

Sealmatic Successfully Delivers Its Mechanical Seal Type SBF (DE & NDE) Single Mechanical Seal For 500MW Critical Thermal Power Plant

A critical thermal power plant is a significant power generation facility that produces electrical power. These power plants are crucial for the reliable and continuous supply of electrical power and are often designated as critical infrastructure. They differ from traditional coal power plants because the water running through it works as a critical fluid, meaning 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 critical thermal power plant, mechanical seals for boiler feed water pump are one of the most critical equipment employed. With newer technologies, increase 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. The material of the seal face is critical to ensure the compatibility with the pumped fluid and to withstand the operating conditions.

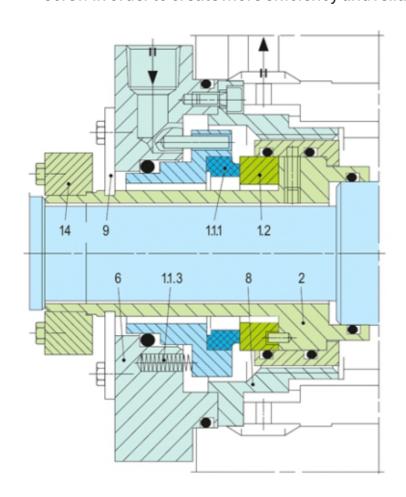
Sealing systems featuring maximum operational reliability, convenient maintenance and low leakage rates with necessary environmental protective measures are standard requirements in modern power stations. Sealmatic mechanical seals are designed for higher capacities and performance, improvements to the structure design for increasing stress resistance so they can adapt to more severe conditions in the operation of thermal power plants.

Operating Parameter of Type SBF Single Mechanical Seal For Boiler Feed Water Pump						sealmatic [®]
Sr No	Seal Type & Size	Speed (RPM)	API Plans	Media	Temperature (°C)	Stuffing Box Pressure (kg/cm2)
1	91-SBF300/162-G917 (DE)	6300	23	Boiler Feed Water	80°C	35 kg/cm²
2	91-SBF200/135-G912 (NDE)	6300	23	Boiler Feed Water	80°C	35 kg/cm²

Sealmatic is pleased to announced that it has successfully delivered type SBF single mechanical seal for Boiler Feed Water 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 SBF Mechanical Seal For Boiler Feed Water Pump

Type SBF is a balanced mechanical seal and independent of direction of rotation, it provides robust construction with the shrink-fitted seal face, and is employed with the pumping screw in order to create more efficiency and reliability.



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 installation, which reduces downtime
- Trouble-free long-term operation due to heavy duty single seat design with bandage
- Can operate under high sliding velocities and medium pressures.

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