Integrated solutions deliver plant efficiency

Through its Integrated Solutions approach, Weir Minerals Africa can provide fast and effective assistance to customers who are engaged in brownfield optimisation of their operations or for those looking for solutions to problems hindering efficient production.

eir Minerals' dedicated Integrated Solutions teams combine diverse experience - ranging from comminution to tailings and from chemistry to hydraulics - and typically include process engineers, design engineers and product experts, as well as local Weir Minerals Africa personnel, who have a thorough knowledge of customer sites in their areas.

"Our multi-disciplinary teams ensure that a problem is considered from all perspectives, identifying potential issues and opportunities to optimise the circuit with upstream and downstream benefits," says Pieter van den Berg, sales director Rest of Africa (ROA) at Weir Minerals Africa.

He adds that the teams can perform process audits during site visits to identify bottlenecks and then use flowsheets, mass balances, 3D layouts and feasibility studies to advise on the most appropriate solution to a particular problem.

Weir Minerals Africa's extensive footprint is one of the cornerstones of the company's Integrated Solutions strategy.

"Our unrivalled manufacturing and service network, featuring service centres within 200 km of most major mining areas, is at the heart of the value we deliver to customers," states van den Berg. "We believe it is essential to be close to our customers and to understand their operations in detail. We expect our engineers in any area to be

completely familiar with the installations and circuits they service."

He says Weir Minerals Africa's local service centres, in combination with its Integrated Solutions teams, have delivered some outstanding results to customers, allowing them to reduce maintenance costs, achieve significant water and power savings,



Weir Minerals' Synertrex intelligent platform conveys real time data of a customer equipment performance and health



The integrated solutions teams combine diverse experience to fully optimise customers' circuits.



Left: Weir Minerals showcased its integrated solutions capability at the Electra Mining 2022 exhibition. Right: The integrated solutions teams work with customers to understand their operations and to offer the best solution for their processes.

and increase throughput at their facilities. Among recent successes have been a million US\$ integrated solutions order received from a diamond mine in the SADC region, as well as a \$2-million order from a Central African copper mine.

Digital solutions can often form part of an integrated solution. In the digital field, Weir Minerals continues to strengthen its capabilities with the Synertrex[®] intelligent platform at the heart of its digital offering. The Synertrex[®] IntelliWear[™] wear monitoring system for spools and hoses in slurry

pipelines is the most recent addition to Weir Minerals' digital range. "This allows pipeline operators to check their equipment in the critical wear areas and perform predictive maintenance to prevent unplanned disruptions and downtime from occurring," says van den Berg. "Most importantly, safety on site is increased, as spools and hoses are replaced prior to failure, thus removing the risk of slurry leakage, which can cause injury to workers on site and damage to the environment." Summing up, van den Berg says Weir Minerals Africa takes the time

In-house capability puts Weir Minerals ahead

As mining projects look to optimise their pump and process performance while minimising risk, there is good reason why Weir Minerals Africa is regularly awarded the lion's share of large execution projects.

According to Marnus Koorts, general manager for pump products at Weir Minerals Africa, the company wins about 95% of the process projects for which it bids in the mining sector today.

"Our success has everything to do with how we leverage our full design, engineering and manufacturing capability," says Koorts. "This level of expertise and infrastructure is something that few of our competitors can match: indeed, we are the only pump manufacturer in Africa with this integrated resource base."

He adds that most of its product offering is manufactured in-house. This internal capability gives the business a distinct advantage in developing and implementing custom designs and complex solutions. It also provides closer control over quality and can radically improve lead times.

"An important differentiator for us is our two foundries - our Heavy Bay Foundry in Gqeberha and another in Isando, which

includes our innovative Replicast plant," he says. "The facilities give us greater reliability in our supply chain and scheduling, reducing the risk of late deliveries that could delay a customer's project roll out."

With Weir Minerals Africa's large team of hydraulic engineers, there is also considerable in-country capacity to support engineered-to-order (ETO) requirements. This enhances the value of early-stage collaboration with customers, where the company can offer insights and guidance on pump and process related issues, even at concept stage. This, emphasises Koorts, makes it easier for project managers to preempt technical challenges later.

The world class facility in Isando is one of Weir Minerals' technology hubs for a range of its pump brands, including the Warman DWU and Envirotech range. As a result, it can export significant volumes of this equipment to sister companies worldwide.

"While many competitors rely on distributors and agents to deal with customers, Weir Minerals Africa has established an extensive branch network across the continent," he says. "This footprint ensures our direct contact with customers, so they to understand customers' problems before providing them with solutions. "We go the extra mile in trying to understand their processes to figure out how we can help. This, combined with our products, sets us apart. Our product lines have been proven through the years and our reputation has stood the test of time throughout the world across different environments, he says.

"And our Integrated Solutions teams have the experience and know how to tackle any given problem," he adds.

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receive the same high level of service irrespective of their location.

"And they also have direct access to our highly skilled and experienced product experts," Koorts concludes.



Weir Minerals has the local expertise to design, engineer and manufacture the company's range of slurry and dewatering pumps.