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## Hardbanding Wire

Data Sheet

# POSTALLOY<sup>®</sup> ULTRABAND<sup>™</sup> NM Patent Pending

### Description

**Ultraband<sup>™</sup>NM** is a hard, 100% crack free Hardband designed for non-mag drill collars and related components. Control of critical elements has resulted in a hardband alloy that meets magnetic permeability specifications and offers substantially improved wear resistance compared to conventional non-mag welding alloys, like 310 stainless – a 400% to 500% improvement. In addition, the abrasion resistance of **Ultraband<sup>™</sup>NM** is 400% to 500% better than drill collar base materials.

- Use on non-mag base materials such as P530, AG17, 15-15LC, NMS-100 and others
- Meets all requirements of API Specification 7 - Relative Permeability – less than 1.01  
All tests are carried out according to ASTM A342 Method 3
- It can be applied in multiple layers without spalling providing the interpass temperatures are properly controlled
- Non-Cracking
- Hardness 40 Rc

For oil and gas industry applications such as non – magnetic drill collars, stabilizers and MWD/LWD drilling tools and related components - optimized for improved wear resistance.

**Ultraband<sup>™</sup>NM** can be applied directly on to non-mag tools and over previous layers of 310 stainless. Used by itself, **Ultraband<sup>™</sup>NM** provides excellent wear resistance. For additional wear protection, a non-magnetic “cast tungsten carbide” may be dropped into the weld. Recommended size is 20-30 or 30-40 mesh at a drop rate of approximately 40 grams per minute. Deposits are smooth and free of any slag. Re-application is easy providing the worn deposit is clean and free of defects. Please contact our Engineering Department for complete procedures.

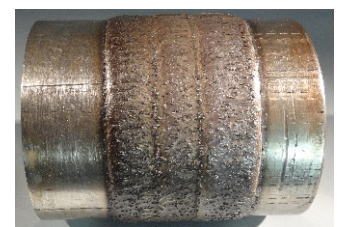
### Welding Parameters

Diameter	1/16” (1.6mm)
Polarity	Electrode Positive
Gas	98% Argon/2% Oxygen
Gas Flow	32 - 37 CFH (Typical 35 CFH)
Current <i>amps</i>	220-290 (Typical 240A)
Voltage <i>volts</i>	28-32 (Typical 30V)
Wire Speed (ipm)	280-330 (Typical 315 ipm)
Stickout <i>inch (mm)</i>	3/4”-1” (18-25 mm) (Typical 7/8” or 21mm)
Preheat	None - weld at room temperature 60°F (15°C) minimum temperature required
Maximum Interpass	400°F (204°C)
Post Welding	Slow Cool to Room Temperature

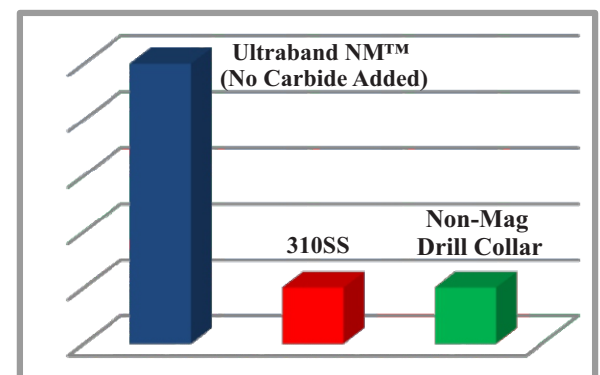
**Packaging** 25 Lb. Spools



Ultraband<sup>™</sup>NM



Ultraband<sup>™</sup>NM  
w/ 20-30 Mesh Cast Carbide



Wear Rating