



ENVIRONMENTAL TECHNOLOGY

Savings all round for South African beer producer

A South African customer had an extremely low MTBF on a top entry mixer where the shaft dealing arrangement was a viton lip seal. The shaft fretting was leading to failures with a MTBF of just 48 hours.

Each time this needed to be repaired, it would take up to 3 hours to complete also leading to production loss during this time

The plant was using a quench to drain arrangement to keep the seal faces cool and clean which was leading to a use of over 7,000 litres of water per seal per day.

AESSEAL® were selected to improve this and so made the following recommendations: lip seal and old bearings to be removed and the seal plate modified to suit an AESSEAL® CDPN 35mm seal. This seal was supplied with a seal support system and is now estimated to have MTBF of 48 months.

Return on Investment

- Water Use: 7,200 litres of water per day per seal
- Cost of water is ZAR 21.21 / KL = ZAR 153 / day / seal = ZAR 55,740 / year / seal
- Lip seal down time cost = ZAR 74,412 / year
- Water lost cost = ZAR 55,740 / year
- AESSEAL® Upgrade cost = ZAR 35,000
- Return on investment = 70 days

Savings year 1 = ZAR 95,152

Savings Year 2 and on = ZAR 130,152 / year

“Reduced water usage and ZAR 130,152 / year cost saving”

Industry: Food & Beverage
Product: CDPN and water management system
Savings: ZAR130,152 / year
Reference N.O: ROI-2020-016



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