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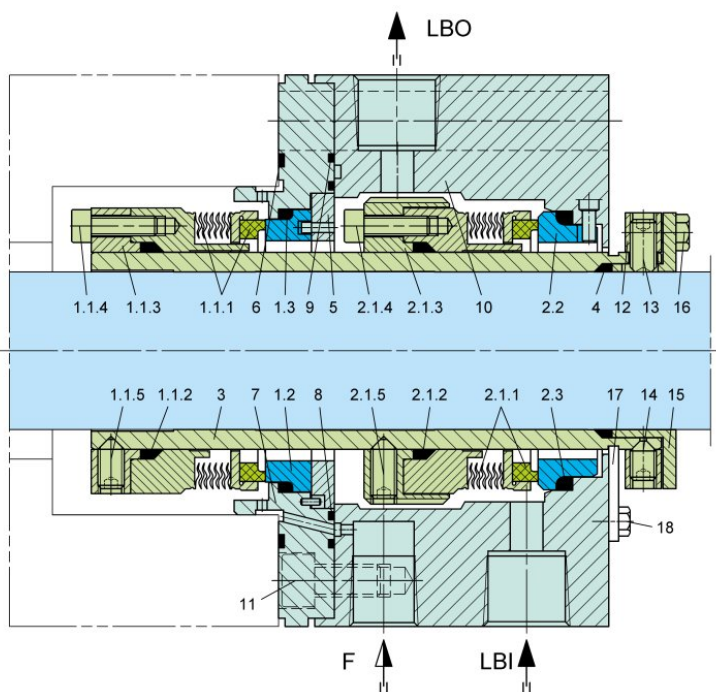
Sealmatic Successfully Commission's Mechanical Seals For DOWTHERM Heat Transfer Fluid At:

Reliance Hazira PE - II HDPE Plant

DOWTHERM is the most thermally stable synthetic organic heat transfer fluid, designed for high temperature heat transfer applications up to 400°C (750°F) as well as to collect, transport and store heat in CSP systems. This fluid can operate in either liquid or vapour phase.

Reliance commissioned Sealmatic to develop and deliver a robust mechanical seal for Dowtherm application with temperature ranging from 227 degree celsius to 350 degree celsius for KSB Netherlands Pump model HPKY 100/315.

Sealmatic has delivered mechanical seals for many pumps in service with DOWTHERM heat transfer fluid. Sealmatic mechanical seals have a wide acceptance for service with DOWTHERM fluid because of their superior performance. Sealmatic experience indicates that the metal bellows seal is preferred over other types. This is especially important for liquid service in poorly ventilated areas because of the distinctive odor of the media. Major causes of poor seal performance include improper installation, excessive temperature at the faces, face distortion, and system contamination. The design of the pump and of the mechanical seal is important. The pump should have a water-cooled stuffing box, and the seal should have the proper face surfaces and secondary seals to withstand system operating temperatures. It is also recommended that a small stream of fluid from the discharge of the pump be filtered and then put into the stuffing box at the seal surfaces to flush any abrasive particles away from the seal. This side stream is often cooled to give additional cooling at the seal face.



Performance Capabilities

- Shaft diameter: $d_1 = 20 \dots 110 \text{ mm}$ (0.79" ... 4.33")
- Pressure: $p = \text{vacuum} \dots 20 \text{ bar}$ (290 PSI)
- Temperature: $t = -40 \text{ }^\circ\text{C} \dots +200 \text{ }^\circ\text{C}$ (-40 °F ... +392 °F)
- Sliding velocity: $v_g \dots 23 \text{ m/s}$ (75 ft/s)

