

# COMPUTER-BASED PROCESS CONTROLS CHEMISTRY SYSTEM UPGRADES

Nuclear, Power & Process Industries



Application of computer-based process controls for new systems and upgrades to existing water and waste treatment processes.

#### **VALUE**

- Expertise in water & waste processes
- Cost effective designs that meet specific requirements
- Customer service

#### **EXPERIENCE**

- Control system for new equipment and processes
- Upgrades to aging/obsolete PLCbased controls
- Replacement of antiquated electromechanical controls





Benchtop Test System

HMI Backwash & Precoat

#### **SYSTEMS**

- Integrated control system includes both a PLC (programmable logic controller) and a HMI (humanmachine interface)
- For upgrades to existing controls, the PLC and HMI may be housed in an existing control panel if feasible
- Use of a remote I/O (Input/ Output) panel allows system operations to be performed in an operator-friendly environment (e.g. low radiation dose area, etc.)





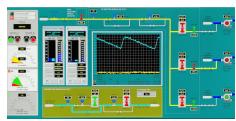
Remote I/O Panel

#### **SERVICES**

- Turnkey solutions all design and development by Structural Integrity
- Control panel fabrication
- Benchtop Test system design and fabrication
- Factory acceptance/validation testing
- End-user training
- Plant start-up support

### **PROCESSES**

- Deep Bed Demineralizers
- Resin Cleaning and Regeneration Systems
- Filter Demineralizer Systems
- Chemical Feed Systems
- Filtration Systems



HWC System Diagram



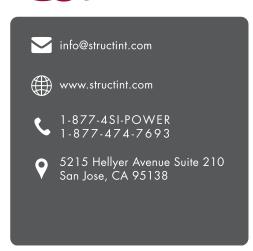
Condensate System Diagram

- Redundant HMIs offer flexibility and reliability
- Custom-designed graphics meet plant specific requirements, standards and preferences

## HARDWARE & SOFTWARE

- Hardware Allen Bradley, Emerson
- Software FactoryTalk®, Proficy®





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