Hydrostatic Pressure Testing Test facilities and services



MacArtney offers worldwide access to cutting-edge hydrostatic pressure test facilities and services.

Empowered by our own purpose built pressure vessels, which are operated by highly trained and certified workshop technicians, we are able to put almost any type of underwater equipment to the test.

With a pressure capacity of up to 1,400 bar, MacArtney pressure vessels can simulate the hydrostatic operating conditions at up to 14,000 metres of ocean depth. 1,400 bar equivalent to 14,000 m water depth, adding 30% safety factor to absolute max water depth. In further support of simulating realistic subsea operating conditions and generating accurate results, the entire testing process can be computer controlled - with electric and optical measurements carried out in real-time. Meanwhile, our in-house developed control software allows customised test programmes and repeated pressure cycling to be carried out. Offering a safe link to the tested equipment, dedicated penetrators are integrated into the pressure vessel lids. Moreover, most of our test facilities are fitted with a powerful overhead crane, which allows for testing large and unwieldy equipment. Finally, several of our pressure vessels feature live video monitoring.

All pressure test facilities are available for rent on an hourly or daily basis - complete with the assistance of certified MacArtney technicians. Full test reports can be provided in the form of a printed graph or as data log.

Features and benefits

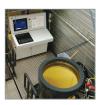
- Up to 1,400 bar pressure testing
- High capacity pressure vessels
- Overhead crane facilities
- Computer controlled testing
- Bespoke test programmes and pressure cycles
- Real time electrical and optical measurements
- Lid penetrators available
- Detailed test reports
- Testing performed by certified technicians

Options

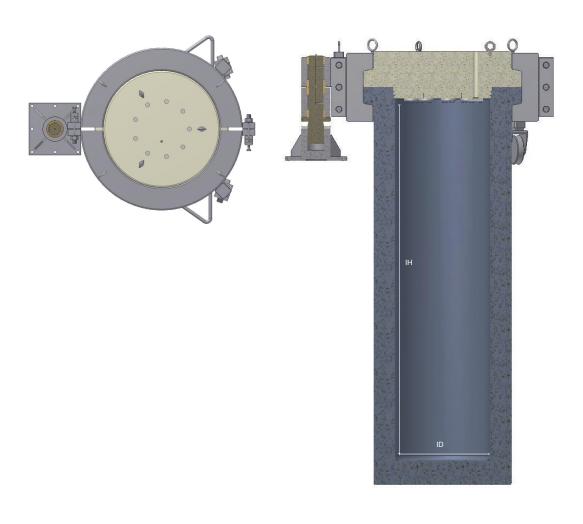
Live video monitoring











Specifications

| Pressure vessel location | Max pressure | Internal diameter (ID) | Internal height (IH) | Pressure medium | Test temperature | Crane facilities |
|--------------------------|--------------|------------------------|----------------------|-----------------|------------------|------------------|
| Denmark - Esbjerg | 700 bar | 650 mm | 2,400 mm | Freshwater | Approx. 20°C | 10,000 kg |
| Denmark - Esbjerg | 650 bar | 305 mm | 2,100 mm | Freshwater | Approx. 20°C | 10,000 kg |
| Denmark - Esbjerg | 1400 bar | 390 mm | 1,400 mm | Freshwater | Approx. 20°C | 10,000 kg |
| UK - Aberdeen | 600 bar | 600 mm | 1,500 mm | Freshwater | Approx. 20°C | 2,000 kg |
| Norway - Stavanger | 300 bar | 450 mm | 1,000 mm | Freshwater | Approx. 20°C | 1,000 kg |
| France - Aix-en-Provence | 600 bar | 650 mm | 1,100 mm | Freshwater | Approx. 20°C | 4,000 kg |
| Holland - Rotterdam | 100 bar | 850 mm | 1,300 mm | Freshwater | Approx. 20°C | 1,000 kg |
| Holland - Rotterdam | 800 bar | 225 mm | 1,500 mm | Freshwater | Approx. 20°C | 1,000 kg |
| Germany - Kiel | 100 bar | 310 mm | 500 mm | Freshwater | Approx. 20°C | 315 kg |
| Germany - Kiel | 30 bar | 285 mm | 500 mm | Freshwater | Approx. 20°C | 315 kg |
| USA - Houston | 70 bar | 292 mm | 406 mm | Freshwater | Approx. 23°C | 315 kg |