



ENVIRONMENTAL TECHNOLOGY

CURC™ solves leakage problem at US plant

Persistent failure of pumps at a chemical plant in Illinois was resulting in unacceptably high loss of product.

At the heart of the problem was the company's use of a triple lip seal design which was unable to handle the abrasive and viscous nature of the process fluid. The seal was sometimes allowed to leak continuously until production was halted for planned maintenance.

Even when the seal was replaced, it would last no longer than a few weeks before failing again. The leaked fluid would collect on the pump frame and base, and in the surrounding work area, resulting in hazardous working conditions and costly unplanned downtime. The plant managers had become so accustomed to these constant failures that they did not realise that a better option was available until they eventually turned to AESSEAL.

The solution suggested by AESSEAL® was the installation of its CURC™ single mechanical seal using API Plan 62, where the steam quench enters the quench port and introduces approximately 3 psi of steam into the cavity of the seal, keeping the seal clean and gum-free. The new system was installed in February 2023, and worked perfectly for 13 months until the entire plant lost steam during a particularly cold winter weekend.

Senior management at the plant, who were delighted at the performance of the AESSEAL® product, immediately installed a replacement CURC™ seal, and repaired the original seal for use as back-up.



before



after

'Reliability increased from <3 weeks to >13 months'

Industry:	Chemical
Product:	CURC
Application:	Chemical pumps
MTBF Increase:	1800%
Reference N.O:	TD3104255



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