MacArtney Pressure Vessels
Advanced systems for hydrostatic testing

MacArtney offers worldwide access to cutting-edge hydrostatic test facilities and services. In addition we also design and supply our own range of pressure vessels to customers who need to set up their own facility capable of putting almost any type of underwater equipment to the test.

Based on the tried and trusted system concept and advanced technology used by MacArtney hydrostatic test facilities, we offer a range of highly capable and versatile standard pressure vessels. All our pressure vessels are manufactured according to EU Standard EN13445. Furthermore, we are able to supply customised vessels featuring alternative dimensions and pressure rating. If required, we can even quote and supply a complete test environment.

With a pressure capacity of up to 690 bar, MacArtney standard pressure vessels can readily simulate the hydrostatic operating conditions at 7,000 metres of ocean depth. In further support of generating realistic subsea conditions and accurate results, the entire testing process is computer controlled - with real time electric and optical measurements. Moreover, our in-house developed control software enables plug-and-play testing, bespoke test programmes and repeated pressure cycling.

Other pressure vessel benefits include lid integrated penetrators and the user-friendly ‘clamp-lock’ system which allows for swift test mobilisation and turnaround. MacArtney pressure vessels are available with on-site installation and operator training. Optional features include live video monitoring. Finally, our pressure vessels require minimal maintenance and have a long service life.

Features and benefits
- Based on the tried and trusted technology used by MacArtney hydrostatic pressure test facilities
- Up to 690 bar pressure testing as standard
- Versatile high-capacity pressure vessels
- In-house developed control software
- Plug-and-play computer controlled testing
- Bespoke test programmes and pressure cycles
- Real time electrical and optical measurements
- 4 lid penetrators as standard
- User friendly ‘clamp-lock’ system for swift test mobilisation and turnaround
- Low maintenance requirements
- Long service life
- Designed according to PED EN13445 EU Standard

Options
- On-site installation and operators training
- Equipment for live video monitoring
- Remote test control
- More (or less) lid integrated penetrators
- Test environment equipment and ancillaries
- Custom pressure vessels with alternative dimensions and higher (or lower) pressure rating available
- Can be designed according to ASME VIII, Div. 2.
## Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Max Pressure</th>
<th>Internal Dimensions ID/IH</th>
<th>Test Temperature (approx.)</th>
<th>Weight (approx.)</th>
<th>Outer Dimensions* A/B/C/D/E (approx.)</th>
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</thead>
<tbody>
<tr>
<td>Type 1 - EU</td>
<td>400/5,800</td>
<td>400/1,500</td>
<td>20</td>
<td>2,000</td>
<td>1,124/700/500/1,750/1,650</td>
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<tr>
<td>Type 1 - ASME</td>
<td>400/5,800</td>
<td>400/1,500</td>
<td>20</td>
<td>2,100</td>
<td>1,124/700/500/1,846/1,670</td>
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<tr>
<td>Type 2 - EU</td>
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<td>762/1,500</td>
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<td>6,800</td>
<td>1,800/800/950/1,900/1,700</td>
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<tr>
<td>Type 2 - ASME</td>
<td>400/5,800</td>
<td>762/1,500</td>
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<tr>
<td>Type 3 **- EU</td>
<td>690/10,000</td>
<td>400/1,500</td>
<td>20</td>
<td>3,400</td>
<td>1,250/750/580/1,810/1,670</td>
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<tr>
<td>Type 3 **- ASME</td>
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<td>1,250/750/580/1,896/1,700</td>
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<tr>
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<td>14,000</td>
<td>2,000/900/1,120/2,050/1,760</td>
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<tr>
<td>Type 4 **- ASME</td>
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<td>762/1,500</td>
<td>20</td>
<td>15,800</td>
<td>2,200/900/1,120/2,115/1,810</td>
</tr>
</tbody>
</table>

Pressure medium: Freshwater

* To be confirmed upon order

** All pressure vessels above 500 bar are 3rd party certified

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Data Acquisition

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Pressure Vessels