

FOR IMMEDIATE RELEASE

**Multotec's Highly Skilled Experts Help Customers  
Look Beyond The One-Size-Fits-All Option**

A key differentiator for Longi-Multotec in the marketplace is having highly skilled and experienced experts on hand. "It is important to work with an original equipment manufacturer that understands the system parameters and is able to see past the one-size-fits-all option that has been the tendency in the past," Willem Slabbert, process and applications engineer at Multotec, says.

An example of this expertise in action is the introduction of the latest developments in air-cooled overbelt magnets to the African mining industry. Multotec's new range of standard range Longi-Multotec air cooled overbelt magnets is capable of operating in an ambient temperature of up to 45°C. "However, in specific instances where a more customised approach is called for, Multotec can size the correct magnet from its range of forced cooled magnets," Slabbert points out.

The standard range conforms to the standard conveyor widths used in the African mining industry with international standard widths also available. There are four models available for each conveyor width. While the conveyor belt dimensions remain the same for all these model variants, the difference lies in the coil height, which can be raised in order to increase the strength of the magnet.

"Depending on the process parameters, we will decide which one of the four model variants is the most applicable. "This gives Multotec the necessary flexibility to be able to carry out custom selections for specific applications, which depends on the tramp metal that needs to be removed," Slabbert explains.

The Longi-Multotec air-cooled overbelt magnets represent a step change in this critical technology. They incorporate a split coil design, whereby heat is dissipated over ten different surfaces compared to conventional technology's six surfaces, making this cooling method far more efficient in terms of the overall system. "We are now able to offer this innovative technology to the African mining industry through our agreement with Longi," Slabbert says.

"By means of this technology we have completely eliminated the use of fans or forced cooling. This lack of forced cooling, along with the improvement in natural convective heat transfer, adds to the

safety and efficiency of the equipment,” Slabbert says. The trend towards larger and faster travelling conveyors in the African mining industry has highlighted the vital role of overbelt magnets.

Another feature of the latest range of air cooled magnets is the circular shape of the magnetic coils and magnetic field distribution. Slabbert explains that circular magnets offer attraction gradients in all directions including the main conveyor travelling direction, whereas conventional rectangular magnets only offers attraction gradients in the perpendicular plane.

“The advantage of a gradient in the conveyor travelling direction is that these attractional fields assist in slowing down fast moving tramp metal, thereby increasing the residence time under the magnet and ultimately increasing extraction efficiency. This technological advantage is more predominant in fast moving conveyor systems like overland conveyors that can run up to speeds of six metres per second,” Slabbert concludes.

AIR COOLED OVERBELT MAGNET SHORT PIC 01: Longi-Multotec's standard range of air-cooled magnets goes up to a 30 t machine.

ENDS ... MARCH 2015

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 : BERNADETTE WILSON  
MULTOTEC GROUP  
TEL :+27 011 923 6193  
EMAIL : [bernadettew@multotec.com](mailto:bernadettew@multotec.com)  
WEBSITE: [www.multotec.com](http://www.multotec.com)