



ZipaTank™

Glencore Technology provides innovative solutions for the mining industry, ranging from mineral processing to smelting and refining. The Zipatank™ is one of those solutions, developed by Glencore Technology to overcome limitations in the slurry storage and leaching market.

The ZipaTank™ is designed as a truly modular slurry storage and agitation system, being able to fit in standard sized shipping containers – including support steelwork and tank auxiliaries. It is a technology that was designed to overcome the need for specialist installation skills that are required with other tank systems, as the tank shell and auxiliaries are bolted in place with a simple joining and construction system. This means the tanks can be rapidly installed, with even the largest being able to be fully erected within two to four weeks. The only part of the tank that requires welding is the base, and this only applies to large diameter tanks.

Advantages

Cedric Walstra, Glencore Technology Manager – South Africa, comments: “We designed the technology to overcome a lot of the shortcomings in tanks that were available on the market, and the net result is a technology that can be installed safely, with skills and equipment that are available at most sites, no matter how remote, in the shortest possible timeframe. The resulting ZipaTank™ is a

Robust and modular slurry storage and agitation system

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The tanks use a simple lap joining system to secure the panels to each other using torque wrenches and supplied high tensile bolts. A similar bolting system is also used for securing tank auxiliaries, such as baffles, slurry risers, launders etc. On-site construction has also been designed for simplicity, using a “top down” construction method, which eliminates scaffolding and support equipment.

Walstra said another advantage of the equipment was the quality lining systems used for the tanks; “The tanks are manufactured in enclosed workshops. If lining systems are required, the internals are treated and lined undercover in controlled conditions, providing high quality bonding to the steelwork. By applying lining under cover, we ensure we get a longer service life than lining applied outside at sites, with no rework required from humidity or contamination. The tanks are then assembled and assessed for fit, and then water tested, before they are disassembled and packed for shipment.”

Projects using ZipaTanks™

ZipaTanks™ in operation include twelve treating acid gold slurry in an Albion Process™ operation in Armenia, where stainless steel tanks were supplied with all internal auxiliaries including agitators, as well as all surrounding steelwork. Operating conditions can be extreme, with winters reaching as low as -10 degrees Celsius with high snow loads being common.

Other projects include TMAC’s Hope Bay gold project, located in the Arctic Circle, Nunavut, Canada. Three mild steel ZipaTanks™ will be part of the cyanide leach residue storage and detox circuit at the site, where cyanide undergoes chemical reactions to render it harmless. The 90m³ tanks were required to be modular due to the need to ship in all supplied equipment during a limited number of months through summer. The tanks are currently being installed at site, along with supplied baffles, overflows, slurry risers, access hatches and support steelwork.

ZIPATANK™

MODULAR TANK SOLUTIONS

GLENCORE TECHNOLOGY

Glencore Technology has the expertise to get the most from your operation. Whether it is mineral processing, hydrometallurgy, smelting or copper refining and electrowinning, Glencore Technology offer a range of solutions and services that can make a difference.



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