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## Data Sheet

# Hardbanding Wire

# POSTALLOY® TUFFBAND® NC

### Description

Postalloy® Tuffband® NC is a high hardness hardband that may be used by itself for casing friendly hardband applications or used as a weld matrix with Tungsten Carbide (WC) when casing protection is not a factor.

### Casing Friendly

Hardbanding deposits are NON CRACKING, providing proper preheat, interpass and cooling temperature procedures are followed. The microstructure consists of a hard, but tough tool steel matrix with approximately 55Rc hardness. Deposits are extremely CASING FRIENDLY. Tuffband® NC can be applied over itself without removal, but only if the surface has been properly cleaned and inspected. Tuffband® NC can be applied over certain previously hardbanded competitive products providing that the worn deposit is 1/32" thick or less. Please contact Postle offices for further information.



Tuffband® NC Hardbanding  
Uses: New Application to Tool Joints



### Tungsten Carbide With Tuffband® NC

When Tuffband®NC is used as a "matrix" wire in combination with WC the weld puddle is fluid and larger than conventional hardfacing wires, thereby allowing the WC bits to be completely consumed. There is no WC residue left on the deposits as is sometimes seen with mild steel and other matrix wires. This means that deposits are filled to the maximum and provide the ultimate in wear resistance. The resulting microstructure is a combination of tool steel and WC having a hardness of about 60Rc.

### Welding Parameters

Diameter 1/16" (1.6mm)

Polarity.....Electrode Positive

Current *amps* .....300-380 (Typical 330)

Voltage *volts*.....29-33 (Typical 30)

Gas Flow.....32-37 CFH (Typical 35 CFH)

Stickout *inch (mm)*.....3/4"-1 1/2" (25-35mm) (Typical 1" - 25mm)

Preheat .....350/450°F (165/232°C)

Maximum Interpass .....800 °F (427°C)

Post Welding.....Slow Cool to Room Temp

### Packaging

Diameter 1/16" (1.6mm)

50 Lb. Spools .....Standard

Other packaging available upon request.

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