

MODEL 600 VALVE TESTING SYSTEM

03 | 2014
M600

Our Model 600, flexible, profitable, productive and customizable beyond standard sizes to meet customers' needs.



Benefits

Model 600 Series are designed to clamp and test valves, fittings and related pressure bearing parts. Hydrostatic or pneumatic seat testing can be performed without removing the valve from the clamp fixture.

The Model 600 Series features a 3000 psi or 10,000 psi hydrostatic pump for testing up to class 2500 values (see table for machine capacities). The system can be fixed or built with optional rotation to switch from horizontal to vertical. The patented Easy Out Seal Head Holders make changing Seal Plates faster, easier and improves production.

Standard Features

CLAMP FIXTURES

Ranges from 1" 2500# Class to 24" 300# Class.

Standard includes two (2) fixed "O" ring seal plates, carbon steel, nickel plated for flanged valves. (Please refer to Series Specification Chart for size range.)

Patented self-aligning seal heads, equals no valve damage.

Clamp Frames powder coated, allowing corrosion resistance.

Clamp Frames can be anchored to floor for safety.

Forklift beams for portability.

HYDRAULIC CONTROL PANEL

Air operated pump with 10,000 psi hydraulic clamp circuit.

4" top mounted 10,000 psi, Glycerin filled, pressure gauge (0.5% accuracy).

Built-in hydraulic reservoir.

Air filter and lubricator assembly for inlet supply air to pumps.

Hydraulic load chart mounted on control panel, which allows quick reference.

Safety interlock.

HYDROSTATIC CONTROL PANEL

Air operated pump with either 3 Series or 10 Series hydrostatic test circuit.

4" top mounted 3,000 psi or 10,000 psi, Glycerin filled, pressure gauge (0.5% accuracy).

Water filter for inlet test water supply.

Air filter and lubricator assembly for inlet supply air to pumps.

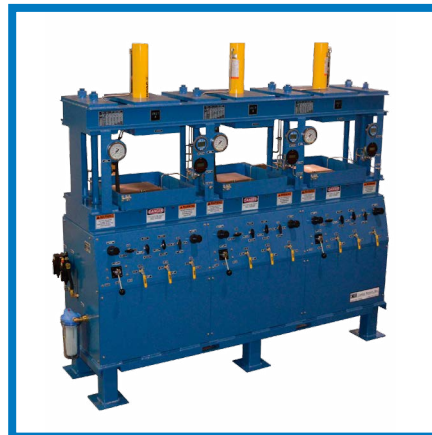
Gauge Calibration Port

Console Panel and legs to be carbon steel powder coated.

Console Panel to have holes for anchor bolts.

Panel instrumentation labeled.

Installations, operations and maintenance manual included.



3 SERIES								
inch		(mm)	CLASS					
			150	300	600	900	1500	2500
MODEL 600-6	1 inch	(25.4 mm)	●	●	●			
	2 inch	(50.8 mm)	●	●	●			
	3 inch	(76.2 mm)	●	●	●			
	4 inch	(101.6 mm)	●	●	●			
	6 inch	(152.4 mm)	●	●				
			CLASS					
MODEL 600-8	2 inch	(50.8 mm)	●	●	●			
	3 inch	(76.2 mm)	●	●	●			
	4 inch	(101.6 mm)	●	●	●			
	6 inch	(152.4 mm)	●	●	●			
	8 inch	(203.2 mm)	●	●	●			
			CLASS					
MODEL 600-12	2 inch	(50.8 mm)	●	●	●			
	3 inch	(76.2 mm)	●	●	●			
	4 inch	(101.6 mm)	●	●	●			
	6 inch	(152.4 mm)	●	●	●			
	8 inch	(203.2 mm)	●	●	●			
	10 inch	(254 mm)	●	●				
MODEL 600-16	12 inch	(304.8 mm)	●	●				
	2 inch	(50.8 mm)	●	●	●			
	3 inch	(76.2 mm)	●	●	●			
	4 inch	(101.6 mm)	●	●	●			
	6 inch	(152.4 mm)	●	●	●			
	8 inch	(203.2 mm)	●	●	●			
MODEL 600-24	10 inch	(254 mm)	●	●	●			
	12 inch	(304.8 mm)	●	●				
	14 inch	(355.6 mm)	●	●				
	16 inch	(406.4 mm)	●	●				
	18 inch	(457.2 mm)	●	●				
	20 inch	(508.0 mm)	●	●				
MODEL 600-24	24 inch	(609.6 mm)	●					

