

# **BenchMark**

**Control Valve Diagnostics**<sup>™</sup>



Shown with Optional 0 - 1000 slpm Flowmeter

## **Features**

- ✓ **Upstream Mass Flowmeters**
- ✓ **Auto-Ranging**
- ✓ **Fully Integrated Reporting**
- ✓ **Pass / Fail Reported**
- ✓ **Standard Ranges**
  - ✓ **0 - 0.01 slpm (0.02 scf/hr)**
  - ✓ **0 - 0.1 slpm (0.21 scf/hr)**
  - ✓ **0 - 1 slpm (2.12 scf/hr)**
  - ✓ **0 - 10 slpm (21.2 scf/hr)**
  - ✓ **0 - 100 slpm (212 scf/hr)**
  - ✓ **0 - 1000 slpm (2,120 scf/hr)**
- ✓ **Special Ranges Available**

## **Seat Leak / Hydro Monitor Test System**

### **Automate Your Seat Leak Testing**

Seat Leak and Hydrostatic Pressure testing are important steps in the manufacture of quality control valves. However, use of flow tubes and pressure gauges make this a labor intensive task prone to operator error and requiring manual data entry, calculations and reporting.

Our automated mass-flowmeter based Seat Leak and Hydro Test Monitor System integrates seamlessly to your **BenchMark** system. Data are gathered, managed and reported automatically.

Mass flowmeters accurately measure flow at leak test pressure permitting placement upstream of the valve body. This eliminates concerns over the water contamination common with flow tubes. Data are recorded electronically and accurately, eliminating the observation and recording errors also common with flow tubes.

Auto-ranged flowmeters match measured flow, ensuring maximum accuracy. Databased meter calibrations allow for fast and simple reconfiguration of the test system. Flow pressure and temperature are monitored and recorded.

Valve configuration and desired Seat Leakage Class Rating are used to automatically determine and report Pass / Fail status for the test valve.

Our Hydro Monitor application, uses two high pressure transducers, attached to an existing Hydro Test system, to monitor and record the pressure history of the Hydrostatic Body Pressure testing. A detailed report documents successful completion of your pressure testing procedure.

Upgrade your process today.



## Seat Leak / Hydro Monitor Test System

This test system integrates directly with your **BenchMark** Control Valve Diagnostics System.

Seat Leakage and Hydro Test Monitor functions are straight-forward and designed for efficient and effective industrial testing, data management and reporting.

Both Seat Leak Test Report and Hydro Monitor Test Report are available as standard **BenchMark** selectable report elements and can be included in standard **BenchMark** reports.

Test hardware is designed for reliability and ease of maintenance. Standard system includes four mass-flow meters with an optional fifth external flowmeter. Flowmeters can be interchanged to adapt the system to meet special testing requirements.

Custom designs and ranges are available by quotation.

### System Requirements

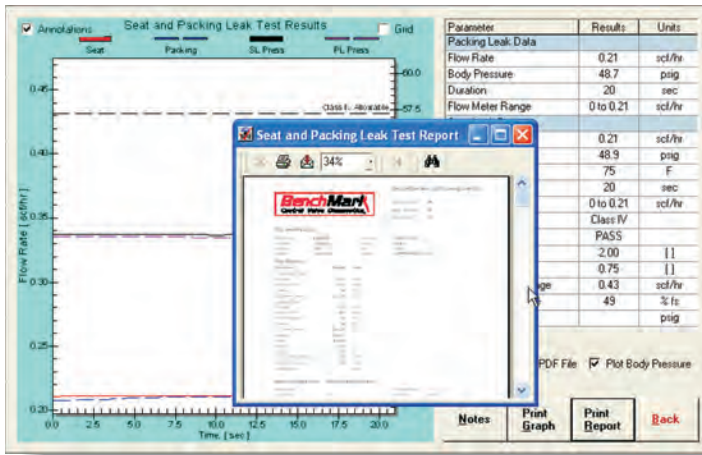
This system can operate integrated or Stand-alone.

#### BenchMark Integration

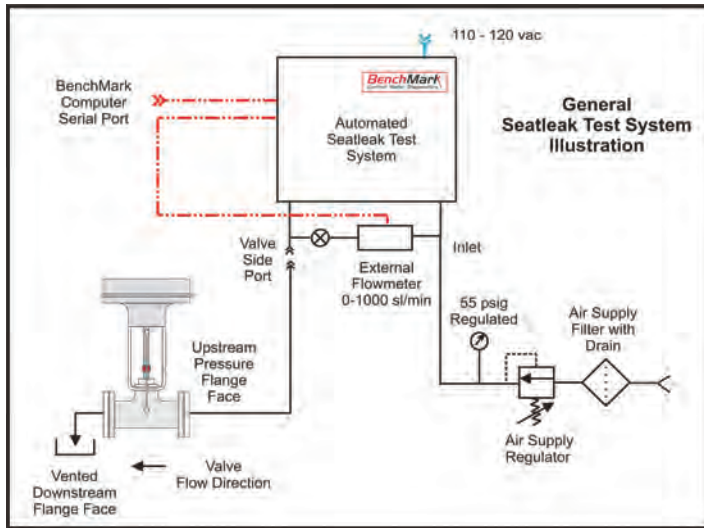
Connect Serial Port, Electrical Power and Air Supply

#### Stand-Alone Operation

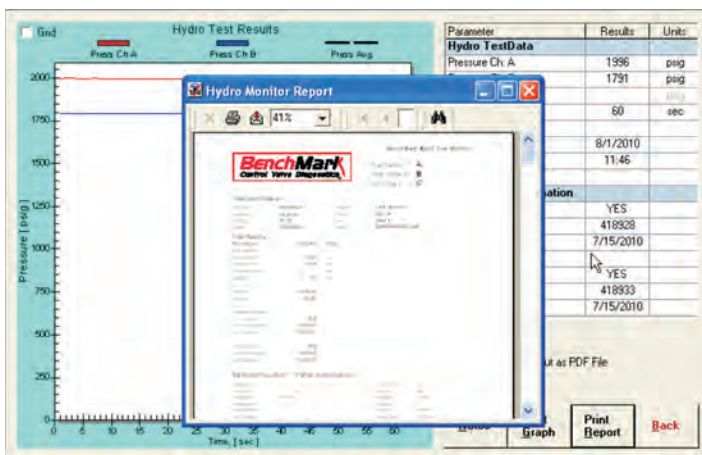
- PC with Windows O/S
- Windows XP™, Windows 7™
- Approx. 40 MB disk space required
- Serial Port, RS-232
- USB 2.0 Port Required for Digital Tag Functions
- Adobe Acrobat™ Required for PDF Outputs



Seat Leak Results with Automatic Report Preview



Simplified Schematic Flow Illustration



Hydro Test Monitor Results with Automatic Report Preview

For more information:

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Black Diamond Engineering reserves the right to change or modify specifications without notice.



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