

# Electronic Valve Testing



## No fuss safety valve and relief valve testing

*In-line valve testing can significantly reduce downtime and costly maintenance. If it's not broke, why fix it?*

The removal of a relief valve for testing can be a time consuming job. The task of removing the valve involves cutting out the relief valve, rigging and transporting to and from the shop, pipe heat treatment, welding the valve into place and a lock out/tag out procedure, longer than your leg. Today's technology allows for a simpler solution.

Electronic valve testing equipment enables Ware's Valve Shop technicians to verify the set pressure of safety and safety relief valves in-line without having to shut down a system or a unit. *Only those valves that test unsuccessful are tagged for repair during a scheduled maintenance outage.* This method of testing can significantly reduce downtime and costly maintenance.



### Portability

The completely portable unit consists of a laptop computer equipped with a database of valve seat effective areas and lift assist device. A combination of system pressure and controlled external force is applied to the valve's spindle to lift the valve. All data is recorded real time. Test results are available by digital and analog mediums.

**The CPU is able to verify set pressures by performing the following calculation:**

$$P_s = F/A_e + P_i$$

### Where as

$P_s$  = Set pressure

$F$  = Force required to overcome seating force

$A_e$  = Effective area

$P_i$  = Inlet pressure at time of test

### Accuracy and Conformance

When used by a trained technician results are within ASME Code tolerances. This device conforms with PTC 25.3 and NB-65.

### Clear advantages are:

- Testing can be performed in-line during normal operation
- Pre-shutdown testing can determine future needs of valves
- Small, portable design allows for quick set-up and operation
- Remote operation
- Real time data collection

**Contact The Valve Shop  
for more information.**

**800-228-8861 - [www.warevalveshop.com](http://www.warevalveshop.com)**