10 SERIES								
inch		(mm)	CLASS					
			150	300	600	900	1500	2500
MODEL 600-6	1 inch	(25.4 mm)	●	●	●	●	●	●
	2 inch	(50.8 mm)	●	●	●	●	●	●
	3 inch	(76.2 mm)	●	●	●	●	●	●
	4 inch	(101.6 mm)	●	●	●	●	●	●
	6 inch	(152.4 mm)	●	●	●			
			CLASS					
MODEL 600-8	2 inch	(50.8 mm)	●	●	●	●	●	●
	3 inch	(76.2 mm)	●	●	●	●	●	●
	4 inch	(101.6 mm)	●	●	●	●	●	●
	6 inch	(152.4 mm)	●	●	●	●	●	●
	8 inch	(203.2 mm)	●	●	●			
			CLASS					
MODEL 600-12	2 inch	(50.8 mm)	●	●	●	●	●	●
	3 inch	(76.2 mm)	●	●	●	●	●	●
	4 inch	(101.6 mm)	●	●	●	●	●	●
	6 inch	(152.4 mm)	●	●	●	●	●	●
	8 inch	(203.2 mm)	●	●	●	●	●	●
	10 inch	(254 mm)	●	●	●			
MODEL 600-16	12 inch	(304.8 mm)	●	●				
	2 inch	(50.8 mm)	●	●	●	●	●	●
	3 inch	(76.2 mm)	●	●	●	●	●	●
	4 inch	(101.6 mm)	●	●	●	●	●	●
	6 inch	(152.4 mm)	●	●	●	●	●	●
	8 inch	(203.2 mm)	●	●	●	●	●	●
MODEL 600-24	10 inch	(254 mm)	●	●	●			
	12 inch	(304.8 mm)	●	●	●			
	14 inch	(355.6 mm)	●	●				
	16 inch	(406.4 mm)	●	●				
	18 inch	(457.2 mm)	●	●				
	20 inch	(508.0 mm)	●	●				
MODEL 600-24	24 inch	(609.6 mm)	●	●				

OPTIONS FOR WATER TESTING LEAK DETECTION

DRIP TUBE - Manufactured to API 598 for seat testing with water. When water is introduced from one side of the valve seat and the seat leaks, water will form on the tube end and drip showing visible signs of the leak that can be counted in drops per minute.

DATA ACQUISITION ANALYSIS SYSTEM (DAAS)

- Basic - reads and displays printout test pressures.
- Advanced - reads, displays, printouts and determines pass/fail test results based on criteria.

DATA ACQUISITION AND CONTROL SYSTEM (DACS) reads displays, prints, determines pass/fail based on criteria and control ramping of test pressure.

OPTIONS FOR AIR TESTING

AIR TEST CIRCUIT with Gauge - Regulates supply air for seat testing up to 160 psi in 125 psi out.

AIR TEST LEAK DETECTION

BUBBLE JAR - Manufactured to ANSI B16.104 for seat testing with air. When air is introduced from one side of the valve seat and the seat leaks, air bubbles will form under the water in the bubble jar showing visible signs of the leak that can be counted in bubbles per minute.

NOTE: MUST HAVE AIR TEST CIRCUIT OPTION TO UTILIZE THIS.

FLOW PANEL - to provide air/gas leak detection for Class II, III and IV seat leakage testing with (6) Analog flow meters, 0.5, 5, 50, 100, 400 & 1800 SCFH in accordance with American National Standards Institute (ANSI) and Fluid Controls Institute (FCI) ANSI/FCI 70-2-2006, Formerly ASME B16.104.

DIGITAL FLOW PANEL with DIGITAL DISPLAY to provide air/gas leak detection for Class II, III,

IV, V and VI seat leakage testing with 10 SCCM, 50 SCCM, 200SCCM, 50 SLM and 200 SLM in accordance with American National Standards Institute (ANSI) and Fluid Controls Institute (FCI) ANSI/FCI 70-2-2006, Formerly ASME B16.104.

DIGITAL FLOW PANEL with DAAS CONNECTION w/o DIGITAL DISPLAY. Connect and read digital Flow meter reading from the power supply or DAAS system. This option requires purchasing our Data Acquisition and Analysis System (DAAS).

OPTIONS FOR OTHER VALVE END TYPES

EASY OUT SEAL PLATES - Seal Plates for flanged valves smaller than 2" and other end type connections (ex. butt weld, socket weld etc.) available upon request. Customer will provide dimensions for special sealing requirements.

OPTIONS FOR SMALL VALVES

3/4" and 1 1/2" "O" ring seal plate for flanged valves

1/2" and 1" "O" ring seal plate for flanged valves

OPTIONS FOR PRODUCTIVITY IMPROVEMENT

PATENTED EASY OUT SEAL HEAD HOLDERS - Allows changing of Seal Plates from flanged to other end type connections like butt welded, socket welded, bore sealing and threaded valves faster and easier, without the use of special tools and bolts.

ROTATION OPTION - Includes pneumatic cylinders to rotate clamp fixture 90 degrees from the horizontal position to the vertical position.

QUICK FILL BYPASS without RESERVOIRS OR PUMP CHANGE TO A FASTER FLOW from 2 gpm to 6 gpm.

