AESSEAL®
ENVIRONMENTAL TECHNOLOGY

CAPI-TXS™ the answer for legacy quench oil pumps

The single seals on three BB2 hot quench oil pumps at a petrochemical plant in the north of England were regularly failing due to poor face lubrication by the product. In addition, contamination of the bearing oil from the seal steam quench was leading to repeated bearing failures.

AESSEAL® recommended the installation of its CAPI-TXS™ dual cartridge seal supported by API Plan 53B seal support systems. Many hydrocarbon processing plants built over four decades ago are fitted with sealing solutions based on traditional component seal technology which doesn't meet today's stringent API standards. CAPI-TXS™ incorporates API 682 qualified seal faces and components which are designed to fit old edition API 610 pumps with smaller seal chambers. It is a simple retrofit upgrade which generally requires no modification to the pumps.

The bespoke seals were supplied to the customer along with a twin API plan 53B seal support system. No modifications were needed to the pump. As cooling water was not available close to the pumps, custom-made air coolers were supplied to support the seals. The seals' patented pumping scroll technology provided sufficient flow to effectively circulate seal barrier fluid to the cooler adjacent to the pumps.

The first installation took place in June 2012. The dual pressurized seal arrangement improved pump MTBF from between six and 12 months to between three and four years. The removal of the steam quench, and the installation of the LabTecta® bearing protection resulted in a dramatic improvement in bearing life, further adding to the reliability of the pumps.

'Modern API 682 compliant sealing technology'

Industry:	Petrochemical
Product:	Dual CAPI-TXS™, 53B System & LabTecta®
Application:	Quench Oil pumps
MTBF Increase:	>366%
Reference N.O:	TD3107672

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