

New compressors from Probe keep mining industry safe and cool under pressure

Mining is a tough environment, combining harsh physical conditions, long operational hours and cost pressures. Evolving compressed air technologies are increasingly playing a vital role in mining processes including exploration, extraction and treatment. Air compressors additionally provide a flexible and safe power source for powering drilling and piling machinery, pneumatic tools, material conveyors, and ventilation systems.

Frank Rovelli, Probe CEO, says that because of the intrinsic dangers associated with mining, equipment used in every aspect of work must be of the highest quality. "Difficult ambient conditions such as dust, heat, cold and moisture, as well as long supply routes, must be endured by both personnel and equipment. When reliability and safety can't be compromised, mines need to access best of breed products that provide high quality air compression solutions at optimum price levels. Maintenance, regular checks and a high level of aftermarket service is also key to keep any risks to a minimum – and suppliers need to provide that.

Already South Africa's leading and largest importer and distributor of premium batteries and rotating electrics, Probe is additionally distributing top international air compressor brands Fini, Stanley Fatmax and SCC compressors which provide optimal air compression solutions for local mining and industrial markets.

Fini is the largest manufacturer of piston compressors in the world and offers industrial compressors ranging in strength from 2,2 to 75kW. In particular, the two stage compressor, with two cylinder belt-driven and lubricated compressors, has been specifically designed for heavy-duty use. "These compressors are encased in robust cast iron cylinders with all parts covered in a plastic belt-guard to protect them while in motion. Large, vibration-damping feet ensure greater stability during operation. These attributes ensure reliable performance over sustained periods of time, no matter what the environment. The two-stage compressor also comes in a vertical series, which is useful in constrained spaces," says Rovelli.

The Fini compressors have an excellent air cooling ability, which is critical for mining and industrial sectors. Rovelli explains: "In any industrial environment, compressors need adequate ventilation as they generate a lot of heat. This heat needs to be removed otherwise operating temperatures will increase. Intensified heat levels can reduce the system efficiency and, in some instances, even cause equipment shutdown. Consider that in industrial settings and particularly mining, space is at premium. Air compressors will often be required to operate in confined spaces which will exacerbate the heat issue."

Rovelli says Fini's compressor is an ideal solution in these environments as it is equipped with large inter- and after-coolers for better cooling of the compressed air. "Large slots increase ventilation of the pumping unit and an output hose has been designed to improve air cooling."

Rovelli adds that another critical issue to consider for mining air compression needs is ensuring that the compressor pump is of the highest standard. He says, "The compressor pump could be seen as the heart of the compressor, so its performance and efficiency over time must be faultless. Fini pumps have been produced with innovative materials at a low friction coefficient and great resistance to usage. The points of strength of Fini's pumps include an oversized oil crank case for better lubrication, connecting rods and finger valves that have been manufactured using a robust steel and fortified with a long-lasting treatment, and multi-blade flywheels that produce excellent pump cooling."

In addition to the Fini, Rovelli says that superb performance in mining environment can also be obtained by the SCC, an air compressor that provides a cost-effective yet high performance solution, and the Stanley Fatmax. "Fatmax includes in its product line a direct driven lubricate twin 'v' cylinder compressor which comes with an aluminum pump and cast-iron cylinder for a large air reserve and a high-performance motor. It offers incredible power and low noise output while still ensuring a compact size."

Rovelli says that bringing a comprehensive range of compressors to market is part of Probe's commitment to expanding into new markets where gaps exist, aiming to provide industry with a total all-in-one solution and the excellent aftermarket service Probe is known for. "With the addition of air compressor solutions to Probe's comprehensive line up of premium products, we are able to provide

the complete power and air package for the mining and industrial sectors, keeping them cool under the most pressured environments.”