

Company News

## SEW-EURODRIVE Power Packs will be Part of Kamoa-Kakula's Copper Complex Phase 3 Expansion.

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With well over 100 units already delivered, SEW-EURODRIVE in South Africa is set to continue supplying Ivanhoe Mines' prestigious Kamoa-Kakula Copper Complex in the Democratic Republic of Congo (DRC), a joint venture with Zijin Mining of China, with a wide range of its X.e-series power packs – integrated units comprising gearbox, coupling and motor.



Kamoa-Kakula is one of many projects in Africa to request the installation of SEW-EURODRIVE's monitoring equipment on the supplied product.

According to Willem Strydom, Business Development at SEW-EURODRIVE, the power packs – which are integrated units comprising gearbox, coupling and motor

 will be part of Kamoa-Kakula's Phase 3 expansion. Since the mine's first phase of development over five years ago, SEW-EURODRIVE has worked closely with both Ivanhoe Mines and the engineering, procurement and construction (EPC) contractor.

"As in previous phases of the mine's development, our robust high quality power packs will provide reliable solutions in on-site applications such as conveyors, agitators, and slurry pumps," says Strydom. "The size range in the order makes use of our wide capability range to provide a total solution, ranging from 55 kW units to 500 kW units."

The latest order includes several X.e Series power packs for conveyor applications, planetary gearboxes for feeder applications, and spare gearboxes. The equipment will be delivered in staggered shipments this year. While the mine typically undertakes the installation of the equipment, SEW-EURODRIVE sends technical teams to site to check final alignment and overall installation parameters.

## **SEW** in Africa



SEW-EURODRIVE continues to supply Ivanhoe Mines' Kamoa-Kakula Copper Complex with reliable solutions in on-site applications such as conveyors, agitators and slurry pumps.

The company has expanded its after-sales service teams considerably in recent years, allowing it to support the growing base of equipment throughout Africa. Its projects and engineering teams have also grown – developing a depth of experience to assist customers right from design phase onwards.

Strydom notes that SEW-EURODRIVE has significantly developed its infrastructural foundation in South Africa, and plans to develop a physical representation in over 23 other African countries. As a priority country for the company's strategy, there is expected to be a representative in place in the DRC in 2023, he explains. Field service teams from South Africa are frequently at Kamoa-Kakula to assist with servicing of the existing power packs operating on

the site.

"Our local assembly capability in our new facility in Johannesburg – combined with our ability to source from the group's other global operations – has allowed us to meet the tight delivery deadlines for this substantial order of equipment," he says. "Our global footprint and production capacity mean that we can deliver faster than most players in our field, and this is often an important factor for our market."

While the company previously imported the larger X.e Industrial gearboxes from Germany, it is now able to assemble these in the new South African facilities. As part of its service, SEW-EURODRIVE will also handle the logistics of getting this large volume of equipment to site. The company's training centre – the Drive Academy – in Johannesburg has also made a valuable contribution by providing training on the equipment and its maintenance.

## Influence of the Climate



The tropical climate as well as high levels of sun exposure meant that SEW-EURODRIVE had to take special care in their design, incorporating special breathers, covers and fans.

In this project, the tropical climate was another important factor in the customer's design requirements. This required the inclusion of certain cooling and paint specifications in the contract. SEW-EURODRIVE Head of Engineering Andreas Meid explains that special breathers were part of the design in response to high humidity levels – and served to ensure no moisture in the gearboxes. In outdoor applications where sun exposure was high, covers were also included to reduce heat build-up. Cooling fans were also optimised in certain cases to ensure optimal performance.

He highlights that Kamoa-Kakula is one of many projects in Africa to request the installation of monitoring equipment on the power packs. This facilitates real-time monitoring, using specialised sensors to measure key indicators like vibration and temperature from anywhere in the world.

"This allows the operation to monitor the equipment remotely, receiving early warnings of any issues in performance," says Meid. "Responding timeously to this information can prevent serious damage and avoid unplanned downtime."

As a preferred supplier, SEW-EURODRIVE first delivered a multitude of X.e Series power packs between 2019 and 2021 for the mine's initial development phase. Motors ranging in motor from 7, 5 kW to 500 kW as well as planetary gearboxes were supplied during this time for feeder applications, together with several spare gearboxes.

For Kamoa-Kakula's Phase 2 expansion, which doubled the concentrator plant capacity, SEW-EURODRIVE supplied many standard X.e Series power packs for the conveyors as well as planetary gearboxes for the feeders.