Special Cartridge Heaters

1. Determine the maximum operating temperature of the heated parts.
2. Calculate the total wattage requirement of the application according to the examples in "Determining Wattage Requirements and Watt Density".
3. Determine the physical size of the heaters based on the availability of space in the part to be heated.
4. Divide the total wattage required by the quantity of heaters to determine the wattage per heater.
5. Determine the watt density per heater according to Example No 1 in "Determining Wattage Requirements and Watt Density".
6. Using the temperature determined in Step 1 and the watt density determined in Step 5, use the graph below to determine the maximum allowable tolerance of the diameter of the hole in connection with the watt density.

If the fit determined in Step 6 cannot be achieved, the watt density must be reduced by:
(a) installing more heaters.
(b) Reducing the total wattage requirement by:
- allowing a longer heat up time
- insulating the assembly to reduce heat loss
- processing less material per hour

If none of these are feasible, provide the best fit possible and plan on reduced heater life (contact our Sales Department).