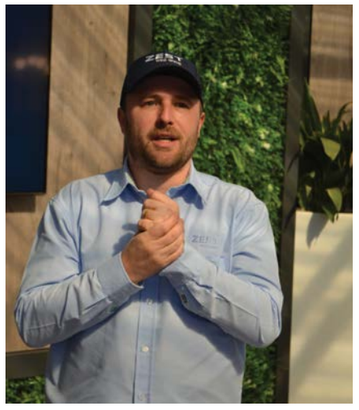

Zest WEG establishes LV **motor** assembly line

At a media event at Electra Mining Africa earlier this month Zest WEG CEO, Eduardo Werninghaus, presented the company's developments, which include a new local assembly line for its IE3 premium and IE4 super premium efficiency electric motors.

At a media event at Electra Mining Africa earlier this month Zest WEG CEO, Eduardo Werninghaus, presented the company's developments, which include a new local assembly line for its IE3 premium and IE4 super premium efficiency electric motors.

"It is part of our WEG DNA always to do things better, faster and more competitively, so there are times when we take small steps forward – and we try to do this every day," begins Eduardo Werninghaus, the CEO of Zest WEG.

He says that at other times, Zest WEG takes huge steps to raise the overall productivity of the mining sector, a core segment for the company. "We have been adding more and more new developments through close partnerships, which are essential these days," he explains, citing the recently formed partnership with Volvo to power WEG alternators for Zest WEG's latest genset solutions.

"Through our Transformers division, we are also working with the mining sector, where manufacturing in South Africa continues to expand," he says, adding that advanced capabilities mean the company can offer better flexibility.

"We can now do up to 45 MVA locally and up to 500 MVA from our overseas facilities, and we have dedicated a lot of time to renewable transformers for solar and wind, which need dedicated designs. In the African market, one thing I soon learned is that more energy is essential for industrial growth," he says, adding that the automation division is taking orders for more and more motor control centres (MCCs), e-houses and mobile research stations

The big step forward right now though, is that Zest WEG is assembling WEG low voltage (LV) motors locally in South Africa. "Why are we doing this? Flexibility and delivery. We established during Covid that we cannot depend on logistics and the supply of raw materials. The LV assembly line in South Africa will enable faster delivery and more flexible production to make sure the right motor is available at the right time for any customer," says Werninghaus.

"Everyone went through rough patches during Covid, but it was a good learning curve and reinforced our strategy not only to be global, but also to be local, because it is not acceptable to let down our local customers as a result of long delivery times. We are therefore making substantial investments in people, infrastructure and processes, so we can onboard the assembly line."

The line is already up and running – albeit in ramp up mode – so "we have the capability to deliver this unique offering to the low voltage motor market in South Africa," he adds.

Aligned with Zest WEG's commitment to achieving better efficiency in support of the national grid, the LV assembly lines will focus on assembling IE3 premium efficiency level motors. "Energy efficiency is key for us and, as I said, we always push for more: more efficiency, better delivery time and reliability. So, our production line was designed for a minimum IE3 efficiency level, which will reduce customer costs."

The Zest WEG South African assembly line for WEG low voltage (LV) IE3 and IE4 motors, which will enable faster delivery and more flexible production.

The first rotor being positioned at Zest WEG's new assembly plant for IE3 and IE4 electric motors.

Werninghaus points out that across the lifetime of a motor, 90% of the costs incurred are for energy, while the remaining 10% are divided between the cost of acquiring the motor and the maintenance costs. By investing in an IE3 motor to save energy, there is a short payback period of less than one year for customers – and this helps reduce demand from the grid by up to 474 GWh per year in South Africa – "so that everyone else on the African continent can grow using the saved energy we are not wasting in motor losses. On average in South Africa, this saving could power up to 43 thousand new family homes," he says.

"Our commitment to society, not only the mining sector, is to deliver better energy efficiency, because, in industry alone, 65% of the energy used is consumed by motors. We are striving to free-up energy for growth by introducing more efficient motors and driving the use of efficient equipment in the mining industry and in society as a whole.

In addition to reducing the energy use that makes up 90% of the total cost of ownership of motors, Zest WEG is also introducing its Motor Fleet Management system, which can help to oversee all the motors in a mine, a hospital or a supermarket. "This system can give warning of any chance of a failure. It's a digital system that helps mines avoid having to stop production, because, while the total costs of ownership take into account the energy, maintenance and capex costs, they do not take into account how much a mine might lose if a fault stops overall production," he points out.

Werninghaus says production loss costs can be very high, and this system delivers some prevention support to operators, so that small issues such as a cooling fan being obstructed or too much grease being accidentally applied, can be dealt with quickly before serious damage occurs.

"By end of next year, the South African Government will enforce minimum efficiency rules for electric motors. This will help to relieve the pressure on our national grid and might even help with load shedding. This puts the cherry on the top of Zest WEG's decision to assemble and supply premium efficiency electric motors from its South African facility," Fanie Steyn, manager of the Electric Motor division at ZEST WEG Group concludes.

www.zestweg.com