



# Calder Testers



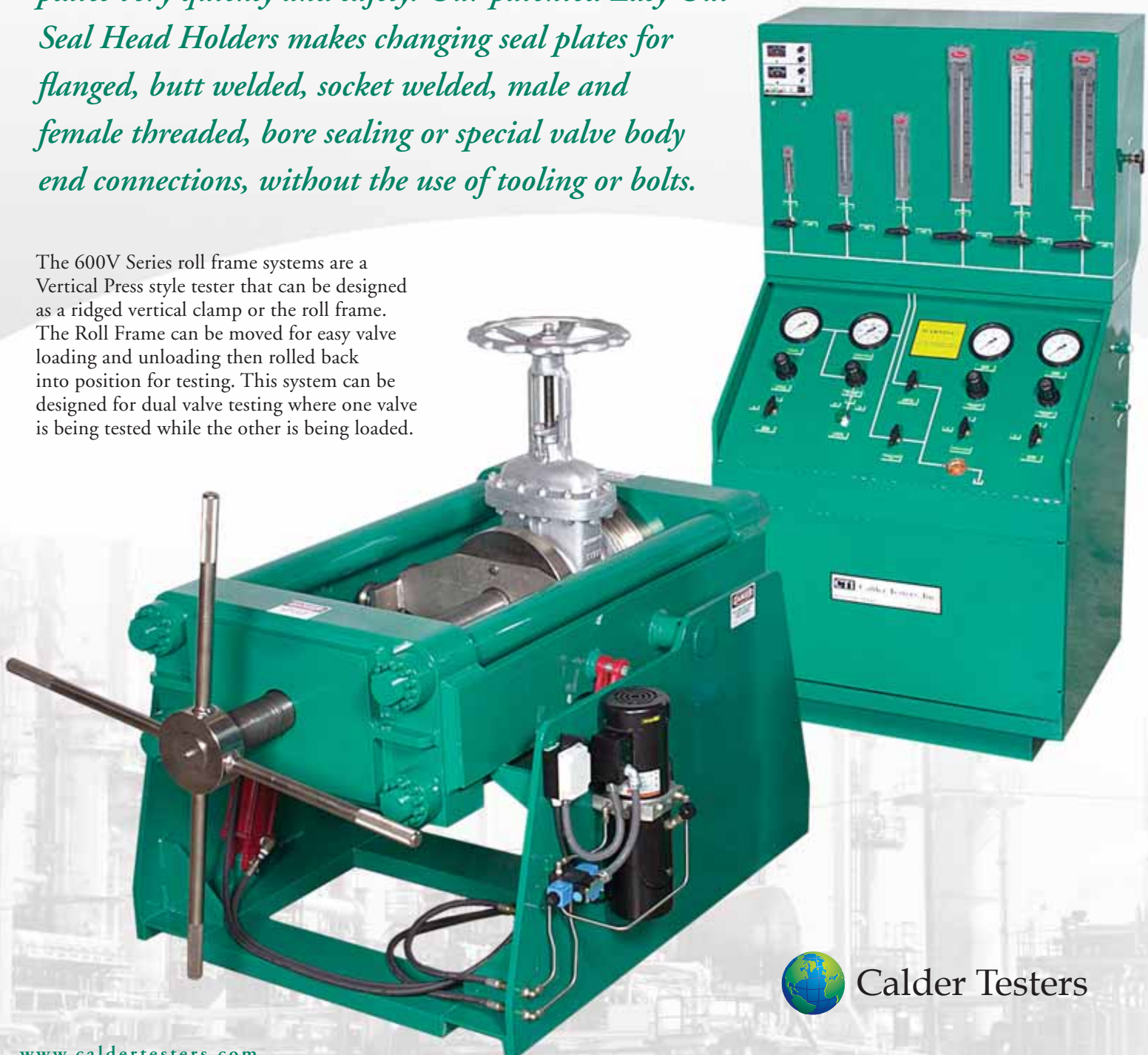
**Model 600 & 600V**  
Multi-Purpose Valve Testing System

# Model 600 & 600V

## Multi-Purpose Valve Testing System

*Our Model 600 Series clamp fixtures are designed to clamp and test valves, fittings and related pressure bearing parts between centers. Hydrostatic or pneumatic seat testing can be performed from both sides without removing the valve from the clamp fixture. The Model 600 Series test systems are best known as the “universal” valve testing system because of its adaptability to change seal plates very quickly and safely. Our patented Easy Out Seal Head Holders makes changing seal plates for flanged, butt welded, socket welded, male and female threaded, bore sealing or special valve body end connections, without the use of tooling or bolts.*

