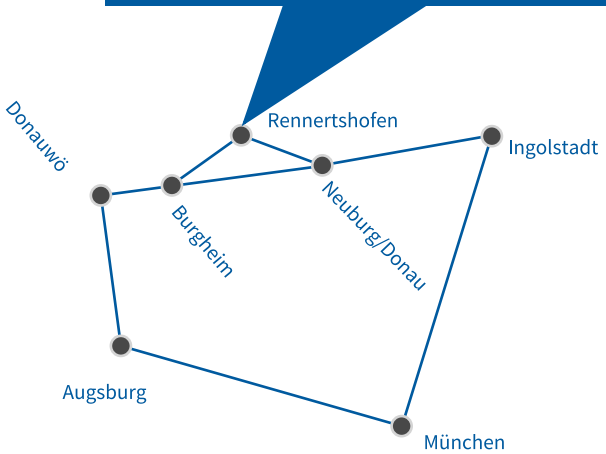
SIMON

METALLVERARBEITUNGS GMBH

English

INHALT

DIRECTIONS & CONTACT



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QUENCHSYSTEM
QSS-2000

SIMON METALLVERARBEITUNGS GMBH

The QSS-2000 quench systems are used to supply single-action or tandem mechanical seals. They are used to store the liquid locally. The fluid exchange can be implemented through natural circulation by means of the thermosiphon effect or through forced circulation by means of a circulating pump or pumping screw. The MIN/MAX fill level can be monitored via two sight glasses or two fill level sensors. There is a lug on the stainless steel container for fastening.

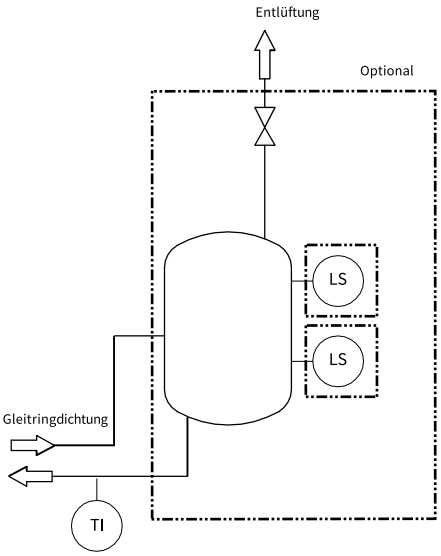
based on : API 682/ ISO 21049 Plan 51

Rec. applications

- Chemical industry
- Food and beverage industry
- Pharmaceutical industry

Basic tasks QSS

- absorb and monitor the leakage rate
- prevent icing
- protect against dry running
- stabilize the lubricating film
- exclude air from the media in order to prevent a reaction with the air



Standard:

- stainless steel vessel
- filling strainer

Optional

- level switch
- measurement and control technology
- pumps
- valves

QSS-2000-X

Volume	equipment
02 - 2L	_ - standard
04 - 4L	L - level switch
06 - 6L	EX - equipment with ATEX

Technical spec.:

Pressure : up to 10 bar

temperature: -10°C / 200°C

material: 1.4571 / 1.4301

QUENCH SYSTEM
QSS-3000

SIMON METALLVERARBEITUNGS GMBH

The QSS-3000 quench systems are used to supply single-action or tandem mechanical seals. They are used to store the liquid locally. The fluid exchange can be implemented through natural circulation by means of the thermosiphon effect or through forced circulation by means of a circulating pump or pumping screw. The MIN/MAX fill level can be monitored via a sight glass. There is a lug on the stainless steel container for fastening.

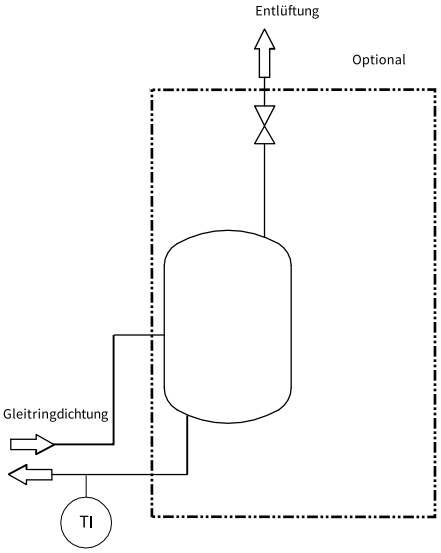
based on: API 682/ ISO 21049 Plan 51

Rec. applications

- Chemical industry
- Food and beverage industry
- Pharmaceutical industry

Basic tasks QSS

- absorb and monitor the leakage rate
- prevent icing
- protect against dry running
- stabilize the lubricating film
- exclude air from the media in order to prevent a reaction with the air



