

## **TORISEAL Mechanical Seal Case History**

## High Pressure RO Pump

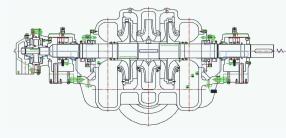
Plant Location: United Arab Emirates
Plant Type: RO Desalination Plant

Pump Model: MSH300/2T Horizontal Multi-Stage Pump

No. of Pumps: 10 Delivery Date: 2016

Service: High Pressure RO

Liquid: Sea Water
Pumping Temp: 22-40°C
Flow Rate: 1,455 m³/hr
Total Head: 549 mtrs







Seal Type: MT2706 Rotating Balanced Cartridge Seal

Seal Code: MT2706HN1ADL110

Shaft Size: 110mn

Metallurgy: Super Duplex Stainless Steel

Face Materials: Carbon/Silicon Carbide

Elastomers: Vitor

Seal Pressure: 12.8 – 17.4 barG Pump Speed: 2,980 rpm

Face Velocity: 20 m/s
API Plan: 11 (Self)

Teamwork Diversity Professional Clarity Enthusiasm Innovation



## **TORISEAL Mechanical Seal Case History**

## **High Pressure RO Pump**

The seals which were originally installed were extremely costly due to high after sales spares prices charged by various seal manufacturers. In addition, the use of a non-standard seal cover adaptor created more potential leak paths.

TORISEAL was able to offer a 'one piece' seal cover to retrofit into the existing stuffing box without any pump modifications required. The tangential flush directed at the seal faces also propagates better flushing fluid circulation, therefore more efficient face cooling and better face lubrication.

The materials offered were Super Duplex Stainless steel to match the existing seal's materials and handle the corrosive sea water.

Whilst being able to offer the same materials, the cost comparison was one of the major benefits for the customer. The TORISEAL MT2706's price was 44% of the existing seal which resulted in huge savings for the customer.

