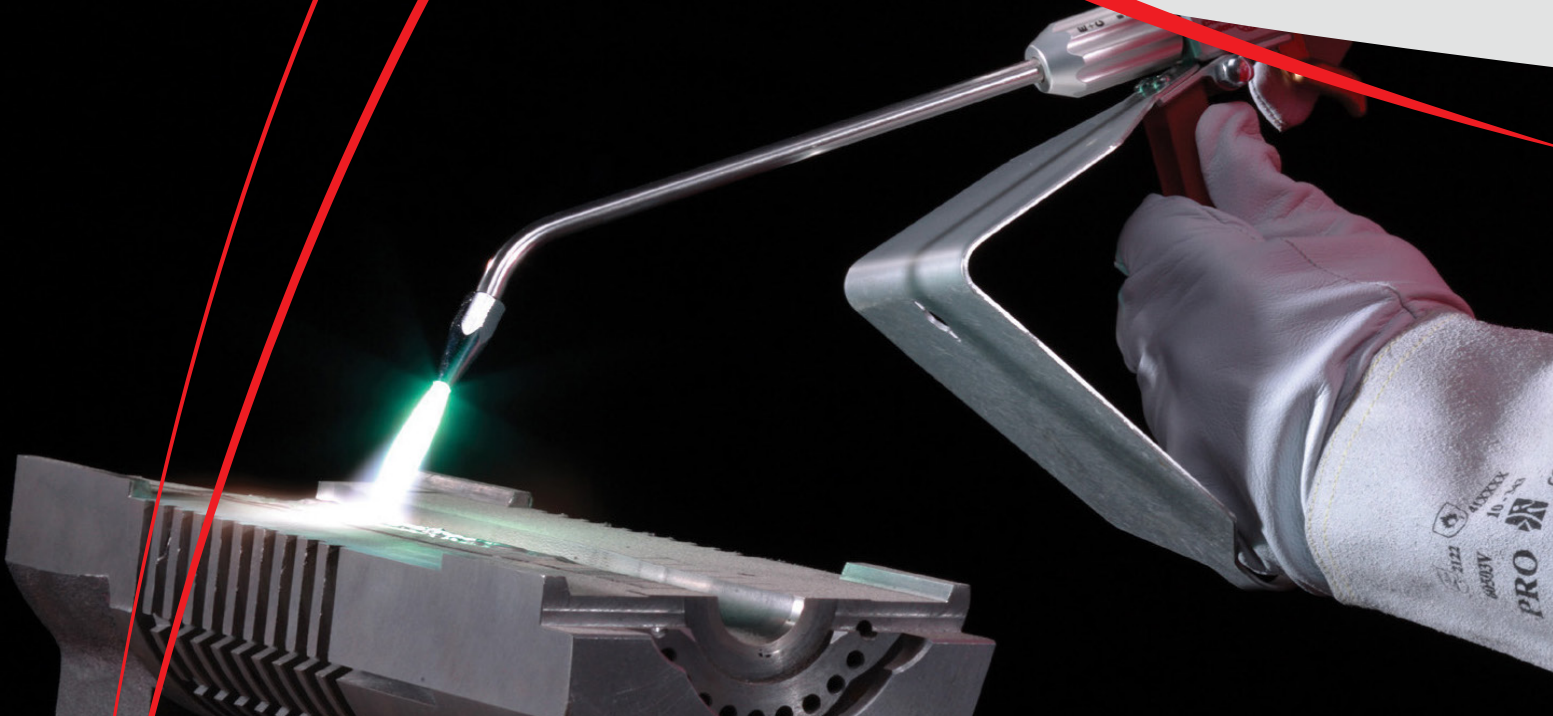




A Hot Process, Nickel-Based Alloy  
with Tungsten Carbide Particles

# **Eutalloy®** **10011**



- Tungsten carbide particles in a hard Ni-based matrix ensures high wear resistance for extremely long service life
- Coatings combined with easy to use Eutectic equipment provides versatility in protecting equipment and parts
- Thin, strong and durable deposits lead to maintenance savings

# Eutalloy® 10011

Eutalloy 10011 is a powder designed for anti-wear applications, particularly for fine particle abrasion. The powder produces a coating consisting of a high volume of tungsten carbide particles (80% by weight) embedded within a hard nickel-chromium matrix.

The unique characteristics of this composite coating enable it to substantially extend the service life of components, more than twice as effective as any comparable coating material.

## TECHNICAL DATA

Typical Coating Properties	
Service Temperature:	1200°F (649°C)
Matrix Hardness:	60 HRC
Tungsten Carbide:	1900 µHV
Service Conditions	
Abrasion Resistance:	Excellent
Corrosion Resistance:	Very Good
Heat Scaling:	Very Good
Red Hardness:	Very Good
Weldability:	Excellent
Machinability:	Non-machinable
Gripping Action:	Excellent
Type of Application	
Thin Overlay:	Recommended
Base Metals	
Cast irons, steels, stainless steels, and nickel alloys.	

## PROCEDURE FOR USE

### Preparation:

All oxides, dirt, grease, or other contaminants should be removed before application. This can be accomplished by mechanical preparation with a file, cutting tool (without lubrication), clean wire brush, grinding or grit blasting.

### Coating Procedure:

Adjust the torch flame so that a neutral or slightly carburizing flame is achieved and preheat the surface to approximately 575F. After depositing a layer of powder, fuse with the torch flame until a glazed appearance is achieved.

### Finishing:

Grind with a green or black silicon carbide wheel, 24-36 grit for rough work and 60 or finer grit for finishing.

## TYPICAL APPLICATIONS

- Mixer Blades
- Post Hole Augers
- Rock Bits
- Choppers
- Debarker Chains
- Plowshares
- Cultivator Blades
- Skid Cleats
- Catwalks, Stair Treads
- Revolving Platforms
- Grippers
- Lift Devices
- Clamping Devices
- Cutter Wheels
- Crawler Shoes
- Muller Blades
- Chutes
- Liners
- Furrowing Shovels
- Billet Tongs
- Grapple Arms
- Ladder Rungs
- Conveyor Cleats
- Guides
- Feed Devices

Observe normal spraying practices, respiratory protection and proper air flow pattern advised. For general spray practices, see AWS Publications AWS C2.1-73, "Recommended Safe Practices for Thermal Spraying and AWS TSS-85, "Thermal Spraying, Practice, Theory and Application." Thermal spraying is a completely safe process when performed in accordance with proper safety measures. Become familiar with local safety regulations before starting spray operations. DO NOT operate your spraying equipment or use the spray material supplied, before you have thoroughly read the equipment instruction manual. Refer to the Eutectic website for Material Safety Data Sheet (MSDS) information. DISREGARDING THESE INSTRUCTIONS MAY BE HAZARDOUS TO YOUR HEALTH.



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