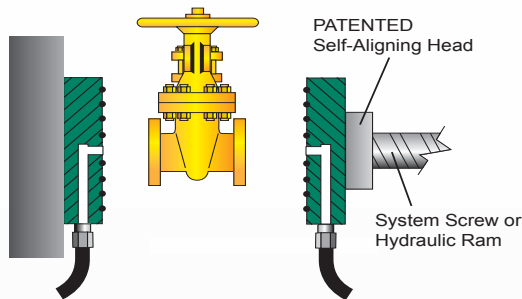
The 600V Series roll frame systems are a Vertical Press style tester that can be designed as a ridged vertical clamp or the roll frame. The Roll Frame can be moved for easy valve loading and unloading then rolled back into position for testing. This system can be designed for dual valve testing where one valve is being tested while the other is being loaded.



Calder Testers

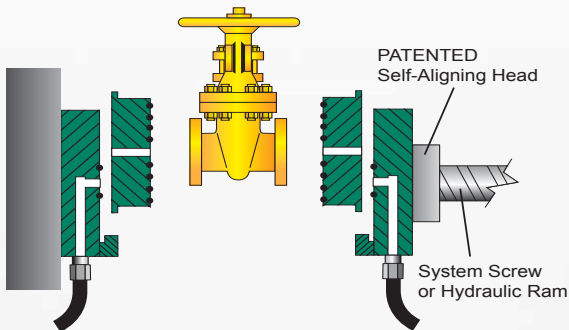
Features for the Model No. 600-6, 600-8, 600-12, 600-16 and 600-24 standard non-rotating flanged valve testing systems. The Model 600 allows the operator to perform air and/or water testing on the same clamping fixture. Source air and water supplied by the customer.

## Fixed "O" Ring Seal Plates



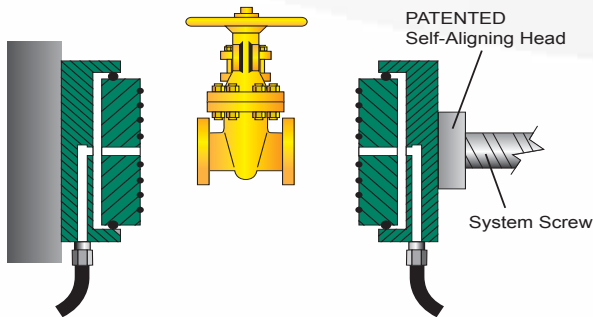
**Fixed Seal Plates** are stationary and used primarily for face sealing flanged valves.

## Easy Out™ Seal Plates



**Easy Out™ Seal Plates** are removable and are designed to test butt welded, female threaded, socket welded, bore sealing, flanged and special valve body end connections.

## Differential Pressure Seal™ Plates



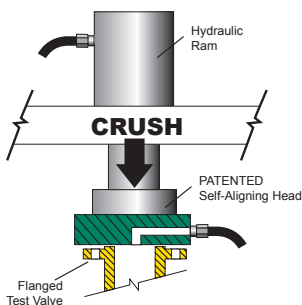
**Differential Pressure Seal™ Plates** eliminate the use of hydraulic clamping.

## Standard Features

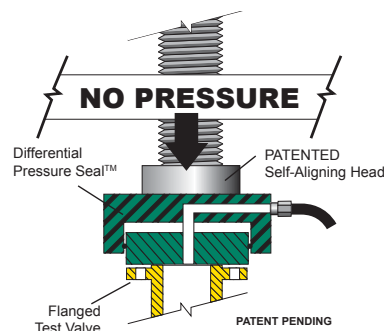
- Air operated pump with 3,000 or 10,000 psi hydrostatic test circuit
- Air operated pump with 10,000 psi hydraulic clamp circuit
- 75, 100, 150, 200, & 300 ton hydraulic clamping
- One skid mounted clamp fixture for fork lift movement only
- One skid mounted control console for fork lift movement only
- Manual Air & Water Bi-Directional seat testing
- Patented Self Aligning Seal Head
- Two (2) "O" ring seal plates, carbon steel, nickel plated, for flanged valve
- Aluminum or Stainless Steel panel face
- 4" or 6" top mounted pressure gauges with disconnect (0.5% accuracy)
- Gauge Calibration Port installed as an alternate pressure port.

## Additional Options & Features

- 600-2, 600-4 available for smaller size valves
- Smaller sizes can be manual clamped or hydraulic clamped
- Model 600 systems can seal flanged, butt welded, socket welded, male and female threaded, bore sealed or special valve body end connections.
- Model 600 systems can be Vertical, Horizontal or Rotating
- Rising Stem lead screw, Air or Electric actuated lead screw
- Special Vertical systems for assembly line or automation are available
- Larger hydraulic clamping up to 1000 tons on standard systems
- End loads for the Model 600 larger than 1000 tons are special design



**Hydraulic Rams** are used on many of our clamping systems for products that can support excessive load forces such as Butterfly Valves. Some model 600 units have lead screws on one end and a ram on the opposite end. Hydraulic clamping may not pass API 598 seat test requirements and could damage or distort some valve bodies.



