

## DESIGN CONTROLS

Portable Water Quality Monitoring System



Complete monitoring of water quality in a portable system helps ensure you are getting the best value from your water treatment system

## DCS-200 SERIES

### Chemical Data, Acquisition & Control System

The ChemDACS (*Chemical Data Acquisition and Collection System*) Portable Monitoring System provides real time local monitoring of all of the process variables described below as well as data logging of the same. Data logger has a maximum storage capacity for 45 days worth of storage and can be exported to a PC via the skid mounted RS-232 connection port. Protocol for this data is in the CSV (comma separated value) format for easy importation into Microsoft Excel.

Monitoring capabilities include but are not limited to:

**Halogen** ORP analyzer for supply water and return water scaled in millivolts. Range 0–1,000 mV

**Conductivity** Conductivity analyzer for make up water and cooling tower water, scaled in  $\mu\text{mhos}$ . Range 0–2,000  $\mu\text{mhos}$  or 0–20,000  $\mu\text{mhos}$ .

**Cycles of Concentration** This is a calculated value of the cooling water and make up water conductivity.

**pH** pH analyzer for make up water and return water, scaled on the standard pH scale. Range 0.00–14.00 pH

**Temperature** Temperature probe for supply water and return water monitoring. Range 50°F – 150°F.

**Temperature Differential** This is a calculated value of the hot return water and cool supply water temperatures

**DATS III** (Deposit Accumulation Test System) online deposition monitor. Calculates heat transfer resistance. Water,

Block and Wall Temperature, Scaled value 32°F – 280 °F.

Flow Velocity, Scaled value 0.0 ft/sec – 13.124 ft/sec.

Applied Heat, Scaled value 0 Btu/Hr – 4778 Btu/Hr.

Heat Transfer Resistance, Scaled value  $-5.45 \times 10^{-4} \text{ Hr} \times \text{ft}^2 \times \text{°F} \div \text{Btu}$  –  $22.716 \times 10^{-3} \text{ Hr} \times \text{ft}^2 \times \text{°F} \div \text{Btu}$

**Corrosion Monitoring** Rohrbach Cosasco online corrosion monitor and a coupon rack is provided on the skid for manual monitoring of corrosion rates.

**Microbiological Monitoring** Biofouling Monitor designed to provide quantitative analysis of microbiological growth via pressure differential monitoring. The differential pressure range is 0 – 10 inches of water.

**Additional Monitoring Capabilities** Activities based monitoring of treatment chemical is available Two (2) inputs are available for monitoring make up water flow and blowdown flow. The flow meter signals for these units would need to be supplied by the plant if desired.

**Wireless Remote Monitoring Capability Via Personal Computer**



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