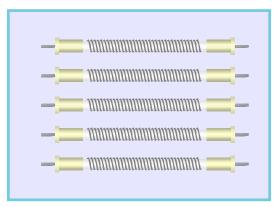
QUARTZ FURNACE HEATER®



Quartz Furnace Heater ®



Glass Bending Oven With Quartz Furnace Heater®

SPECIAL FEATURES

HORIZONTAL OR VERTICAL OPERATION

The Casso-Solar Infrared Heater® Quartz Furnace heater® can be configured to operate in the horizontal or vertical position. The vertical burnQuartz Furnace Heater® will not experience coil sag, and will remain uniform in temperature during operation.

CUSTOM WATTAGE AND VOLTAGES

The Gold Unitube® Heater is available in watt densities up to 80 watts per lineal inch, depending on tube diameter, window size and availability of cooling air. Custom operating voltages are also available.

Sales & Technical Information

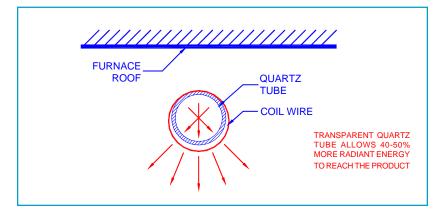
800-988-4455

All other calls: 845-354-2500
Fax: 845-362-1856
Website: www.cassosolar.com

ith new product and process technology under continuous development, production equipment is required to give precise and flexible control over production quality, while operating efficiently with minimum maintenance. For over forty years, Casso-Solar Corporation has been providing our customers the competitive edge.

CONSERVES ENERGY

CASSO-SOLAR TUBULAR QUARTZ FURNACE HEATERS® have the ability to direct 40-50% more energy toward your product as compared to conventional ceramic tube heaters. The Casso-Solar furnace tube utilizes a quartz tube core, allowing energy from the back of the coil to radiate through the quartz to the product. (See Diagram Below). Typical ceramic tube supports block this energy.



HIGHER POWER OUTPUTS

Due to its unique ability to effectively radiate more of its energy, higher wattage coils can be operated without exceeding the maximum allowable emitter temperature. Power outputs as high as 200 watts/inch (80 watts/centimeter) can be utilized.

STURDY CONSTRUCTION

A heavy wall quartz tube is used in the Casso-Solar furnace tube construction. Quartz tube diameters can be chosen to accomodate your existing element design.

CONTROL

CASSO-SOLAR QUARTZ FURNACE HEATERS® can be used with a variety of control types including any existing furnace controls. Simple on/off circuits allow full heater power to be utilized. If adjustment of power output is required for a heater or zone of heaters, phase angle fired SCR power controllers can be used.





QUARTZ FURNACE HEATER®

THERMOCOUPLE

For the most precise control of CASSO-SOLAR QUARTZ FUR-NACE HEATERS®, thermocouple feedback control is recommended. Thermocouples should be placed as close to the product as is practical. Consult Casso-Solar sales engineers for advice on your application and process.

DESIGN FLEXIBILITY

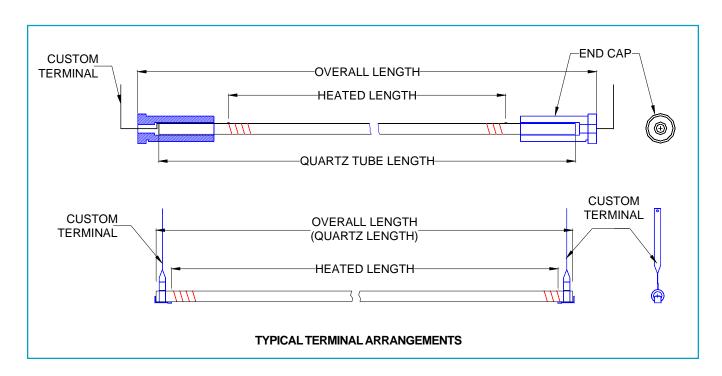
CASSO-SOLAR QUARTZ FURNACE HEATERS® can also be designed to meet most wattage/voltage combinations. A variety of terminal and mounting arrangements are available as are custom designed ends to replace elements in existing furnaces.

CREEP RESISTANCE

Creep is the electromagnetic phenomenon which can cause coils to "bunch up" after repeated heating and cooling. CASSO-SOLAR QUARTZ FURNACE HEATERS® utilize a special alloy coil wire which has a higher mechanical strength at elevated temperatures than conventional furnace resistance elements creating life expectancies that are 3-4 times greater than conventional elements.

IMPROVED ZONING

CASSO-SOLAR QUARTZ FURNACE HEATERS® are supported by a quartz tube which allows more energy to pass through from rearset zones to your product. Tube wattage can be custom designed to put more heat in areas where it is needed most.



SPECIFICATIONS:

WATT DENSITIES: Up to 200 watts per lineal inch (80 watts per centimeter) generating watt densities VOLTAGES: Up to 200 watts per lineal inch (80 watts per centimeter) generating watt densities 120V, 240V 277V, 380V, 415V, 480V, 575V, 600V & Non-standard voltages

SIZES: 6" through 120" in length and longer

TUBE SPACING: Heaters can be mounted as close as 1 1/4" centers

WAVELENGTH EMISSION: 2.5 - 6.0 microns **TEMPERATURE RANGE:** Up to1800°F(982°C)

COLD ENDS: Cold ends are provided as required for terminal and mounting arrangements. Customer designs available ELECTRIC CONNECTIONS: Terminals can be provided for connection through furnace side walls or for connection through roofs and

floors.

THERMOCOUPLE: Consult our technical staff for recommendations on thermocouple and control configurations

230 US Route 202, P.O. Box 163, Pomona, NY 10970



Sales & Technical Information 1-800-988-4455