

## FINNED TUBULAR HEATERS

## Finned Tubulars Offer Lower Sheath Temperatures or Higher Wattages Compared to Traditional Tubular Heaters



Compared to traditional tubular heaters, finned tubulars offer an increased surface area providing more wattage in a smaller package size and lower sheath temperatures.

Composed of 304 stainless steel fins welded or brazed to a Watlow<sup>®</sup> tubular element, the finned tubular heater offers flexibility in its mounting options, shapes and lengths. It can be bent in different directions and angles allowing the heater to fit into customers' existing design requirements, which can minimize downtime.

The finned tubular is an ideal replacement for the Watlow 375 strip heater, which has reached end-of-life status. Although the manufacturing process is different, the heater has similar characteristics and can be used in the same applications.

### Features and Benefits

#### Finned construction

- Ensures maximum heat transfer and element life as well as lower sheath temperatures
- Allows heater to be used in tighter spaces, such as forced air ducts, dryers and ovens

#### Precision wound nickel-chromium resistance wire

- Distributes heat evenly to the sheath for optimum heater performance

#### MgO insulation filled sheath

- Maximizes dielectric strength, heat transfer and life

## Specifications

### Performance Capabilities

- Maximum operating temperature: 1100°F (595°C)
- Maximum watt densities: Up to 33 W/in<sup>2</sup> (5.1 W/cm<sup>2</sup>)

### Heater Elements

- Sheath materials: 304 SS, 316 SS, Incoloy® 800, Incoloy® 840
- Diameters: 0.430", 0.475"
- Surface finishes: Oxide and bright
- Formation: Straight, any shape that fits within the bending limitations

### Fin Specifications

- Material: 304 SS
- Thickness: 0.28 – 0.5 mm
- Height: 4 – 10 mm
- Spacing: 4 – 8 fins per inch

### Agency Approvals

- UL® 52951 (UL® 499), CSA LR 31388, CE (low voltage directive)

### Fin Mounting Options

- Tig and braze

## Applications

- Enclosure heating
- Load bank resistors
- Shrink tunnels
- Duct heaters
- Space heaters
- Drying ovens
- Incubators
- Air heating
- Heat curing
- Ink drying
- Food warmers
- Moisture protection
- Dehumidifiers
- Stress relieving ovens

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