RESEMIN addresses narrow vein drilling with Muki

Pneumatic hand held jackleg and stopper drills have been the standard in "classic mining" for more than 100 years and are still widely used, particularly in intensive non massive deep metallic mining operations following veins, reefs and other structural based ores, whether in South Africa, China, Peru, Canada, or elsewhere. Although modern electric hydraulic drilling jumbos for narrow vein mining have been developed they have faced limitations where they are running in sections of 1.8 m width or less, while to the largest mining equipment suppliers, narrow vein equipment is not always top priority. These sizes of excavation therefore remain an important niche market for jacklegs and stoppers, where cut & fill and breasting are the mining methods used. But this is still one of the toughest and high risk jobs for workers in underground mining due to falling rock hazards, especially when stopper drills are used.

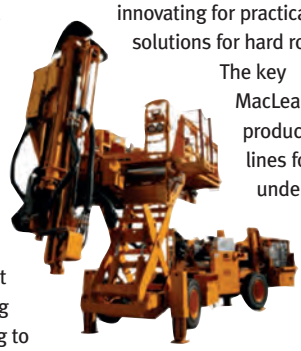
Muki is the name of a legendary dwarf said to live in the underground mines in Peru, but it now is also the tradename of a micro jumbo of 1.05 m width that has been developed by Lima-based RESEMIN. RESEMIN believes it to be the smallest jumbo on the market today. RESEMIN told ***IM***: "It has just been launched recently and looks to us to be a serious candidate to modify the existing panorama in narrow vein mining. It has the means to replace pneumatic drills and finally to facilitate the mechanisation of classic mining. Our strategy is to manufacture machines of simple design, which are reinforced, easy to operate and uncomplicated."

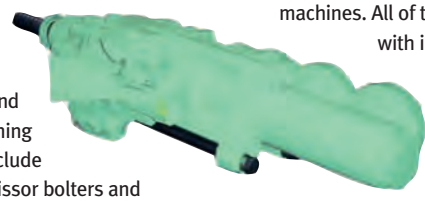
One Muki has been in operation since October 2014 in the Caudalosa Chica lead/zinc/silver mine, at a location over 4,500 m altitude. The Operations Manager Engineer Otto Sandoval says that the machine has helped them to increase productivity. Firstly, the size of the machine makes it versatile to run the excavations in widths up to 1.50 m; secondly, each machine replaces five manual stoppers, hugely increasing safety as well as productivity because the operator is seated and well protected under a FOPS canopy when drilling, a quite different situation than that with manual pneumatic drills. The mining method used in Caudalosa Chica is cut and fill with up holes. Sandoval adds that now it will be sure to increase the production of the mine up to 60,000 t/mth during this year. Muki is equipped with a Montabert drifter model HC50 (14 kW) which drills a 38 mm and 2.4 m hole in 40 seconds instead of seven minutes with a jackleg. **www.resemin.com**

MacLean makes partnership with Montabert

Global supplier of underground mechanised mining solutions, MacLean Engineering, has announced a new partnership with rock drill major, Montabert, that will "optimise MacLean's drilling product line and provide customers with improved access to parts, drill repairs and sales support worldwide." MacLean has built a global reputation for innovation in the hard rock industry over the past 40 years by partnering with longstanding customers on continuous product improvement. This same approach is now being taken with Montabert drill technology, "helping to once again raise the bar on underground mining equipment performance."

"Today's announcement is good news for our global customer base that will now benefit more than ever from direct access to Montabert's drilling R&D, as well as an expanded customer support footprint," noted MacLean Engineering Product Line Manager, Steve Denomme. "It is also a concrete example of our commitment to innovating for practical, game-changing solutions for hard rock mining customers."





The key MacLean product lines for underground mining include scissor bolters and secondary breakers. MacLean for example created the unique Series 900 Bolter. The Series 900 Bolter is a scissor lift that raises the operator to the ceiling. The machine then drills a hole into the roof and inserts a rock bolt that stabilises the ceiling, creating a much safer working environment. This bolter utilises the Mercedes-Benz 904 engine, supplied by MTU. Over the years, MacLean has sold over 400 bolters, making it the number one ground support machine in the world.

MacLean Engineering relies on Mercedes-Benz Series 900 engines from MTU to power 90% of its machines. All of the engines are equipped with innovative clean technology to protect the environment. The 147 hp Mercedes-Benz 904 engine is used not only in MacLean bolters, but also many of its personnel carriers and their remote-controlled BH3 Blockholer. For jobs requiring more power, such as hauling heavy supplies up and down inclines, MacLean outfits machinery with the Mercedes-Benz 906 engine, which generates 201 hp. The additional horsepower allows for speedy delivery of equipment and supplies.

www.macleanengineering.com

EIB innovation loan to Atlas Copco

The development of cleaner, safer and more efficient manufacturing, construction and mining equipment will be enhanced thanks to research, development and innovation at Atlas Copco, supported with financing from the European Investment Bank (EIB). Under an agreement signed in Luxembourg, the EIB will provide a €300 million loan to Atlas Copco, one of the world leaders in compressors, construction and mining equipment, power tools and assembly systems. As part of Atlas Copco's long-term funding program, the loan will support the development of more efficient, more environmentally friendly and safer products. The company's activities in research, development and innovation, mainly based in Sweden and Belgium, also involve close cooperation with European universities and research institutes, helping to disseminate cutting-edge technologies.

Jonathan Taylor, EIB Vice-President with responsibility for lending in Sweden, stated: "We are glad to sign this agreement with Atlas Copco, a global leader in the technology of compression, mining and rock excavation. This will support innovation in a key area of the economy, reduce carbon emissions, improve energy efficiency, and enhance the safety of workers". The project supported by the bank of the European Union will be carried out from 2015 until 2018 and implemented by more than 5,000 Atlas Copco employees, with some 1,350 directly involved in the research and development work.

www.atlascopco.com