and causing damage. In addition, three Trio® inclined screens were installed.

To support the future operations of the plant, a service agreement was signed between Weir Minerals and CNC Crushers. Regular inspections are now conducted by a Trio® product support specialist and all machines are well maintained. The service agreement ensures best practice is adhered to in operating and maintaining the equipment. This helps the plant achieve maximum availability and long operational life of its equipment.

The results

Since the Weir team deployed an integrated solutions approach:

- Plant production has improved by 60% as a result of the maximum availability of equipment.
- Downtime for liner changes has reduced by 13%.
- Start-up procedures are quick and simple, while adjustment of the crusher takes only 5 minutes compared to 90 minutes with the old technology crushers.
- Socket liner life has extended from two months to over 12 months due to the lubrication power unit system used with the Trio® equipment.
- The payback period for the package of solutions was just 24 months.



Crusher and screen performance are now predictable, maintenance is predictable and future planning is possible without running operations from day to day. Working with Weir was one of the best things I have ever done and I should have done this a long time ago.



CNC owner
Carl Crous

Strategy in Action:**Technology**

The Group's technology leadership in its main markets is a significant competitive advantage. As our markets evolve, we are committed to leading the technology change in our industries.

**Our new technology roadmap****Overview**

In 2017, the Group developed a new technology roadmap aimed at ensuring we continue to maintain and enhance our market leadership positions to take full advantage of emerging technology trends.

These include improving customers' digital experience and the increasing digitisation of industrial products through the so-called Internet of Things (IoT). IoT deploys sensors on machines and extracts and transmits the data using cloud software. It also involves the use of machine learning to analyse the vast amount of 'big data' produced by industrial products.

The strategy includes opportunities to develop and deploy software platforms that enhance Weir's own operations enabling the Group to achieve future efficiencies. These include smart factories and advanced manufacturing, where we have already seen initial benefits from the 3D printing of some component parts.

And to enhance the sustainability of our main markets such as mining, we are examining how we can help our customers reduce their energy and water consumption using our engineering and materials science expertise.





Synertrex® is designed to provide better insight into our products to help reduce downtime, enhance performance and improve the safety of our customers' operations.



Synertrex®, Weir's IoT platform

The Group's Synertrex® IoT solution was deployed to customer sites in 2017 following a significant development stage of the technology that involved partnerships with Microsoft and Dell.

Synertrex® is designed to provide better insight into our products to help reduce downtime, enhance performance and improve the safety of our customers' operations.

Synertrex® uses expertly placed sensors to capture data to identify ways to ensure our equipment achieves its optimal performance. For example, by capturing vibration data on a mining screen, we can gain detailed insights into the equipment's behaviour. This data can be captured by computers placed in close proximity to our equipment and analysed to determine whether an alarm should be raised. This alarm will notify one of our local engineers who can go to the site and solve the issue at hand, in many cases preventing unplanned and expensive downtime.

Helping optimise assets

Synertrex® will enhance our product and service offering, enabling our customers to better understand how our products operate in real-time. From the data collected, we can advise our customers on how they can make better use of our products.

Readings and critical extracts of the real-time data are sent to the cloud where it can be displayed on our customers' performance dashboard, sent as an alert to their mobile device or stored for further analysis using analytical tools. Integrating data directly into our customers' existing operational systems ensures ease of access anytime, anywhere for operators, maintenance teams and process engineers, to optimise operational performance and reliability.

The Group's new technology strategy builds on Weir's leadership positions in its main markets.

Strategy in Action:**Performance**

Utilising Value Chain Excellence (VCE) to deliver improved efficiencies for our customers and drive change across the organisation.

**Continuous improvement****Overview**

VCE is a vital component in optimising our business performance and delivering improved efficiencies to our customers. VCE uses a structured framework and set of tools to drive change across the organisation to add value, eliminate waste and improve our bottom line. There are five themes in our VCE process: customer, procurement, engineering, planning and lean management. These look at ways to eliminate all types of waste or non-value added activities. By analysing and evaluating our performance in each of these areas against key performance indicators, we are able to drive improvements for customers.

In 2017, we took steps to re-focus our VCE strategy, attempting to improve our performance in three key areas: increasing on-time delivery, improving inventory turns and reducing the cost of poor quality.





Utilising a variety of Value Chain Excellence methods, Weir Malaysia has consistently managed to improve the on-time delivery rate of its rubber sheet products.

Adopting VCE in operations

Weir Malaysia identified an opportunity to use VCE methods to increase efficiency and customer satisfaction.

The business, which delivers rubber sheets to customers' specific requirements, focused its efforts on improving machine performance to deliver higher output and reduce waste. By adopting lean manufacturing tools such as value stream mapping, 'kaizens' and a daily 'war room' for team meetings, they identified opportunities to increase productivity.

The opportunities were digitally simulated to test the results of this approach and analyse the potential to reduce machine downtime and increase throughput. The business constantly evaluated performance and focused on any deviation, putting corrective actions in place quickly.

In addition, the business trained staff to have the essential skills they need to work across a set of machines, all underpinned by appropriate safety and risk assessments.

The value of VCE

By using VCE tools to identify and improve operations, the business has increased machine efficiency and productivity. This has translated into greater velocity and ultimately improved on-time-delivery, which has led to greater customer demand.

Weir Malaysia is now focusing on maintaining its new standards and achieving continual improvements. The VCE lessons of 2017 are now being shared across departments.

Key lessons include the value of engaging a wide variety of stakeholders to increase collaboration and deliver improved performance for the business and better outcomes for customers.



VCE relies on our people, customers and technology working together to drive improved performance at the heart of our business.

