

BenchREMOTE monitor for Elf Drilling

Epiroc has completed a landmark sale of the first BenchREMOTE in South Africa to key customer, Elf Drilling. CEO Faghmi Cader and founder Eduard Mostert of Elf Drilling explain how this purchase is taking their company into the age of automated drilling.

The innovative BenchREMOTE is an advanced monitoring system that can be linked to up to three SmartROC surface drilling rigs. It is ideal for removing operators from the danger area - taking them away from the noise, dust and drilling in hazardous areas, thereby contributing to elevated safety levels.

Since its inception three decades ago, Elf Drilling, has been a frontrunner in drilling, sampling and service for the Northern Cape mining industry. Operating as a complementary team, Faghmi Cader and Eduard and Lizelle Mostert are leading Elf Drilling into the new age of automation drilling. Consisting of a regional office in Kathu, a head office in Kimberley and a workshop in Kuruman and supported by a team of 145 employees, the company boasts extensive experience across South Africa, as well as in Namibia and Angola. Elf Drilling is also a manganese specialist and operates on two of the largest manganese mines in the Northern Cape. Featuring an Epiroc fleet of 25 machines, Elf Drilling procured its first FlexiROC D65 in 2012, and more recently received delivery of two SmartROC D65s, together with the BenchREMOTE in Q4 2018.

The rock-solid relationship between Epiroc and Elf Drilling began 17 years ago when Eduard Mostert operated on a zinc mine in Namibia using Atlas Copco air compressors. There Mostert met Cobus Engelbrecht, area

manager: machinery, Atlas Copco, who introduced him to the then Atlas Copco L8 drill rig. "When I first saw this machine, I was highly impressed by its compactness, flexibility and manoeuvrability," says Mostert. "But what really stood out for me was the machine's automated rod handling capability, which takes safety to the next level. In addition to reducing the risk of manual errors, operators are kept away from potential risk areas. The auto-rod handling function also minimises wear on the rig as well as on consumables."

From here on the relationship between the two companies grew steadily. When Mining & Rock Excavation Technique branched off from Atlas Copco to become Epiroc, the connection with Elf Drilling remained unaffected. "It was business as usual between Elf Drilling and the Epiroc team of Hedley Birnie, Kevin Govender and Cobus Engelbrecht," affirms Mostert.

The mining industry is safety-driven, and Elf Drilling has aligned itself to this focus by procuring the state-of-the-art BenchREMOTE. Following an incident in which a machine fell over due to operator error, fortunately not resulting in injuries but incurring costly machine damage, the



Eduard Mostert test drives Elf Drilling's new BenchREMOTE with Hedley (FLTR), Cobus and Kevin (Epiroc) and Lizelle Mostert and Faghmi Cader (Elf Drilling).

company adopted an even more aggressive preventative approach by utilising the BenchREMOTE.

This technologically advanced machine comprises premium quality components such as SR and PTZ cameras that enable operators to conveniently monitor progress from the comfort of a FOPS/ROPS approved cabin, situated 100 m away within the line of sight. "This feature converts the SmartROC into a reliable, low-maintenance partner on the bench, and enables substantially improved operational and safety efficiencies," notes Hedley Birnie, business line manager: surface & exploration drilling, Epiroc.

The single BenchREMOTE's capability to operate up to three SmartROC drill rigs enhances productivity for the lowest possible total cost of ownership. Further adding to its impressive features, the BenchREMOTE's memory can store information on up to ten drill rigs, so that when required the machine can be moved from one block or area to another to control the rigs in each respective area.

The BenchREMOTE will assist in the prevention of machine abuse, so training is of vital importance. Epiroc will provide Elf Drilling with a three-week training course on the BenchREMOTE system and all training is on-going as refresher courses are essential for customers to keep up with the latest technologies.

Elf Drilling also utilises a web-based on-board reporting system from Epiroc called CERTIQ to monitor operator activities and productivity as well as machine health. This innovative monitoring system allows customer to remotely log in to view their fleet through a smart mobile device.

Training and local community develop-

ment are close to the heart of Elf Drilling. "We are passionate about the upliftment and growth of our community and that is why we predominantly employ local people," says Cader. "The hiring of local talent means that the community is given job opportunities and employees do not incur exorbitant commuting costs. Training is also essential in order to ensure that the drilling machines are correctly operated and utilised to their full potential." Cader notes, however, that the lack of training facilities such as schools, technical colleges and universities is forcing contractors to source operators from outside the Northern Cape.

Recognising this shortfall, Elf Drilling plans to open a training facility within the next year that will benefit internal and external resources. The company has also invested in a FlexiROC simulator with plans to purchase a simulator for SmartROC. This lucrative investment will enable Elf Drilling to choose its very own well-trained operators from the cream of the crop to operate its Epiroc machines. The plan is to take an unskilled person with no tertiary education through the training

process and then bring him or her into the company. Addressing the challenges around gaining next-level operator training due to red tape and high costs, Elf Drilling is collaborating with the Epiroc Academy which will provide crucial train-the-trainer courses.

