

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.

<i>Diameter</i>	<i>Amperage Setting</i>
1.6/250mm	25 - 35
2.5/300mm	35 - 70
3.2/350mm	60 - 110
4.0/350mm	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 1,000°C. 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 90° vee joint should be used when joining heavy sections. Maintain a short arc length and use striger beads.

***Typical Mechanical Properties:***

<b><i>Tensile strength as welded</i></b>	132,300 psi (910 N/mm <sup>2</sup> )
<b><i>work hardened</i></b>	186,000 psi (1280 N/mm <sup>2</sup> )
<b><i>Yeild strength</i></b>	94,000 psi (660 N/mm <sup>2</sup> )
<b><i>Elongation</i></b>	32%
<b><i>Reduction of area</i></b>	25%
<b><i>Hardness</i></b>	Rockwell B-97 Brinell 320

***Recommended Current***

- DC reverse polarity (Electrode +) or AC

***Welding positions***

- PA, PB, PC, PD, PE, PG