SUNALLOY 601

Electrode for high strength and extreme crack-resistance for all steels

DESCRIPTION

The most widely applicable electrode for maintenance and repair welding. For joining all dissimilar, problem and “unknown” steel combinations. The most crack resistant filler metal combining maximum strength, good corrosion and heat resistance with outstanding weldability in all positions to produce smooth, porosity free welds without undercut or spatter.

ALLOY BASIS

Fe, Cr, Ni, Mn

APPLICATIONS

Tools, dies, springs, carbon steels, stainless steels, pressure vessels, aircraft steels. Welding low, medium and high alloy steels requiring the highest strength and quality. Also ideal as an underlayment prior to applying hard facing alloys. Commonly used for joining stainless of unknown analysis and these steel to carbon steels. Also used for rebuilding shafts and blades used in the chemical, construction and mining industries. Heavy machinery parts, earth-moving equipment parts, automobile springs, trunnions of cement mills, parts subject to heat, corrosion and impact.

PROCEDURE

Clean weld area thoroughly, preferably using a solvent or emulsifier to remove all grease, fats or oils. Ensure electrodes are dried. Preheat is not generally required, except for heavy sections of high carbon or alloy steels, when a temperature of 200 o C should be developed. Weld using electrode vertical with a short arc or “touch” technique. Use lower currents where low heat input is required to limit distortion. De-slag completely before over-welding.

MECHANICAL PROPERTIES

Tensile Strength	:	upto 800 N/mm^2
Yield Strength	:	upto 600 N/mm^2
Elongation	:	Approx. 30%

TECHNICAL DATA & WELDING PARAMETERS

Size (diameter)/length (mm)	:	2.50 x 350	3.15 x 350	4.00 x 350	5.00 x 350
Current (amps)	:	60-80	80 - 100	110 - 130	150 - 280
Current	:	AC/DC (+)			