



Euro Pressure **VESSELS**

Stainless Steel & Alloy Pressure Vessels



CE Pharmaceutical/Hygienic Vessels
UN Portable Stainless Steel Pressure Vessels
CE General Purpose Portable Pressure Vessels
Pressure Equipment Directive (PED) 97/23/EC

www.europressurevessels.com

A division of Visilume Ltd. Company Reg No. 1607816

Euro Pressure Vessels

Euro Pressure Vessels, represent Alloy Products Corporation of Waukesha, Wisconsin, USA, as sole distributors throughout Europe.

Euro Pressure Vessels, a division of Newson Gale Ltd, have over two decades of experience in plant and process safety and in particular the supply of high-specification portable pressure vessels. We understand the need for high quality standards (ISO9001) and excellent levels of customer service.



Our Technical Sales and Support Team work with clients from an array of industries including:

- High-Purity and Industrial Chemical
- Pharmaceutical
- Semiconductor
- Paints and Coatings
- Dairy, Food and Beverage
- Water, Ink and Adhesive

We are at hand to answer all your questions in regards to your specific applications. Please contact Euro Pressure Vessels and we will be happy to help.

Alloy Products Corporation (APC), since their inception in 1929 APC has striven to meet all the requirements of world-class supply of Stainless Steel pressure vessels. The new-generation robotic work stations enable APC to consistently deliver the highest quality product, accelerate delivery times and minimise cost, their motto being *“Craftsmen in Stainless Steel”*.

Certification

The Alloy Products manufacturing facility conforms to the stringent standards for National Board plant inspections and certification of equipment, personnel and materials. All APC vessels pressure ratings and temperatures are designed in psi/bar and Fahrenheit/Centigrade.

All Alloy Products' ASME vessels are constructed to meet or exceed the exacting standards of the American Society of Mechanical Engineers. In terms of design criteria, they fully comply with:

- ASME requirements for “UM” CODE Unfired Pressure Vessels, section VIII, Division I
- The Pressure Equipment Directive (PED) 97/23/EC
(Required throughout Europe)



Please contact **Euro Pressure Vessels**
for your special requirements

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UN Portable Pressure Vessels

Globe-Trotting Pressure Vessels – tough enough to meet both UN and Euro Pressure Vessels standards

Our range of rugged **UN Pressure Vessels** are designed and built to perform reliably for the world's most demanding users, in challenging transport situations around the globe. They live up to rigorous United Nations standards and Euro Pressure Vessels reputation for **quality and long life**.

Stock UN Vessels

Pre-tested 5 and 55 US gallon UN versatile vessels are available from stock to facilitate quick delivery.

Individual UN testing may be required with end user fittings.

Standard UN Vessels

A range of 1 to 10 US gallon UN standard designed vessels are preferred by many customers to save the cost of Testing to UN standards.

Individual UN testing may be required with end user fittings.

Custom UN Vessels

Ranging in size from 1 to 55 US gallons, our custom-made non-bulk packaging UN vessels are precisely fabricated to your requirements. Customised vessel attributes such as fitting sizes, style and location can be specified.

Each new custom designed vessel must undergo UN certification testing.

Closure Options

A choice of several different types of closures adds flexibility to your UN vessels use:

- Standard nipple-type closures
- NPT-type closures
- Flange closures
- Sanitary clamp closures
- VCR closures



Protective Skirts & Chimes

Added features provide sturdy, stable footing for your UN vessel and protect it against harsh environments and the rigours of frequent transport.

