Unlike Conventional Valves, Control Valves not only need to be tested for Seat & body tightness but also for proper adroitness amongst the Main Valve, Actuator & Positioner. K.Mass designs and manufactures a custom made range of Test Benches for testing of all Gate, Globe, ball, butterfly and numerous special types of Control valves.

Capabilities

- Safety Valve Types
  - Spring, Gate, Globe, & Sluice Valves
  - Ball Valves
  - Butterfly Valves

- Size Ranges
  - From ½” Inlet to 10” Inlet Flanged Valves (Higher sizes available on request)
  - From ¼” Inlet to 2” Inlet Screwed Valves

- Test Type
  - Seat Test
  - Body Test
Test Medium

- Compressed Air / Nitrogen
- Liquid

Pressure / Vacuum Range

- Variable ranges from Vacuum up to 6000 psig.

Standard Features

- 3Jaw, Stainless Steel, Piston loaded Auto Clamping unit for Quick & effortless clamping of valves for Seat Leak Test. (For Valve Sizes up to 6”)
- Lead Screw type SS-410 Hardened, Top Pillar Clamping assembly to clamp the downstream side of Valves for Body Hydro Test
  Electronic Over Pressure Protection System with a ‘Real time Digital Pressure Read Out’ to preset the maximum pressure limit of the Test Bench & avoid accidents due to over pressure.
- Onsite calibration option for Electronic Over Pressure Protection System for user
- Safety Valves on Accumulators to protect against system over pressure.
- Safety Screen to protect the operator from exposure to pressurized test media.
- Priming Bypass system to vent air bubbles & pockets in test valves by filling up water prior to hydraulic testing.
- Pressure Gauge Adaptors to enable directional control of Test Pressure Gauges
- Pressure Outlets for testing external pressure tight assemblies.
- All electrical mountings & cables routed neatly in accordance with international standards using conduits & covers with appropriate glands, clamps & gaskets.
- High Quality Weather Proof Painting to prevent rusting even in highly corrosive offshore environments.
- Sequential Nametags & labels for easy identification & operation.
- Stainless Steel Circuit Tubing Integrated in accordance with International Standards
Optional Features

- A Remote Controlled 4-Jaw, En-24 Chrome-Moly-Steel Hardened, Bottom Hydraulic Cylinder Proportional Clamping unit with fully equipped with a PLC based Safety Interlock System & Touch Screen Human Machine Interface for Safe, Quick & effortless clamping of valves for Seat Leak Test.

- A Remote Controlled Compression type Top Hydraulic Cylinder Proportional Clamping System fully equipped with a PLC based Safety Interlock System & Touch Screen Human Machine Interface for Safe, Quick & effortless clamping of valves for body Test.

- 90° Tilting Port to facilitate easier loading/unloading for larger Valves as well as for testing of valves in either Vertical or Horizontal state. (For Valve Sizes of 6” and above)

- Common / Independent Skid Mount Platform for all Test System Modules.

- Large Size Bright LED Displays for ‘Real time Digital Pressure Read Out’ Available in Variable Sizes)

- Panel & Direct Mounted Chart Recorders

- Complete Stainless Steel Structural Fabrication.

- Containerized System with / without Work benches for Offshore applications (Only up to 8” Valve size)

Standard Accessories

- Air Gun for cleaning of valves & Test Bench during & after the tests.

- 6” Test Pressure Gauges with Accuracy of +0.5% of FSD.

- High Pressure Threaded Adaptors for Screwed Valves.

- Phosphatized Intermediate and Outlet Flanges with O-Rings to accommodate various valve sizes.

- Interconnecting Cables & Hoses
Compatible Add On Systems & Accessories

- Rotameter Panel for Leakage Measurement
- Data Acquisition System
- High Pressure Air Supply System to cater to the Drive Air & Pre-charged Air requirement of the Test Bench
- Liquid Reservoir with Accessories
- Portable Trolley mounted Nitrogen Cylinders
- Test Media Recirculation System