

Reliability upgrade improves Mean Time Between Failure by 5 times

Major chemical company SASOL were experiencing premature seal failure on one of its process pumps.

The original seal was a single seal and was experiencing product crystallizing on the seal faces, in addition the pump was often run dry meaning the seal faces would no longer be lubricated and therefore would get hot. With a typical mean time between failure (MTBF) of just two months SASOL tuned to AESSEAL® for assistance.

AESSEAL® recommended replacing the single seal with a DMSF™ dual seal along with an API Plan 53 seal support system. The DMSF™ seal incorporates an internal pumping ring that helps provide efficient cooling of the seal faces by pumping barrier fluid around the inside of the seal. The Plan 53 system ensured that in the event of the pump dry running, the seal faces would be lubricated by the barrier fluid. The new solution was installed in 2017 and has proved to be significantly more reliable with the MTBF improving to 10 months. The customer has made savings of approximately ZAR335,000 (\$21,880) per year and been able to reduce the time spent on plant inspections.



'400% Mean Time Between Failure increase'

Industry: Chemical

Product: DMSF

Application: Process pump

MTBF Increase: 400%

Savings: ZAR335,000 (\$21,880)

Reference N.O: CS0070