Standard:

- stainless steel vessel

Optional

- measurement and control technology
- fillunit
- pumps

QSS-3000

volume

02 - 2L

04 - 4L

06 - 6L

08 - 8L

Technical spec.:

Pressure : up to 10 bar

temperature: -10°C / 200°C

material: 1.4571 / 1.4301

QUENCH SYSTEM
QSS-5000

The QSS-5000 quench systems are used to supply single-action or tandem mechanical seals and can be equipped with various sensors. They are used to store the liquid locally. The fluid exchange can be implemented through natural circulation by means of the thermosiphon effect or through forced circulation by means of a circulating pump or pumping screw. The MIN/MAX fill level can be monitored via a sight glass and a fill level sensor. There is a lug on the stainless steel container for fastening.

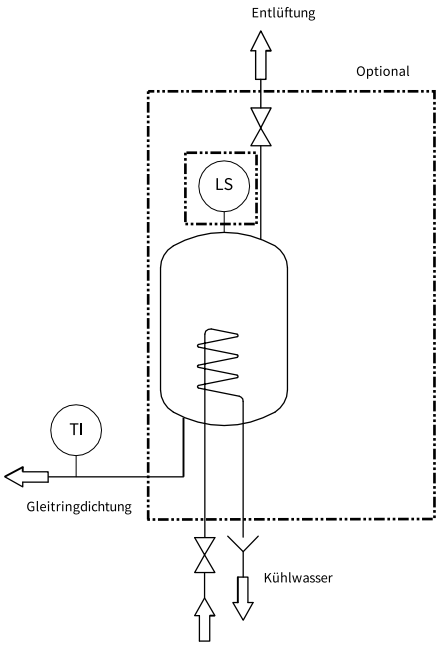
based on: API 682/ ISO 21049 Plan 51

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology

Basic tasks QSS

- absorb and monitor the leakage rate
- prevent icing
- protect against dry running
- stabilize the lubricating film
- exclude air from the media in order to prevent a reaction with the air



Standard:

- pressure gauge
- valve

Optional

- level switch
- measurement and control technology
- Fill unit
- pumps
- Temperature unit

QSS-5000-X

volume

08 - 8L

12 - 12L

equipment

_ - standard

L - level switch

EX - equipment with ATEX

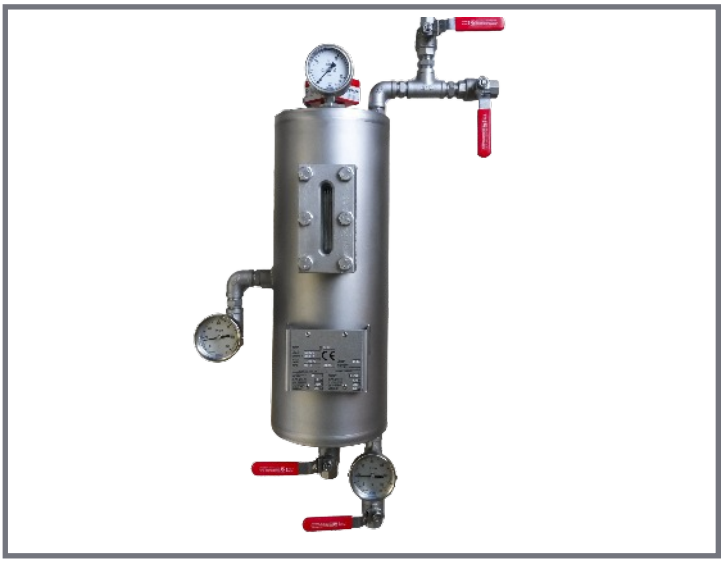
Technical spec.:

Pressure : up to 10 bar

temperature: -10°C / 200°C

material: 1.4571 / 1.4301

THERMOSIPHON SYSTEM
TSS-1000



With the TSS-1000 thermosiphon system, both double and tandem mechanical seals can be supplied in a wide range of applications. The sealing pressure containers are available in different sizes with flat bases, sight glasses for fill level monitoring and with or without cooling coil. All process connections and brackets are provided on the container as standard. All process connections can be implemented as threads with/without sealing surfaces.

