



Dual-Station Test Stand with a 20" diameter, 100-ton clamping fixture and a 36" diameter 300-ton clamping fixture. Control console can be used to operate both fixtures independently or simultaneously.

## FEATURES

- **SAFETY INTERLOCK:** Hydraulic Safety Interlock feature prevents accidental release of clamping pressure unless hydrostatic test pressure is vented.
- **INCREASED TESTING VERSATILITY:** Test Stand can perform both upstream and downstream seat tests, as well as body shell test without removing the valve from the test fixture.
- **INCREASED TESTING EFFICIENCY:** Dual high-low hydraulic pumps provide quick clamping and unclamping functions, while high-low fill and hydro pumps quickly fill and pressurize valves to be tested. Air flush option quickly flushes water back to water reservoir.

Barbee's Dual Station Test Stand, Model H-1000-DS is designed to perform seat and shell tests on butterfly valves as well as other flanged valves. The tester consists of two clamping fixtures and a control console. Each test station can be operated independently from each other, allowing the operator to leave one valve under test, while setting up the next valve for another test.

A series of o-ring grooves is machined on the face of the hydraulic ram to seal the flanged or wafer ends of the valve. The sliding hold-down arms are then pushed forward to engage the valve body or

flange to create a seal. Pressure is then introduced at the center port of the ram and can be regulated by a panel-mounted regulator.

A high-low hydraulic pump set up is employed to allow the operator fine control for lower clamping pressures on small valves as well as high pressure for larger valves.

A closed-loop recirculating system is installed in the hydrostatic circuit. This allows the tester to be used with other test media other than water. Test media from the valve can be re-circulated back to the tank after the testing is completed.

# Model H-1000-DS Specifications

**TEST COMPONENTS:**

Flanged and wafer style Butterfly Valves as well as other flanged valves from 3" 150# Class up to 24" 300# Class.

**TEST PRESSURE:**

0-1,500 PSI water at ambient temperature. Hydrostatic test pressure can be regulated as low as 50 psi. Shop air from 0-100 PSI for air seat tests.

**CLAMPING FIXTURES:**

**100 TON FIXTURE:** 20" diameter piston with single-acting cylinder, 12" stroke. Seal plate has 1/2" NPT outlet port with o-ring grooves to seal valves from 3" up to 12" 300# Class. Four hold-down arms that slide out. Maximum clearance is 24" diameter on largest valve flange.

**300 TON FIXTURE:** 36" diameter piston with single-acting cylinder, 12" stroke. Seal plate has 1/2" NPT outlet port with o-ring grooves to seal from 14" up to 24" 300# Class flanged valves. Six hold-down arms, retractable. Maximum clearance is 36" outside diameter flanged valve.

**HYDROSTATIC SYSTEM:**

**PUMPS:** Air-operated Fill Pump, 20 g.p.m flow rate for fast fill rates. Air operated piston pump, 20:1 ratio, 0-1500 PSI.

**GAUGES:** 6" dial panel-mounted gauges, glycerin filled, 0.5% accuracy full scale. 0-600 and 0-1,500 PSI on each test station. Hydraulic clamping pressure gauges are 0-600 and 0-10,000 PSI.

**RE-CIRCULATION:** 35-gallon polyethylene tank for water storage and recovery. Panel mounted stainless steel ball valves for Supply Pressure cutout and suction back to the tank. Water from the valve being tested can be recovered back to the tank after the test.

**COMPONENTS:** All high-pressure valves, fittings and tubing stainless steel. All gauges, valves and controls panel-mounted for ergonomic controls.

**SAFETY FEATURES:**

A hydraulic safety Interlock valve is installed in the circuit to prevent the accidental release of clamping pressure unless the test pressure is vented.

**WARRANTY:**

1 Year Full warranty. (Refer to Barbee Terms and Conditions of Sale.)

## VALVE TEST CAPABILITY

	100-TON FIXTURE				300-TON FIXTURE				
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ANSI	150	300	600	900	ANSI	150	300	600	900
1-2"	YES	YES	YES	YES	14	YES	YES	YES	YES
3-5"	YES	YES	YES	YES	16	YES	YES	YES	NO
6-8"	YES	YES	YES	NO	20	YES	YES	NO	NO
10-12"	YES	YES	NO	NO	24	YES	YES	NO	NO

DIMENSIONS: 100-TON FIXTURE: 48" W x 48" L x 60" H ,      WEIGHT: 3000 LBS.  
 300-TON FIXTURE: 72" W X 72" L X 68" H, WEIGHT: 6000 LBS.  
 CONSOLE: 84" X 36" W X 60" H, WEIGHT: 2000 LBS.