## Flexibility, innovation and tailormade drive solutions



MAXOLUTION engineer, Dylan Enslin.

s part of its well established mining offering, the Projects Department of SEW-EURODRIVE, under the direction of project sales representatives, Brett Weinmann and Bruce Farthing, has delivered a complete drive package for a new mine in the Mpumalanga coalfields, which has standardised on drives from SEW-EURO-DRIVE for its entire conveyor-belt system.

This entailed a 27-unit order in the form of a simple 'bolt-on' solution for the coal mine's conveyor-belt system, which were assembled at the OEM's Nelspruit facility and transported directly to site early this year. The project scope included the drives themselves, gearboxes, base plates, guards and, in one instance, an ancillary cooler.

Such was the success of the work undertaken that SEW-EURODRIVE has subsequently clinched another three cross-border projects with the same client, assisting in expanding its footprint in the African mining industry.

Weinmann explains that the long-term aim of the Projects department is to establish longstanding relationships with project houses, in particular, who put their designs out to competitive tender. Thereafter it is the responsibility of Farthing, a qualified mechanical engineer, to come up with a solution best-suited for the application in hand, which is subsequently presented to the client for approval.

"Our team is very dynamic in devising the best solutions for our clients. We really go out of our way to offer the best customer

MechChem Africa presents some recent success stories from SEW EURODRIVE that demonstrate the flexible use of its drive technology in satisfying a wide range of customer-specified outcomes.

> service and technical back-up," Weinmann comments. "It is important to note that we do not simply supply products, but look closely at the holistic application itself."

> Due to the fact that this massive order had to be customised, an important part of the value-added service offering was overseeing that the required specifications were met, keeping in mind the strict delivery date. This was essential in giving the client peace of mind

> "We like to be on-site during this critical phase of any project in order to ensure that everything is according to specification and installed correctly. For example, we double check the oil levels and the alignment of the units, and are also present at the first cold start-up," Weinmann notes.

> Critical to the success of this project was the close working relationship forged with the project house, which resulted in SEW-EURODRIVE being afforded an extended lead time. "This not only allowed us to iron out all of the technical specifications in advance, but was of great benefit to our sub-suppliers as well," says Farthing.



Head of exports, Marcio Sicchiero.

Film Riggers help French Spiderman Specialist rigging company Film Riggers was recently called upon to ensure the safety of Alain Robert, also known as the French Spiderman, while scaling a skyscraper in central Johannesburg for an advertisement for an international tyre manufacturer.

The specialist rigging company is a longtime user of automation and mechatronics technology from SEW-EURODRIVE, in addition to deploying its drives for its customised winches. It was approached by a production company to execute the logistics and safety requirements for the advertisement. The idea was to have Robert climb the building while it was raining, as a metaphor for the extra grip provided by the tyres being showcased.

Partner Graham Terrell, who established

Film Riggers with Alard Hüfner in 2012, explains that Robert had two ropes attached to a harness, controlled by SEW-EURODRIVE drives with a custom program based on torque control to delay the climber.

The winches devised by Film Riggers use the MOVIDRIVE® drive inverter from SEW-EURODRIVE, which includes the IPOSplus® integrated positioning and sequence control system as standard. The drive inverters have a wide power range, large overload capacity, and a modular design. In addition, they facilitate unrestricted application of AC drives, featuring the most modern digital inverter technology, this according to MAXOLUTION® Engineer, Dylan Enslin.

For this particular project, Film Riggers used CM112 synchronous servomotors from SEW-EURODRIVE. Two 11 kW drives were used to secure the climber, and a 30 kW drive for the accompanying camera system.

Terrell was given access to the OEM's electronics workshop to configure a miniature set-up of the system, based on a 0.55 kW MOVIDRIVE drive inverter. This allowed for more controlled and refined testing, allowing Terrell to scale up the solution to the specific requirements of the project.

Commenting on the challenges posed by the project, Hüfner points out that Film Riggers had the dual responsibility of winching the camera platform up and down, in addition to securing Robert, and ensuring his own safety during the filming process.

"The idea was for the camera to be seen to be almost in pursuit of him, then tilting as it

Left: The 27-unit complete drive package order from SEW-EURODRIVE was assembled at the Nelspruit facility and consisted of the drives, gearboxes, base plates, and guards. Below: SEW-EURODRIVE's bolt-on solution for the conveyor system.





"This is a unique application of the MOVI-

went past, while tracking him. There were certain changes made at the last minute, which meant we had to adjust our programming in order to cater for the new reference points needed for our rigging," Terrell elaborates. DRIVE drive inverter technology and an excellent example of the flexibility and innovation we can provide to specific customers, offering tailormade solutions based on the latest developments," Enslin explains.

## Cement producer stocks up on critical spares.

A major cement producer in Zambia has also invested significantly in a comprehensive stockholding of critical spare units to prevent any costly downtime and subsequent loss of productivity. The multimillion-rand order for SEW-EURODRIVE equipment consists of 40 units, including geared motors, planetary units, and Industrial Gear (IG) units, ranging from 7.5 kW to 250 kW. A total of 15 customised IG units are being supplied by SEW-EURODRIVE of Finland, while other units are also being sourced from Germany.

"This is testament to the internationalisation of SEW-EURODRIVE, which can call on its extensive global capabilities in order to meet the specific requirements of major clients in the required timeframe," says head of Exports, Marcio Sicchiero, adding: "This long-standing client has enjoyed a close relationship with us for the past three years."

Because of the size and quantity of the order, the products are being dispatched to

Zambia from the SEW-EURODRIVE head office in Johannesburg in six different batches, with different lead times, in order to facilitate transportation and logistics. The OEM is providing technical support and assistance directly from South Africa, with export sales representative, Philip Steyn, already having travelled to site five times.

The back-up support offered on this particular project has even included assistance with correct storage procedures. Being critical spares, these products will not be deployed in the plant straightaway, and therefore have to be stored correctly to avoid any issues when they are required.

"The client has opted for the critical spares stockholding due to the impact that any downtime has on productivity," Sicchiero explains. This is a proactive approach to maintenance that takes advantage of the user-friendliness and simple installation of the SEW-EURODRIVE products.

Commenting on the current state of the cement industry in Africa, Sicchiero points out that major producers such as this Zambian client are expanding aggressively on the continent, so as to be less dependent on South African markets.

"While our involvement with the cement industry in Africa is quite extensive, it does tend to vary from country to country, and even company to company. However, there remains significant scope for us to expand in this sector, especially with regard to standardisation of entire plants and the provision of critical spares," Sicchiero suggests. 🖵