



Sealmatic Successfully Installs & Commissions Its CTX-SN Seals For A Greenfield Solar Power Project

Water is conveyed by pumps for a variety of purposes in thermal energy generating systems, district heating systems, home heating systems and so on. Especially in power plants the importance of water is exceptional, and its sealing methodologies need a very conscious approach. The suitability of a mechanical seal for these applications depends on many different parameters, e.g., pressure to be sealed, temperature at the seal, sliding velocity, power consumption, water quality (pH-value, O₂-dose, conductivity, operating mode), water additives such as corrosion inhibitors etc.

Sealmatic takes pride in announcing that its CTX-SN seals of 100 mm and 110 mm sizes were turned around in a phenomenally short period, starting with design, manufacturing to installation and commissioning. Manufacturing and internal testing of 27 cartridge seals was completed within a span of just 3-1/2 weeks. These seals were designed for vertical pumps of a reputed global OEM. With the assistance from the OEM and the plant teams, the pumps were turned around and taken in process within a timeframe of 8 days, effectively from the start of installation of the seals. Sealmatic service engineers performed this task unrelented within a week's time.

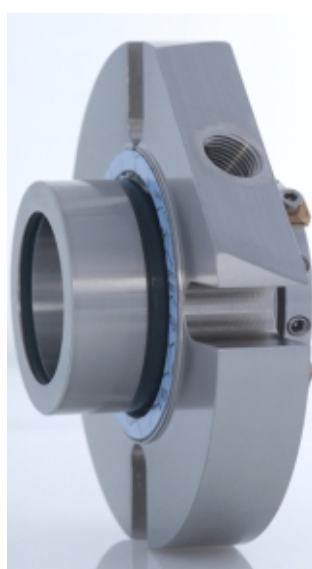
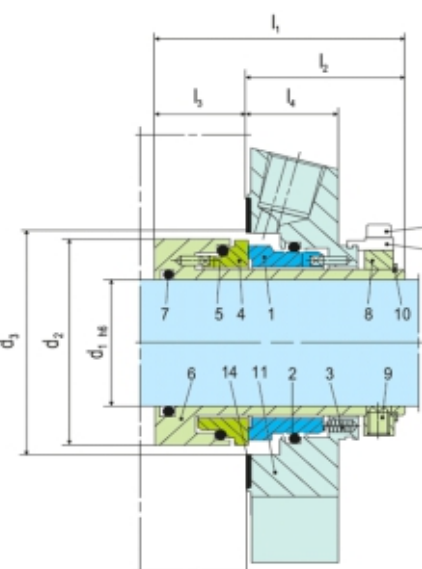
Apart from the business goals, one of the major objectives of this Solar Power Plant is to assist the humanity in some of the underprivileged nations in fulfilling their basic needs. The output from the plant will be distributed to these countries in the form of funds and basic resources as a social responsibility. Sealmatic's pride is thus twofold; being a part of the Indian Industry to have a share in India's growth and economy enhancement, and more importantly, being a part of a noble social cause.



Operating Parameters of Type CTX-SN Mechanical Seal Current Installation							
Sr No.	Seal Type and Size	RPM	Media	Temperature (°C)	Stuffing Box Pressure (kg/cm ²)	Suction Pressure (kg/cm ²)	Discharge Pressure (kg/cm ²)
1	CTX-SN/100	1485	Raw (Clear) Water	Ambient	6.0 (kg/cm ²)	3.0 (kg/cm ²)	8.0 (kg/cm ²)
2	CTX-SN/110	743	Raw (Clear) Water	Ambient	5.0 (kg/cm ²)	3.0 (kg/cm ²)	6.0 (kg/cm ²)

Sealmatic Type CTX-SN Single Cartridge Mechanical Seal

Type CTX-SN is a cartridge single balanced mechanical seal, by and large employed in the process industry. CTX seals are inherently balanced, stationary design, with non-fretting and non-clogging features. Dynamic O-ring is mounted on a silicon carbide face, thus preventing shaft/sleeve fretting. Springs are product protected to make it a non-clog design.



Performance Capabilities

- Sizes: d = Upto 100 mm (Upto 4.000")
- Temperature: t = -40°C ... +220°C (-40°F ... +428°F)
- Sliding face material combination BQ1
 - Pressure: p₁ = 25 bar (363 PSI)
 - Speed = 16 m/s (52 ft/s)
- Sliding face material combination Q1Q1 or U2Q1
 - Pressure: p₁ = 12 bar (175 PSI)
 - Speed = 10 m/s (33 ft/s)
 - Permissible axial movement: ± 1.0 mm, d₁ > 75 mm ± 1.5 mm

Typical Industrial Applications

- Chemical Industry
- Power Industry
- Food and Beverage Industry
- Petrochemical Industry
- Pharmaceutical Industry
- Water and Wastewater Technology

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