



Sealmatic Delivers Mechanical Seals For Supercritical Thermal Power Plant

Supercritical thermal power plants are a type of coal-fired power plant employed with more modern designs. They differ from traditional coal power plants because the water running through it works as a supercritical fluid, hence it is neither a liquid or a gas. This occurs when water reaches its critical point under high pressures and temperatures, specifically at 22 MPa and 374oC.

In a super critical thermal power plant, mechanical seals for Boiler Feed Water, Booster & Condensate Extraction Pumps are one of the most critical equipments employed. With newer technologies, the increases in the capacity of equipment for thermal power generation, improvements to adapt to higher temperatures and pressures, and changes in operation method, mechanical seals have been improving and advancing.

Sealing systems featuring maximum operational reliability, convenient maintenance and low leakage rates with necessary environmental protective measures are standard requirements in modern power stations.

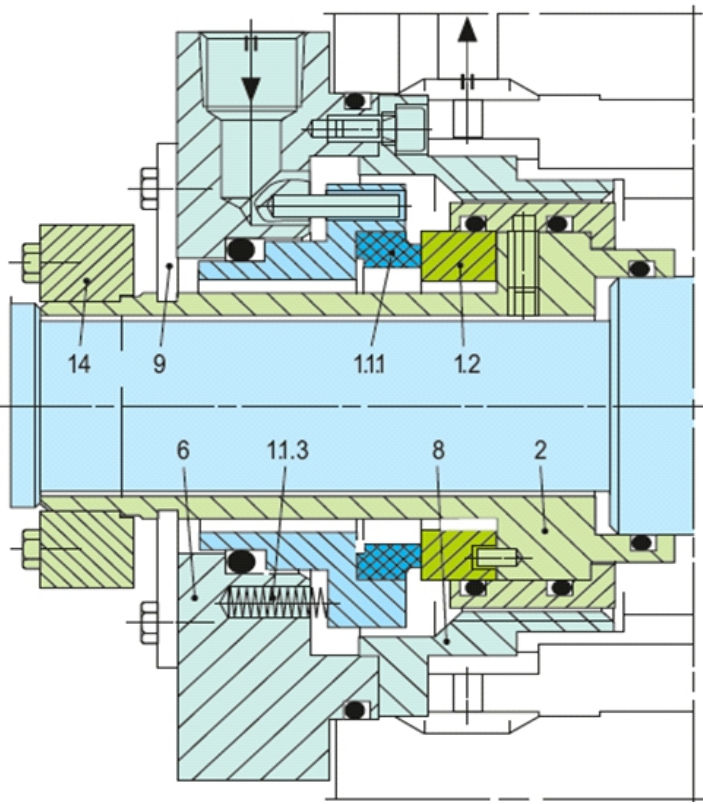
Sealmatic mechanical seals are designed for higher capacities and performance, improvements to the structure design for increasing the stress resistance so that they can adapt to more severe conditions in the operation of thermal power plants.

Operating Parameter for Boiler Feed Water Pump, Booster Pump & Condensate Pump								sealmatic®
Sr No	Seal Type & Size	Speed (RPM)	API Plans	Media	Temperature (°C)	Stuffing Box Pressure (kg/cm ²)	Suction Pressure (kg/cm ²)	Specific Gravity
1	91-SBPIA1/183-G911	6300	23,61	Boiler Feed Water	215°C	14.78 kg/cm ²	28.76 kg/cm ²	0.877
	91-SBPIA1/183-G912							
2	91-SBP400/145-G911	1500	23	Boiler Feed Water	190°C	15.29 kg/cm ²	15.29 kg/cm ²	0.877
	91-SBP400/145-G912							
3	91-B750N/100-G914	1485	11,13,61	Condensate	50°C	10 kg/cm ²	0.5 kg/cm ²	-

Sealmatic is pleased to announced that it has successfully delivered seal type SBP mechanical seal in BFW & Booster pumps, and type B750N for condensate pump, in order to meet the demanding operating conditions and stringent requirements as mentioned above, thus bringing consistent and cost-effective sealing method, operation and maintenance with a view to achieve highest safety standards.

Sealmatic Type SBP Mechanical Seal For BFW & Booster Pumps

Type SBF is a balanced mechanical seal and independent of direction of rotation, it provides robust construction with the shrink-fitted seal face, and employed with the pumping screw.



Performance Capabilities

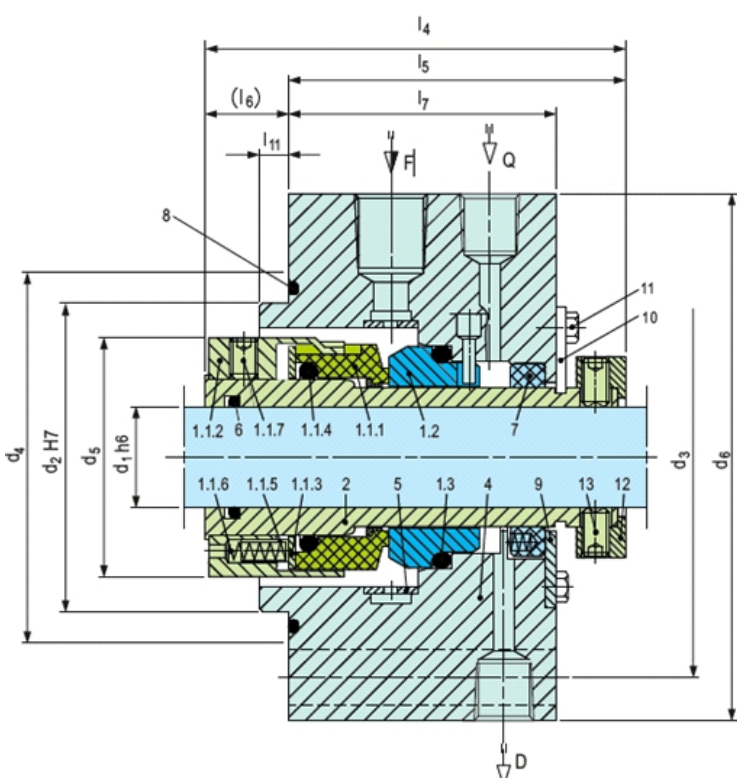
- Sizes: d1* = Upto 250 mm (Upto 10.000")
- Pressure: p1 = 50 bar (725 PSI)
- Temperature: t = 300 °C (572 °F)
- Speed = 60 m/s (197 ft/s)
- Permissible axial movement: ±3 mm

Technical Features

- Accommodates shaft deflections due to stationary design.
- Can be designed for individual pump application with corresponding connection parts to be adapted to the pump seal chamber.
- Optimum heat dissipation due to integrated pumping device available for increased efficiency in circulation and optimized seat design.
- Cartridge unit factory assembled for easy.
- Can operate under high sliding velocities and medium pressures.

Sealmatic Type B750N Mechanical Seal For Condensate Extraction Pump

Type B750N is a single and balanced mechanical seal with a cartridge construction which provides independent direction of rotation.



Performance Capabilities

- Sizes: d = Upto 110 mm (Upto 4.250") *
- Pressure: p1 = 40 bar (580 PSI)
- Temperature: t = -40 °C... +220 °C (-40 °F... +428 °F)
- Speed = 23 m/s (75 ft/s)
- Permissible axial movement: ± 2.0 ... 4.0 mm depending on diameter and installation situation.

Technical Features

- Designed for "Low - Emission" conforming to the American STLE limits
- Can handle extensive applications in various temperatures and pressures
- Versatile in design to fit various seal chambers
- Material of construction available in special metallurgy