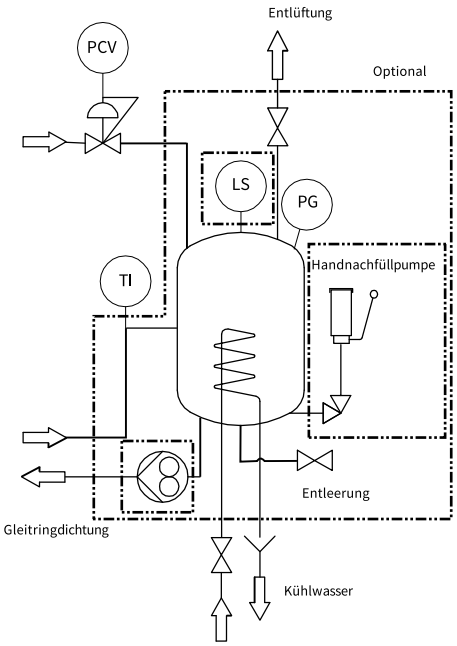
based on: API 682/ ISO 21049: Plan 52 / 53A

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology
- Pharmaceutical industry

Basic tasks TSS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running



Standard:

- pressure gauge
- safety valve
- valve

Optional

- Level switch
- measurement and control technology
- refill pump
- pressure regulator
- pumps

TSS-1000-X

volume

08 - 8L

12 - 12L

equipment

_ - standard

L - level switch

EX - equipment with ATEX

Technical spec.:

Pressure : up to 16 bar

temperature: -10°C / 200°C

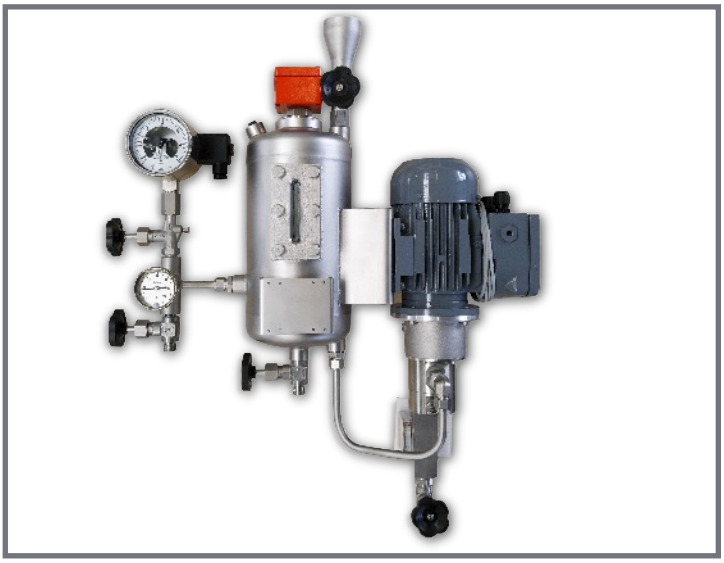
material: 1.4571 / brass

AD-2000

ASME Sektion VIII Division 1

THERMOSIPHON SYSTEM
TSS-2000

SIMON METALLVERARBEITUNGS GMBH



With the TSS-2000 thermosiphon system, both double and tandem mechanical seals can be supplied in a wide range of applications. The sealing pressure containers are available in different sizes with dished bases, sight glasses for fill level monitoring and with or without cooling coil. All process connections and brackets are provided on the container as standard. All process connections can be implemented as flanges or sockets with/without sealing surfaces.

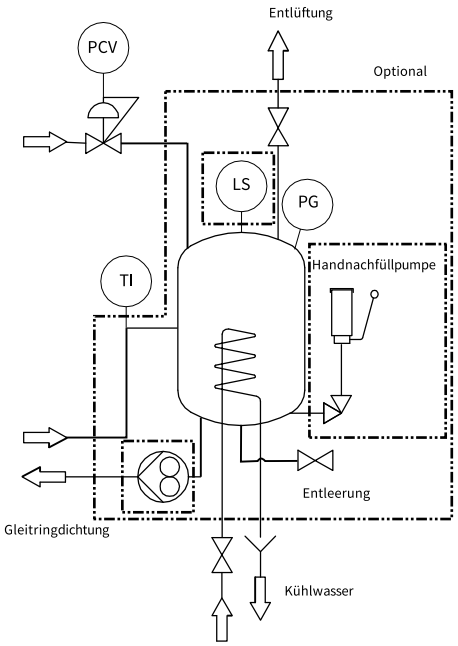
based on: API 682/ ISO 21049: Plan 52 / 53A

