

# SALES AND RENTAL OF HEAT TREATMENT EQUIPMENT

Dragon Works, Chester Road, Saltney, Chester CH4 8RW

Tel: +44 (0) 1244 670810 Fax: +44 (0) 1244 680491

E-mail: sales@rapidheatsystems.com Website: www.rapidheatsystems.com



## HOT TAP SPLIT TEE 36" IN DIAMETER GAS LINE

**Customer:** Transco

**Job Description:** To pre-heat a 36" 'LIVE' gas main ready for welding a 6" diameter piece of pipe (as protection) around a 3/4" screwed valve on the main and then to pre-heat the gas main again ready for the welding of a 'Split Tee' lowered onto the gas main around the 3/4" valve.  
Pre-heat Target Temp: 150°C  
Product: Natural Gas  
Flow Rate: (No flow given)  
Pressure: 57 Bar  
Product Temp: Ambient

**Job Location:** Transco  
West Walton, Wisbech, Cambridgeshire

**Job Date:** 31.08.04 to 04.09.04

**Equipment:** 2 x 20kw RHS Induction Heating Machines  
2 x 50ft Induction Heating Cables  
2 x Induction Heating Extension Cables

**Value Protection:** We arranged a 3-coil configuration, which was then laid over the pipe around the valve. The target temperature under the coils was set to 240°C allowing for gas flow and a safe distance away from the 3/4" valve. This gave us the 150°C we required at the weld face. Time to temperature at the weld face from switch on took 20 minutes.

**Longitudinal Welds:** We arranged a 3-coil configuration, which was then strapped to a wooden frame, which in turn was strapped to each side of the split tee. Target temperature under the coils was set to 240°C and time to temperature at the weld face was approx 20 minutes to reach the 150°C required. (See pictures 1 & 2)

**Circumferential Welds:** We arranged a 3-coil configuration on the pipe and then a 3-coil configuration on the "tee" piece. Target temperature on the pipe was set to 340°C. This would allow for heat drawn out of the product as the wall thickness of the pipe is only 16mm. Target temperature on the "tee" piece was set to 155°C as the "tee" piece is 70mm thick this will hold the temperature very well. Time to temperature at the weld face, from switch on took 30 minutes to reach the 150°C required. (See pictures 3 & 4)



Picture 1



Picture 2



Picture 3



Picture 4