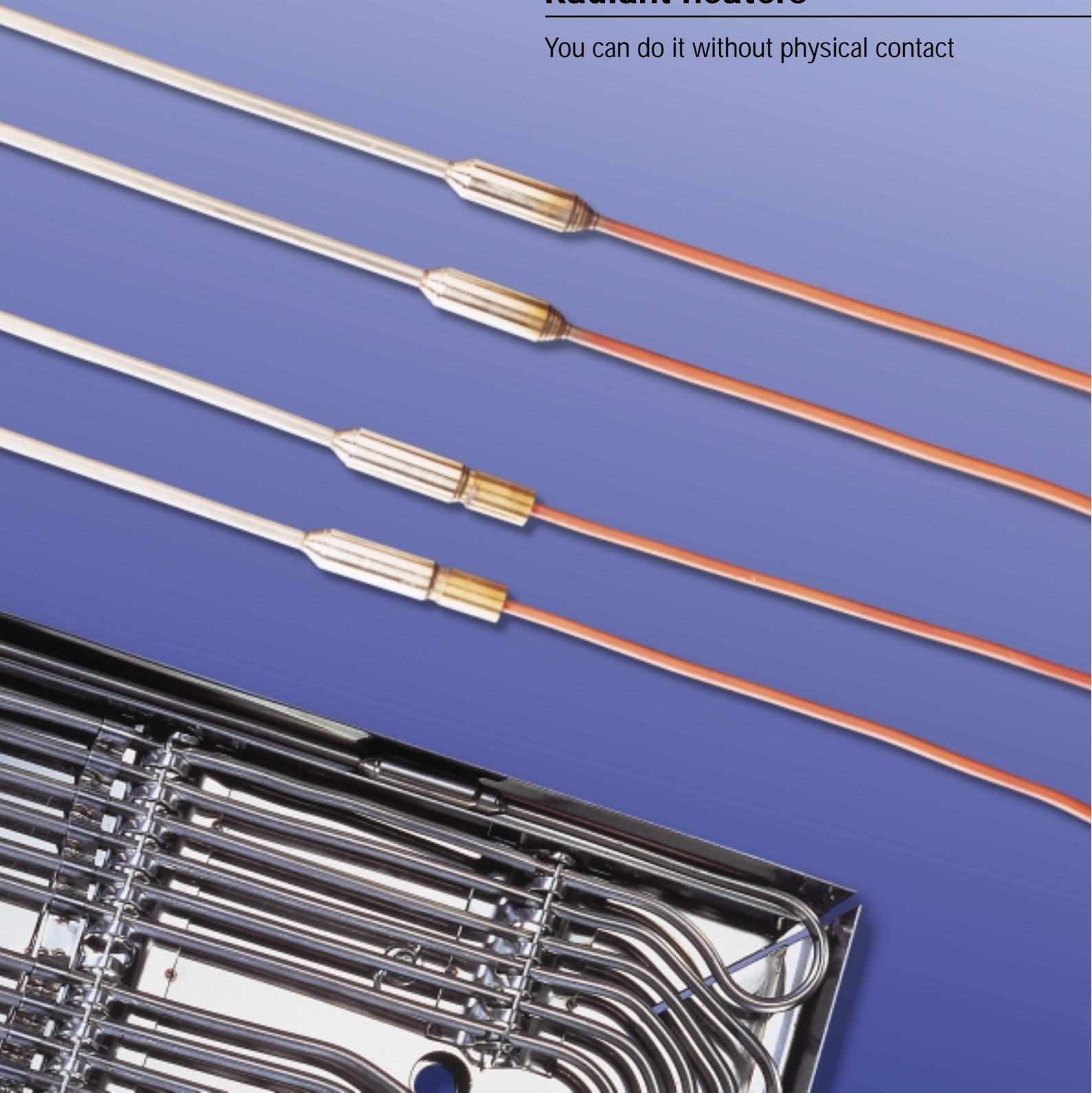


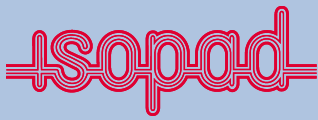
Mineral insulated heating cables

Compact heat up to 1000°C

Radiant heaters

You can do it without physical contact





Compact heating elements up to 1000°C As radiant heaters without physical contact Heat transfer inside a cover ready for use

Mineral insulated heated cables

Mineral insulated heated cables or MI-Heating cables offer a simple and economic solution to an increasing number of heating requests. We offer different sheath types like copper, cupro-nickel, stainless steel and inconel. These extremely compact heating elements start with a minimum outside diameter of 3.2 mm, (smaller diameters possible on request). We can also offer our unique laser welding capabilities: Cables with stainless steel or inconel sheath are manufactured with a laser welded joint at the heater element / cold tail junction. The advantage of this is a totally mechanically secure joint. Because this welding is done at lower temperatures we avoid heat stresses to the sheath material and the danger of moisture ingress. These cables consist completely of inorganic materials and offer a combination of mechanical strength, electrical safety and thermal conduction. This type of cable can be used for temperatures up to 1000°C, under extremely high pressures, and in very low vacuum, it is also totally moisture proof.

Radiant heaters

Heat transfer is not always possible with physical contact, our range of radiant heating elements allows for the heat up of different materials by radiation. This series of heaters was developed for the extreme requirements in use in vacuum applications.

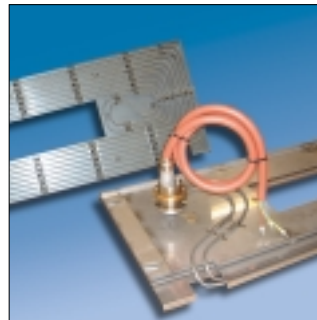
Specials features:

- High surface loads (W/m²)
- Optimum heat distribution over the whole area with temperature regulation
- Mounted heating elements suspended over a patented carrier in front of a reflected carrier sheet
- Laser welded joints between hot and cold leads
- Clean electro polished surface
- Can be used in clean rooms and food industry
- Supplied with special vacuum sealing components



Heating for a substrate holder in sputters for thick film technology under vacuum

High temperature heating cables are mounted on a polished steel mirror and fitted with high-vacuum sealing components at the connection points. Heater shape and size dependent upon the constraints of the system.



Radiant Heater used in the vacuum industry for hard-metal covering of various tools and components

Mineral-insulated heating cable mounted in a cover. Design according to customer request and production requirements.



Heating of receptacles used for containing aggressive substances in the temperature range of 250°C

Mineral-insulated inconel-sheathed heating cable mounted on a frame basket and installed between two walls. The total capacity and load of the heating cable is dependent upon the specific requirements of the substance being heated.

Quality Control at Isopad:

Every product must meet or exceed the extensive technical regulations laid down by our quality control department. A computer controlled test unit assures that all independent norms and requirements are maintained and adhered to.

Isopad – a brand of Tyco Thermal Controls.

www.isopad.de
www.tycothermal.com

tyco
Flow Control

Tyco Thermal Controls

We manage the heat you need

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