



ENVIRONMENTAL TECHNOLOGY

Trapezoidal Packing improves reliability threefold

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A phosphates and phosphoric acid producer in South Africa was having problems with the packing on its phosphoric acid pumps leaking uncontrollably and damaging the pump shaft sleeve. The packing was difficult to replace and when new, 'run-in' was a long procedure. The packing had a life of just 1 week, and with replacement costs for a new sleeve of ZAR 7,500 the customer was looking for an alternative solution and approached AESSEAL®.

AESSEAL® recommended replacing the competitor's standard square cross-section packing with its trapezoidal cross-section packing (AESSEAL 380TP). Trapezoidal cross-section packing has a number of benefits over the more common square cross-section:

- The braided trapezoid cross-section forms into a perfect square shape during installation
- Even pressure in all directions inside the stuffing box
- No OD leakage due to significantly improved k-factor
- No excessive compression along the shaft, therefore reduced friction and heat generation
- Reduced wear of shaft and packing
- Packing rings do not rotate with the shaft
- Reduced run-in procedure and minimum readjustment required.
- Optimised efficiency and longer lifetime

The new packing has been found to last much longer (1 month), and the 'run-in' is significantly reduced, as is maintenance, with adjustments only required weekly to maintain the required drip rate.

Industry:	Chemical
Product:	380TP
Application:	Phosphoric Acid Pump
MTBF Increase:	300% (and counting)
Reference N.O:	15032021-RSF01

