

BSS Buffer Support System

Plan 52 Non-Pressurized Tank

Easy to install, complete non-pressurized solution for reliable operation of dual mechanical seals.

The Chesterton Buffer Support System (BSS) for dual mechanical seals is a complete solution for the environmental support of dual mechanical seals where product contamination from support fluid cannot be tolerated.

BSS Configuration

Supplied ready to install the BSS is preconfigured to allow simple connection and non-pressurized support to a dual mechanical seal. A dedicated fill valve allows quick and easy commissioning of the seal and system arrangement.

The BSS can be enhanced further with a complete range of accessories designed for easy configuration and reduced maintenance. ATEX certified instrumentation is also available.

The support fluid is circulated to and from the seal by the thermosyphon effect and the mechanical seal's internal pumping ring, a standard feature of Chesterton Dual Mechanical Cartridge Seals.



- Preconfigured system, simplified ordering
- Simple maintenance of fluid level

Recommended Applications

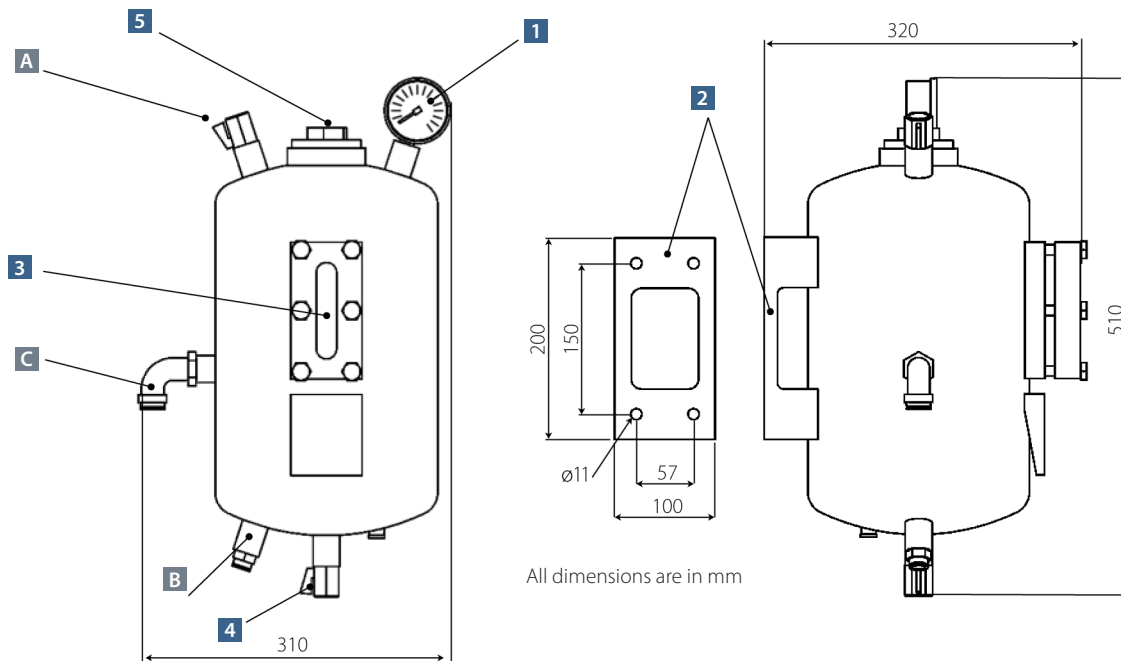
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Pulp and paper industry

Technical Data

Tank Capacity	12 l Maximum / 9 l Operating
Tank Operating Pressure	16 bar Maximum
Tank Material	316Ti / 1.4571
Cooling Capacity	400 W Tank Only 1.5 kW with Cooling Coil 4 kW with Cooling Coil and Circulation Pump
Auxiliary Connection	1 x R 2" and 1 x R 1/8"

Components (Included)

Level Gauge	Reflex Sight Glass
Fluid Line Connection	Rp 1/2" Female
Pressure Gauge	0-16 bar - Brass
Fill Valve	R 1/2" - NiCr Plated Brass
Drain Valve	R 1/2" - NiCr Plated Brass
Hoses	Kit: 1 m and 1.5 m Polyamide 12 mm OD
Seal Connections	Kit: 2 x NPT 1/2" S - Straight Push-in Connectors NiCr Plated Brass
Applicable Standards and Approvals	PED (97/23/EC) - TÜV



All dimensions are in mm

Operating Principle

Connect the system to the seal and add the support fluid via the fill valve until it is at the required level on the glass.

The support fluid is circulated by thermosyphon effect or the mechanical seal's pumping ring.

Components

- 1 Pressure Gauge
- 2 Mounting Brackets
- 3 Level Gauge
- 4 Drain Valve
- 5 Auxiliary Connections

Connections

- A Fill/Vent Valve
- B To the Mechanical Seal
- C From the Mechanical Seal

Ordering Codes

Type	Description	Code	Item Number
Tank	Buffer Support System complete with all the Components	BSS	STS-100142
	Buffer Support System complete with Cooling Coil	BSSC	STS-100143
Accessories			
Tank Stands	Fixed Stand - Stainless Steel	FS	STS-100093
	Telescopic Vertically and Horizontally Adjustable Stand - Carbon Steel	XY	STS-100094
	Telescopic Vertically and Horizontally Adjustable Stand - Stainless Steel	XT	STS-100095
Piping Kits	Stainless Steel Braided Hose Kit 1 x 1 m and 1,2 m with Fittings	BH	STS-100147
	Finned Tube Kit 1 x 1 m with Fittings	FT	STS-100148
Seal Connector Kits	Seal Connector Kit 2 x NPT 1/4" S ⁽¹⁾ - Straight Push-in Connectors NiCr Plated Brass	CSS	STS-100150
	Seal Connector Kit 2 x NPT 3/8" S ⁽¹⁾ - Straight Push-in Connectors NiCr Plated Brass	CMS	STS-100151
	Seal Connector Kit 2 x NPT 1/4" A - Angled Swivel Joint Push-in Connectors NiCr Plated Brass	CSA	STS-100152
	Seal Connector Kit 2 x NPT 3/8" A - Angled Swivel Joint Push-in Connectors NiCr Plated Brass	CMA	STS-100153
Instrumentation	High/Low Pressure Switch for Nonhazardous Area 0-10 bar	PS	STS-100111
	High/Low Pressure Switch EExia, Intrinsically Safe, ATEX Certified	PU	STS-100112
Forced Circulation	Circulation Pump	CP	STS-100091

Chesterton ISO certificates available on www.chesterton.com/corporate/iso

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