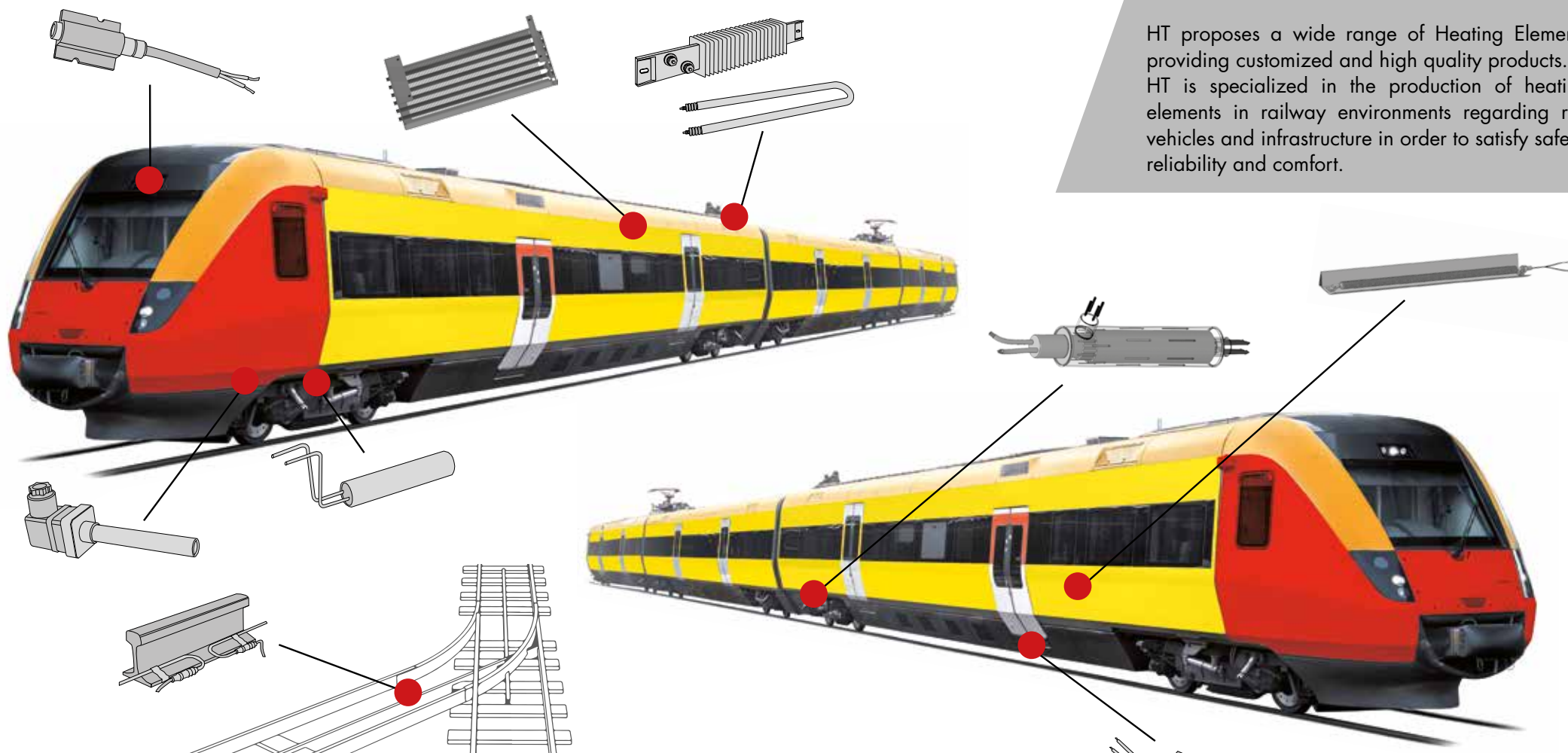


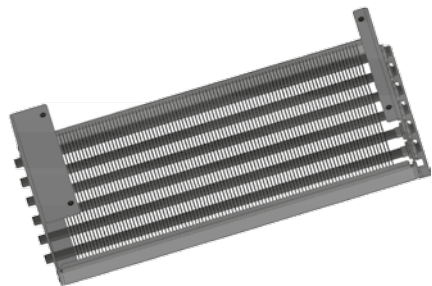
## Heating solutions For railway applications

HT proposes a wide range of Heating Elements providing customized and high quality products. HT is specialized in the production of heating elements in railway environments regarding rail vehicles and infrastructure in order to satisfy safety, reliability and comfort.



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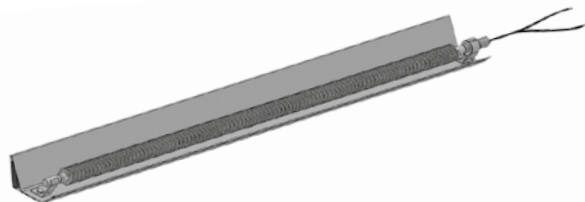


## BATTERIES

HT offers a wide range of convection air heating systems, supplied with frames in various materials, stainless steel, zinc coated steel and aluminum; complete with fans, cables and temperature controls. Also available in IP67 sealing grade. All heaters are supplied with sealing and specific insulation according to customer needs.