- Impact-resistant rubber skirts
- Stainless steel skirts
- Ring chimes make it easier to transport vessels and protect fittings and other components during vessel shipment and use
- Built-in skids



UN Certification Testing

Our UN vessels fully comply with the requirements of:

- UN/DOT CFR-49, parts 171-180
- Society of Mechanical Engineers (ASME) for Unfired Pressure vessel, Section VIII, Division I
- Euro Pressure Vessels Standards

All UN vessels manufactured by Alloy Products undergo the following tests:

- Drop Test Subpart M, Section 178.603
- Leak-Resistance Test Subpart M, Section 178.604
- Hydrostatic Test Subpart M, Section 178.605
- Stacking Test Subpart M, Section 178.606
- Vibration Test Subpart M, Section 178.608
- Periodic Retesting Subpart M, Section 178.601(e)

UN - Material Specifications

| | |
|--------------------------|--|
| Capacity | 3.8 litres to 141.5 litres (1 to 37.4 US gallons). |
| Material | T-304. Other materials available. |
| Inside Diameter | 229mm (9"), 305mm (12") or 458mm (18"). |
| Fittings | Four, 1/4" NPT female pipe fittings in top head. |
| Skirt | 229mm (9"), 305mm (12") Stainless with rubber boot or 458mm (18") Stainless. |
| Maximum Working Pressure | 14 bar (229mm), 11 bar (305mm), 11 bar (458mm). |
| Surface Finish | White pickle or electropolish. Other finishes available. |
| Capacity | 209 litres (55 gallons). |
| Material | 316L standard. Other materials available. |
| Inside Diameter | 610mm (24"). |
| Fittings | Two 1" NPT female. Two 2" Code 2. |
| Skirt | Stainless with skid. |
| Maximum Working Pressure | 4.9 bar @ 37.8°C for 316L. |
| Surface Finish | White pickle or electropolish. Other finishes available. |

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Pharmaceutical/Hygienic Vessels

Custom Crafted Quality to fit every processing need, whilst holding ASME certification and in conformance to the PED

Custom designed specifically for your application, our **pharmaceutical/hygienic portable pressure vessels** are available in 229mm (9"), 305mm (12"), 458mm (18") diameters, with a total volume range from 3.8 to 141.5 litres (1 to 37.4 US gallons).

Pressure Rating

Rated for full vacuum, all our pharmaceutical/ hygienic portable pressure and process vessels meet the ASME "U" or "UM" Code Section VIII, Division I and the European Pressure Equipment Directive. The maximum allowable workable pressure of each vessel varies depending on the vessel's diameter and CE Certification.

Construction Materials

Our pharmaceutical/ hygienic portable pressure vessels can be constructed from a variety of materials, including:

- Type 304L, 316L or 317L low-carbon-grade stainless steel
- Type 304, 316 or 317 stainless steel
- Higher alloys such as Hastelloy, Monel or Duplex
- Internally lined with materials such as Teflon

Surface Finishes

Electropolishing is the standard for our range of pharmaceutical/ hygienic vessels, many of our customers opting for mechanical polishing which smooths the metal's surface to facilitate film or soil removal and reduce contamination and adhesive.

Alloy Products' craftsmen progressively polish your stainless steel vessels to free all product contact surfaces or visible imperfections, such as inclusions and pits, for maximum hygiene, release-ability and clean-ability.

Fittings

Are sanitary-clamp type or equivalent in order to CIP or SIP, with the length-to-diameter rate of each fitting not exceeding 2.0 whenever feasible. All fittings and accessories are located in positions that enhance vessel cleanability and sterility.

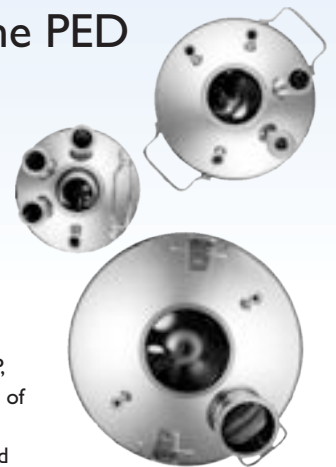
Protective Skirts

In addition to giving your vessel a sure, solid footing, protective skirts help prevent vessel damage during transport.

