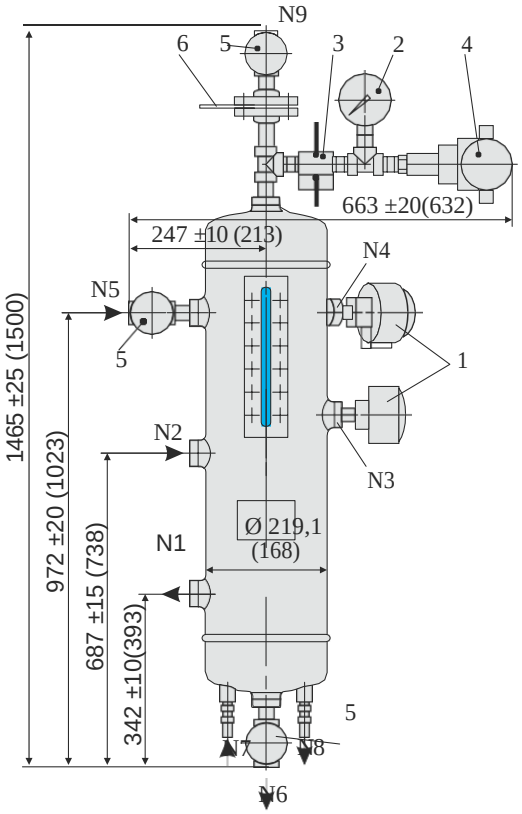
SBF6000



Functional Description

The SBFS system performs all the basic functions of a buffer/barrier system for the operation of double seals:

- to pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated by thermosiphon effect
- or forced circulation system
- to cool the seal
- to selectively absorb product leakage and prevent dry
- running (tandem arrangement) Use compressed air or nitrogen for pressurization; pressurization is monitored by a pressure switch.

The incorporated level switch issues a signal whenever the level of buffer/barrier fluid is too low.

Typical Industrial Applications

Refining technology Oil and gas industry
Chemical industry
Petrochemical industry

Thermosiphon System (API Plan 52)

Item	Description
1	Level switch
2	Manometer
3	Manifold
4	Pressure switch
5	Shut-off valve
6	Orifice

Description

The MAK-TECH SEALS Thermosiphon systems of the SBF6000 range meet all the requirements to supply mechanical seals in accordance with the API 682 guidelines. The vessels are equipped with all essential connections for fitting additional components. The range is available in two standard vessel sizes (shown: SBF6000) with dished heads; a version which can be dismantled is also available as an option. The modular system allows the SBF6000 vessels to be combined with a wide range of system components such as, level switch/transmitter, pressure switch/transmitter, base frame, etc. Circulation in accordance with API 682 / ISO 21049: Plan 52, Plan 53A

Technical Features

A version which can be dismantled is also available as an option: for optimum and simple cleaning of the vessel interior

Modular system: combination with a wide range of system components possible

Operating limits up to 50 bar / 200°C: suitable for a wide range of demanding operating conditions

Robust design with weld-pad type sight-glass for optimum visual level monitoring

Standards

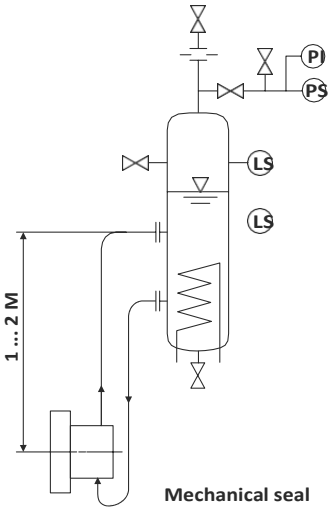
PED 97/23 EC
ASME VIII, Div.

Thermosiphon System (API Plan 52)

Item	Description
N1	to the mechanical seal
N2	from the mechanical seal
N3	Level switch
N4	Level switch
N5	Filling connection
	Bottom
N6	Drain
N7	Cooling water IN
N8	Cooling water OUT
	Cover
N9	Connection to flare

Dimensions for BFS6002 / BFS6003 values in brackets for BFS6000 / BFS6001

Installation, Details, Options



Operating and installation diagram for a SBF6000 system.
The SBF vessel must always be installed higher than the mechanical seal. The buffer/barrier fluid flows via the return pipe into the vessel and is cooled. The exchange of fluid takes place by the thermosiphon principle or by forced circulation, e.g. with a pumping screw. Connection pipes to the seal should be designed with as little resistance as possible.