

WE950

WE950 API PLAN 53B
WATER-COOLED
HIGH-PRESSURE
BARRIER LIQUID SYSTEM



PRODUCT FEATURES

- The product is composed of bladder accumulator + cooler + measuring control parts + pipeline system; All components are integrated into the bracket for compact construction and easy field installation.
- The cooler can be water cooled, or air cooled when there is no cooling water supply outdoors.
- The product is equipped with a manual refueling pump, which can be more convenient before the operation of the equipment and exhaust, but also in the operation of the equipment, without stopping the case, real-time manual refueling and pressure.
- Optional all kinds of instruments and meters, such as thermometer, pressure switch, liquid level switch, pressure transmitter, liquid level transmitter, etc. Can realize the scene alarm, also can transmit the data to the PLC control panel, better monitor the operation of the mechanical seal.

PRODUCT APPLICATION

1. WE series gas-free barrier liquid system is used for the double seals of arrangement 3 seal, that is, the pressure of the barrier fluid is higher than the maximum pressure of the seal chamber, and the pressure of the barrier fluid is realized by the bladder accumulator.
2. The barrier system of this scheme is gas-free system, which uses a bladder-type accumulator to prevent contact between the pressurization gas and the barrier liquid, and allows for high-pressure operation.
3. Piping Plan 53B is usually chosen over Piping Plan 52 for dirty, abrasive, or polymerizing products that would either damage the seal faces or cause problems with the buffer liquid system if Piping Plan 52 were used.
4. The clean barrier liquid provides lubrication to the seal faces, but the barrier liquid that passes across the inner seal faces will enter the pumped process stream. Therefore, the process liquid shall be compatible with the barrier liquid and be able to tolerate a small amount of contamination from the barrier liquid.

ITEM	SERVICE
RD	Cooler Drain
BD	Barrier Fluid Drain
AD	Accumulator Drain
LBI	Liquid Barrier In (From Seal)
LBO	Liquid Barrier Out (To Seal)
WI	Cooling Water Inlet
WO	Cooling Water Outlet
VE	Vent
MU	Make-UP liquid
BC	Bladder charge connection

SYSTEM PARAMETERS

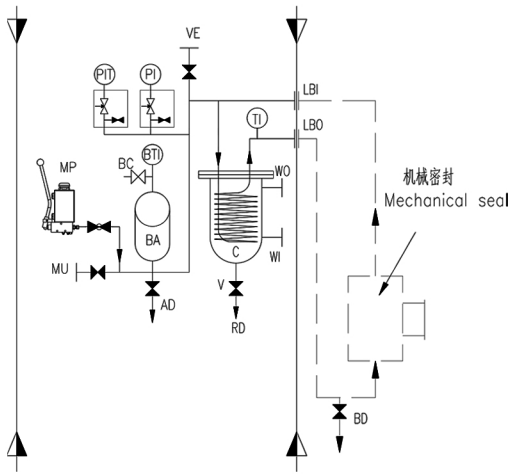
Temperature	-20 ° C ~ + 100 ° C
Pressure	80bar
Volume (heat exchange area)	20L(0.4m³), 32L(0.6m³)

SYSTEM MATERIALS

Cylinder housing	Carbon steel / 304SS
Cylinder bladder	NBR
Heat exchanger	304SS / 316L
Piping components	304SS / 316L
Manual refilling pump	304SS

APPLICABLE INDUSTRIES

- Process pumps
- Arduous applications demanding pressurized barrier fluid
- Mixer and agitators
- Wide range of applications requiring high reliability across oil and gas, chemical and general Industry, and high-purity and organics
- High abrasives content
- Slurries



ITEM	SERVICE
C	Cooler
BA	Accumulator
V	Valve
PI	Pressure Gauge
PIT	Pressure Transmitter
TI	Temperature Gauge
TIT	Temp. transmitter
BTI	Bladder Temp. Gauge
MP	Manual Pump