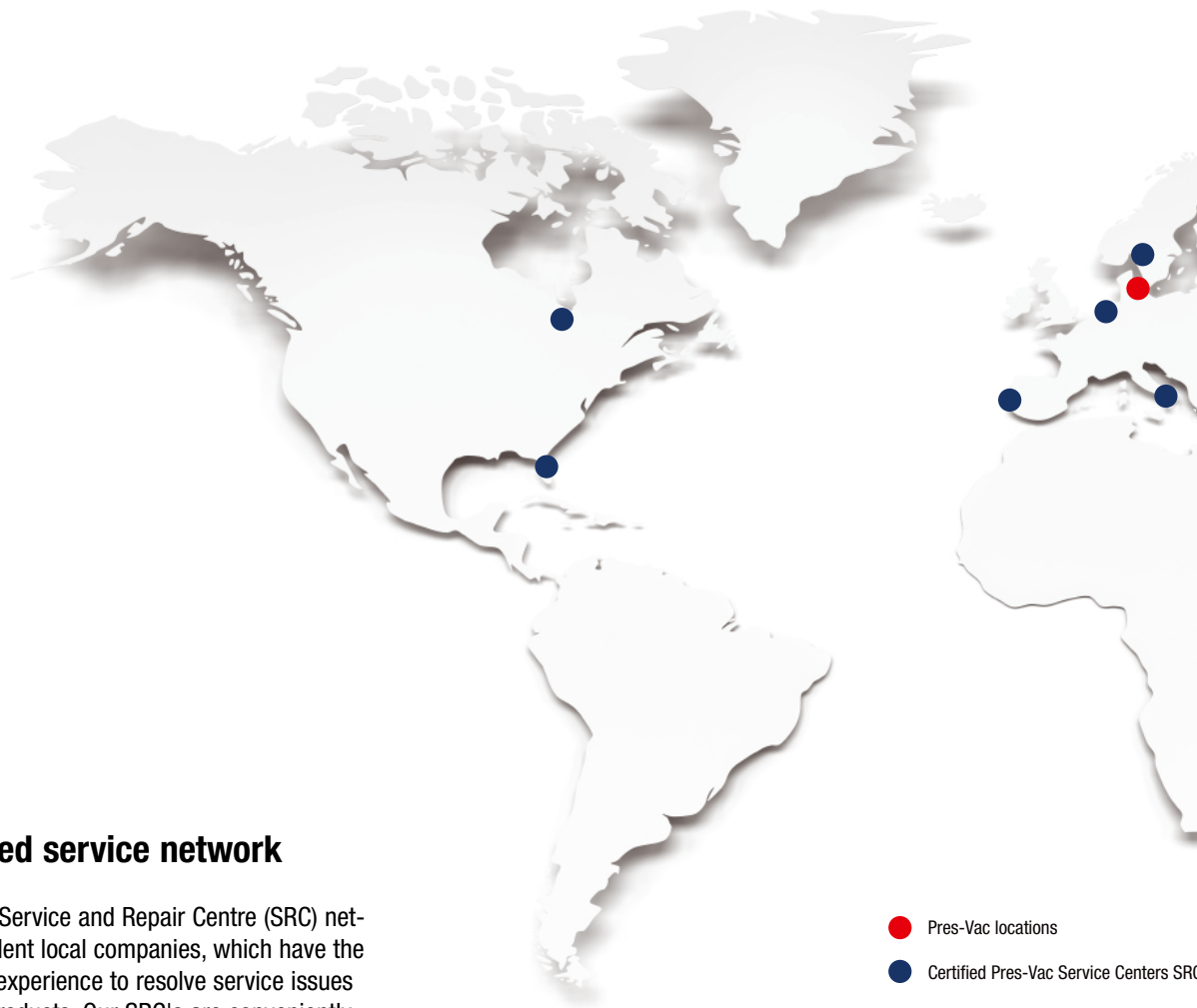


Service & Spare Parts

PRES·VAC



Conveniently located service network

Pres-Vac has established a Service and Repair Centre (SRC) network consisting of independent local companies, which have the technical skills and marine experience to resolve service issues concerning your Pres-Vac products. Our SRC's are conveniently located all over the world to provide you with rapid access to spare parts and qualified service engineers.

Repair jobs

The SRC's have the experience to deal with any service job involving Pres-Vac valves - from pre-inspection to overhauling valves during special surveys. SRC's have test-rigs available that can be used to provide you and the classification societies with certified test results for the opening settings of your installed valves.

