

A hydrostatic test is a way in which pressure vessels such as pipelines, plumbing, gas cylinders, boilers and fuel tanks can be tested for strength and leaks. The test involves filling the vessel or pipe system with a liquid, usually water, which may be dyed to aid in visual leak detection, and pressurization of the vessel to the specified test pressure.



We offer two test methods for re-qualifying gas cylinders

Direct Expansion Test Method

This method is applicable to hydrostatic tests when volumetric expansion determinations are required. It consists of forcing a measurable volume of water into a cylinder filled with a known weight of water at a known temperature, and measuring the volume of water expelled from the cylinder when the pressure is released. The permanent volumetric expansion of the cylinder is calculated by subtracting the net volume of water expelled from the cylinder from the volume of water forced into the cylinder. The total volumetric expansion of the cylinder is calculated by subtracting from the total volume of water forced into the cylinder, volume of water due to compressibility and volumetric expansion of the test apparatus.

Water Jacket Test Method

It consists of enclosing a cylinder filled with the water inside a test jacket filled with water. Pressure is then applied internally to the cylinder, causing the cylinder to expand. The total and permanent volumetric expansions of the cylinder are determined by measuring the amount of the water displaced by the expansion of the cylinder when under pressure and after the pressure has been released.

Dependable, Easy to operate Testing Pump

Complete Testing Panel with inbuilt Hydrostatic Pressure Testing Pump, Electric Motor, on/off switches, Glass Burettes, high pressure bleed valves, Pressure Gauges and inbuilt pipelines for testing vessels as per direct expansion Test Method or Water jacket test method

Includes -

- ✓ Enamel Painted Steel Cabinet
- ✓ Soft Seated Check Valves
- ✓ Pressure Pulsation Dampener
- ✓ Two 750ml Burette Tubes (standard)
- ✓ Valves -Tubing - Hoses To Complete System
- ✓ High / Low Pressure Bleed Valves and Safety Relief valves
- ✓ 2 Nos. of Class 3A, 1/4% Accuracy Pressure Gauges of 6" Diameter
- ✓ Pump Stainless Steel Water Section with Contaminant Free Design



Testing Pump Panel with inbuilt Testing Pump



For Removal and Insertion of Tapered Threaded Valves Into and Out of Industrial Gas Cylinders Manually

Features

- ✔ Unique "Center Pull" Design Eliminates Belt Slippage
- ✔ Designed for portable or full size cylinders
- ✔ Rubber Belted to Protect Cylinder Finish
- ✔ Removable Clamping Plate
- ✔ Accepts Cylinder Diameters From 4" to 12"
- ✔ Steel Base frame Plate with Mounting Holes



Cylinder Vise

The Testing Pump

Heavy Duty Induction Motor with Optional VFD

Heavy Duty Construction

Fully Enclosed Self lubricated

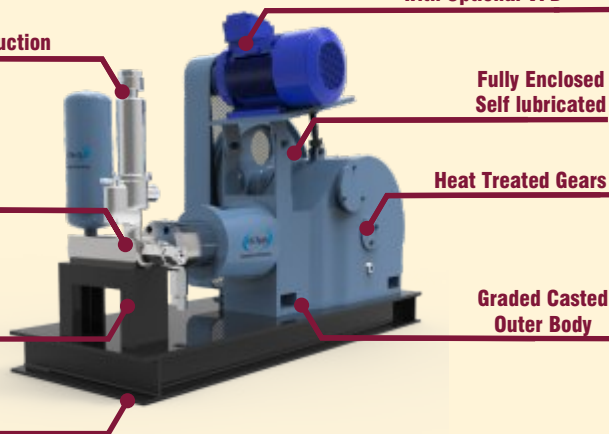
Stainless Steel Water Section

Heat Treated Gears

Minimum Maintenance

Graded Casted Outer Body

Platform Mounted



For Removal and Insertion of Tapered Threaded Valves Into and out of Industrial Gas Cylinders under a Controlled torque electrically.

Features-

- ✔ Heavy Duty Steel Construction
- ✔ Adjustable Torque Limit Control With Override
- ✔ 1400 Nm of servo Powered Torque
- ✔ Adjustable Wrench Quick Coupled to Telescoping Wrench Arm
- ✔ Pneumatic/Manually Operated Vise
- ✔ Accepts Cylinders to 12" Diameter
- ✔ Accepts cylinders to 156" Length
- ✔ Enclosed Operating Control Panel
- ✔ 36" x 48" Steel base Plate With Mounting Holes



Valving / Devalving machine

For use of inverting cylinders to expel test water and drying moisture inside cylinder



Cylinder Drier and Inversion Racks

Includes-

- ✔ Heavy steel construction
- ✔ Enamel paint finish
- ✔ Four Cylinder Points for Full Size Cylinders
- ✔ 1 H.P. Electric Motor
- ✔ 3KW Temperature Controlled Heating Element
- ✔ Will Dry Cylinders in 30-40 Minutes (variable)

A full Line of Hydrostatic Pumps are available

Our Hydrostatic pump provides testing pressure ranging from 300 to 1000 Bars, Use the following Table to determine which model is most suitable for your application.

Model	TS-100	TS-80	TS-40	TS-28
Specifications				
Testing Fluid	Water	Water	Water	Water
Capacity	100 LPH	80 LPH	40 LPH	25 LPH
Max Test Pressure	300 Bars	450 Bars	750 Bars	1000 Bars
Pump Motor Power	1 KW	1.5 KW	2 KW	3.5 KW
Water Jacket Size	24" * 72"	24" * 72"	24" * 72"	24" * 72"
Water Jacket Lid	Manual / Pneumatic	Manual / Pneumatic	Manual / Pneumatic	Manual / Pneumatic
Cylinder Vise	Manual / Pneumatic	Manual / Pneumatic	Manual / Pneumatic	Manual / Pneumatic
No.of Cylinder in Dryer	4 Nos.	4 Nos.	4 Nos.	4 Nos.
Pump Motor Power	1 KW	1.5 KW	2 KW	3.5 KW
Total Power Connected	5 KW	5.5 KW	6 KW	8 KW

Note- Specifications are subjected to change without prior notice
Custom Built models also available

WORLDWIDE LOCATION

Hi-Tech Gas Equipment & Hardware
262 KM Stone, National Highway-1,
Mandi Gobindgarh-147 301, Punjab
India

- ☎ +91-1765-500999
- ☎ +1-302-996-5818
- 🌐 www.hitechgas.com
- ✉ sales@hitechgas.com

NORTH AMERICA LOCATION

Hi-Tech North America LLC
1408, Old Capital Trail, # 554
Wilmington, DE- 19808
United States of America

- ☎ +1-302-298-1374
- ☎ +1-302-996-5818
- 🌐 www.hitechgas.us
- ✉ sales@hitechgas.us

YOUR LOCAL CONTACT