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry

Basic tasks TSS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running



Standard:

- pressure gauge
- safety valve
- pumps
- valves

Optional

- Level switch
- measurement and control technology
- refill pump
- pressure regulator

TSS-2000-X

volume	type	equipment
03 - 3L		_ - Standardausrüstung
06 - 6L		E - Edelstahlzubehör
08 - 8L		EX - Zubehör mit ATEX
09 - 9L		A - Design Code ASME
12 - 12L		

Technical spec.:

Pressure : up to 100 bar

temperature: -10°C / 200°C

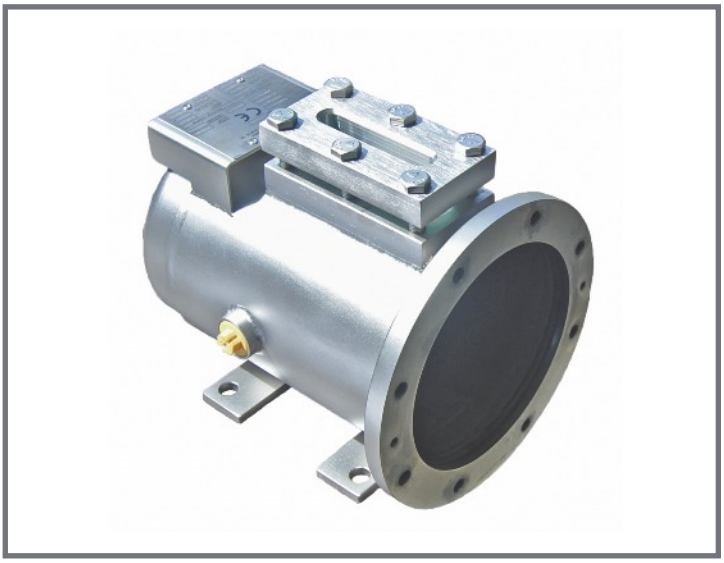
material: 1.4571 / brass

AD-2000

ASME Sektion VIII Division 1

THERMOSIPHON SYSTEM
TSS-3000

SIMON METALLVERARBEITUNGS GMBH



The TSS-3000 thermosiphon systems have a removable cover allowing them to be easily cleaned. Both double and tandem mechanical seals can be supplied with the system in a wide range of applications. The sealing pressure containers are available in different sizes with dished and removable bases, sight glasses and with or without cooling coil. All process connections and brackets are provided on the container as standard. All process connections can be implemented as flanges or sockets with/without sealing surfaces.

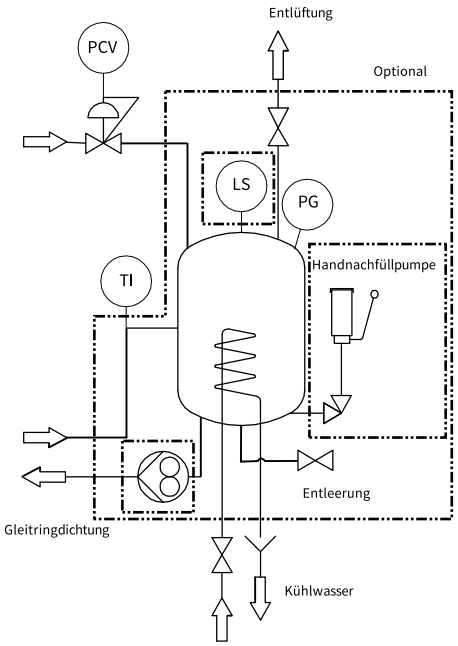
based on: API 682/ ISO 21049: Plan 52 / 53A

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry

Basic tasks TSS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running



Standard:

- removable bases
- pressure gauge
- safety valve
- pumps
- valves

Optional

- measurement and control technology
- refill pump
- pressure regulator

TSS-3000-X

volume	equipment
03 - 3L	_ - standard
06 - 6L	E- equipment in stainless steel
08 - 8L	EX - equipment with ATEX
09 - 9L	A - Design Code ASME
12 - 12L	

Technical spec.:

Pressure : up to 16 bar

temperature: -10°C / 200°C

material: 1.4571

AD-2000

ASME Sektion VIII Division 1

THERMOSIPHON SYSTEM
TSS-6000

The TSS-6000 thermosiphon systems are designed in accordance with API682 and have the facility to have level switches installed. Both double and tandem mechanical seals can be supplied with the system in a wide range of applications. The sealing pressure containers are available in different sizes with dished and removable bases, sight glasses and with or without cooling coil. All process connections and brackets are provided on the container as standard. All process connections can be implemented as flanges or sockets with/without sealing surfaces.

