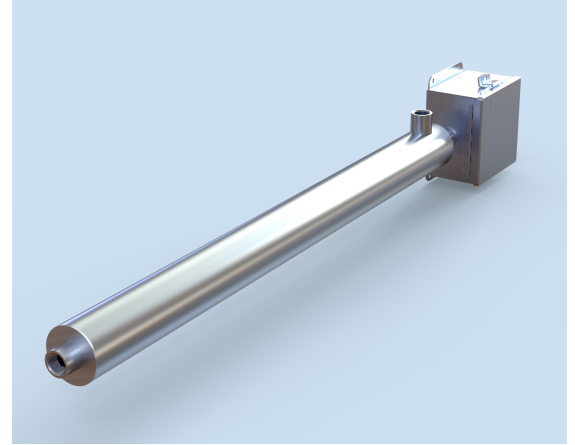


BCE APPLICATION NOTE

MINI CLEAN FLOW – LARGE DI WATER HEATER

BACKGROUND

Deionized water application requiring the recirculation of 3 gallons per minute to reach 66° C in 2 hours. NEMA 4 moisture resistant housing was required.



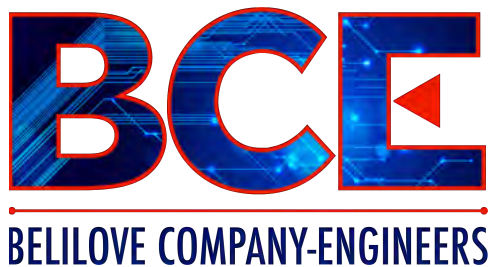
SCOPE:

MCF – Large DI Water Heater:

- Temperature from 18° C to 66° C in 2 hours
- 316 Stainless Steel All wetted parts
- Pressure tested to 90 PSI
- NEMA 4 Housing
- RTD, 3-wire 100 ohm process sensor built-in near outlet
- An additional TC for bottom temperature read
- 16KW ($\pm 10\%$) , 208 Volt, 3-phase
- Mounting threads on the bottom of the assembly
- Medium being heated: Deionized Water (DI Water)
- Recirculate at 3gpm

OUTCOME

The heater zones were individually heated at lower voltage then pressure tested up to 90 PSI at 20° C - 25° C. The typical ramp temperature for a bench test prior to shipping is 100° C. The response time in an air medium environment was immediate as the temperature was achieved in under 20 minutes. All zones passed the recommended 700 VDC for 5 seconds on the Hi-Pot test prior to shipping. The heater was cleaned & packaged then sent out for delivery.



BCE
21060 Corsair Blvd. Hayward, CA 94545
Phone: (510) 274-1990
www.bcemfg.com

ELECTRIC HEATING
ELEMENTS

VACUUM
FEEDTHROUGHS

CUSTOM THERMAL
SYSTEMS