## Hotfoil-EHS, Inc.

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## CERAMIC MAT HEATERS

The most important feature of a resistance heater is the ability to transfer the heat away from the resistance wire to the outer covering where it can be absorbed by the work piece. Even when accurately controlled a poorly designed or poorly applied heater can cause the wire temperature to exceed the limits of endurance. Hotfoil-EHS Inc. ceramic mat heaters are designed to produce more even and efficient heat transfer while maintaining maximum flexibilty.

- 1) Sintered alumina oxide is formed into shapes and fired at precise temperatures to produce a ceramic insulator with a combination of high dielectric strength and efficient, fast heat transfer. This ceramic is also solid enough to withstand physical shock and resistance to oxidation and corrosion from a broad range of chemicals and atmospheres.
- 2) An accurately measured length of stranded nickel-chromium wire is precisely wound through the ceramic beads ensuring electrical isolation to produce a compact and flexible resistance heater. Suitable for operation at 2000 Deg. F.
- 3) The resistance wire is then metallurgically bonded to a stranded nickel-copper wire to provide trouble free electrical continuity. The flexible stranded cold junction wire is connected to brass Twistlock connectors fitted with insulated sleeves. The cold junction extension leads are rated for 250 °C continuous temperature.

Hotfoil-EHS features a wide range of heater configurations as well as optional resistance wire characteristics for different applications.