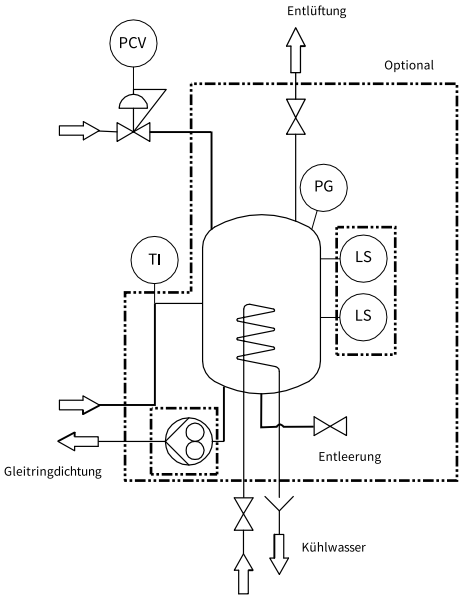
based on: API 682/ ISO 21049: Plan 52 / 53A

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry

Basic tasks TSS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running



Standard:

- pressure gauge
- Safety valve
- pumps
- valves

Optional

- measurement and control technology
- refill pump
- pressure regulator

TSS-6000-X

volume	equipment
12 - 12L	_ - standard
20- 20L	E- equipment in stainless steel
24 - 24L	EX - equipment with ATEX
28 - 28L	A - Design Code ASME
	F- flange

Technical spec.:

Pressure : up to 25 bar (100 bar)

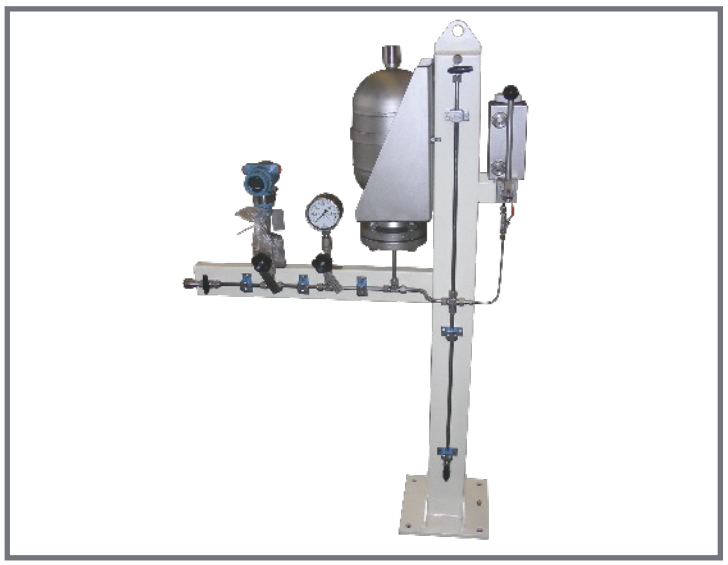
Temperature: -10°C / 200°C

Material: 1.4571

AD-2000

ASME Sektion VIII Division 1

LOOPSYSTEM
SDS-1000



Loop systems are used with media that are prone to crystallisation as well as with abrasive, toxic and environmentally damaging media, with high pressures and if leakages are to be minimised.

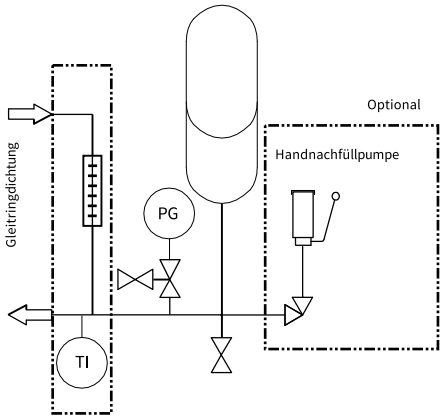
API 682/ ISO 21049: Plan 53B

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology

Basic tasks SDS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running



Standard:

- bladder accumulator
- pressure gauge
- pumps
- valves

Optional

- heat exchanger
- measurement and control technology
- refill pump

SDS-1000-X

volume	type	equipment
10 - 10L	1 - C-Stahl/NBR	_ - standard
15 - 15L	2 - C-Stahl/EPDM	E- equipment in stainless steel
20 - 20L	3 - 316 /NBR	EX - equipment with ATEX
35 - 35L	4 - Duplex / NBR	A - Design Code ASME
55 - 55L		

Technical spec.:

Pressure : up to 300 bar

temperature: -10°C / 120°C

material: 1.4571 / Carbon steel

AD-2000

ASME Sektion VIII Division 1

BARRIER SYSTEM SAS

Pressure sealing units carry out all of the tasks of a sealing system required to operate double seals: Pressurisation, circulation and cooling of the sealing medium as well as leakage compensation.

