

### BACKGROUND

To meet the requirements of new Pressure Systems and Transportable Gas Container Regulations, there is a growing need for gas cylinders, accumulators, fire extinguishers, etc. to be pressure tested for proof and volumetric expansion. These regulations require that all owners of such equipment must ensure that such items undergo periodic examination and test the product in accordance with the relevant Standards and Measure for any permanent stretch.

Haskel has for many years been a specialist in the design and manufacture of high pressure hydraulic and gas test systems and supply a wide range of Gas Container Test Rigs built to BS 5750 Part 2 Quality Assurance.

### DESCRIPTION

Haskel International, Inc. Gas Container Test Rigs can be supplied to test single or multiple containers simultaneously to pressures up to 15,000 psi (1,000 bar) and hold this pressure without consuming power while the necessary measurements are being carried out. They can be supplied to meet the two methods for determining the volumetric expansion of gas containers as required by BS 5045 (the water jacket method) and BS 5430 (the non-water jacket method).

Both methods of test comprise the following key items:

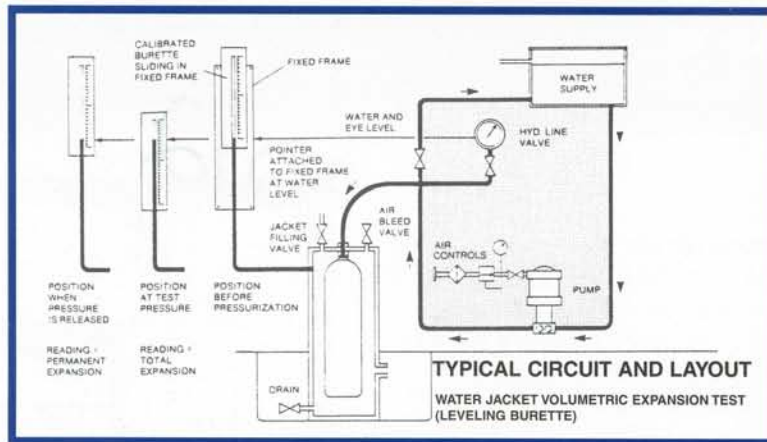
- A Haskel air driven liquid pump to generate the required test pressures. There is a wide range of pump models available to meet any pressure, flow and liquid test requirement. Ask for our Liquid Pump catalog for full data.
- Glass burette tubes graduated and of sufficient uniform diameter and length to contain the full volumetric expansion of the gas container. Multiple burettes can be provided to cater for testing a wide range of container sizes.
- A calibrated pressure gauge to comply with the requirements of BS 1780 Part 2 and fitted with a test point.
- A water jacket or jackets, depending on which system is utilized, to suit different size gas containers.



Two Station Test Rig  
with Water Jacket

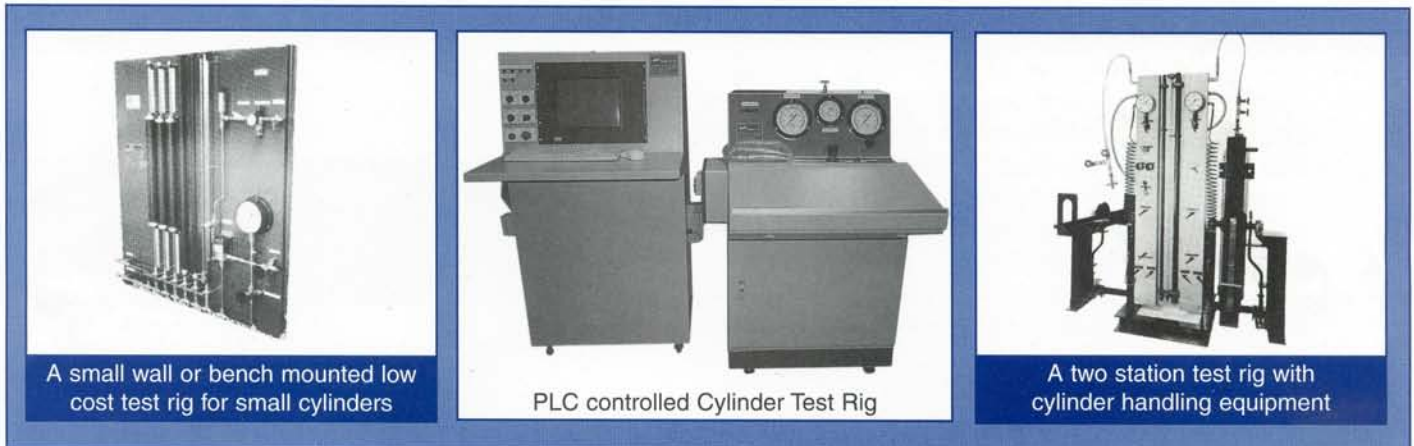
**CAUTION: High-pressure gas can be dangerous if improperly handled.**

- Container handling equipment, which allows rotation from filling and test stations to emptying of tested containers.
- A fluid reservoir with suction strainer, filler cap/breather and sight glass.
- All necessary pipe work, valves (including relief valves) and fittings tested to twice the maximum test pressure of any container that may be tested.
- A control panel which includes air pressure regulator, air pressure gauge, on/off speed control valve, isolation valves, a pressure release and return to tank bleed valve, burette measuring tubes and hydraulic pressure gauge.
- All housed in a fabricated steel frame for wall mounting, bench mounting or freestanding depending on size of system and customer requirements.



## GAS BOOSTERS FOR ACCUMULATOR CHARGING

A further requirement problem with accumulators is that they need to be charged with nitrogen. Haskel also produces a range of gas boosters which will take nitrogen from as low a pressure as 250 psi and boost it up to as high as 10,000 psi if required. This allows full effective use of all gas purchased. Ask for catalog for additional information on our range of gas boosters.



A small wall or bench mounted low cost test rig for small cylinders

PLC controlled Cylinder Test Rig

A two station test rig with cylinder handling equipment

Large fully automatic multiple station test rigs for gas cylinder manufacturers are available.



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For further information on Haskel products, visit our website at: [www.haskel.com](http://www.haskel.com)

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