RECIRCULATION SYSTEMS with QUICK FILL BYPASS and 25 PSI PUMP:

Recirculation system with quick fill bypass, 30, 50 OR 80 gallon - increase flow rate from 15 gpm to 17 gpm and allows the testing liquid to be reused.

BI-DIRECTIONAL TEST CIRCUIT (10K or 3K) - built into the control panel which allows operator to change the flow of test medium w/o unclamping the valve being tested. (upstream & downstream for vertical testing and A ↔ B for horizontal testing.)

ACTUATED CONTROL VALVE OPTIONS

DC POWER SUPPLY provided in 4 to 20 milliamps for input voltage to valve actuators that require a supply voltage to open the actuator.

0 to 100 psi AIR ACTUATOR/ POSITIONER CIRCUIT provided for input pressure to valve actuators that require a supply of air to open the actuator or to provide for input pressure to valve actuators that require a supply of air to position the actuator.

CLIMAX Training Facilities

CLIMAX has been teaching the fundamentals and fine points of portable machine tool operation for practically as long as we've been inventing and building the tools.

We offer several training facilities across the United States - the Global Learning Center, situated in our corporate headquarters near Portland, Oregon, our New Hampshire Training Facility, and our Houston Training Facility. All facilities offer training for machine tool operators on safety and machine setup and operation. Trainees also receive technical tips and tools to improve operational efficiencies, with the vast majority of every program devoted to hands-on activities and skill development.



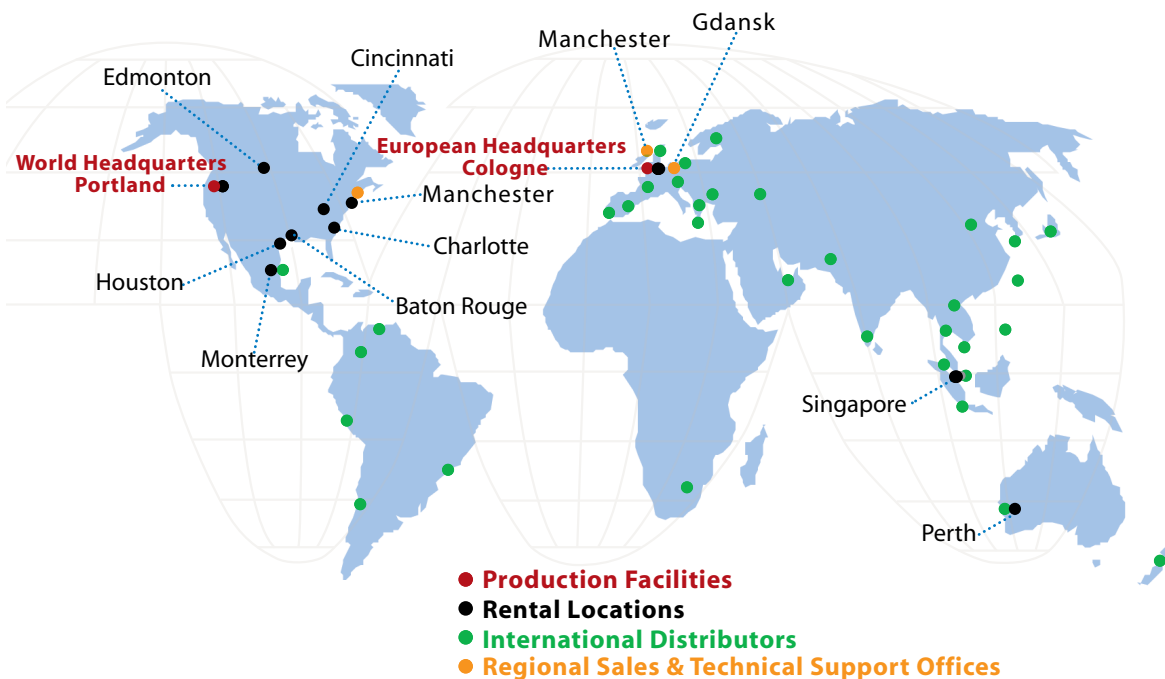
The CLIMAX instructional team includes specialists in shipbuilding, power generation, civil engineering, bridge re-building, petrochemical and other industries.

Whether it's a regularly scheduled course at one of our training facilities, or custom curriculum conducted at your facility, your machinists will benefit from courses developed by some of the most respected authorities in the business.

Call us today to register for a regularly scheduled class, or talk to us about how we can customize a training program for your specialized application.



CLIMAX GLOBAL LOCATIONS



Call CLIMAX for:

On-site Training

Need some refresher courses in setting up and operating your CLIMAX machine or tester?

Special Projects

CLIMAX has been customizing valve testing solutions for more than 25 Years.

Rentals

With 16 worldwide rental depot locations, you are never far away from a CLIMAX

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