

## TEST BENCHES FOR VALVES

Paskals designs, manufactures and delivers valve test units for pressure testing any type of Gate, Globe, Plug, Ball, Check, Safety and Butterfly valve according to all international test standards.

### Capabilities:

- + Range DN10 – 2200 mm. / ¼ - 86".
- + Horizontal (stem vertical), vertical. (Stem horizontal) or tilting clamping system
- + Clamping on the inlet flange, either flanges or (proportional clamping) between the clamping tables.
- + 1 – 2000 tons of clamping force.
- + With no or limited linear force on the valve body.
- + Test pressure range: from vacuum up to 2000 bar / 30,000 PSI.
- + Test medium: Liquid, compressed air, Nitrogen, Helium or Hydrogen.



### Standard Features:

- + Computer registration system.
- + Full automatic operation system.
- + Testing one or a complete series of valves.
- + Automatic open close action.
- + Valve performance testing, considering; measuring of the stroke measuring, open/close time and torque measuring.
- + Stainless tubing.
- + Fugitive emission and cryogenic test facilities on requirement.

### Tests include:

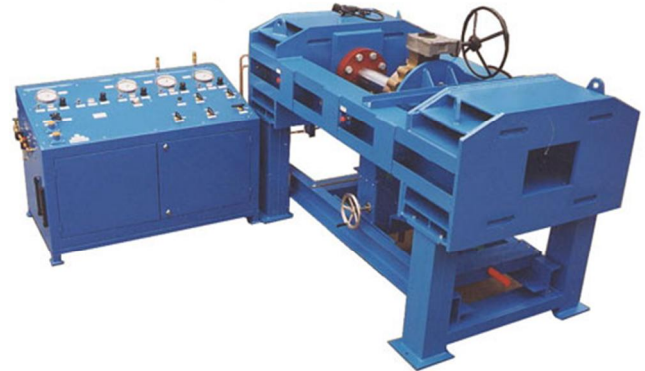
- + Shell test - pressure inside the assembled valve to 1.5 times working pressure.
- + Back seat test - pressure inside with seat fully opened and closed to 1.1 times working pressure.
- + High pressure closure test - pressure applied to each side of the closed valve to 1.1 times working pressure.
- + Low pressure closure test - same as high pressure but with air at 100 psi (7 bar), detected by air bubbles in a water column or in laser bubble counter.
- + Relief valve test - opening pressure using a 'Pop' test and to 90-95% of set pressure.

## TEST BENCH FOR CONTROL VALVE

Paskals designs, manufactures and delivers valve test units for pressure testing any type of Gate, Globe, Plug, Ball, Check and Butterfly valve according to all international test standards.

### Capabilities:

- + Range DN10 – 2200 mm. / ¼ - 86"
- + Horizontal (stem vertical), vertical (stem horizontal) or tilting clamping system.
- + Clamping on the inlet flange, either flanges or (proportional clamping) between the clamping tables.
- + 1 – 2000 tons of clamping force.
- + With no or limited linear force on the valve body.
- + Test pressure range: from vacuum up to 2000 bar / 30,000 PSI.  
Test medium: Liquid, compressed air, Nitrogen, Helium or Hydrogen.



### Standard features:

- + Auto clamping system with proportional clamping force system.
- + Low pressure air test system  
7 bars / 100 PSI.
- + Computer Registration System  
Control Valve Test Software.
- + Pressure transducers and digital mass flow meters to measure seat leakage according class II, III and IV.
- + Laser Bubble Counter according standards
- + Stainless steel control panel.
- + Stainless tubing.
- + High pressure water prefilling system.
- + High accuracy gauges and pressure transmitters.



## Test benches for Safety Valves

Paskals designs, manufactures and delivers Safety (relief) valve test benches for set pressure measurement on all types of spring or pilot operated safety (relief) valves.

### General specification:

- + Range ¼ -10" or ¼ -16".  
(Larger stations available on request).
- + Low or high volume 'full lift' testing.
- + Stationary, skid mounted portable or containerized systems.
- + Safety screen.
- + Safety interlocks.
- + API 527 test facility.
- + Liquid test system with J-tube design.
- + Test medium: Compressed air, Nitrogen or Liquid.



### Features:

- + Windows operated Computer Registration System.
- + Full automatic set pressure and leakage testing.
- + Pneumatic or electric driven high pressure compressor and storage system.
- + Set pressure detection system by lift and acoustic measuring.
- + Adapters for male and female thread connections.
- + Partly for fully closed safety closure.
- + Separate or combined test facility for pressure vacuum (breather) valves.



## TEST UNIT FOR MANUFACTURER

Fully automatic test units for quick and efficient testing a series of valves. Our IT specialists design smart software for the test- & operation system. The fully integrated computer system assures a very simple operating procedure. The test- & operation system controls the test procedure and a combination of accurate pressure sensors and flow meters detect / measure any leakage. The intelligent software compares the found test results with the programmed test standard. Within seconds the system gives a 'pass' or 'fail' signal.

### Capabilities:

- ✚ Range DN10 – 2200 mm. / ¼ - 86”.
- ✚ Horizontal (stem vertical) or vertical stem horizontal).
- ✚ 1 – 2000 tons of clamping force.
- ✚ With no or limited linear force on the valve body.
- ✚ Test pressure range: from vacuum up to 2000 bar / 30,000 PSI.
- ✚ Test medium: Liquid, compressed air, Nitrogen, Helium or Hydrogen.



### Features:

- ✚ Computer registration system.
- ✚ Fully automatic operation system.
- ✚ Testing one or a complete series of valves.
- ✚ Automatic open close action.
- ✚ Valve performance testing, considering measuring of the stroke measuring, open/close time and torque measuring.
- ✚ Auto clamping system with proportional clamping force system.
- ✚ Low pressure air test system 7 bars / 100 PSI.
- ✚ Computer Registration System.
- ✚ Pressure transducers and digital mass flow meters to measure seat leakage according class II, III and IV.
- ✚ Laser Bubble Counter according standards
- ✚ Stainless steel control panel.
- ✚ Stainless tubing for better electronic control.
- ✚ High pressure water prefilling system.
- ✚ High accuracy gauges and pressure transmitters.