SUNALLOY 621 HC

Fully welding HK30, HK40 and similar heat-resisting alloys

DESCRIPTION

Easy arc striking, Easy slag removal. Evenly rippled shining bead. The weld deposit can withstand temperatures up to 1150°C in continuous service. Creep rupture strength at working temperature is quite high. Use low current and short arc. This high carbon electrode is intended for service at elevated temperatures where creep resistance is of primary importance. Measurement of elongation at room temperatures has little meaning in this case. For guidance, an elongation of about 5% may be expected.

ALLOY BASIS

Fe, Cr, Ni, C

APPLICATIONS

For welding reformer tubes (also called furnace tubes) made of HK 30 and HK 40 alloys used in fertilizer industries, oil refineries, petrochemical plants, etc. Also suitable for hot dies and overlays on cast iron, salvaging pumps, valves and shaft working at high temperature.

PROCEDURE

Before welding, dry the electrode at 250-300°C for 2 hour. It is advantageous to use a stringer bead with short arc. Clean and de-grease the area to be welded. For heavy thickness prepare a 60° included angle Vee. Fit up should be accurate for long joints. Then weld at regular intervals and use jigs and fixtures to avoid distortion. Use DCRP (DC+) on DC power source for good ripple and finish. Stringer bead technique with shortest possible arc length is recommended.

TECHNICAL DATA

UTS	:	60 - 70 kgf/mm^2
Elongation	:	10% min

WELDING PARAMETERS

Size (diameter)/length (mm)	:	2.50 x 350	3.15 x 350	4.00 x 350	5.00 x 350
Current (amps)	:	50 - 70	70 - 100	100 - 135	100 - 160
Current	:	AC/DC (+)			