

## DON'T LET HISTORY BE YOUR GUIDE

In the water works industry, brass ground key valves have had a long history - perhaps too long. The principal of effecting a water-tight seal by allowing a tapered key to tightly fit within a valve body dates back to the Roman times and is still used today, with little variation in the basic design. Simple and inexpensive to manufacture, the key valve does its intended job, but is hampered in its overall effectiveness by some basic weaknesses.

The necessarily tight fit between key and body accounts for a major performance problem; key valves are inherently hard turning. Deterioration of valve lubricants and the buildup of corrosion products ensure that the key valve's turning torque will worsen over time.

Waterworks service line brass is malleable and can be distorted by excessive force, which accounts for the second major weakness of key valves; improper installation practices can distort the body and cause a valve leak. The third potential problem is a factor of water system working and test pressures. Key valves are not reliable in high water pressure situations; in fact, AWWA Standard C-800 limits 3/4" and 1" key valves to a maximum working

pressure of 100 PSI and 1-1/2" and 2" key valves to working pressures not to exceed 80 PSI. If your water system has areas of high pressure, key valves are not your best choice.

Fortunately, there are available valve choices that address all three of the problems plaguing key valves. Ford Ball Valves and Ballcorps do not rely on brass to brass contact for a watertight seal.

A fluorocarbon coated brass ball rotating on rubber seats replaces the key and body contact. This maintenance free design ensures easy turning, now and in the future, and provides water-tight sealing at pressures up to 300 PSI.

Furthermore, the ball valve is much less prone to damage caused by distortion of the valve body. All of these advantages more than justify the slightly higher initial cost of using a ball valve design. And if

history is important to you, remember that Ford Ball Valves have been reliably serving water utilities for over 30 years.

We think you'll agree that Ford Ball Valves put outdated key valves where they belong - in the history books. For more information on the complete Ford Ball Valve line, contact your local Ford distributor.

