INDUCTION HEATING

WHAT IS INDUCTION HEATING?

Induction heating is a non-contact method of electrically heating conductive materials. Utilising high frequency, alternating currents in coils creates a rapidly alternating magnetic field. This magnetic field crosses the work-piece creating a current flow (eddy currents) within the part; heat is then generated due to the resistance to eddy current flow within the material (I2R losses).

TC RECORDER 3 WITH FLASH MEMORY:

RAPID HEAT SYSTEMS

Rapid Heat System (RHS) is a patented induction heating technology that has many applications and benefits over conventional resistance heating methods or propane.

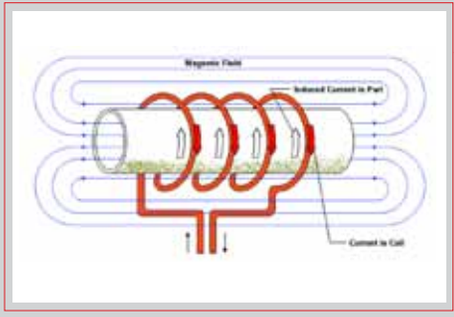
RHS use a non-contact heating method, inducing heat electro-magnetically rather than using a heating element in contact with a part to conduct heat, which is the traditional method.

This service provides equipment and technicians to carry out, at site, all our customers heating requirements. Almost any type of steel component can be heated up to 1,450 degrees F (788°C) using our induction heating system.

Some of the more common applications are: pre and post weld heat treatment, hydrogen bake out, stress relieving for pipe lines of all sizes, structural steel, flat plates and vessels. It is also ideal for shrink fitting shafts, bearings and couplings. Due to the flexibility of the induction heating coils, various shaped components can be easily wrapped for heating.

Key safety benefits are: minimal reflected heat, operators can touch the water cooled heating cables whilst the heating process takes place, allowing for reduction in welding times. RHS eliminates the use of propane, which creates an uneven temperature transfer; in addition to this, every kilo of gas burned creates three kilos of water, whichcan be a problem when welding.Time saving: a digital recorder allows for the storage of all documents for downloading later onto a computer; this saves time in retrieval and managing documents.

RAPID HEAT
RHS
SYSTEMS



THE FUTURE OF PIPE WELDING

INDUCTION COILS PREHEATING 150°C