



Sealmatic Successfully Installs & Commissions Type BR Heavy Duty Single Mechanical Seal In Alumina Refinery

Mumbai – August 06th 2024 – Sealmatic India Ltd (BSE Listed: 543782), a prominent player in a mechanical sealing technology, has successfully carried out an installation and commissioning of type BR single mechanical seals for a major alumina refinery.

Alumina refining is a crucial process in the production of aluminium, involving the extraction of alumina (aluminium oxide) from bauxite ore. The process involves several stages; including crushing, grinding, digestion, clarification, precipitation and calcination. One of the critical challenges in this process is managing the slurry, a mixture of bauxite ore and other abrasive materials, which requires robust and reliable sealing solutions to prevent leakages and ensure smooth operations.

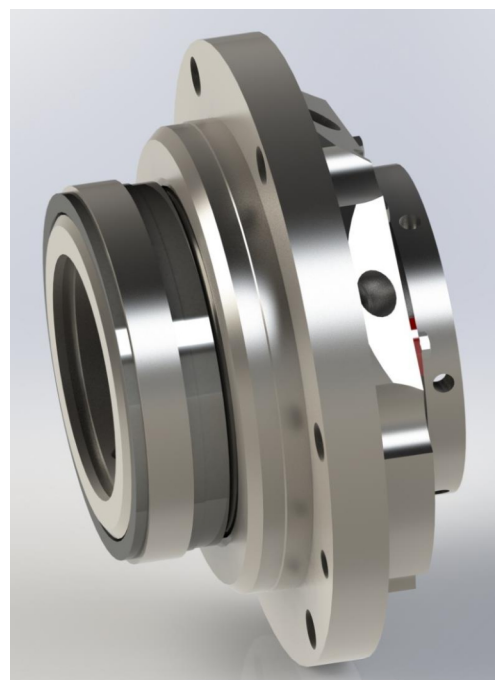
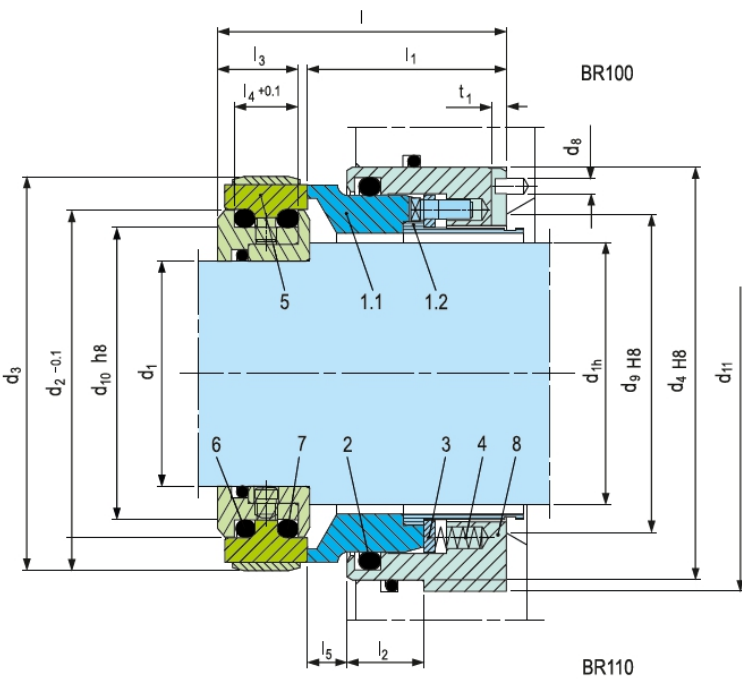
Slurry mechanical seals are essential components in the alumina refining process that are designed to handle abrasive and corrosive slurries, ensuring that the equipment operates efficiently and with minimal downtime. The BR single mechanical slurry seal, recently commissioned by Sealmatic, is specifically engineered for the demanding applications as mentioned below.

Operating Parameter Of Type BR Heavy Duty Mechanical Seal									sealmatic®
Sr. No	Plant	Mechanical Seal Type	Equipment	Stuffing Box Pressure (kg/cm ²)	RPM	Media	Temperature (°C)	API Plan	Viscosity
1	Alumina Plant	91-BR2S100/250-G911	Slurry Pump	7 kg/cm ²	900	Bauxite Slurry Liquor	101°C	62	2.2cP

The installing and commissioning of the BR single mechanical slurry seal at the alumina refinery highlights the company's capability to deliver cutting-edge solutions for challenging industrial applications.

Sealmatic Type BR Single Mechanical Seal

Type BR mechanical seal is a single and balanced cartridge seal majorly employed for slurry applications; it is a high performance seal designed to operate under the harsh conditions. The seat arrangement is designed behind the impeller and the design of the seal is rotary.



Performance Capabilities

- Sizes: dN = Upto 270mm (Upto 10.625")
- Pressure: p1*) = 16 Bar (230 PSI)
- Temperature: t= -20oC + 160oC (-4oF +320oF)
- Speed: 10 m/s (33 ft/s)

Technical Features:

- Accommodates shafts deflections due to stationary design
- Designed to handle media containing solids
- O-ring is dynamically loaded to prevent shaft damage
- Can operate under vacuum without locking the seat
- Pumping device available for increased efficiency in circulation
- Springs are product protected to avoid contamination

Typical Industrial Applications

- Water and waste water technology
- Mining Industry
- Dirty, abrasive and solids containing media
- Dredger pumps
- Oil and Gas Industry
- Oil sand extraction plants
- Power plant technology
- Pulp and paper industry
- Sewage water pumps
- Scrubbers in FGD plants.

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