



Stainless steel portable pressure vessels

Handle a wide variety of substances with safety and convenience

Pope's sturdy stainless steel portable pressure vessels let you handle a wide variety of sterile, high purity or flammable substances easily and safely. These vessels are designed to take pressures exceeding 15 psi and have a working pressure of 130 psi and higher at 100° F, with burst pressure in excess of 1200 psi. They are manufactured according to ASME specifications and meet all OSHA, state and local regulations. Each vessel features a permanent



ID plate and comes with a choice of closure styles. Closures seal effectively using internal pressure and cannot be removed while the vessel is pressurized. These durable vessels are available in capacities from 1 to 37.4 gallons. You can depend on Pope's portable pressure vessels for reliability and performance.

Apparatus and instrumentation for science and industry

Versatile pressure vessels with a c

Strong, corrosion-resistant construction

Pope portable pressure vessels are built for extra strength and protection against corrosion. Specifically, *they are made in accordance with and exceed the parameters of the Code for Unfired Pressure Vessels, Section VIII of the ASME Boiler and Pressure Code, 1968.* This code covers pressure vessels with an inside diameter of six inches or greater and a maximum working pressure of 15 psi or greater. Since Pope pressure vessels exceed code specifications (but are less than 5 cubic feet capacity at 600 psi), they can be classified as "unfired miniatures".

They are made from certified type 304 or 316L stainless steel with walls thicker than the 1/16" specified by ASME. Butt weld construction eliminates crevices or gaps where corrosion or contamination might begin. And fittings are welded into the tank from both outside and inside for even greater protection.

Each vessel has a permanent identification plate attached indicating maximum psi, maximum operating temperatures, serial number, type of stainless steel and the year of manufacture.

Convenient pressure and vacuum closures

Pope pressure vessels offer you a choice of easy-to-use pressure or vacuum type closures. By substituting a vacuum type closure for the standard pressure type closure, Pope pressure vessels can be used under full vacuum. The simple, effective pressure closure can be opened or sealed in seconds, with no bolts or toggles to unscrew or lose, and requiring no tools of any kind. It features an inexpensive, easily replaced O-ring on the inside of the tank which is sealed by internal pressure of the vessel itself. The greater the pressure, the more efficient the seal becomes. *The closure cannot be removed while the tank is pressurized meeting ASME requirements.* The elliptical opening measures 3-7/8" by 3-1/4" or 5-7/8" by 4-7/8" for easy inspection and access.

For easy conversion to vacuum use, a vacuum closure is available which employs a stainless steel cap, yoke and plastic nut and is made to fit exactly, with no matching required. This closure provides extra security under any conditions.

Added protection with foot rings or chimes

For extra protection during rough handling, all 9-inch diameter tanks are fitted with a molded hard rubber foot ring. This base increases stability with a solid, level stance, is resistant to most chemicals and acids and withstands normal operating and cleaning temperatures. An optional stainless steel chime for 9-inch vessels is available at extra cost. Recommended especially where temperatures exceed 230° F.

The 12-inch diameter tanks are supported by a rugged, reinforced stainless steel chime with drain holes.

A choice of attractive, easy-to-keep-clean finishes

All assembled vessels receive a full immersion white pickle bath to remove discoloration at weld areas and all contaminants that may have been picked up during the manufacturing process. This results in a soft, uniform light-gray finish, similar to 2B mill finish, which is very easy to keep clean.

If you prefer a bright, reflective appearance, Electro-Polished finishes (obtained by additional electro-chemical treatment) are also available. Optional 180, 240, 320 and other grit surface finishes are available for pharmaceutical, sterile use.



choice of closures and many options

A full range of standard and custom options

Standard options available with Pope pressure vessels include:

- Electro-Polished finish.
- Metal skirt for 9" tanks.
- Extra side-mounted handle.
- Extra vacuum or pressure closure.
- Special Viton O-ring.

If you have special needs, we will be happy to customize vessels for you. Customized options include:

- Larger capacity vessels up to 37.4 gallons (18" diameter).
- Additional top head, side, or bottom fittings for level control, drain plugs or other devices.
- Wheels, hose brackets, mounting brackets, heaters, jackets, valves, gauges, mixers, carts, specialized instrumentation, systems, etc.

Be sure to inquire if you have other special requirements.

Safety tested pressure ratings

Pope pressure vessels are designed for a maximum working pressure of 130 psi and higher at 100° F and incorporate many safety factors which exceed ASME requirements.

Extensive testing has demonstrated burst pressure to be in excess of 1200 psi for extra security. The chart below shows the maximum rated working pressures at given working temperatures as well as general specifications and dimensions for both 9" and 12" diameter vessels. Because of stainless steel's slight reduction in tensile strength at increased temperatures, the rated working pressure may be less under those conditions. (Maximum operating temperatures must accompany each order for proper stamping of the identification plate.)

Fitting arrangements to match your needs

Vessels ordinarily come with four standard 1/4" NPTF fittings, including pressure inlet, product outlet, pressure or safety relief valve fitting and pressure gauge/miscellaneous fittings. You may, however, substitute other fittings, up to 3", or request less than four fittings. Fittings not required can be plugged at the factory. Extra top, side or bottom fittings can also be installed. See "Options and Spare Parts" for special fittings, etc. Sanitary and other type fittings available.

