



ENVIRONMENTAL TECHNOLOGY

Improving reliability and reducing product loss for sugar refinery

A South African based sugar refining plant was using gland packing on two screened juice pumps and two mixed juice pumps with a quench to drain seal support system. This was costing over ZAR21,300 (£1,216) in lost product, and using 1.8million litres of water each year, and requiring regular maintenance.

For each pump this was costing the company over ZAR21,300 (£1,216) in lost product, and using 1.8million litres of water each year. The screened juice pumps required maintenance every 2 months and the mixed juice pumps every 2 weeks.

AESSEAL® replaced the gland packing with a CDPN, cartridge double seal, along with a SW02 Water Management System. The seal and water management system operate in a closed loop environment which provides significant water savings over a quench to drain system, as well as protecting against leakage of the product to the environment.

After 18 months the installed solution continues to operate without undue maintenance. The cost of the upgrades to the four pumps was repaid within 17 weeks of operation and saved the facility over ZAR107,500 (£6,121) in the first year and ZAR235,500 (£13,450) in subsequent years.

‘Reduced maintenance and ZAR107,500 cost saving’

Industry:	Food & Beverage
Product:	CDPN and Water Management System
Application:	Mixed Juice Pump
MTBF:	800% and increasing
Savings:	ZAR 107,500 (Year 1), ZAR 235,500 (Year 2 +)
Reference N.O:	CH00376, 377, 378, 379



aes seal.com/info