

PSS Pressurized Support System

Plan 53A Standard Tank

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

The Chesterton Pressurized Support System (PSS) for dual mechanical seals is a complete solution for the support of dual mechanical seals where product leakage cannot be tolerated.

Pressurized Support System Configuration

Supplied ready to install, the PSS features a non-return valve, pressure regulator with gauge, and pressure relief valve. A dedicated fill valve allows quick and easy commissioning of the seal and system arrangement.

The PSS can be enhanced further with a complete range of accessories designed for easy configuration and reduced maintenance. ATEX certified level and pressure switches are 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 process
- Simple maintenance of fluid level
- Standard Plan 53A tank

Recommended Applications

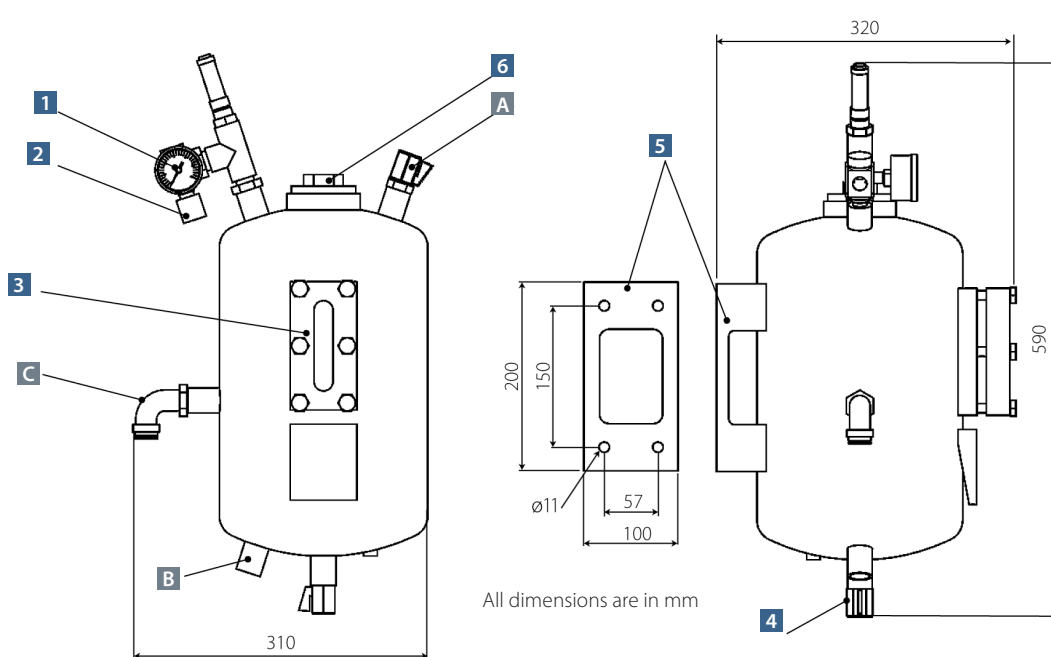
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Pulp and paper industry

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 Regulator	0-16 bar - Brass
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



Components

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

Connections

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

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.

Close the fill valve and connect the air or nitrogen supply and adjust the regulator to the required pressure.

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

Ordering Codes			
Type	Description	Code	Item Number
Tank	Pressurized Support System complete with the Components	PSS	STS-100140
	Pressurized Support System complete with Cooling Coil	PSSC	STS-100141
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 - Straight Push-in Connectors NiCr Plated Brass	CSS	STS-100150
	Seal Connector Kit 2 x NPT 3/8" S - 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	Low Level Switch for Nonhazardous Area	LS	STS-100107
	High/Low Level Switch for Nonhazardous Area	LT	STS-100108
	High/Low Level Switch EExia, Intrinsically Safe, ATEX Certified	LW	STS-100109
	Single High/Low Pressure Switch for Nonhazardous Area 0-10 bar	PS	STS-100111
	Single High/Low Pressure Switch EExia, Intrinsically Safe, ATEX Certified	PU	STS-100112
Refill Pumps	Hand Pump Assembly for Oil-Based Fluid	HO	STS-100113
	Hand Pump Assembly for Water-Based Fluid	HW	STS-100013
Forced Circulation	Circulation Pump	CP	STS-100091

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

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