

On-site sievebend tests at metal refinery

On-site test work at a base metal refinery in South Africa has allowed Multotec to prove its sievebend solution for improving the quality of the customer's end product. Process engineer, PJ Pieters explains.



According to PJ Pieters, process engineer at Multotec, a base metal refinery customer approached Multotec looking for the most efficient way to reduce impurities to less than 200 ppm in the product stream.

"As the contaminants were found mainly in a specific size fraction, the aim was to remove this fraction by classification using a sievebend," says Pieters. "To test this proposal, we used our mobile sievebend test unit, which we could take onto the customer's site and link up to one of the product streams in the plant."

This provided a convenient way to conduct testing under normal plant operating conditions. It also meant there was no need to remove any valuable mineral product from the site, which could demand onerous security compliance procedures. The tests took only a

week to conduct, once the mobile units were installed.

"The tests were conducted to reduce impurity levels and to measure the effect of the sievebend on the downstream screen scroll centrifuge," he says. "We managed to achieve the product quality goal, while also maintaining optimal centrifuge performance in terms of the customer's product moisture requirement."

The addition of a sievebend to the process does not increase the energy costs, as the machine is operated under normal gravity conditions and is compact enough to fit inline between existing process equipment.

To withstand the highly corrosive application, the sievebend and its housing were manufactured in stainless steel. By using appropriate sampling techniques, the test

work was able to deliver very representative results. This gave the customer an accurate expectation of the precise results that a full-scale installation would deliver.

"This kind of testing adds confidence to the customer's decision to invest in a specific solution," Pieters says. "It is also part of Multotec's contribution to continually improve customers' process efficiency – we work to provide customers with the best knowledge and products to optimise their plants."

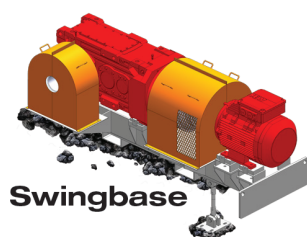
Another element of the value added by the sievebend, says Pieters, is that the refinery is likely to save on potential penalties arising from impurity levels in the saleable product. Multotec also provides after-sales optimisation and support to ensure on-going benefit from the innovations applied. □

SEW-EURODRIVE—Driving the world

Quality. Innovation. Efficiency.

Diverse, adaptable engineering options with SEW-EURODRIVE (Pty) Ltd.

- Incorporates SEW-EURODRIVE's latest, most efficient Industrial Gear solutions and IE3 electric motors.
- Swing base, bell housing or motor adaptor arrangements with torque arms for convenience.
- Extended warranty when using IE3 DRN electric ac motors for complete designs.
- Suitable for all environments: Standard, flameproof or ATEX-ready designs optional
- Suitable for all conveying applications in industries such as chrome, platinum, coal, bulk handling, paper, etc.
- Free commissioning assistance on all new projects and sales within South Africa.



Swingbase



Bell Housing

SEW-EURODRIVE – Driving the world

Cape Town Branch
Tel: +27 21 528 7600

Durban Branch
Tel: +27 31 902 3815

Nelspruit Branch
Tel: +27 76 617 0307

Port Elizabeth Branch
Tel: +27 41 372 2244/6

SEW EURODRIVE

SEW-EURODRIVE (Pty) Ltd.
Eurodrive House
Cnr. Adcock Ingram & Aerodrome
Roads, Aeroton Ext 2
Johannesburg
P.O. Box 90004
Bertsham 2013
Tel: +27 11 248 7000
Fax: +27 11 248 7289
→ www.sew-eurodrive.co.za

