

Isopad platen heater

Isopad platen heaters (IPH) have been designed to blend the benefits of an electric radiant heat source and the design requirements of press plates. Due to a uniform heat density they are ideally suited to coating and lamination processes and have been widely adopted in high quality applications such as solar panel manufacture.

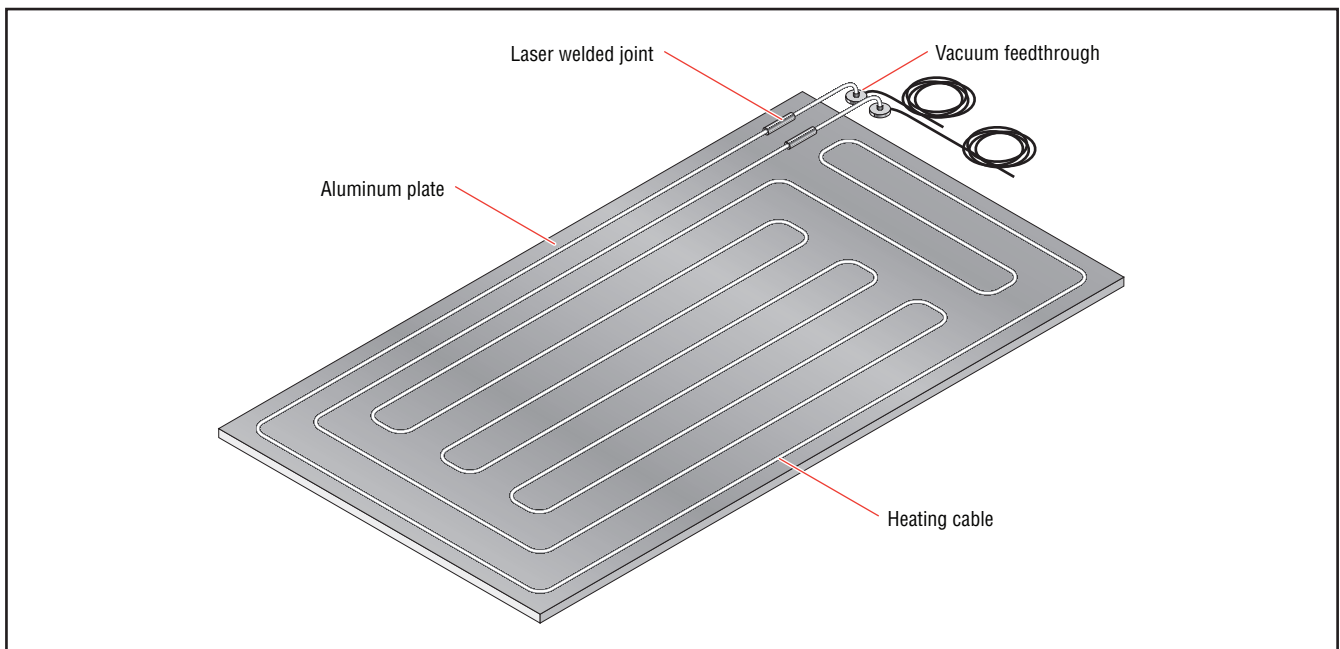
At the core is a mineral insulated (MI) heating cable which can supply temperatures

up-to 1000°C, the MI heating cable is manufactured into a hermetically sealed heating element utilising laser welding technology, formed to deliver optimum heat density then fully encapsulated in a metallic platen ready for use.

The long element lengths made possible by MI cables minimise the number of vacuum feedthroughs required thus reducing the number of failure modes in the final

assembly. Additional reliability is achieved using multiple temperature sensors with the option of fully integrated and vacuum tested power and sensor feedthroughs.

TC-E can provide a customised platen heater to specific customer design requirements or engineer from a simple design outline.



Area Specifications

Area classification	Nonhazardous, ordinary area
Ingress protection	IP68
Electrical protection class	Class I
Maximum withstand temperature (power off)	1000°C
Minimum installation temperature	-60°C

Heater Construction

Type	Resistance heating cable
Material	Various alloys
Material of insulation	Magnesium oxide (MgO)
Material of outer sheath	Depending on design

Technical Data

Maximum operating voltage	300/500 Vac
Maximum operating temperature	1000°C (depending on plate material)

Options

Vacuum feedthrough of different style for heater and sensor connection; the length of the cold lead, the number of wires and optional vacuum feedthrough can be designed to customer requirements in terms of space, temperature and electrical needs.