

# Three Station Leak Test Stand

## Challenge

John Henry Foster Company was asked to provide an automated test fixture to accurately measure the leak rate of brass water valves. The existing test fixtures utilized mechanical clamps and a dunk tank. Operators would clamp the valves, immerse them in water, and watch for bubbles. The test results were inconsistent and the mechanical clamping was very dangerous to operators.

## Goals

- Automated test fixture
- Repeatable, high-resolution (0.00001 psi) tests
- Safe operation

## System Features

- Cincinnati Test Systems leak test controller
- Allen Bradley Controls for Sequence
- Allen Bradley Panelview Interface
- Fully automatic operation
- Go/No-Go test results
- Safety circuits with guarding
- Startup assistance by JHF engineering

## Project Success

- Turn-Key Solution: design, build, programming, and startup provided by John Henry Foster
- Completed on time and within budget
- No guesswork of test results = increased quality