With its focus on drilling rather than on machine repair, Elf Drilling has opened a workshop in Kuruman - Kalagadi Engineering Hydraulics (KEH). This move has empowered the company's mechanics who receive regular training from Epiroc.

Aftermarket service is crucial to sustaining machine health and performance. "It's clear that Epiroc considers the after-market to be as important as the quality of its machines, and I have seen its after-market offering constantly improve," says Cader. "That is the reason why Epiroc is the preferred mining partner for Elf Drilling as the performance of its machines is unmatched." Elf Drilling receives quick and seamless financing from Epiroc Financial Services, Sweden, with fast delivery of machines.

Elf Drilling lauds the Epiroc team for their professionalism and superior customer ser-

vice as they are always approachable and just a phone call away. Cader adds that they can always rely on Epiroc to assist in maintaining a sterling reputation, which Cader points out, in a small town means everything. "There is no doubt that Epiroc machines give us the competitive edge and we can say, without hesitation, that few drilling companies can match us."

Wrapping up, Epiroc's Birnie says that Elf Drilling has walked a long way on a short road and has one of the best maintained drilling fleets in the industry. "Team Faghmi, Eduard and Lizelle work as a well-oiled machine and lines of communication between the two companies are always open. We consider our customers as our partners and stand by them as much as they stand by us. We will never hesitate to free up any resource to come to their assistance," concludes Birnie.

Elf Drilling's purchase of the first BenchREMOTE in South Africa as well as the two SmartROCs was commemorated on 17th January 2019 at a celebratory function at the Elf Drilling Service Hub in Kuruman, Northern Cape. □

Easing financial, production risk for coal mines

As the size of South African coal deposits shrink and operations expect shorter mine lives, miners look to reduce capital expenditure on infrastructure. B&E International's build-own-operate-transfer (BOOT) plants offer a solution.

"Our expertise and equipment in crushing and screening takes the capex pressure off customers and relieves them of considerable production risk," says Ken Basson, director of plant and engineering at B&E International. "We can even assume other responsibilities in the value chain, from drilling and blasting to coal conveying and processing."

This allows the business to flexibly fit in to customers' value chains, maximising production performance and machine uptime while taking on the risk of meeting the agreed output targets. With research and development as a key driver, new technologies are continuously in the pipeline to meet the changing needs of the industry.

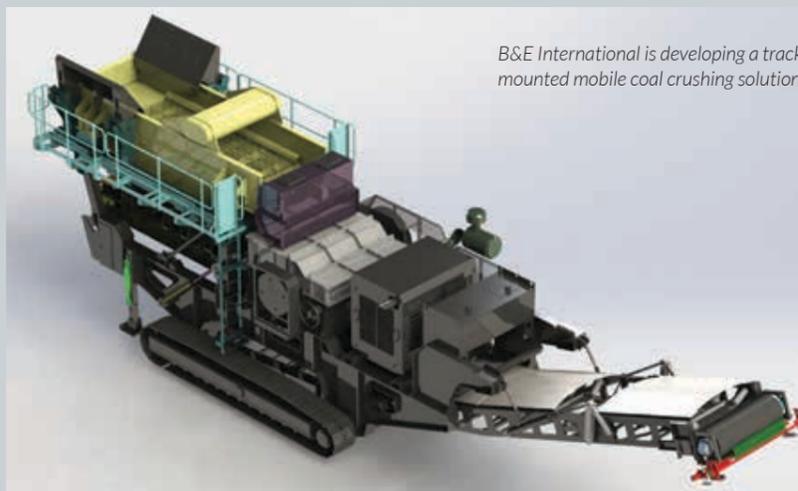
"Our R&D focus has allowed us to develop our own primary coal crushing plant; a high capacity, track-mounted unit that is currently under construction and will soon be launched," says Basson. "The design is aimed at further reducing unit costs we can achieve when conducting a contract for a customer. Its high-volume capacity means better efficiencies while being able to serve multiple small deposits on the same mine site."

Water conservation in the coal beneficiation process is another focus of the company's R&D. B&E is exploring practical options for 'dry separation' technology for coal plants, in collaboration with a local university. Traditional water-based coal washing technology is

a major consumer of water in mine plants.

Process optimisation is also a service that B&E International provides for customers, based on its years of experience in designing, constructing and operating plants, he says. "Whether a project is greenfield or brownfield, we can assist in providing solutions and addressing challenges," he says. "For existing plants, our engineering team can identify and address constraints in the process - whether the equipment is ours or a competitor's. We conduct detailed studies on how customers can remove bottlenecks from their plants."

Equipment is designed, built and maintained by B&E International's experts at their well-equipped facilities in Kempton Park, Gauteng. As a member of JSE-listed Raubex Group, B&E International is B-BBEE-compliant and works closely with mines, project houses and contractors. □



B&E International is developing a track-mounted mobile coal crushing solution.



Epiroc's SmartROC and BenchREMOTE make a powerful winning combination for Elf Drilling.