

### Product Description

Circulation in accordance with API 682 / ISO 21049: Plan 52, Plan 53A

The BFS6000 range of vessels range conforms to API 682 guidelines. The vessels are equipped with all essential connections for fitting additional components. The BFS 6000 system is available in standard sizes with flat ends, sight-glasses for level monitoring and with or without cooling coil. BFS 6000 system is equipped as a standard with all the necessary system connections and brackets.

### Technical Features

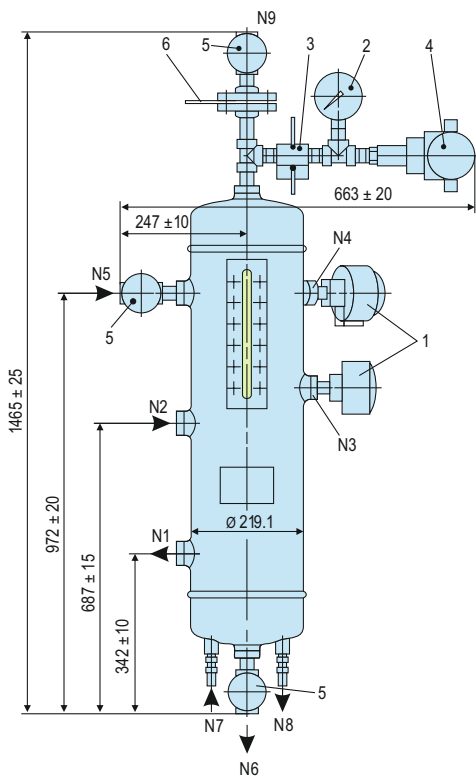
1. For optimum and simple cleaning of the vessel interior, a design variant is available which can be dismantled
2. Modular design combination available with a wide variety of system components and instruments selection possible, such as level switch, circulation pump, hand refill pump, thermometer, base frame etc.
3. Construction of the BFS 6000 is designed for demanding operating conditions up to 50 bar / 200°C
4. Optimum visual is achieved for level monitoring through a robust design with weld-pad type sight glass

### Typical Industrial Applications

Refining technology  
Oil and gas industry  
Chemical industry  
Petrochemical industry

### Standards

PED 2014/68/EU  
ASME VIII, Div. 1



### Thermosiphon System (API Plan 52)

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

### Functional Description

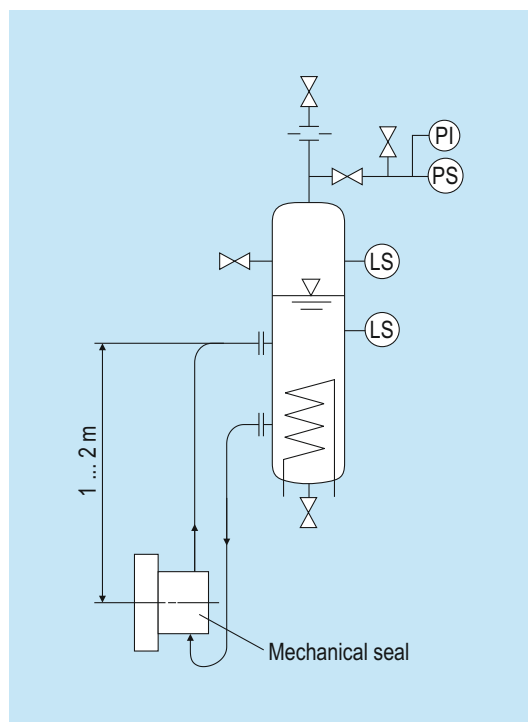
The BFS system performs all the basic functions of a buffer/barrier system for the operation of double seals:

- 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.

### Installation, Details, Options



Operating and installation diagram for a BFS6000 system.

The BFS 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.

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