

Model 3400-WTR Recirculating Water Conditioning System

Rev. 120221

The Tekran[®] 3400-WTR Recirculating Water Purification System is an inexpensive and convenient source of deionized, mercury-free water for the Series 3400 Mercury CEM. The system has two stages of pre-filtration to eliminate particulates and organic residues in the water. A reverse osmosis (R/O) unit then removes the bulk of ionic material. Two stages of finishing ion exchange (IX) resin filters then remove any remaining ionic compounds, including mercury. The R/O unit ensures that the final IX filters will have an extremely long life.

The 3400-WTR is easily able to meet the water low water demand of the Tekran 3400 Hg CEM system. The long-life filter elements are simple to change, inexpensive, and can last for several years. *(Lifetime may vary depending on original initial water source and flue gas matrix)*



Product Highlights

- Two stage particulate & carbon pre-filtering
- Two stage ion exchange resin final filters
- Water purity monitor verifies proper operation
- Simple, rapid changing of filter elements
- Reverse osmosis (RO) membrane
- 2-day holding tank supply of purified water
- Includes booster pump to pressurize system
- Long-life, inexpensive replacement filters

Applications of Series 3400 Hg CEM

- Coal fired power plants
- Waste incinerators
- Other industrial sources
- Cement manufacturing emissions
- Bench scale testing
- Mercury removal process monitoring

Specifications

Inlet Water Pre-Charge

Ideal: 5 gal. (20 L) pre-charge of deionized water
Acceptable: 5 gal. (20 L) pre-charge of municipal grade potable water

Physical

Water Inlet Fitting: 1/4" OD tube fitting
Water Outlet Fitting: 1/4 OD tube (Teflon)
R/O Drain Water Connection: 1/4" OD tubing
Tank Overflow Water Connection: 1/4" OD tubing
Holding tank size: 6.5 L

Power Requirement

No pressure booster pump: 0.2 A, 24 VAC
With pressure booster pump: 0.6 A, 24VAC (max)
Note: Power supply, AC adapter with 24VAC 800mA output

Miscellaneous

Drain Requirement: 0.26 L/min maximum (when active)
Production Time (3 L): 45 min (*warm water*)
90 minutes (*cold water*)



Due to ongoing development, all listed specifications are subject to change.