The **Differential Pressure Seal™ Plate** holds the test object between centers and increases clamping forces proportionally as the test pressure increases. The Differential Pressure Seal™ applies only the differential load force on the object being tested.

# Specifications

# Model 600 Series System Options

## Series 600-6

	150	300	600	900	1500	2500
3,000 psi	1"	●	●	●		
	2"	●	●	●		
	3"	●	●	●		
	4"	●	●	●		
	6"	●	●	●		
10,000 psi	1"	●	●	●	●	●
	2"	●	●	●	●	●
	3"	●	●	●	●	●
	4"	●	●	●	●	●
	6"	●	●	●	●	●

## Series 600-8

	150	300	600	900	1500	2500
3,000 psi	2"	●	●	●		
	3"	●	●	●		
	4"	●	●	●		
	6"	●	●	●		
	8"	●	●	●		
10,000 psi	2"	●	●	●	●	●
	3"	●	●	●	●	●
	4"	●	●	●	●	●
	6"	●	●	●	●	●
	8"	●	●	●	●	●

## Series 600-12

	150	300	600	900	1500	2500
3,000 psi	2"	●	●	●		
	3"	●	●	●		
	4"	●	●	●		
	6"	●	●	●		
	8"	●	●	●		
	12"	●	●	●		
10,000 psi	2"	●	●	●	●	●
	3"	●	●	●	●	●
	4"	●	●	●	●	●
	6"	●	●	●	●	●
	8"	●	●	●	●	●
	12"	●	●	●	●	●

## Series 600-16

	150	300	600	900	1500	2500
3,000 psi	2"	●	●	●		
	3"	●	●	●		
	4"	●	●	●		
	6"	●	●	●		
	8"	●	●	●		
	10"	●	●	●		
	12"	●	●	●		
	16"	●	●	●		
10,000 psi	2"	●	●	●	●	●
	3"	●	●	●	●	●
	4"	●	●	●	●	●
	6"	●	●	●	●	●
	8"	●	●	●	●	●
	10"	●	●	●	●	●
	12"	●	●	●	●	●
	16"	●	●	●	●	●

## Series 600-24

	150	300	600	900	1500	2500
3,000 psi	8"	●	●	●		
	10"	●	●	●		
	12"	●	●	●		
	14"	●	●	●		
	16"	●	●	●		
	18"	●	●	●		
	24"	●	●	●		
10,000 psi	8"	●	●	●	●	●
	10"	●	●	●	●	●
	12"	●	●	●	●	●
	14"	●	●	●	●	●
	16"	●	●	●	●	●
	18"	●	●	●	●	●
	24"	●	●	●	●	●

**PATENTED EASY OUT™ SEAL HEAD HOLDERS** are designed to change seal plates for socket weld, butt weld, threaded, bore seal or special end connections.

**90 DEGREE ROTATION** designed to rotate the clamp fixture from the horizontal to the vertical position for hydrostatic valve testing.

**SAFETY INTERLOCK** circuit installed on the hydraulic clamp circuit to lock hydraulic pressure if there is a system failure.

**BI-DIRECTIONAL TEST CIRCUIT** installed inside the control console to change the flow of air and water without changing hoses.

**DATA ACQUISITION AND ANALYSIS SYSTEM (DAAS)** is designed to measure pressure and time with PC based hardware and software.

**BUBBLE JAR** manufactured to ANSI B16.104 for seat testing with air.

**DRIP TUBE** manufactured to API 598 for seat testing with water.

**DC POWER SUPPLY** provided in 0 to 24 volt for input voltage to valve actuators that require a supply voltage to open the actuator.

**0 to 100 psi AIR ACTUATOR CIRCUIT** provided for input pressure to valve actuators that require a supply of air to open the actuator.

**0 to 100 psi AIR POSITIONER CIRCUIT** provided for input pressure to valve positioner that require a supply of air to position the actuator.

**FLOW PANEL** provided with 0.05 to 1800 SCFH leak detection.

**RECIRCULATION SYSTEMS** provide a closed circuit system for recirculation of the test medium.

- Standard recirculation system (2 to 4 gpm)
- Quick Fill recirculation system (8 to 10 gpm)
- 30, 50, 85 & 100 gallon reservoirs standard



Calder Testers

9000 Monroe • Houston, TX 77061 USA  
1.800.704.TEST (8378) • fax 713.944.2982

[www.caldertesters.com](http://www.caldertesters.com)