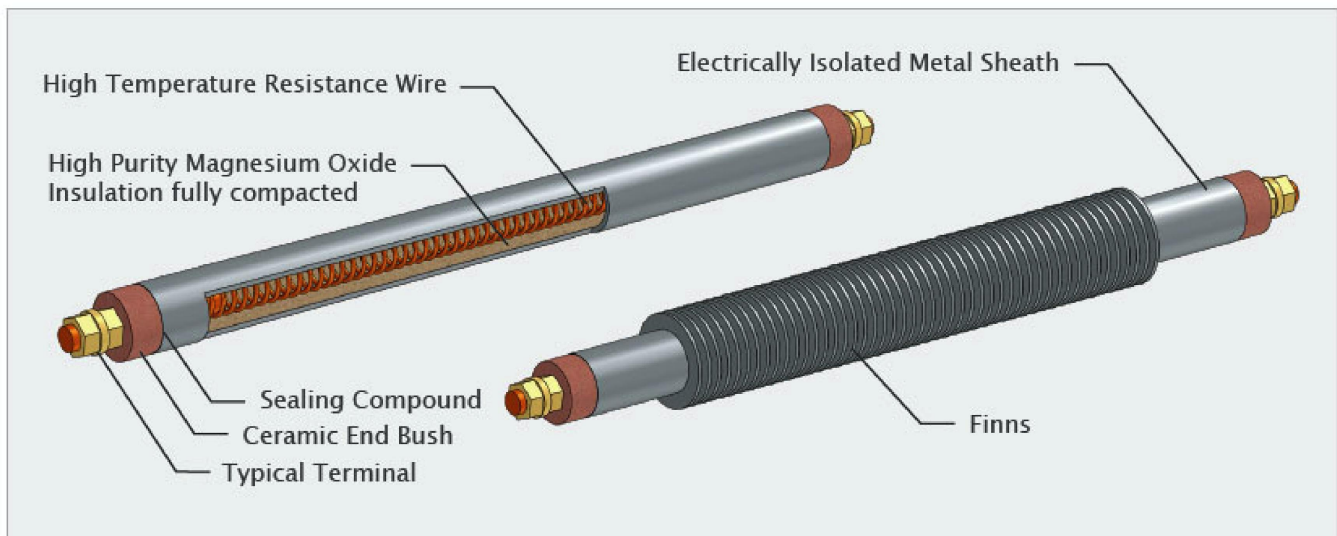


Tubular Heaters

The most versatile of all electric heating elements, the tubular heaters are capable of being formed into virtually any shape & configuration, brazed or welded to any metal surface and can be cast into different metals. Depending on the application different tube diameters and different tube Sheath materials are available.

Heating of air requires an oxidized tube surface. The Commonly specified Sheath Materials are SS304, SS316, and SS316L & INCOLOY for high temperature applications. The range of ratings, sizes, materials and terminations available, makes the tubular heater adaptable to many industrial, commercial and Process applications. All wattages and voltages are possible as long as the resistance is within the fixed limits and the surface load is not exceeded.



APPLICATIONS

Tubular heaters can be used in almost any application. They can be clamped to metal surfaces or inserted in machined grooves for conductive heat transfer. Or use a formed Tubular heater to provide consistent heat in any type of special application. Typical applications include Ovens, Duct heating, Tank heating, Hopper heating, Platen & dies, Castable heaters etc.

Specifications

Tube Sheath Materials

Different sheath materials are available for different applications. Options include Copper, SS 304, SS 316, SS 321, Incoloy. Tolerances: Resistance +10% - 5%
Wattage + 5% -10%
Length +/- 3%

Tube Diameters

Tubular heating elements are available in the following diameters.

Tube dia : 8 mm, 11 mm, 14 mm, 17 mm, 19 mm.
Tubular heaters lengths can extend upto 5.8 meter +
Maximum Sheath Watt Density 30 w / in²
NOTE: Cold zone at each end; 1-1/2" min.

Mountings

Variety of mountings are available to suit the application area. Tubular heaters can be brazed or welded to different sizes of threaded flanges, plate flanges, nipples, bolts.

