

# SP Range™

Pressure Systems



## Features

- Integral 304 SS scalloped weld pad level gauge design
- 304 SS vessel construction
- Satin bead blast vessel finish
- Available with / without cooling coil

## Benefits

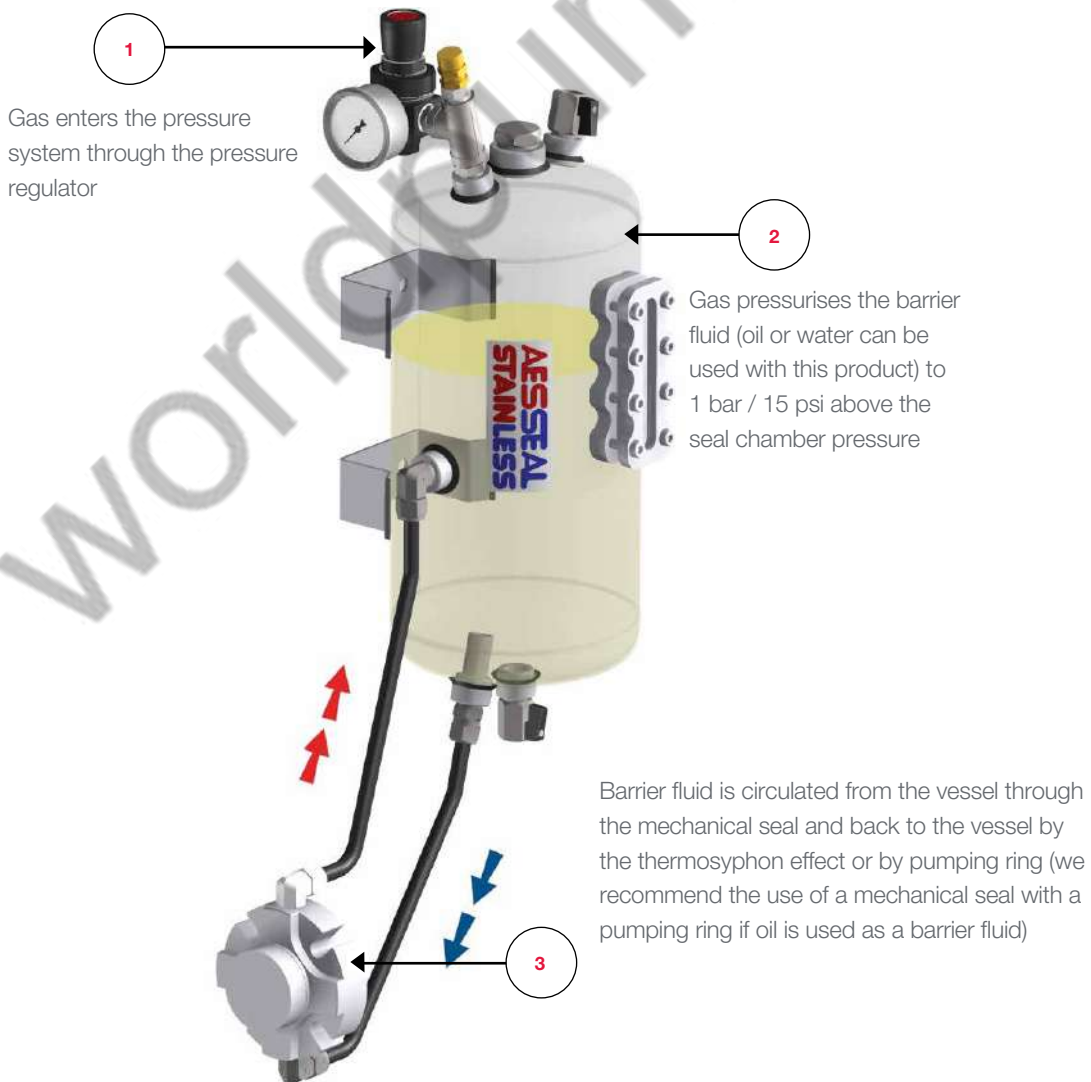
- Distinctive and robust visual indication of barrier fluid level
- Suitable for a range of challenging environments
- Suitable for a wider range of industrial environments
- Adaptable to a wider range of modular piping plans



