

AESSEAL® achieves major savings for Middle East oil producer

An oil and gas company in the Middle East is saving more than \$600,000 a year following the installation of an AESSEAL® product.

The company was experiencing persistent reliability problems with mechanical seals in its OTSG (Once-Through Steam Generators) Boiler Feed Water Pumps. The pumps are used to produce steam which is then injected into the ground to soften the crude oil, making it less viscous and easier to extract.

A considerable amount of time and money was invested in the attempt to improve reliability, but without success. The company tried using rotary and stationary mechanical seals, different seal face materials and elastomers, as well as various seal face constructions. However, the seals continued to fail on average every three to four months, allowing oil and water to mix, resulting in bearing failure and frequent operational downtime. The waste of water was all the more serious because of the scarcity of water in an extremely dry climate.

The problem was finally solved with the installation of a specially-designed AESSEAL[®] CAPI[™] ES23 cartridge seal with a Double Python cooler to help conserve water. This greatly improved the reliability of the mechanical seal, which in turn reduced maintenance costs, and minimized operational downtime.

This halved the company's costs per pump from more than \$30,000 a year to just over \$15,000, providing a return on investment in just six months. With upgrades to 40 pumps, this amounted to annual total savings of more than \$600,000. The MTBF has improved from less than four months to between three and five years. To date AESSEAL[®] has supplied the company with around 50 seals and python coolers.

A company spokesman described AESSEAL® as one of its most reliable regular suppliers.

"Whatever upgrades you undertook," he said, "no matter how challenging, have always proved to be effective, and this is one of the best improvements we have implemented in recent years."

'Reliability improved from 3 months to >3 years'

Industry:	Oil & Gas
Product:	CAPI™ ES23
Application:	Boiler Feed Water Pumps
MTBF Increase:	1,1000%
Savings:	>\$600,000 each year
Reference N.O:	TD3102683



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