## SALES AND RENTAL OF HEAT TREATMENT EQUIPMENT

Induction Pipe Heating, Pipe Cutting, Bolt Heating, De-magnetisation & Shrink Fitting Services for On-shore and Off-shore Projects

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SYSTEMS

# RAPID HEAT 3.5 (30A) WELD PREHEATING AND STRESS RELIEVING



## **Semi-Automatic Unit**

The RapidHeat 3.5 (30A) is an inverter-based semi-automatic preheating unit especially for tubes with maximum size of Ø350 mm.

Depending on the size of the pipe, one or two units are used. Induction coils or resistors are placed on both sides of the welding seam and when using only one heating unit they are connected to the series with a jumper cable.

#### **Induction v Resistance**

The (30A) can be used for either Induction or Resistance Heating.

## **Induction Heating**

Heats only the tube material, so radiant heat loss is very small. The maximum temperature with the induction method is around 700°C. Induction coils are fast to install and can be used in tight heating places.

# **Resistance Heating**

If a higher temperature than 700°C is required, resistance heating is required. The power source is an inverter, enabling the use of even the smallest special resistors and the heating of very small workpieces.

### **Heating Elements**

Induction coil(s) with maximum length of 5,0m or resistance heating mat(s) with maximum power of 3,45kW can be connected.

#### **Control System**

Processor controller with digital display. Able to program heating/cooling rate and target temperature.

#### **Temperature Measurement**

Can be carried out with or without a thermocouple. If needed, the temperature can be recorded using a separate power for the unit, which means that short cables can be used.

# **Processor Regulator**

The (30A) has one processor regulator, which is used for adjusting heat treatment parameters. When using a thermocouple, the regulator shows the temperature and the following parameters can be adjusted

- Heating rate (°C/h)
- Holding temperature (°C)

If a thermocouple is not in use, the so-called percentage system is applied, whereby the heating power is regulated in percentage ration and the temperature is measure with an external measuring device.

# **Handling and Transport**

The unit is small and light in weight, which makes it easy to handle and transport. Because the (30A) stands next to the workpiece, adjustments are easy to make.

# **QUICK SPECS**

# **Applications**

Pipe Fabrication Shops
Power Piping – Construction/Repair
Transmission Pipeline –
Construction/Repair
Petrochemical – Construction/Repair
Shipbuilding
Mining Equipment Maintenance
Drill Pipe Manufacturing

#### **Process**

Induction Heating Resistance Heating

# **Control System**

Processor controller with digital display.

## **Temperature Range**

Induction: 20°C - 700°C Resistance: 20°C - 1050°C

# **Heating Power**

3.5kw

## **Connection Voltage**

220 ... 240 V 1-phase/50Hz

# **Dimensions**

H: 380 mm W: 150 mm L: 375 mm

## Weight

11Kg

## **Induction Coils**

Induction coils are in ready-to-use lengths. (1m, 1.5m, 2m, 2.5m, 3m, 3.5m, 4m, 4.5m, 5m) When using an induction coil in preheating, it is wrapped around the pipe without any insulation. The coil can be protected against welding spatter with insulation cloth. When doing post-weld heat treatment, the pipe is first insulated with 20 mm-thick ceramic blanket after which the coil is wrapped around the pipe.

The coil is heat resistant up to 400°C.