Specifications/Dimensions

9" Inside Diameter Vessels

Part Number	Capacity In Gallons	Overall Height	Approx. Shipping Weight
*10690	1	8-1/2 inches	10 lbs.
*10691	2	11-5/8 inches	13 lbs.
*10692	3	15-1/4 inches	15 lbs.
10693	4	18-7/8 inches	18 lbs.
*10694	5	22-1/2 inches	20 lbs.
10695	6	26-1/8 inches	23 lbs.
10696	7	29-3/4 inches	26 lbs.

Pressure Ratings

Type of Stainless Steel	Maximum Operating Temperature	Maximum Allowable Working Pressure
Type 304	100° F	175 psi
	150° F	170 psi
	200° F	165 psi
	250° F	170 psi
	300° F	155 psi
Type 316L	100° F	155 psi
	150° F	155 psi
	200° F	155 psi
	250° F	155 psi
	300° F	150 psi

Large capacity vessels

Pressure vessels with capacities greater than 16 gallons are available up to 37 gallons (5 cubic feet). Inner diameter of these vessels is 18 inches with fitting configurations similar to 9-inch and 12-inch vessels. Prices and pressure ratings will be supplied on request. These vessels are also made in acceptance with the Code for Unfired Pressure Vessels, Section VIII of the ASME Boiler and Pressure Vessel Code, 1968.

Stock vessels

The following pressure vessels are available for prompt delivery from stock:

**1, 2, 3, 5, 10, 16 gallon capacity
100° F, 140 psi**

**Standard 1/4" fittings
304 or 316L stainless steel**

For safe, reliable, high quality stainless steel portable pressure vessels tailored to your needs, contact us today.

12" Inside Diameter Vessels

Part Number	Capacity In Gallons	Overall Height	Approx. Shipping Weight
10697	6	16-7/8 inches	26 lbs.
10698	7	18-15/16 inches	28 lbs.
10699	8	21-1/16 inches	30 lbs.
10700	9	23-1/8 inches	32 lbs.
*10701	10	25-5/16 inches	34 lbs.
10702	11	27-1/4 inches	36 lbs.
10703	12	29-5/16 inches	38 lbs.
10704	13	31-3/8 inches	40 lbs.
10705	14	33-3/8 inches	42 lbs.
10706	15	35-7/16 inches	44 lbs.
*10707	16	37-1/2 inches	46 lbs.

Type of Stainless Steel	Maximum Operating Temperature	Maximum Allowable Working Pressure
Type 304	100° F	165 psi
	150° F	160 psi
	200° F	155 psi
	250° F	150 psi
	300° F	145 psi
Type 316L	100° F	170 psi
	150° F	170 psi
	200° F	170 psi
	250° F	165 psi
	300° F	160 psi

*Available from stock (1/4" fittings only)

Pressure Vessels for shipping and dispensing

For safe shipment and dispensing of hazardous high purity chemicals and solvents from the same container, this Pope pressure vessel is the answer.

This unique, reusable vessel can be utilized both for shipping and later for dispensing under pressure on the production line or in the laboratory.

Constructed of certified 304 and 316L stainless steel in the same manner as other Pope pressure vessels, they likewise exceed the parameters of the Code for Unfired Pressure Vessels, Section VIII of the ASME Boiler and Pressure Code, 1968. In addition, these containers meet UN regulations for hazardous material shipping containers.

These vessels are available in 1 through 10 gallon capacities. Top fitting arrangement is similar to the standard Portable Pressure Vessels. Many fitting options are available. Stainless steel 1/2-inch diameter rods at the top provide for convenient handling and protection for the fittings and valves during shipment and use. The closure is an aluminum/stainless steel nut with Viton or Teflon O-ring.

Many of the Options and Spare Parts available on standard Portable Pressure Vessels are also available on Shipping Vessels. Request further information.



Specifications/Dimensions (9" Inside Diameter Vessels)

Part Number	Capacity In Gallons	Overall Height	Approx. Shipping Weight
10968	1	10-3/4 inches	18 lbs.
10969	2	13-3/8 inches	19 lbs.
10970	3	17 inches	23 lbs.
10971	4	20-5/8 inches	24 lbs.
10972	5	24-1/4 inches	25 lbs.
10973	6	27-7/8 inches	27 lbs.
10974	7	31-1/2 inches	29 lbs.
10975	8	35-1/8 inches	31 lbs.
10976	9	38-3/4 inches	33 lbs.
10977	10	42-3/8 inches	35 lbs.

Pressure Ratings

Type of Stainless Steel	Maximum Operating Temperature	Maximum Allowable Working Pressure
Type 304	100° F	175 psi
	150° F	170 psi
	200° F	165 psi
	250° F	170 psi
	300° F	155 psi
Type 316L	100° F	155 psi
	150° F	155 psi
	200° F	155 psi
	250° F	155 psi
	300° F	150 psi



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