

## FEATURES

- **DUAL FUNCTION TEST STAND:** Test stand has the ability to perform seat tests with air or water with standard valves, as well as to check the set pressure of relief valves.
- **SAFETY INTERLOCK:** Hydraulic Safety Interlock feature prevents accidental release of clamping pressure unless the test pressure is vented.
- **DATA ACQUISITION CONSOLE:** (OPTIONAL) Complete with software and hardware, Windows based system, PC with CDwriter, 17" monitor, keyboard, and printer. Data Acquisition System has a standard test profile for control valves, and another profile for relief valves.



RV-3000 SERIES SHOWN WITH STORAGE BOTTLES & SURGE TANK, SAFETY SHIELD, ON A PLATFORM.

Barbee's RV-3000 Series Tester is a modified version of the standard HP-6000-RV Series, for use with testing relief valves.

The clamping fixture has a 20" diameter stainless steel plate with o-ring grooves. The four upright arms are spaced far apart to enable up to a 12" 300# Class flanged valve to be tested. A 90-ton hydraulic cylinder with adjustable clamping pressure is used to seal on the inlet flange of relief valves or standard shut off valves. For threaded valves from 1/2" to 2" NPT, threaded adapters with quick disconnects are provided with an adapter seal plate.

The Model RV 3000 is capable of testing relief valves with air and water up to 3,000 PSI. The test stand has a 10 gallon DOT tank, 4500 PSI for a surge tank, along with a 5-gallon ASME tank for water surge tank. High Pressure air from an external source is regulated by the panel mounted regulator and is stored in the surge tank.

When testing with water, the water surge tank is pre-filled with water for use when testing relief valves with water. A 1 1/2" air-actuated ball valve is used for quick opening and closing of the test pressures during testing.

Test stand is equipped with a safety shield with Lexan and tubular frame. Test gauges are 6" dial all stainless steel, glycerin filled, 0-300, 0-600, 0-1500, and 0-3000 PSI, all calibrated with certification from NIST. Optional features include a bubble jar and adapters for NPT and flanged valves. A flange adapter plate for 1/2" to 2" flanged valves is standard along with the NPT adapter plates.

Data Acquisition System (optional) includes software and hardware, Dell PC, with CD CD writer, 17" monitor, keyboard, mouse and color printer, with cables and all CD's for software and hardware and transducers.

# Model RV-3000 Specifications

## TEST COMPONENTS:

Flanged, and threaded valves from 1/2" to 2" NPT, 3" to 12" 150# & 300# Class Flanged Valves.

## TEST PRESSURE:

0-3,000 PSI air & water at ambient temperature, which can be regulated to as low as 250 PSI. Shop air from 0-100 PSI for seat tests, & 0-3000 PSI high pressure air .

## CLAMPING FIXTURE:

90-ton hydraulic cylinder, 2" inch stroke. Seal plate has 1/2" NPT threaded outlet port with o-ring grooves to seal flanged valves from 3" to 12" 150# Class. Maximum diameter clearance of arms is 22 1/2"

Hydraulic cylinder is operated by an air-driven piston pump, 125:1 ratio, adjustable from 500-10,000 PSI, complete with hydraulic reservoir, and selector valve, 4" dial panel mounted clamping pressure gauge.

**STORAGE TANKS:** 5- gallon ASME surge tank for water service. 10 gallon DOT tank, 4500 PSI air service with 3/4" high pressure hose for high flows. Panel mounted pressure regulator 100-4000 PSI range.

**UTILITIES REQUIRED:** High Pressure air , 3000 PSI, shop air 100 PSI, city water.

**GAUGES:** 4" dial panel mounted auxiliary gauges for air supply, hydro pump discharge and hydraulic clamping pressures. 6" dial all SS Test Gauges, with QDC's and red hand maximum pressure pointers for testing with the following pressure ranges: 0-300, 0-600, 0-1500, 0-3000 PSI all calibrated with certifications.

**COMPONENTS:** All high pressure valves, tubing and fittings stainless steel. All gauges, valves and regulators are panel mounted.

## 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.

A swing-out safety shield can be installed in the front of the test fixture. Shield has a square tubular frame and clear Lexan® window.

**DATA ACQUISITION SYSTEM:** Windows based software, with Excel spreadsheet, pressure transducers, 0-5 volt, Data Acquisition card, Dell PC with CD writer, Pentium , 17" monitor, Windows XP, Office 2000, HP Printer, cables, all related software with licenses.

**WARRANTY:** 1 Year Full warranty, Technical Manuals with CD ROM copy, schematics, parts breakdown lists.

Valve Test Capability				
ANSI CLASS	150	300	600	900
1/2"-2"	YES	YES	YES	YES
3"-5"	YES	YES	YES	YES
6"-8"	YES	YES	YES	NO
10"-12"	YES	YES	NO	NO

## DIMENSIONS:

TEST STAND: 96" L x 48" W x 70" H.

SHIPPING WT: APPROX. 3000 LBS.