- Impact resistant or stainless steel skirts on 229mm (9") and 305mm (12") diameter portable pressure vessels
- Rugged reinforced stainless- steel skirts are standard on 458mm (18") portable pressure vessels

Jackets (Heat Transfer)

To maximise heat transfer, we offer either a **full baffled jacket** or a **full dimpled side jacket** and bottom head on your vessel. Thermolux paint and Chloride-free insulation are available to help reduce stress cracking and corrosion, while Type 304 or other stainless steel, **finished to your specification**, covers the insulation.



Pharm - Material Specifications

| | |
|--------------------------|---|
| Capacity | 3.8 to 141.5 litres (1 to 37.4 US gallons). |
| Material | 316L standard. Other materials available. |
| Inside Diameter | 229mm (9"), 305mm (12") or 458mm (18"). |
| Fittings | Size, type and quantity optional. |
| Skirt | 229mm (9") Stainless with rubber boot, 305mm (12") and 458mm (18") Stainless. |
| Maximum Working Pressure | 11 bar (229mm), 10.5 bar (305mm), 7 bar (458mm). |
| Surface Finish | 8 to 12 Micro inch / 0.2 to 0.3 Micro Metre. & electropolished. Other finishes available. |

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ASME/General Purpose Portable Pressure Vessels

Rugged Euro Pressure Vessels quality that conforms to rigorous ASME and PED requirements

Standard ASME Vessels

Virtually any need for an ASME stainless steel portable pressure vessel can be met with a range of available products within our standard ASME line. Standard ASME vessels are offered in fluid capacities from 3.8 to 141.5 litres (1 to 37.4 US gallons).

A range of 3.8 to 19 litre stock vessels are available off the shelf for quick delivery, please contact us for further information.

Custom ASME Vessels

For non-standard uses, our ASME pressure vessel range can be custom built to fit exact needs, with an **unlimited choice of options**.

Closures

Three different ASME vessel closure options cover a wide range of potential uses:

- Standard closures feature a straightforward, reliable design proven through the years of use
- "Wide mouth" closure allow for easier filling and simpler cleaning and inspection – especially useful when handling high viscosity or high purity materials
- Full-vacuum closures for either vacuum or pressure applications have simple, single hand-turn knobs for easy reliable sealing

Fittings

Adaptability is the key

in the size, position and type of fittings you specify for your ASME vessels. Different size standard NPT or optional sanitary clamp fittings can be installed in various positions on your vessel to accommodate special features.



Protective Skirts & Chimes

Various features can be added to your ASME vessel to **protect it during transport** and give it sturdy, stable footing:

- Impact resistant rubber skirts
- New flared stainless steel skirts with rubber boots
- Ring chimes protect fitting and other components

Standard Options

- White Pickle and Electropolished finishes
- Closure O-rings can be made of materials other than standard rubber to suit the chemical makeup of the material stored or the pressures required
- Extra-length stainless steel skirts allow fittings to be installed into the vessels bottom head
- Wheeled cart assembly available both attached and independent of the vessel



ASME - Material Specifications

| | |
|--------------------------|---|
| Capacity | 3.8 to 141.5 litres (1 to 37.4 US gallons). |
| Material | T-304 or 316L. Other materials available. |
| Inside Diameter | 229mm (9"), 305mm (12") or 458mm (18"). |
| Fittings | Four, 1/4" NPT female pipe fittings in top head. |
| Skirt | 229mm (9") Stainless with rubber boot, 305mm (12") rubber skirt or 458mm (18") Stainless. |
| Maximum Working Pressure | 14.1 bar (229mm), 13.1 bar (305mm), 8.9 bar (458mm). |
| Surface Finish | White Pickle or Electropolished. Other finishes available. |

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Make Contact

We invite you to find out more by visiting our website at
www.europressurevessels.com

If you need more information about products and services, please
contact our **Technical Sales Team** on **+44 (0) 1457 600 400**.



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