

**Bolt Heaters** 

# **BOLT** HEATERS

# 4" Unheated \*\* Hi-Dens \*\* Cond \*\* W. \*\* W. \*\* Effective Heated Length 2" Unheated

**TEMPCO Bolt Heaters** are used as an aid to tighten large bolts in heavy machinery and equipment. Heaters are sized for easy insertion into a hollow bolt. The rapid heating of the bolt expands it, allowing further tightening of the nut. The heater is then de-energized and removed. As the bolt cools, its contraction back to original size provides a tight fit.

Tempco Bolt Heaters are constructed with one of the industry's most efficient and highest quality heating elements—Tempco Hi-Density (swaged) Cartridge Heaters; with close tolerance fits, watt densities of 100 watts per square inch are obtainable—65% higher than standard cartridge or tubular heating elements can deliver. The higher wattage on Hi-Density Bolt Heaters means quicker heat-up time and minimum heat loss to the area surrounding the bolt.

### **Design Features**

- \* Hi-Density Construction
  - \* Conduit Box with Knockouts
    - \* Wooden Handle
      - \* High Temperature Lead Wires— 250°C (482°F)
        - \* Optional SJO Cord or Post Terminals
          - \* Optional Quick Disconnect Plugs

### **Typical Industries**

- **→** Power Plants
- → Shipyards
- → Large Machine and Die Manufacturers
- **Construction**
- **→** Boiler Manufacturers

### **Typical Applications**

- **→** Large Compressors
- **Turbines**
- → Die Blocks
- → Large Cylinders
- **→** Engine Heads
- → Pressure Vessels

## **Bolt Heaters Standard Specifications and Tolerances**

### **DIMENSIONAL SPECIFICATIONS**

| Actual Diameter (in) | .438 | .496 | .553 | .580 | .621 | .710 | .745 | .813 | .993 |
|----------------------|------|------|------|------|------|------|------|------|------|
| Actual Diameter (mm) | 11.1 | 12.6 | 14.0 | 14.7 | 15.8 | 18.0 | 18.9 | 20.7 | 25.2 |

Diameter Tolerance: ±.005 (.127 mm) Length Tolerance: ±2% of sheath length

Camber Tolerance: 0.020" (0.508 mm) per foot of length (0.020 x (length in feet)<sup>2</sup>)

### **ELECTRICAL SPECIFICATIONS**

| Diameter (in)    | .438 | .496 | .553 | .580 | .621 | .710 | .745 | .813 | .993 |
|------------------|------|------|------|------|------|------|------|------|------|
| Maximum Voltage  | 240  | 240  | 240  | 240  | 480  | 480  | 480  | 480  | 480  |
| Maximum Amperage | 6.7  | 10.5 | 10.5 | 23   | 25   | 25   | 25   | 25   | 25   |

If tighter tolerances are required, consult Tempco.

