

**For Immediate Release**

**Zest Weg Group Supplies Generator Sets For Kansanshi Mine**

The ability to provide an engineered backup power supply solution that will ensure optimum reliability in a remote mining region secured Zest WEG Group a contract to supply containerised generator sets for First Quantum Mineral Ltd's Kansanshi mine in Zambia.

The contract award, which is for three 1 500 kVA and two 1 250 kVA containerised generator sets, was based on Zest WEG Group's track record in the mining industry, the capabilities and experience of its team, its manufacturing capacities and know-how, as well as the cost effectiveness of the solution supplied.

"The African continent suffers from a general lack of reliable electricity grid power capacity. While Zambia's power supply is slightly more reliable than that available in many other African countries, there is still a need to provide an alternative power source for the sustainable operation of the Kansanshi plant," says Bruce McCracken, sales manager for Zest WEG Group's generator set division.

Kansanshi is the largest copper mine in Africa, situated 10 km north of the town of Solwezi and 180 km to the northwest of the Copperbelt town of Chingola. The mine has undergone several expansions since it began operating in 2005 and the order forms part of the latest phase of the upgrades. From an initial production capacity of 110 000 tpa of copper, Kansanshi is now capable of producing 340 000 tpa of copper and more than 3 400 kg of gold per year. A multi-stage expansion project aims to increase copper output capacity to approximately 400 000 tonnes by 2015.

"Although the Zest WEG Group has supplied products to the mine in the past, this is the first time we have been requested to provide generator sets. Each package comprises a Cummins QSK50G3 diesel engine coupled to a single bearing alternator rated for 550 V and mounted on a purpose made simplex type base frame," says McCracken.

He explains that each combination set is enabled for singular or synchronous operation. "The units can operate singularly or together, which facilitates and satisfies a larger electrical output from the generator backup system. This capability is required due to the varied load demand experienced on

the mine. In addition, the units act as backup for each other in the event of failure of one unit. This ensures that backup generator power will always be available to the mine.”

McCracken points out that the generator sets are placed in 12 metre custom modified ISO certified shipping containers, manufactured by Zest WEG Group to suit the specific configuration of the generator solution and the precise needs of the customer. “By placing generator sets in containers, we enable the swift and easy transportation of the generator set and all its components to any location required by the customer, in a ready-to-run format,” McCracken points out.

In addition to the generator set components, each container includes a 2 000 litre on board fuel tank, complete with an automatic filling system which is fed from an external bulk fuel tank. The container is dampened to absorb the sound generated within its confines and has an acoustic breakout limit of 85 db(A) at a distance of approximately 7 metres.

The order for the first two units was received in May 2013 and the second order was received in October 2013. Delivery of the first units was expedited in January 2014 and the remaining units will be delivered in May 2014. Commissioning of the first two units will be followed by commissioning of the third unit three weeks later. The final commissioning will be undertaken in the presence of Zest WEG Group’s technical team and the mine’s personnel.

Zest WEG Group has a fully integrated genset manufacturing facility where fabrication, assembly, testing and commissioning of generator sets is conducted in accordance with the Group’s high standards of quality assurance and compliance with the OSH Act. The facility manufactures in accordance with ISO quality and procurement standards and is currently undergoing the ISO certification process.

“We have made a substantial investment in our manufacturing facilities to ensure that customers are provided with reliable and robust generator sets. Many suppliers rely on subcontractors to provide them with canopies, containers and exhaust systems. We are, however, able to manufacture all of these elements, ensuring consistent quality and timeous delivery of a complete solutions package,” says McCracken.

McCracken explains that the division’s success is based on a number of strategically linked factors, including the experienced team who are able to provide customers with application-specific

solutions as opposed to boxed products. “The design engineer and electrical engineer are responsible for providing a solution that considers best practice for each customer’s unique requirements. Project management ensures that the process and procurement is timeously facilitated and that the final solution matches the original specifications, while the manufacturing team are responsible for working according to the Zest WEG Group’s extremely stringent quality control procedures.

“We have been involved in supplying generator sets to a large footprint of customers in South Africa, Mozambique, Zimbabwe, Nigeria and the DRC for the past 27 years, placing us in a position to understand and overcome the challenges of working in Africa. Another advantage we bring to the table is that within the Zest WEG Group we are able to source a complete portfolio of offerings, including generator sets, electric motors, drives systems, transformers, installation systems and electrical distribution panels,” says McCracken.

“This turnkey service provides customers with the assurance that all solutions are manufactured in adherence to our quality assurance standards. An added benefit is that the customer has the convenience of dealing with one source for their supply, commissioning, after-service support and maintenance needs,” McCracken concludes.

KANSANSHI GENSETS PIC 01 : The ability to provide an engineered backup power supply solution that will ensure optimum reliability in a remote mining region secured Zest WEG Group a contract to supply containerised generator sets for First Quantum Mineral Ltd’s Kansanshi mine in Zambia.

KANSANSHI GENSETS PIC 02 : Each Zest WEG Group package comprises a Cummins QSK50G3 diesel engine coupled to a single bearing alternator rated for 550 V and mounted on a purpose made simplex type base frame.

KANSANSHI GENSETS PIC 03 : The generator sets are placed in 12 metre custom modified ISO certified shipping containers, manufactured by Zest WEG Group to suit the specific configuration of the generator solution and the precise needs of the customer.

KANSANSHI GENSETS PIC 04 : Zest WEG Group secured a contract to supply containerised generator sets for First Quantum Mineral Ltd’s Kansanshi mine in Zambia.

KANSANSHI GENSETS PIC 05 : Placing generator sets in containers enables the swift and easy transportation to any location required by the customer, in a ready-to-run format.

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FROM : CORALYNNE & ASSOCIATES  
TEL : +27 011 849 3142  
EMAIL : [communicate@coralynne.co.za](mailto:communicate@coralynne.co.za)  
WEBSITE: [www.coralynne.co.za](http://www.coralynne.co.za)

FOR : KIRSTEN LARKAN  
ZEST WEG GROUP  
TEL :+27 011 723 6000  
EMAIL : [kirstenl@zest.co.za](mailto:kirstenl@zest.co.za)  
WEBSITE: [www.zest.co.za](http://www.zest.co.za)