



EXPERIENCE THE EXCEPTIONAL

## **AESSEAL® saves chemical company a month's worth of downtime**

AESSEAL® have successfully obtained a contract with chemical company Lubrizol working within their plant to identify and diagnose issues surrounding regular reactor sealing failures. The contract enables AESSEAL® to provide Lubrizol with an Asset Health Database supported by analysis for any failure that occurs.

Following the implementation of the contract, AESSEAL® set to work on the 3 reactors, which were experiencing up to 4 or more seal failures per year at Lubrizol's Dutch plant. Typically this equated to approximately 3 days of downtime each time a seal was replaced. Through the careful analysis of the failures, AESSEAL® were able to identify the issue. The inboard seal was leaking due to process fluid attacking the seal surfaces. However, addressing the seal faces was only part of the issue, as it was also discovered that the elastomers used within the seal were being attacked by the process. Following some extensive testing of alternative solutions, a more suitable material was specified and used within the seal.

As a result of the analysis and discovery of the deterioration, the seals were changed to the externally mounted CDMSC, a cartridge double mixer seal, designed specifically for these types of applications. These are typically used to provide maximum face stability in applications where there is high pressure and temperatures that might affect seal life.

The alloy components of this product are put together to eliminate the wear on the seal due to the corrosive elements of the process fluid.





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By changing the seals, the mean time between failures (MTBF) has improved from 3 months right up to 3.5 years. Changing the seals also takes significantly less time from 72 hours down by almost half to 40 hours. By changing to an AESSEAL® product, downtime is now just 5 days over 3.5 years saving Lubrizol 31 days or a whole month of downtime.

Prior to taking on AESSEAL®, Lubrizol were experiencing up to 864 hours/36 days of downtime over 3.5 years.



## ‘1400% increase in MTBF’

Industry:	Chemical
Product:	CDMSC
MTBF Increase:	1400%
Reference N.O:	CH01515



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