



ENVIRONMENTAL TECHNOLOGY

Major savings follow installation of AESSEAL® product

A petrochemical company based in the Middle East was having problems with persistent and costly seal failures. The existing seals were competitors low-cost API 682 Category 1 seals. Seal life was typically around 18-24 months with failure frequently resulting in a loss of process containment.

The most common cause of failure was seal drive pin wear, with seal faces often fractured at the drive slot. Added to the cost of replacing the seal were the man hour costs associated with a pump outage. These would typically include the hours spent in planning, machine isolation (LOTO), pump removal, workshop rebuild, as well as pump reinstallation and commissioning.

To solve the problem, AESSEAL® replaced the existing competitor seal with its CAPI™ A Single, a seal designed to be a direct replacement with no modifications to the pump or pipework. In addition, the seal face drive is of a more robust design. Since its installation in December 2016, there have been no further failures.

The AESSEAL® CAPI™ is more expensive than the seal previously used by the company. However, the reduction in pump outages has resulted in a considerable reduction in man-hours worked, estimated at 180 hours saved per pump over a six-year period. As many of those man hours are spent in potentially hazardous environments, the reduction in man-hours is also reducing the risk of workplace accidents.

Over a six-year period, the company has reported savings of US\$18,000 per pump, with a breakeven point after just 12 months.

'Reliability increased from <2 years to >7 years'

Industry:	Oil & Gas
Product:	CAPI™ A Single
Application:	Water + Glycol (50/50) 4°C at 4.6 bar
MTBF Increase:	300% (and counting)
Savings:	\$18,000 per pump
Reference N.O:	TD3089142



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