CINOX WELD

CINOX 299™

An ultimate electrode for welding dissimilar steels and many kind of steel surfacing without any danger of cracking or breakage. CINOX 299 also serves as a "STUD REMOVER" electrode.

Diameter	*Amperage*
1.6mm/250mm	25 – 35
2.5mm/300mm	35 - 70
3.2mm/350mm	60-110
4.0mm/350mm	75-140

CHARACTERISTICS AND TYPICAL APPLICATIONS

CINOX 299 is an AC weldable electrode with a fully alloyed core, suitable for joining difficult-to-weld steels. Austenitic-ferritic stainless steel welding deposit (high ferrite content). The weld metal remains ferritic, even after dilution with an austenitic base weld forming elements such as Mn, Ni and C and is thus highly crack resistant. Plastic weld metal of high tensile strength, impact proof, tough, and acid and heat resistant up to 1,000ºC
Soft, intense fusion, easy slag removal, finely rippled beads. Suitable for AC welding.
Joint weld with a short arc using stringer bead techniques. Maximum wall thickness <30mm. The weld metal alloy strain-hardens during use.

APPLICATION

Due to the exceptional strength and crack resistance, CINOX 299 ideal for repairing tools, dies, spring steel and any dissimilar metal combinations, except for the aluminum and copper alloys. It is also recommended for repairing worn parts and as an underlay for hardfacing.

WELDING TECHNIQUES

The area in which the weld is to be made should be free of rust, grease, paint and other materials which cause weld contamination. A 90º vee joint should be used when joining heavy sections. Maintain a short arc length and use striger beads.

TYPICAL MECHANICAL PROPERTIES

Tensile strength as welded	132,300 psi (910 N/mm²)
work hardened	186,000 psi (1280 N/mm²)
Yeild strength	94,000 psi (660 N/mm²)
Elongation	32%
Reduction of area	25%
Hardness	Rockwell B-97 Brinell 320
Recommended Current	DC reverse polarity (Electrode +) or AC
Welding positions	PA, PB, PC, PD, PE, PG