The systems are manufactured according to requirements of the customer.

based on: API 682/ ISO 21049: Plan 52 / 53A

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology

Standard:

- pressure gauge
- Safety valve
- pumps
- valves

Basic tasks SAS

- pressurize the buffer chamber
- leakage compensation
- buffer/barrier fluid is circulated
- cool the seal
- selectively absorb product leakage
- prevent dry running

Optional

- Level switch
- measurement and control technology
- pressure regulator

The systems are manufactured according to requirements of the customer.

Feel free to contact us .

We are happy to help!

Technical spec.:

Pressure : up to 100 bar

temperature: -10°C / 200°C

material: 1.4571 / Carbon steel

AD-2000

ASME Sektion VIII Division 1

WATERSAFE WSS

The water management systems provide a cost-effective opportunity to reduce the fresh water and waste water quantities and thus the associated costs. The optimum flow for the mechanical seal can be set with a ball valve. Various sensors and filters can be incorporated upstream and downstream of the control unit.

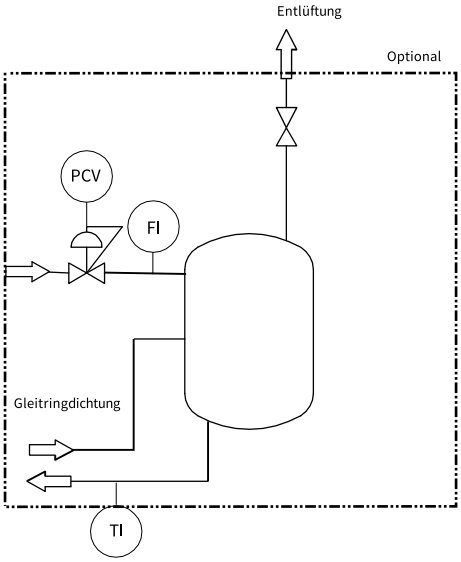
based on: API 682/ ISO 21049: Plan Plan 32 /62

Rec. applications

- Pulp and paper industry
- Food and beverage industry
- Water and waste water technology
- Chemical industry
- Process industry

Basic tasks WSS

- leakage compensation
- cool the seal
- prevent dry running



Standard:

- pressure gauge
- valves
- flow indicator
- pressure regulator

Optional

- measurement and control technology
- flush system

WSS-1000-X

Volume

12 - 12L

equipment

_ - standard

E- equipment in stainless steel

EX - equipment with ATEX

A - Design Code ASME

Technical spec.:

Pressure : up to 10 bar

temperature: -10°C / 200°C

material: 1.4571 / brass

AD-2000

ASME Sektion VIII Division 1

MULTI-CONTAINER MFS

The MFS multifunction container can be used as a quench container for simple applications but can also be used as a leakage collection system per Plan 65. Both variants are possible depending on the use of the connections. In addition, the container can also be equipped with fill level sensors.

based on: API 682/ ISO 21049: Plan 51 / 65

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology

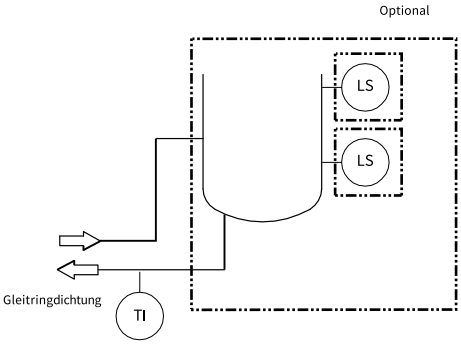
Basic tasks MFS

- leakage compensation

or

- Targeted recording of product leakage

Plan 51



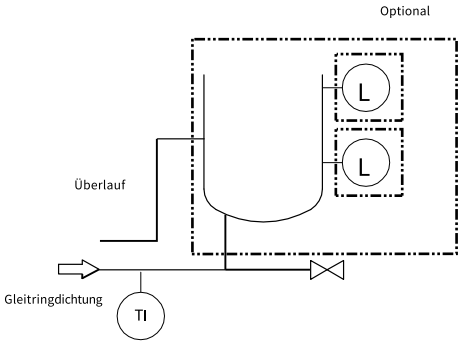
Standard:

