

### STANDARD FEATURES:

- All Stainless Steel Wetted Parts
- Single Unit Flows up to 710 gpm
- ASME Code Stainless Steel Vessel Designed for 100 psig
- Factory Assembled Stainless Steel Flanged and Welded Valve Nest
- Stainless Steel Hub and Lateral Underdrain
- NEMA 4XFG Electrical Enclosure
- Outlet Water Sample Valve
- Automatic Backwash Flow Controller
- Separate Cold Water Connection for Regeneration Cycles
- High capacity, High Crosslinked Macroporous Cation Resin
- Raw Water Bypass Piping

### ADVANTAGES:

- Quick ROI by Reclaiming Waste Heat and Increasing Cycles
- Cold Water Regeneration Saves Heated Water
- Materials Selected to Withstand Corrosive Environment
- Standard Designs Reduce Cost and Delivery Time
- Flanged and Welded Piping Designed for Problem-Free Operation
- Simple Operation Reduces Operator Training Requirements
- High Strength Resin Selected for Long Life

### OPTIONS:

- Allen Bradley PLC
- Differential Pressure Switch
- Flow Sensor
- Water Sample Cooler
- Manual Isolation Valves
- Subsurface Wash
- Skid Assembly

Res-Kem Sodium Cycle Condensate Polishers are available in a wide range of self-contained packages configured in single, double, and triple unit arrangements to treat condensate return for reuse as boiler feedwater. The standard wetted parts for Res-Kem Condensate Polishers are stainless steel. Single units are rated for flows up to 710 gpm. For larger flow rates, contact Res-Kem to determine whether larger or multiple units would be appropriate.

Economical and efficient, Res-Kem Condensate Polishers can be equipped for manual, semi-automatic or full-automatic operation. Regardless of configuration, only limited technical expertise is required for operation. Res-Kem Condensate Polishers will integrate into a complete water treatment system without expensive custom field engineering and programming.



**Model CP48**  
375 gpm unit

### Why Treat Condensate

The power industry operates in an environment of increasingly stringent boiler feed water requirements. Couple this with exploding energy costs and one finds boiler blow down to be the least desirable way of maintaining proper boiler water quality.

As a cost effective alternative to boiler blow down one needs to look no further than simple sodium cycle condensate polishing. It's the smart choice when looking for a means to control corrosion transport and the ill effects of condenser in-leakage. Particularly pronounced are the operating savings realized relative to chemical and energy consumption. Relying on proven ion exchange technology condensate polishers are also simple to operate and maintain.

Let Res-Kem work up the actual savings available by polishing your dirty condensate. The payback is both swift and dramatic.

| Model<br><br>Prefix | Vessel<br>Diameter<br><br>inches | Maximum<br>Flow Rate<br><br>gpm | Resin<br>Quantity<br><br>cubic feet | Capacity Range |           | Inlet/Outlet<br>Pipe Sizes<br><br>inches | Brine Tank<br>Diameter x Height<br><br>inches | Approximate<br>Dimensions<br>L x D x H<br>inches |
|---------------------|----------------------------------|---------------------------------|-------------------------------------|----------------|-----------|--|---|--|
|                     |                                  |                                 |                                     | grains         |           |  |   |  |
| CP20                | 20                               | 65                              | 7                                   | 140,000        | 182,000   | 2  | 24x54   | 56x32x94   |
| CP24                | 24                               | 95                              | 10                                  | 200,000        | 260,000   | 2  | 24x54   | 60x36x94   |
| CP30                | 30                               | 150                             | 15                                  | 300,000        | 390,000   | 3  | 30x48   | 72x42x98   |
| CP36                | 36                               | 210                             | 20                                  | 400,000        | 520,000   | 3  | 39x48   | 81x51x98   |
| CP42                | 42                               | 285                             | 28                                  | 560,000        | 728,000   | 4  | 42x48   | 96x54x101  |
| CP48                | 48                               | 375                             | 37                                  | 740,000        | 962,000   | 4  | 48x48   | 108x60x101                                       |
| CP60                | 60                               | 590                             | 58                                  | 1,160,000      | 1,508,000 | 6  | 60x46   | 132x72x110                                       |
| CP66                | 66                               | 710                             | 70                                  | 1,400,000      | 1,820,000 | 6  | 72x46   | 150x78x110                                       |

Flow Rate and Pipe Sizes based upon a flow rate of 30 gpm/sqft

| Features   | Standard | Optional |
|--|----------|----------|
| <b>System Design and Operation</b>                               |          |          |
| Stainless Steel Pressure Tank with 60 " straight side            | ◆        |          |
| ASME Code Vessel Construction                                    | ◆        |          |
| Stainless Steel Hub and Lateral Underdrain                       | ◆        |          |
| Stainless Steel Flanged and Welded Face Piping                   | ◆        |          |
| Stainless Steel Flanged Diaphragm Valves<br>(Up to 2" Pipe Size) | ◆        |          |
| Stainless Steel Butterfly Valves<br>(3" and larger Pipe Size)    | ◆        |          |
| Automatic Backwash Flow Control                                  | ◆        |          |
| Automatic Brine Float Valve                                      | ◆        |          |
| Subsurface Wash  |          | ◆        |
| Manual System Isolation Valves                                   |          | ◆        |
| Skid Assembly for Multiple Units                                 |          | ◆        |
| <b>Instrumentation and Controls</b>                              |          |          |
| Differential Pressure Switch                                     |          | ◆        |
| System Flow Sensor   |          | ◆        |
| Electronic Programmable Controller                               | ◆        |          |
| Allen Bradley Programmable Logic Controller                      |          | ◆        |
| Stainless Steel NEMA 4X Electrical Enclosure                     |          | ◆        |
| Inlet and Outlet Pressure Gauges                                 | ◆        |          |
| Outlet Sample Valve  | ◆        |          |
| Outlet Water Sample Cooler                                       |          | ◆        |
| <b>Regeneration Initiation Methods</b>                           |          |          |
| Manual   | ◆        |          |
| Timer  | ◆        |          |
| Differential Pressure Switch                                     |          | ◆        |
| Flow   |          | ◆        |

Wasted Fuel by Scale Type and Thickness

