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
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 1200°F.

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

Eutectic Corporation
N94 W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA
P 800-558-8524 • F 262-255-5542
www.eutecticusa.com

Eutectic Canada
428, rue Aime Vincent
Vaudreuil-Dorion, Quebec J7V 5V5
Phone: (800) 361-9439
Fax: (514) 695-8793
www.eutectic-na.com

Eutectic Mexico
KM 36.5 Autopista
Mexico-Queretaro
54730 Cautitlan-Izcalli
Estado de Mexico, Mexico
Phone: 011 (52) 55-5872-1111
e-mail: eutectic@eutectic.com.mx

Statement of Liability: Due to variations inherent in specific applications, the technical information contained herein, including any information as to suggested product applications or results, is presented without representation or warranty, expressed or implied. Without limitation, there are no warranties of merchantability or of fitness for a particular purpose. Each process and application must be fully evaluated by the user in all respects, including suitability, compliance with applicable law and non-infringement of the rights of others, and Eutectic Corporation and its affiliates shall have no liability in respect thereof.