A Special Extruded Hardfacing Rod With Tungsten Carbide For Maximum Abrasion Resistance

Xuper® ElastoDur R8811




BRAZING

- Highest percentage of Diamax particles
- Deposits are less crack sensitive than conventional deposits
- Deposits are at full strength during all phases of service (initial and final)
- No melting of base metal

Castolin Eutectic®
Eutectic Castolin

DESCRIPTION

Xuper ElastoDur R8811 is a unique, proprietary torch and TIG alloy designed to provide TeroCote® protection to steel, stainless steel and cast iron. Deposits exhibit maximum uniformity and concentration of dimensionally-controlled super hard Diamax particles.

The high hardness and excellent heat-resistance combine to offer outstanding resistance to even the most severe wear abrasion and "cutting action" wear. Upon deposition, the self fluxing matrix alloy and special organic binder react to assure thorough wetting and metallurgical bonding. Not only does the composite thoroughly bond to the substrate, but the suspended hard particles are also metallurgically bonded to the matrix.

TECHNICAL DATA

Brazing Temp. Range: 1950°F - 2100°F (1065°C – 1150°C)
Typical Bulk Hardness: HRC 65
Carbide Hardness (kg/mm²): 2000 or Ra 89-91
Tungsten Carbide Content: 80%
Matrix composition Nickel + Chromium + Boron, Carbon and Silicon
Gas Tungsten-Arc Welding: Refer to the GTAW Procedure for the "T" Series Alloy

BRAZING WELDING PROCEDURE & TECHNIQUE

Preparation: Clean joint area with RotoClean OS or use a proprietary VOC-free solvent. Lightly grind the part to be coated to facilitate quicker bonding. Preheat broadly at first then locally to a good soaking preheat to 1000 to 1200ºF.

Note: *that when brazing on cast iron make sure to prepare the surface by searing using an oxidizing flame. This will help to remove free graphite from the surface and help with bonding.*

Technique: Use a large neutral flame to 1x carburizing. Do not use an oxidizing flame as this can reduce the self-fluxing properties and oxidize the wear-resistant carbides. After preheating, deposit the filler metal using a continuous "drop-and-melt" technique. Continue until the surface is built-up slightly oversize. This surplus will aid in grinding to profile if needed.

Post-Brazing: Allow part(s) to cool naturally in still air or wrap in a heat-retardant material such as vermiculite or silicone blanket.

TYPICAL APPLICATIONS

- Guide Plates
- Scrapers
- Mixer Blades
- Teeth
- Drill Heads
- Mud Pump Rotors
- Conveyor Screws
- Debarker Knives

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS

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