

For testing small components at pressures up to 70 Bar g there are three enclosed booths two of which measure 2,000mm long x 1,900mm wide x 1,850mm high.



To complete the hydrostatic testing facilities there is a third Low Pressure booth which measures 10,000mm long x 5,000mm wide x 2,500mm high suitable for the testing of large low pressure components. Again like the two adjacent high pressure booths drain water is collected in the sump tank and recycled.



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CLYDEUNION offers the following heritage products:



\* This is a heritage product acquired when the Weir Pumps business transferred to Clyde Pumps in May 2007

We are constantly endeavouring to improve the performance of our equipment and as a result, we reserve the right to make alterations from time to time, and equipment may differ from that detailed in this brochure.

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# Manufacturing

- Glasgow Hydro Test Facilities



Hydrostatic tests are conducted remotely via a control panel with a "touch sensitive" HMI (Human Machine Interface) screen. Test data is programmed into a computer and the test is monitored via the control panel, which shows test pressure, ambient temperature in the booth, temperature of the test fluid and a timer to monitor the test duration. There is also a software chart recorder linked to the control panel via a computer for printing test results. Tests in all five booths can be conducted simultaneously through this control panel.



• CCTV Monitors



• CCTV Monitors



• Floor Mounted Camera



• 2 High Pressure test booths with doors open & one roof retracted

CLYDEUNION's manufacturing plant at Glasgow in Scotland has upgraded its testing capabilities with the inclusion of new Hydrostatic Testing facilities. Principal features are two High Pressure test booths which are capable of remote testing components up to 965 Bar g and an additional three booths that can test components at pressures up to 70 Bar g. These booths are constructed with structural steel and 10mm thick plate for the doors, walls and roof to comply with Health & Safety guidelines.

### CONTROL ROOM

The main driver for upgrading of the Hydrostatic Testing facilities has been Health & Safety, both of CLYDEUNION employees and customer representatives. Facilities have been designed to separate the component being tested from the individual overseeing the testing process. To achieve this there is a control room, completely separate from the five testing booths, which contains a control panel for conducting testing and a bank of television monitors for viewing the test via CCTV cameras. All parts containing pressure are housed in individual booths and at no point during the test will an individual be exposed to components under hydrostatic pressure.

All doors on the individual booths, and the retractable roofs, are equipped with interlock switches and these must be engaged allowing a test to be carried out on any individual booth. In the event of the doors being opened during testing the interlocks will open a dump valve, which will release any pressure in the component to drain. This procedure prevents any possibility of an accident occurring.



• Control Room

The component being tested is also viewed via CCTV cameras, which are located in each booth. There are two types of camera in the booths. These are pan, zoom and tilt type giving a comprehensive viewing capability and the fixed type which has no pan, zoom or tilt facility. Viewing capability is further enhanced with the use of portable floor mounted cameras. Pan, zoom and tilt cameras have been tested under the most stringent conditions using Jaeger Text Charts to meet ASME Nuclear standards for remote visual examination. These cameras have the ability to detect imperfections and discontinuities on the surface of components including cracks, wear, corrosion or erosion to ASME VT1 level.



• High Pressure Booth

The High Pressure booths are 6,000mm long x 4,000mm wide x 4,000mm high with double doors at the front and a retractable roof to facilitate loading of components into the booth. Both high pressure booths have suitable drainage within the booth which is collected in a sump tank and recycled via a filter and feed tanks for the next test. The feed tanks are located at the rear of the booths.