Booster Sizing for a Low Temp Dishmachine

Chemical low-temp dishwashers are most effective when supplied with 140°F hot water. This water temperature may not be available due to an undersized primary water heater or local safety code. Hubbell J model boosters can operate as a pre-heater for chemical low-temp dishwashers to provide an adequate supply of 140°F hot water for proper operation. For temperatures other than the factory setting of 185°F, simply set the digital display to your desired temperature.

To properly size a Hubbell booster heater for low temp use:

1. Determine the required temperature rise; the difference in temperature between your supply water temperature to your booster and your desired hot water temperature out of the booster.
2. Determine the water usage gallons per hour (GPH) by consulting the dishwasher data plate, literature or NSF listing.
3. Select the appropriate kW based on 1 and 2 above using either the formula below or the Recovery Rating Chart on page 4.

Booster Sizing Formula

Required Variables:

A. Water usage in GPH [ ]

B. Supply water temp in °F [ ]

C. Desired water temp in °F [ ]

D. Calculate the ΔT (temp rise) by subtracting **C** - **B** in °F [ ]

Formula to Determine KW:

[ ] GPH x [ ] °F ΔT x 0.00244 = [ ] KW