- removable cap
- right glass

Optional

- Level switch

Plan 65



MFS-1000-X

Volume	equipment
03 - 3L	_ - standard
04 - 4L	E- equipment in stainless steel
06 - 6L	EX - equipment with ATEX

Technical spec.:

Pressure : unpressurized

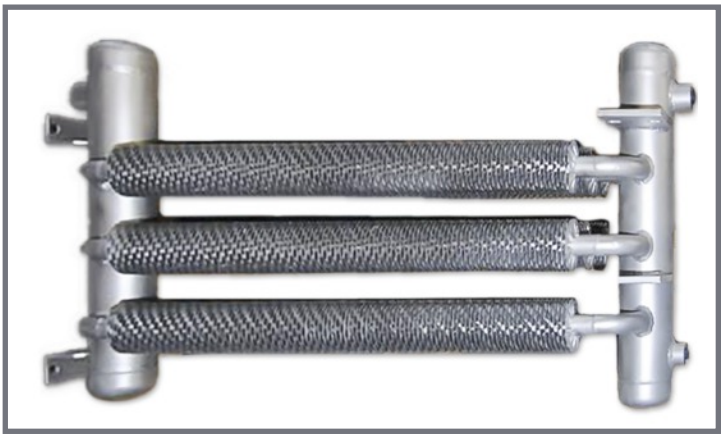
temperature: -10°C / 200°C

material: 1.4571 / Carbon steel

AD-2000

ASME Sektion VIII Division 1

HEAT EXCHANGER LWS



Heat exchangers are used for cooling sealing liquids in sealing circuits. The heat exchangers are designed as tube bundle heat exchangers. Cool air flowing around the finned tubes is used as the cooling medium. They can be made in a spiral or in a rack (as shown).

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -196 ... +350 °C
- **pressure:** P = Vakuum .. 100 bar
- **power**: 0,5kW / 1kW / 1,5kW / 3kW / 9kW
- Wide variety of different process connections and materials
- Optional with fan

HEAT EXCHANGER RWS

RWS series heat exchangers are used for cooling sealing liquids in sealing circuits. The heat exchangers are designed as tube bundle heat exchangers. Cool water flowing around the internal tubes is used as the cooling medium.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Refining technology
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -196 ... +200 °C
- **pressure:** P = Vakuum … 100 bar
- **power**: 0,5kW / 1kW / 1,5kW / 3kW / 9kW
- Wide variety of different process connections and materials

REFILL PUMP NPS

The manual refill pump is used for topping up the sealing fluid manually during operation in the event of a leak. It is mounted directly onto the container with a bracket.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry
- Water and waste water technology

Technical spec.:

- **Max. pressure:** 100 bar
- **temperature:** 0 - 50°C
- **medien:** Water, oil and glycol based fluids, media suitable for the material
- **lift capacity:** 3 cm^3 capacity
- **material:** PTFE, FPM ,1.4571 ,1.4301
- **volumen:** 1,5 Liter

LEVEL SWITCH LSS

Level switches are used to detect fill level limit conditions. Their operation is independent of foam formation, pressure and temperature and they are suitable for almost any liquid medium. The switch process is contactless and requires no auxiliary energy. ATEX versions are also possible.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pulp and paper industry
- Food and beverage i
- Water and waste water technology

Technical spec.:

- **temperature**: T = -196 ... +350 °C
- **pressure :** P = Vakuum … 40 bar
- **min density:** ρ ≥300 kg/m^3
- Wide variety of different electrical connections, process connections and materials
- Explosion proof available

TEMPERATURE GAUGE UNIT TMS

Temperature measurement unit for direct mounting in the return line. For gaseous and liquid, aggressive, non high viscosity and non-crystallising media, also in aggressive environments.

