How to Select Water Meter Testing Equipment

The Ford Meter Box Company has been the leading manufacturer of Water Meter Test Benches for almost 100 years. If your utility is considering creating or upgrading a meter test facility, let our many years of experience guide you in making your equipment decisions. Many considerations need to be addressed when ordering meter testing equipment, some of which are discussed below.

For the small shop with few meters to test, a single unit bench is adequate, although multi-unit benches offer so many savings in use, and cost so little more, that they should be considered carefully. For larger shops, multi-unit machines are definitely recommended, the number of units depending on the volume of testing to be done and the space available.

A single calibrated tank may be sufficient for the small meter shop where nearly all the meters tested are of the 5/8" size. Such a tank is ordinarily for tests of one cubic foot and/or ten gallons. The combination of a large and small tank is much more satisfactory and is actually a necessity for the larger meter shop. When meters to be tested read in cubic feet, the No. 1F and 10FG tanks are the best combination. When meters read in gallons, the No. 10GF and 100GF tanks are most convenient. They are calibrated in both gallons and cubic feet and have percentage markings at 1 cubic foot, 10 gallon, 10 cubic feet and 100 gallon points, as well as at intermediate points.

The Ford Meter Box four station Standard Test Bench

Any test bench that holds both large and small meters is necessarily a compromise in efficiency and performance. Either the means of clamping domestic sizes (5/8", 3/4" and 1", which in most cases constitute almost 90% of the testing) is necessarily more cumbersome and less efficient, or the flow through the larger sizes is limited. The Tester Clamp will adapt any Ford Standard Type Test Bench or 110, 112, 124 Indianapolis Type Bench to take 1-1/4" through 2" meters, and at 75 lbs. pressure will provide a flow of 40 GPM, which is ample for low and intermediate flow tests on these sizes.

When there are enough 1-1/2" and 2" meters to justify special equipment, the Akron Type Test Bench is recommended. Large calibrated tanks for testing big meters at greater quantities are also advised. In large meter shops there are generally large numbers of 5/8" or 5/8" x 3/4" meters to test and the use of special equipment can pay a good return on the investment. The Indianapolis Test Bench holds up to twelve meters, all of which are clamped into test position with one small hydraulic cylinder. A double-row Indianapolis Bench can hold up to 24 meters, which can be tested with one stream of water.
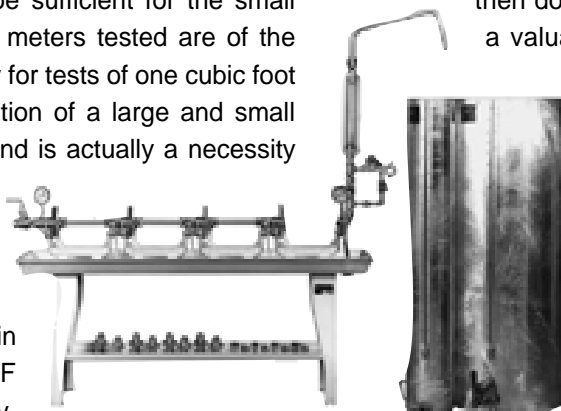
An electric control valve to automatically stop the test flow saves time for the operator, who can start a test and then do other work. The Testerate Indicator is a valuable piece of equipment in any meter shop. It shows the rate of test flow in gallons per minute. Liters per hour and liters per minute scales are also available.

The Ford Meter Box Automated Measuring System (AMS) test bench takes the time-proven and reliable Ford test bench to the next level of water meter testing. The AMS is available as an option on a new Standard or Indianapolis Style test bench. The Ford AMS combines the trusted method of weighing metered water with computer automation to ensure accurate measurements. The Ford AMS uses an easy to operate touch screen, menu-driven computer. The data gathered during the test is compiled by a computer and readied for output.

Every meter shop needs a repair bench. The bench includes a sink and a meter vise to improve the efficiency of meter repairing.

For more information about Water Meter Test Benches, and other products for water meter test shops, contact your local Ford distributor or the Ford Meter Box Company.