## APPLICATIONS

Duct heaters; under seat heaters; HVAC; vestibule heaters

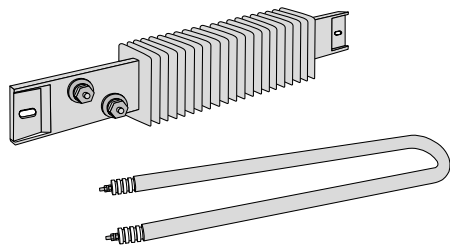


## CONVECTOR HEATERS

Finned cartridge heaters with thermal metal reflectors, thermal isolation back panel and temperature control. Also available in **IP67** sealing grade.

## APPLICATIONS

Under seat heaters; vestibule heaters

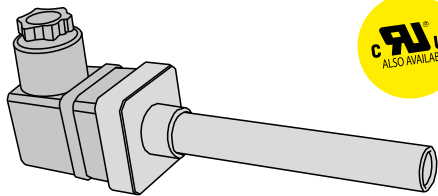


## AIR HEATERS

The air heaters are constructed using tubes and ceramic cores for high temperature environments for perfect heat exchange. The finned air heaters are provided with metallic fins mechanically locked to maximize the heat exchange surface. The heaters are available in various lengths and with a built-in thermocouple.

## APPLICATIONS

Duct Heaters, Switch Point Machines, Electric Motors

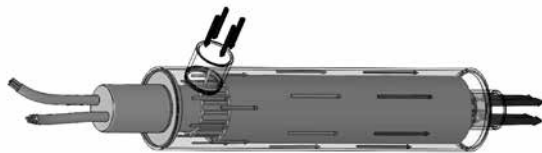


## CARTRIDGE HEATERS

HT offers high, medium and low density cartridge heaters, available in a wide range of loadings and voltages, both in metric and imperial. They are suitable for a large number of applications in the industrial field completed with built-in J-type or K-type thermocouples, special leads for high temperatures and/or galvanized flexible protective sleeves. It is also possible to supply the heaters with wattage differentiation. HT can also offer ULCSA approved cartridge heaters.

### APPLICATIONS

Sand Dryers, Braking Systems,  
Compressor Crankcase,  
Waste Valve, Hydraulic Systems

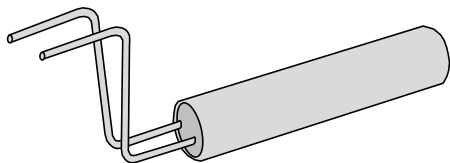


## HIFLOW

HT HIFLOW is an integrated and compact heating system, ideal for satisfying and solving constant temperature control. The entire range of HIFLOW systems considers application in various industrial fields where thermoregulation is requested through oil or water. The cartridge heater is never in contact with water/ oil but heats an aluminium or inox heat sink, that allows a lower working temperature rather than the traditional system.

### APPLICATIONS

Hydraulic systems, water heating

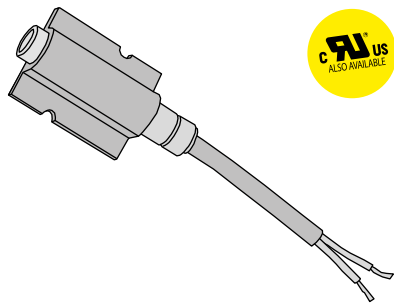


## CERAMIC HEATERS

HT proposes a wide range of ceramic heaters for quick heating and high working temperatures. It is possible to complete products with temperature controls or security probes. HT can customize products with special high temperature leads.

### APPLICATIONS

Braking Systems

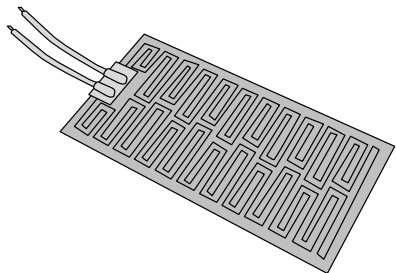


## PTC HEATERS

The self-regulating PTC heater can regulate its output power in function of set temperature (Positive Temperature Coefficient). Due to this, there is no need to complete the PTC heater with other safety devices (thermostat or thermal fuses). The PTC heaters, can be utilized completely immersed in a liquid, inserted in a metallic mass or otherwise in external support for an anti-freeze function.

### APPLICATIONS

Switch Point Machines, Hydraulic Systems, Plate-warming Systems, Anti-Condensation Systems

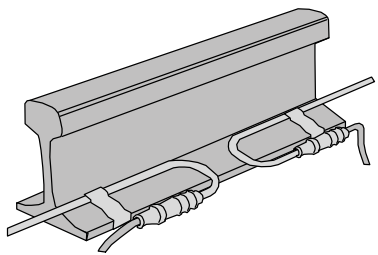


## ETCHED FOILS

The flexible HT heaters are available in polyester, silicone and Kapton®. The thermal homogeneity developed over the entire surface allows to prevent the occurrence of any anomalous thermal expansion. HT guarantees the use of films with high value of adhesiveness for an easy assembling and a perfect heat exchange. The maximum working temperatures depending on the used insulation material: 120°C for polyester, 200°C for silicone, 260°C for Kapton®. Customized products allows Etched Foils to be used in several applications.

### APPLICATIONS

Seats, Floors, Door Steps, Sand Pipes, Displays, Ticket Machines, Antennas, Mirrors, Waste tank



## POINT HEATERS

The Flat bar heaters are used for deicing switch point blades during wintertime. They are available in different size, shapes and material. Electrical connections are guaranteed for IP67

### APPLICATIONS

Switch Point Blades, underneath the stock rails

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