

# BT Mechanical Seal

# Model BT992



The **BT 992** is a pump seal development of the highly successful, and technically advanced, NF900 dry gas seal installed in many hundreds of turbo compressor and blower applications.

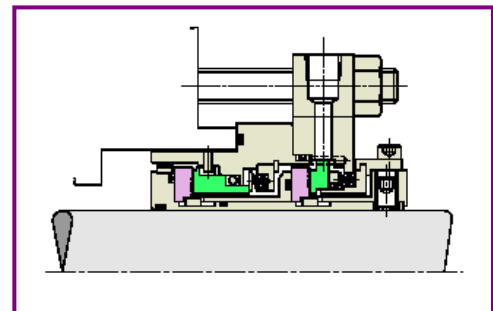
Process and chemical pumps in hazardous application conventionally use liquid lubricated, double or tandem seal arrangements to prevent liquid leakage or hazardous emissions.

These seal configurations are subject to rapid failure and leakage to atmosphere when liquid pressure, or circulation, is lost. Contamination of the sealant liquid over time is also a frequent problem.

The BT 992 is a complete answer to these failure modes and in addition only requires a relatively simple buffer gas injection system instead of large and complex liquid circulation systems.

## Specific Features of BT992

- Zero leakage to atmosphere, ideal for hazardous media.
- Non-contacting design reduces power consumption to a small fraction of that used by liquid seals.
- The internal, or product side, seal contains the media at the seal outside diameter. No centrifugal effects to drive contaminants across the seal faces.
- Separate labyrinth over inner rotating seat to minimize contaminants in seal face area.
- Product side seal equipped with SIC faces and seats for durability and to resist abrasive particles in the seal area.
- Minimal usage of buffer gas.
- Double balanced. In the event of losing buffer gas pressure the internal seal will not open but function as a conventional liquid lubricated seal until corrective action is taken to restore buffer gas pressure.
- Bi-directional. Eliminates possibility of mis-fitting and will operate normally in either direction.



### ❖ Face Material

Inner side: SIC x SIC

Outer side: SIC x Carbon

### ❖ Metal Components: SUS 316

### ❖ O-RING: FKM

### ❖ Performance Capabilities

**Pressure** : Vacuum to 1.6MPa (16kgf/cm<sup>2</sup>G)

**Temperature** : -20°C to 160°C (-4°F to 320°F)

**Shaft Speed** : to 20m/s

**Viscosity** : to 300mPa·s (300cp)

**Slurry Content** : to 20 wt%