FINNED TUBULAR HEATERS

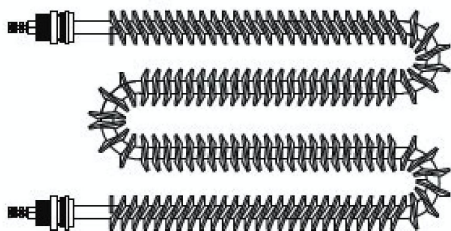
Tubular heaters of any diameter can be finned with steel or stainless steel fin material to increase the surface area. Finns can be spiral in shape or punched to suit the application. Designed for rapid uniform heat transfer in air heating ducts. Also used in blower type comfort heating units, recirculating ovens and other industrial processing equipment & processes requiring heated air.

Tubular Heaters

TYPICAL BEND FORMATIONS

The following are a few, but by no means the only, ways tubular heaters can be formed. For other shapes, please provide us with dimensional details, drawings or samples.

M Type Finned Tubular Heater



U Type Finned Tubular Heater

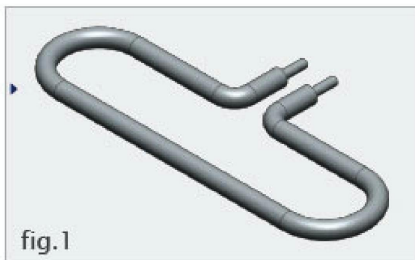
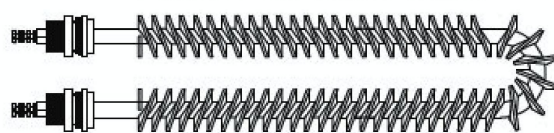


fig.1

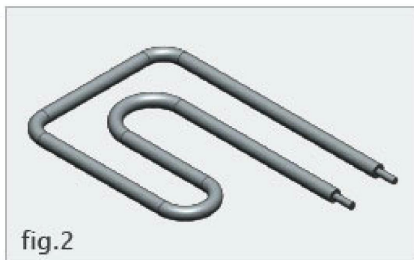


fig.2



fig.3

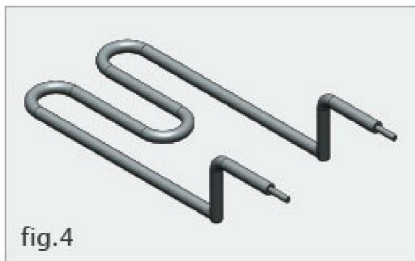


fig.4

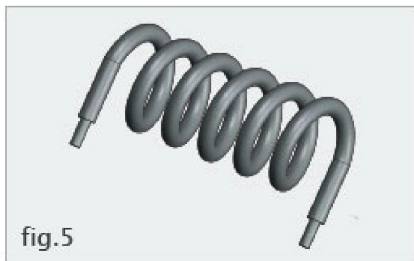


fig.5

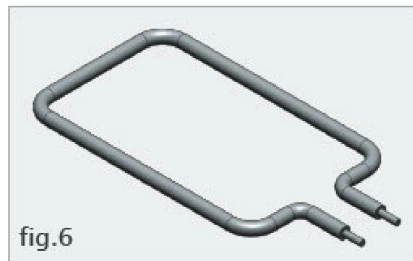


fig.6

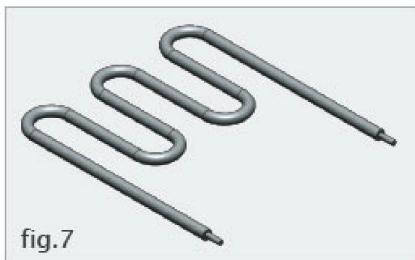


fig.7



fig.8

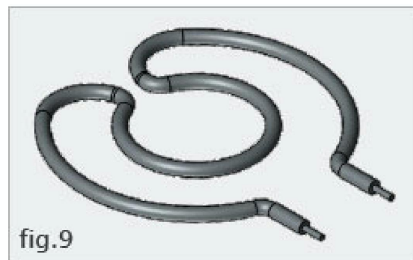


fig.9



Typical Multi Bend Air Heater

Super Heater Element

Hot Air Generator Heater

De - Humidifier Heater

Humidifier Heater