



Product Description

Circulation in accordance with API 682 / ISO 21049: Plan 53B

Pressurised barrier system (closed circuit) is employed for applications in sealing systems with operating parameters of high pressures and/or for hazardous/ environmentally harmful processes. The BFS (Plan 53B) range is available with a pressure accumulator, cooler (finned tube or water or air cooler with fan) with a wide range of instruments.

Technical Features

1. Design construction available with finned tube, water or air coolers with fan
2. Barrier pressure is created without any need for connection to a nitrogen supply
3. Modular design combination available with a wide variety of system components and instruments selection possible
4. Pressurisation is achieved through a pre-loaded bladder accumulator
5. Nitrogen cannot get into the barrier medium or process medium, because it is separated from the barrier medium by membranes in the accumulator

Typical Industrial Applications

Chemical industry
Oil and gas industry
Petrochemical industry
Refining technology

Standards

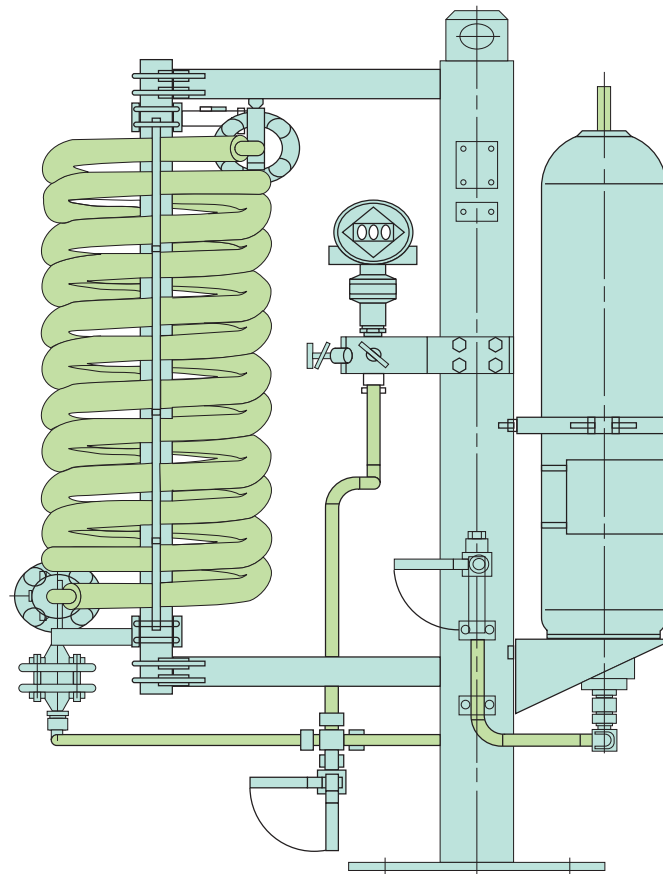
PED 2014/68/EU (Design and production in accordance with EU Pressure Equipment Directive)
ASME VIII, Div. 1 (Design, calculation and production)

Functional Description

The BFS is designed to perform the following functions of a barrier system:

- to pressurize the barrier chamber
- leakage compensation
- to cool the seal

Pressurization (> process pressure) prevents the process medium from getting into the barrier circuit or the atmosphere. Pressurization is supplied by a pressure accumulator which is pre-loaded with nitrogen. Circulation in the barrier circuit takes place by the thermosiphon principle or by forced circulation, e.g. with a pumping screw.



Installation, Details, Options

Operating and installation diagram for a BFS (Plan 53B).

- A From mechanical seal
- B To mechanical seal
- C Fill
- F Drain
- G Vent
- H N2 Precharge

