Application Success Story

Petrochemical • Crude Oil • Mechanical Seal

From 3 Months to 3 Years...and Counting

Challenge

Aggressive operating conditions (waste oily salt water associated with high percentage sand particles, H2S and chloride). Average Mechanical Seal MTBF is 1-3 months due to associted high percentage chloride, aggressive sand particles and oily water. Frequent bearing fallure due to bearing housing exposed to media and water. High maintenance and spare parts cost.

Solution

Plan 11 Configuration with SpiralTrac and Chesterton 442C Seal

OEM Seal replaced with Chesterton 155™ and 442C™ with SpiralTrac Version N for cleaning the stuffing box, providing a clean environment for the seal to elongate the normal life time. Utilizing Plan 11 discharge flush configuration.

Result

As of writing, 3 years has passed without any bearing housing or seal failure. Increased MTBF, pump is more reliable. Service and spare parts costs are reduced significantly. Spare parts cost per pump per year reduced by 70%.



Application Info

Pump: Ensival Moret Waste Water Pump:

EMTECH 100.200 E

Shaft size: 100 mm

Product: Crude Oil - Upstream, 60° C, 3000 RPM, 25.5 bar pressure, 850

GPM Flow rate



SpiralTrac Version N Type I made of 316 Stainless Steel





Chesterton 442C™ and 155™ Mechanical Seals



Chesterton 155™ Seal installed with SpiralTrac Version N Type I

If this Success Story has piqued your interest and would like to know more, our technical support team can always be reached at support@enviroseal.co



SpiralTrac™





Chesterton 442C™