## SP Range

The AESSEAL® SSE12-P™ and SSE25-P™ robust weld pad vessels are used as the core of a modular Pressure System range (SP1™-SP3™). This range starts with the SP1™, which is a non-pressurised API Plan 52 Buffer System, used to provide cooling to mechanical seal faces. The SP2™ and SP3™ Systems are piped as API Plan 53A configuration. The SP3™ has the addition of finned tubing to enhance surface area so it can operate on high heat applications. All vessels are designed and manufactured in accordance with ASME VIII Div.1 and certified by TÜV to cover PED requirements.

### SP2 Operating Principle



(SP1™-SP3™ System plans available as standard)



## Specifications

### System Specification:

**Maximum Design Pressure:** 10 barg / 145 psig  
**Maximum Temperature:** 100°C / 212°F (with suitably rated piping / hosing)  
**Minimum Temperature:** -20°C / -4°F\*  
**Construction:** 304 Stainless Steel  
**Capacity:** 12 litres / 3.00 gal (US), or 25 litres / 6.60 gal (US) option available  
**Connections:** 1/2" NPT for seal feed and return hoses  
**Finish:** Satin bead blast  
**Designed to:** ASME VIII Div.1  
\* Protection against freezing required for water below 0°C

### Optional Extras:

Cooling Coil  
 Stainless Steel Braided flexible hose  
 Hard pipe kit  
**Pressure Switch:** Safe area, explosion proof and intrinsically Safe options  
**Level Switch:** Safe area, explosion proof and intrinsically Safe options  
 Top Up Trolley  
 Oil / Water Hand Pump

### Vessel:

**Construction:** 304 Stainless Steel  
**Capacity:** 12 litres / 3.17 gal (US) Or 25 litres / 6.60 gal  
**Connections:** 1/2" NPT for seal feed and return hoses  
**Finish:** Satin bead blast  
**Designed to:** ASME VIII Div.1

### SP Range System Components:

**Pressure gauge:** Brass (Stainless Steel options available)  
**Pressure regulator:** Zinc  
**Pressure Relief valve:** Brass (Stainless Steel options available)  
**Ball valve (fill):** Nickel plated Brass  
**Finned Tubing:** (supplied as standard on the SP3™)



## The Pressure Systems are most commonly used with these seals:



DMSF™



CDSA™

#### Barrier & Buffer Fluid Systems For Use With Double Mechanical Seals

AESSEAL® supplies an extensive range of barrier and buffer fluid systems for use with double mechanical seals. Wherever possible AESSEAL® prefers to supply both the seal and the system. In addition the company will suggest suitable barrier or buffer fluids for most applications, based on extensive field experience. AESSEAL® accepts no responsibility for any problems associated with system design, installation, operation, or the use of an unsuitable barrier or buffer fluid, where the fluid, seal or any part of the system have not been specified and / or supplied by AESSEAL®.



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[www.aesseal.com](http://www.aesseal.com)

This brochure is fully recyclable. When laminated, a sustainable, biodegradable and recyclable lamination is used.

For further information and safe operating limits contact our technical specialists at the locations below.



AESSEAL plc is certified to ISO 9001, ISO 14001, ISO/IEC 20000, ISO/IEC 27001, ISO/TS 29001, ISO 37001, ISO 45001 & ISO 50001

Use double mechanical seals with hazardous products.

Always take safety precautions:

- Guard your equipment
- Wear protective clothing

**WARNING**

**UK Sales & Technical advice:**

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'Our purpose is to give our customers such exceptional service that they need never consider alternative sources of supply.'

**USA Sales & Technical advice:**

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