



Sealmatic Successfully Installs Type SBFV Double Mechanical Seals On Injection Pumps At A Refinery Site

The processing of crude oil in refineries is a complex and multi-stage process in which crude oil is transformed into refined, high-quality end products or feed materials for petrochemical industry. Sealing technology for such diverse applications have to meet challenges in various respects; risk of insufficient lubrication and dry running, media with a diversity of physical properties, high and low temperature ranges and the handling of hazardous substances and all other conditions which need to be controlled with absolute reliability. With a comprehensive range of API-compliant quality seals and supply systems Sealmatic is playing a key role towards ensuring the reliability and safety of refinery processes.

Sealmatic, with its extensive range of API compliant mechanical seals and advanced supply systems, continues to play a pivotal role in enhancing the reliability and safety of refinery processes. Sealmatic is proud to announce the successful installation of its mechanical seal type SBFV double mechanical seals on injection pumps at a major refinery site, marking another milestone in its commitment to delivering innovative sealing solutions for demanding industrial applications as per the below mentioned operating parameters.

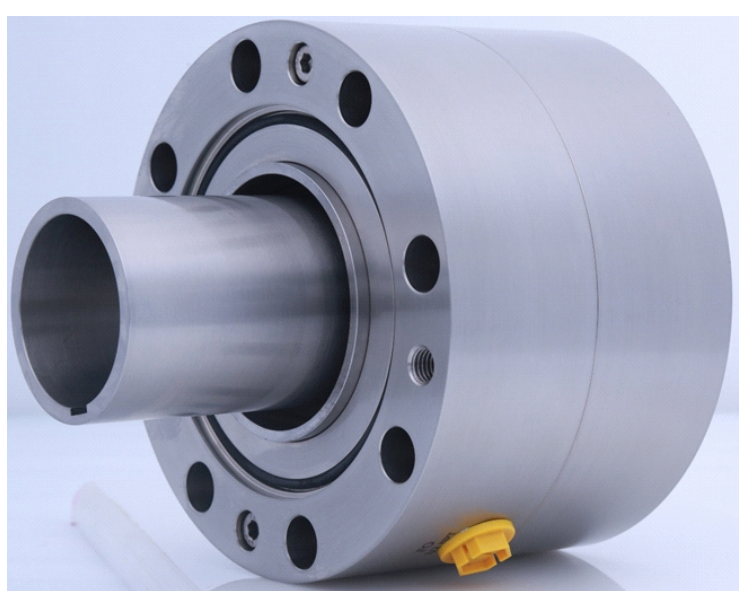
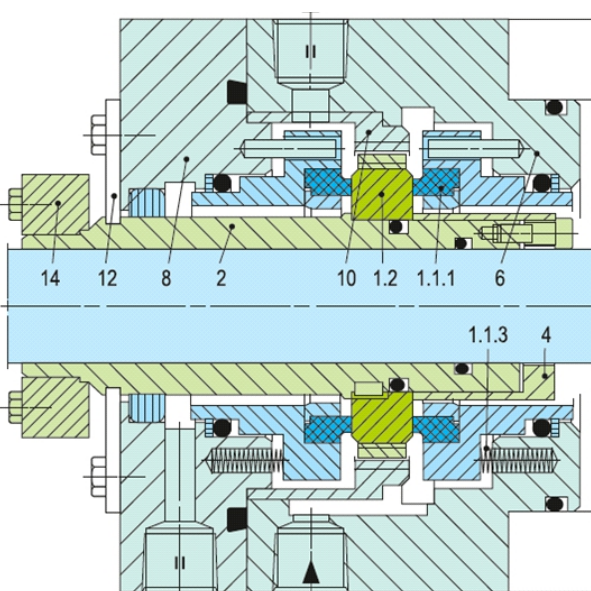
Operating Parameters Of Type SBFV Double Mechanical Seal									
Sr. No.	Equipment	Mechanical Seal Type	Seal Size	Temperature (°C)	Stuffing Box Pressure (kg/cm ²)	Suction Pressure (kg/cm ²)	RPM	API Plan	Viscosity
1	Injection Pump	91-SBFV-D/144-G911 (DE & NDE)	144 mm	60°C	14.37 kg/cm ²	9.83 kg/cm ²	4129	53B, 61	1.96 cP

Injection pumps play a pivotal role in modern refineries, particularly in regions where water management and environmental conservation are critical. The treated water is pressurized and reinjected using specialized pumps to meet the operational requirements. The pumps handle high pressure applications and ensure efficient transportation of treated water. Thus, ensuring reliable operation over extended periods, reducing downtime and maintenance costs.

The performance of Sealmatic type SBFV double mechanical seals in these pumps is a result of careful engineering and material selection. The mechanical seals are designed to operate under high sliding velocity, high pressure and temperature, ensuring the suitability for harsh environments often encountered in such applications. The mechanical seals are designed and manufactured as per API 682 standards.

Sealmatic Mechanical Seal Type SBFV Double Mechanical Seal

Type SBFV is API complaint balanced double mechanical seal having the configuration of 3CW – FF. Type SBFV can operate under high sliding velocities and high pressures and designed with robust construction with shrink-fitted seal face.



Technical Features:

- Accommodates shaft deflections due to stationary design
- Can be designed for individual pump application with corresponding connection parts to be adopted 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

Performance Capabilities:

- Shaft diameter: d1 = 40 ... 110 (250) mm (1.57" ... 4.33 (9.84)"
- Pressure: p1 = 42 (150) bar (609 (2,175) PSI)
- Temperature: t = -40 °C ... +176 (+200) °C (-40 °F ... +350 (+394) °F)
- Sliding velocity: vg = 23 (60) m/s (76 (197) ft/s)
- Axial movement: ±3.0 mm

27th December 2024

