

**Process  
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Chemical Engineering/  
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**RUNDLE-SPENCE**

**PLUMBING HEATING INDUSTRIAL**

WHOLESALEERS SINCE 1871

**For Revised Lead and Copper Rule Corrosion Control Testing  
And Follow-up Monitoring of Corrosion Control in the Distribution System**

## The PRS Monitoring Station<sup>®</sup>



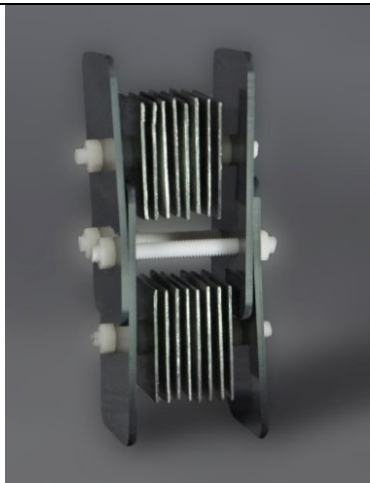
*Photo above is a 2-chamber PRS Monitoring Station.  
A PRS Monitoring Station with 4 test chambers is also available.*

The Revised Lead and Copper Rule calls for comparison tests of corrosion control chemicals and dosages in order to select the proper corrosion control treatment for each water system. After the treatment strategy has been implemented in the water system, the system needs to be monitored to document the effectiveness of the corrosion control and to anticipate future issues.

A PRS Monitoring Station<sup>®</sup> can serve all purposes. It has all the features of a typical pipe rig for testing and monitoring, but it is less expensive to install and operate. Please be aware that it currently is not approved by the regulations for final chemical testing in systems with lead service lines. However, it is approved by regulation for preliminary chemical testing for systems with lead service lines and is approved for all chemical testing for systems with copper service lines. It is approved for distribution system monitoring as a water quality sentinel for any water system and can monitor the effect of system water on lead, copper, copper with lead solder, and leaded brass.

**Specifications:**

- Size
  - 2-chamber PRS Monitoring Station<sup>®</sup>: 38" wide x 32" deep x 79" high maximum
  - 4-chamber PRS Monitoring Station<sup>®</sup>: 50" wide x 32" deep x 79" high maximum
- Site Requirements
  - Indoor location with temperatures above freezing
  - Proximity to a tap nearby or directly into a water main
  - A floor drain to a sanitary sewer
  - A 120V electrical outlet with ground fault interrupter (GFI) or GFI plugged into outlet
  - Secure location with access only to water utility personnel
  - Booster stations, pressure reducing stations, and city-owned buildings are typical sites for installation of Stations in a water distribution system
- Operation Requirements
  - 0.5 gpm system or test water per test chamber
  - Flow for only one hour a day (30 gpd per test chamber)
  - 30 psig maximum; 10 psig minimum
- Miscellaneous Features
  - Automatic operation of the station using timer-controlled valves
  - All sampling is manual and weekly visits to the Station are recommended
  - Locking casters for easy transport within a building
  - Chemical dosing port and static mixer are installed upstream of each test chamber; for chemical dosing, purchase of a dosing kit complete with storage, pump, tubing, fittings, and calibration by-pass is available
  - An operation manual and an initial training session is included in the cost of the Station
  - Other related educational materials are being developed
  - Data analysis is available for a separate fee

<b>PRS Monitoring Station<sup>®</sup> Test Chamber Internals</b>	
	<p>Each test chamber is an abstraction of water service lines and premise plumbing. The test chamber produces similar lead and copper release data as in the distribution system.</p> <p>A stack of metal plates is set into each test chamber. The plates and chamber have the same metal surface to volume of water ratio as a small diameter pipe.</p> <p>A <i>Water Science</i> article will be published soon that proves the relevance of the Station data as the upper potential of lead and copper release in the water system.</p>

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