

SUPERALOY 495

Superaloy 495 is a special electrode depositing a sound, highly alloyed weld metal which is designed to offer excellent resistance against metal to metal wear at temperatures as high as 650° C. The weld metal is capable of developing secondary hardness on tempering. Maximum hardness is achieved after three tempering treatments, each of 1 hour duration at 600° C. As deposited hardness of the weld metal is 41 - 43 HRC (In the third layer) which increases to 44 - 47 HRC after first tempering 47-49 HRC after second tempering and 50-53 RC after third tempering. The special alloy additions ensure good red hardness and strength, resistance to fatigue as well as oxidation.

Applications:

This electrode can be used for hardfacing any component subjected to metal to metal wear at elevated temperature upto 650⁰C. Hence it is suitable for a variety of wearfacing applications viz. Continuous casting driving rolls, Hot forging dies, Hot forming dies, Mandrels, Draw rings, Hot punching tools, Hot forming tools, Guide rings, Wear rings, Hot drawing dies, Hot trimming dies etc.

Procedure:

Remove damaged, Oxidised and fatigue material, preheating is advisable for high carbon steel base metal. If moisture content is high in atmosphere re-drying of electrode at 200[°]C for one hour before use is advisable. Chip slag between two passes.

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Technical Data

SUPERALOY 495

Size (mm)Dia Welding Current (Amps)	:	; 80	3.15) — 110	4.00 120 – 150	5.00 150 - 190
HARDNESS				I Layer	III Layer
Hardness (As Deposited)				47 – 49 HRC	41 – 43 HRC
Hardness after 1 st tempering 600°C.	for	1	hour at	49 – 51 HRC	44 – 47 HRC
Hardness after 2 st tempering 600°C.	for	1	hour at	51 – 53 HRC	47 – 49 HRC
Hardness after 3 st tempering 600 ^o C.	for	1	hour at	52 – 54 HRC	50 – 53 HRC

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