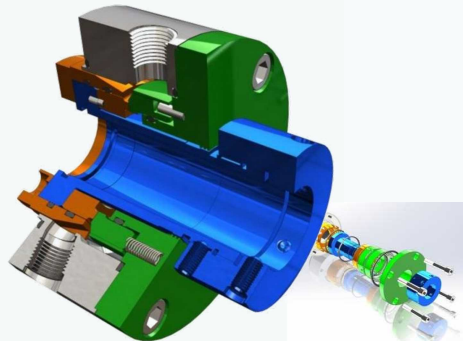


TORISEAL Mechanical Seal Case History

Preheater Recirculation Pump

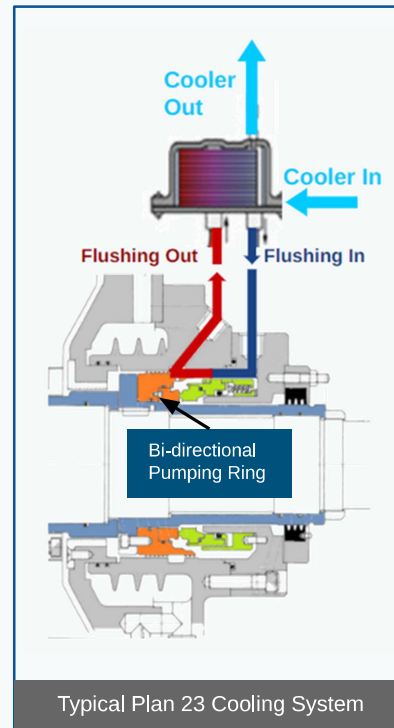
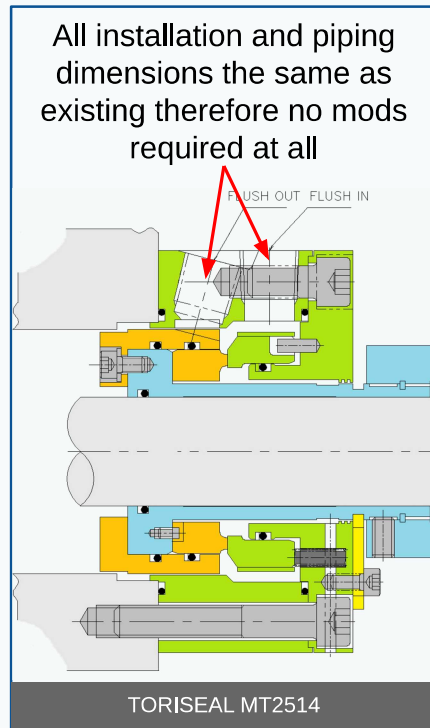
Region:	Middle East
Plant Type:	Power Generation
Pump Model:	CPW End-Suction Pump
No. of Pumps:	80
Delivery Date:	November 2017
Service:	Preheater Recirculation Pump
Liquid:	Condensate
Pumping Temperature:	179°C
Flow Rate:	267m ³ /hr
Total Head:	72 mtrs



Seal Type:	<i>MT2514 Stationary Balanced Cartridge Seal</i>
Seal Code:	MT2514WP63LD040
Shaft Size:	40mm
Metallurgy:	316 Stainless Steel
Face Materials:	Silicon Carbide/Antimony Carbon
Elastomers:	Kalrez
Seal Pressure:	6.3 MPaG
Pump Speed:	3,550 rpm
Face Velocity:	13.3 m/s
API Plan:	23

TORISEAL Mechanical Seal Case History

Preheater Recirculation Pump



Preheater Recirculation Pumps preheat condensate water before it goes into the boiler in a Combined Cycle Power Plant (CCPP).

The condensate is at very high temperature and pressure, therefore the pump and mechanical seal must be able to handle these extreme conditions.

The TORISEAL MT2514 which was supplied was kept in the same style and materials as the existing seal – a stationary cartridge design to handle the high shaft speed and for easy installation, balanced for high pressure capabilities up to 75 barG, and with Kalrez elastomers to withstand any high peak temperatures.

The MT2514 was also supplied without any modifications required to the pump or piping, making it an easy and problem free change-out. The existing cooling system could be used without any changes.

TORISEAL was also able to offer a more cost effective alternative to the previous mechanical seal.