

Media Release

Using specialised lifting tools for safer and easier maintenance

There's little doubt that mining is a high risk industry. Every day, workers on mine sites around the world face inherent risks. Weir Minerals takes this seriously, with safety at the heart of everything the company does. Committed to manufacturing processing equipment of the highest standard, the company also produces lifting tools for the safe handling of slurry pump parts during maintenance. An often overlooked component, lifting tools help keep workers safe, maximise equipment life and can reduce pump rebuild times.

"We have a duty of care to our customers to ensure they remain safe when operating and maintaining our equipment. Adopting our uniquely engineered lifting tools for our slurry pumps mean that when the correct procedures are followed, it's very safe," states David Russell, Trials Manager for Weir Minerals Australia.

As time has gone on, processing equipment has become larger and larger. It was only in the 1990s when a Warman® AH® 20/18 pump, was one of the largest available. Now it is regarded as a medium sized model, eclipsed by the likes of the mammoth Warman® MCR® 760 pump.

As equipment has rapidly increased in scale over the past couple of decades, Weir Minerals has developed specially engineered tools to safely disassemble and reassemble machinery, reducing the risks associated with lifting components.

In the case of slurry pumps, Weir Minerals' range of lifting tools are designed for use when performing wet-end overhauls. Specific lifting tools are used for impellers, throatbushes, suction covers, frame plate liner inserts, stuffing boxes, casings and volutes. Lifting tools have also been designed to lift multiple components together to make rebuilds easier and quicker. For example, a lifting beam has been developed that lifts a suction cover squarely with the throatbush still attached to it. Using purpose designed assembly equipment in accordance with OEM lifting procedures can reduce rebuild time, in some cases by up to 50%, leading to increased plant uptime and availability.

"When lifting pump parts weighing more than two tonnes in restricted areas, there is little room for error. Often, the components will be worn and it is crucial they can still be secured and lifted safely in accordance with the strict global standards that Weir Minerals adheres to" states David Russell.

Normal wear can cause razor sharp, jagged edges on components, with the potential to damage lifting slings and chains as well as injure maintenance personnel. Purpose designed lifting tools reduce this risk. When designing



lifting equipment, Weir Minerals also carefully considers the mechanical strength and the stresses placed on the components being lifted, since worn parts are likely to be weaker and more brittle than new parts.

Another example of Weir Minerals' commitment to innovative development relates to impeller lifting tools. While some competitors may employ a simple hook design, increasing the risk of the impeller falling off, Weir Minerals has developed a tool with a fixed locking jaw so that the impeller eye is locked in position and the component is properly secured prior to being lifted. This positive engagement across two points of contact ensures that components are lifted evenly and securely with minimal risk of injury.

The safety culture in which Weir Minerals operates leads to proactive working relationships with customers to ensure they have a full set of safe lifting tools which meet the latest design requirements and are fully compliant with industry standards. Independently certified in each region, the tools are manufactured and sold to meet local health and safety requirements.

"Safety is central in everything we do at Weir Minerals. We are an OEM supplier who complies with global safety standards and we adopt a stage-gated development process incorporating risk assessments and product stewardship best practice for equipment design and lifting. Throughout all facets of maintenance, customers can trust us to provide the best and safest solution for their needs," states Joel Goodwin, Weir Minerals' Aftermarket Manager for Warman[®] pumps.

To discover more about Weir Minerals' range of lifting tools, contact your local representative.

Ends

Further information

About Weir Minerals

Weir Minerals employs more than 8,900 people worldwide, delivering end-to-end solutions for all mining, dewatering, transportation, milling, processing and waste management activities. Weir Minerals has an advanced product range incorporating brands such as Warman[®] centrifugal slurry pumps, GEHO[®] PD slurry pumps, Linatex[®] rubber products, Vulco® wear resistant linings, Cavex® hydrocyclones, Trio® crushers and screens, Enduron® comminution equipment, , Isogate® slurry valves, Multiflo® mine dewatering solutions, , and Lewis® Pumpscovering virtually any application, in any environment. The Weir Minerals global network ensures they are close to their customer wherever they may base their local operations. For more information, visit www.global.weir