Spare parts and kits

All SRC's have spare parts for Pres-Vac products in stock. This means, that Pres-Vac will be able to supply most parts worldwide within just 48 hours. To supplement the ordering of parts, Pres-Vac has developed a series of Maintenance Kits, which enable the vessel to carry inexpensive parts on board to cover the most common repairs. Pres-Vac has also developed upgrade packages to handle changes in IMO regulations or cargoes with higher vapour points.

Safety

P/V valves are safety equipment designed to ensure the security of cargo and crew. The valves open at predefined cargo tank pressures and close at lower pressures. This ensures that the pressure in the individual cargo tanks is always within the allowed limits.

- Pres-Vac locations
- Certified Pres-Vac Service Centers SRC

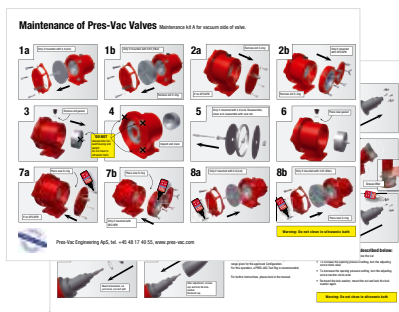
Critical Areas of Maintenance

At worst the inoperability of the valve can lead to severe damages to the vessel or even injury to crew members. The critical areas are the seat and disc of the pressure and vacuum unit. With this in mind we have designed our Maintenance Kits.

Maintenance Kits to Overhaul a P/V Valve

The Maintenance Kits from Pres-Vac ensure that the valves will function and comply with international rules and regulations. The Kits contain an installation guide and are designed and certified to be implementable by the crew. However, we recommend that a Certified Pres-Vac Engineer is doing the overhaul on larger kits such as Kits B and C (see table on the opposite page for more information on the various Kits).

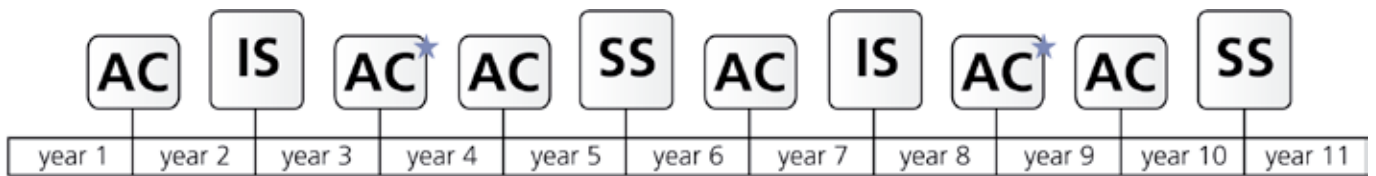
The pressure unit and the vacuum unit can be damaged due to various impacts, and separate Maintenance Kits are available for each unit. For damages that cannot be fixed by use of the Maintenance Kit, please consult our main office in Denmark.



Installation guide



Pres-Vac Test-Rig & Maintenance Kit



★ Year 3 and 8 can be deferred due to Intermediate Survey (IS)

Event	Frequency	Description	Appropriate Maintenance Kit
AC	Annual Check	Cleaning and check of valve	Maintenance Kit A Pressure + Maintenance Kit A or B Vacuum
IS	Every 2.5 year	Intermediate survey	Maintenance Kit A Pressure + Maintenance Kit A or B Vacuum
SS	Every 5 year	Special supervised survey	Maintenance Kit B Pressure + Maintenance Kit A or B Vacuum
SS	Every 10 year	Special supervised survey	Maintenance Kit C Pressure + Maintenance Kit C Vacuum

About Pres-Vac Engineering

For over 60 years, Pres-Vac Engineering has been supplying pressure/vacuum valves and venting equipment to the tanker shipping industry.

Today, we are the worlds' leading supplier of high-velocity pressure/vacuum valves and around 50% of all tanker vessels world-wide use Pres-Vac equipment.

We work with shipyards, naval architects and other partners on all continents. We have a network of highly professional, experienced agents and distributors in all major ship owning and ship building countries.

Pres-Vac Engineering ApS

Svanevang 3-5
DK-3450 Allerød
Denmark

Tel. +45 48 17 40 55
Fax +45 48 17 17 88
Email presvac@pres-vac.com
Website www.pres-vac.com

PRES·VAC