



JR TECHNOLOGY
LIMITED

REINFORCED PLASTICS & COMPOSITES
PRODUCTION ENGINEERS

FLEXIBLE RUBBER HEATER
MATS

JR TECHNOLOGY LIMITED offer three material types for their range of Flexible Rubber Heater Mats:-

- STANDARD Type: JRTH-SR
- DOUBLE INSULATED Type: JRTH-SR-P
- SUPERFLEX Type: JRTH-SR-F

ADVANTAGES

- Fast heat response & low power requirements
- Shape, size, voltage & power to suit your application, with precise / even heating
- Resistance to moisture & corrosion
- Vibration proof
- Working temperatures from -70°C to +200°C.
- Flexible & thin; SUPERFLEX available on request & self adhesive backing option

APPLICATIONS

- Curing of resin in moulds, laminated components & repairs
- Hot plates & platens
- Defrosting
- Heat sealing
- Drying, etc.

CONSTRUCTION

The mats consist of an element winding sandwiched between two sheets of silicone rubber cloth, which is then heat-cured under pressure to form an integral heater. The material is non-toxic, can be made into virtually any shape or size & the windings are designed to ensure uniform heating over the mats surface. They are supplied to a tolerance of $\pm\%$ (minimum + 3 mm) on length & width, are low in mass, with a thickness range of 2 - 4 mm, the time required to reach working temperature is short & power consumption is therefore reduced. They can be sheathed in woven glass fibre, PTFE, nylon or other protective materials.

Eyelets can be incorporated to facilitate lacing for positioning on cylindrical work.

The leads consist of a single, flexible cable insulated with silicone or glass sleeving, terminated from a convenient position on the edge; lengths to suit application.



JR TECHNOLOGY LIMITED, 81 NORTH END, MELDRETH, ROYSTON, HERTS. SG8 6NU, UK
Tel.- +44 (0)1763 260721 Fax.- +44 (0)1763 260809
e-mail.- enquiries@jrtech.co.uk Website.- www.jrtech.co.uk

JRTD0400/01

ELECTRICAL

IMPORTANT - Always ensure that the control thermocouple is in contact with the heater mat to control the temperature to the required level.

The mat heaters are available for any voltage & for mats smaller than 30 in² reduced voltages are sometimes required as the maximum resistance obtainable is about 100 ohms per in². Alternatively, our range of Hot Bonding Controllers will ensure temperature stability. When operating in free air, mat heaters are limited to a maximum rating of 5 watts per in², but when clamped between metal plates, or bonded to a metallic surface, the watts density may be increased. A surface rating of 2-5 watts per in² is normally adequate for most applications. Where mats are man handled, we recommend the supply voltage should be 110 volts or less.

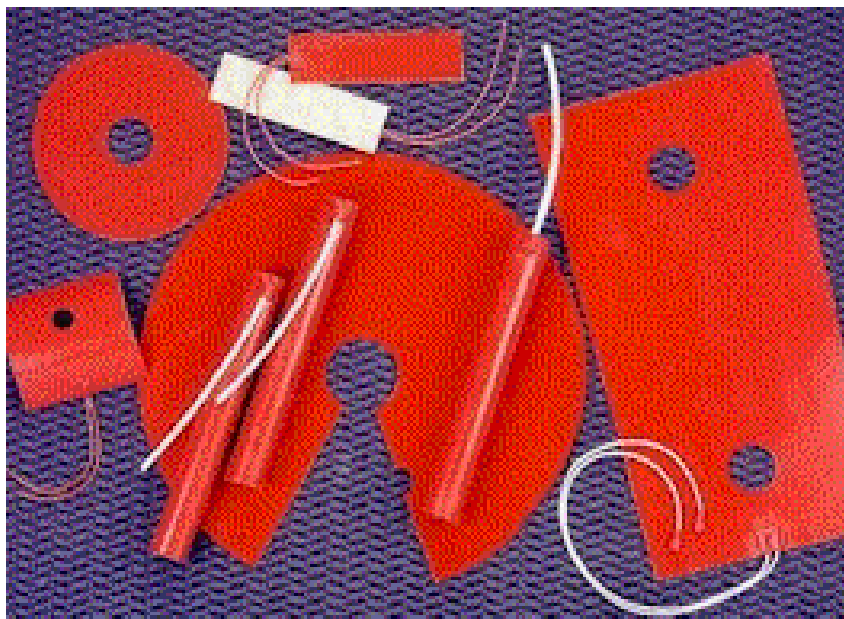
SAFETY

When the mats are in contact with conductive surfaces they must be earthed & normal precautions observed when handling live electrical equipment. Should you have any doubts, contact your supervisor or electrical maintenance specialist.

OBSERVATIONS

The heater mats can be made with holes & cut outs for attachment purposes, as well as a uniform heat distribution pattern, graded windings & multi-zones can be supplied. The mats are flexible & will follow most contours. They are able to withstand uniform pressures up to 200 lbs. per in² & may be tied, clamped or bonded in position. They can also be supplied bonded to customer's components. Mat heaters are not suitable for immersion in liquids, however they are splash-proof & will not be affected at working temperature by water, oil or any substance which does not adversely affect silicone rubber. They are suitable for continuous operation at any surface temperature up to 200°C & occasional use at 225°C.

If you require any further details, please do not hesitate to call our Technical Department.



J R TECHNOLOGY LIMITED, 81 NORTH END, MELDRETH, ROYSTON, HERTS. SG8 6NU, UK
Tel.- +44 (0)1763 260721 Fax.- +44 (0)1763 260809
e-mail.- enquiries@jrtech.co.uk Website.- www.jrtech.co.uk

JRTD0410/01