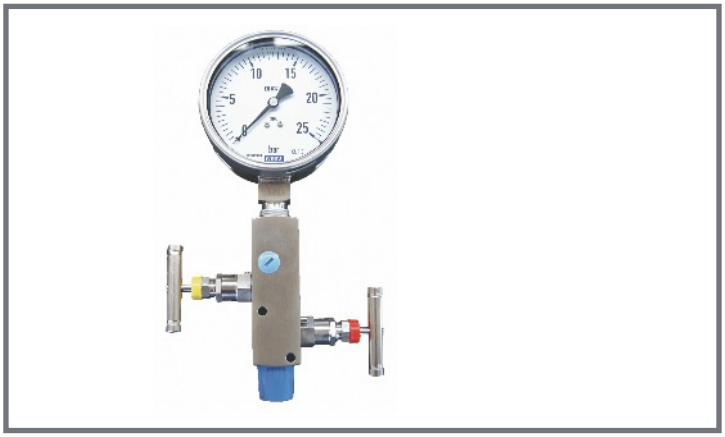
Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pulp and paper industry
- Food and beverage industry
- Pharmaceutical industry
- Water and waste water technology

Technical spec.:

- **temperature**: T = -40 ... +200 °C
- **pressure:** P = Vakuum … 60 bar
- Wide variety of different electrical connections, process connections and materials
- Explosion proof available

PRESSURE GAUGE UNIT MMS



Pressure measurement unit for direct mounting on the containers. For gaseous and liquid, aggressive, non high viscosity and non-crystallising media, also in aggressive environments.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -40 ... +200 °C
- **pressure:** P = Vakuum … 100 bar
- Wide variety of different electrical connections, process connections and materials
- Explosion proof available

CYCLONE SEPARATOR ZAS

The cyclonic separator is incorporated to separate out particles in the supply line. For liquid, aggressive and non high viscosity media, also in aggressive environments.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -40 ... +200 °C
- **pressure:** P = Vakuum … 100 bar
- Wide variety of different process connections and materials

MAGNETIC FILTER MAS

The magnetic filter is incorporated to separate out magnetic particles in the supply line. For liquid, aggressive and non high viscosity media, also in aggressive environments

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -40 ... +100 °C
- **pressure:** P = vacuum … 100 bar
- Wide variety of different process connections and materials
- Explosion proof available
- With flush function for electromagnetic version

THERMO-PRESSURE-UNIT TDS

Temperature and pressure measurement unit for direct mounting in the return line. For gaseous and liquid, aggressive, non high viscosity and non-crystallising media, also in aggressive environments

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature**: T = -40 ... +200 °C
- **pressure:** P = Vakuum … 60 bar
- Wide variety of different electrical connections, process connections and materials
- Explosion proof available

PUMP UPS

The circulating pump is used to circulate sealing liquid in a supply system. The pump is suitable for water and other liquids with similarly low viscosity.

Rec. applications

- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- **temperature** : -8 bis +110 °C
- **pressure** : max. 10 bar
- power supply : 230V/50Hz
- power : 0,09 kW
- rate speed : 1450 1/min
- capacity 3 m^3/h

PUMP ZPS

The gear pump is used to circulate sealing liquid in a supply system. The pump is suitable for water and other liquids, even those with high viscosity.

Rec. applications

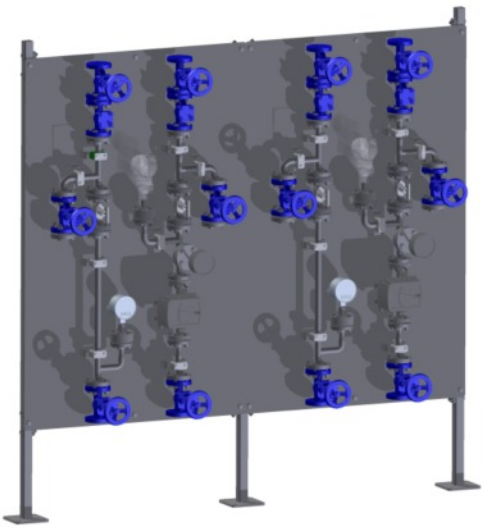
- Chemical industry
- Petrochemical industry
- Oil and gas industry
- Pharmaceutical industry
- Pulp and paper industry
- Food and beverage industry

Technical spec.:

- capacity 4,5 cm^3/U
- differential pressure max. 6 bar
- with pressure regulater, adjustable 0 - 6 bar
- temperature -20 … 130°C
- pressure 0,08 - 101 bar

CUSTOMER DESIGNED SYSTEM

Are you having trouble finding the right system? We would be delighted to design a suitable system for your requirements.



OTHERS

Please get in touch with us if you require other types of containers or accessory parts. We can manufacture containers to suit your needs and requirements. All containers can be equipped with process sensors, pumps and devices from any well-known manufacturer

- pressure transmitter
- temperature transmitter
- level switch
- Refill unit
- pumps
- gas supply system
- Etc.

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