

Technical data sheet

EN050825GB

PREMIUM HARDBANDING CORED WIRES

DRILL-GUARD Nb



Founded in 1966, Welding Alloys Group is the global specialist in alloyed cored welding wires. Each of our DRILL-GUARD hardbanding wires is specifically formulated and produced in-house utilizing our own manufacturing technology and from extensive Oil & Gas industry knowledge.

DRILL-GUARD® the ultimate wear protection for your drill string and casing

Best in Class: Welding operator appeal

- Excellent wear performance
- Niobium, vanadium, and titanium carbides
- Crack-free, non-spalling or flaking
- Re-applicable over itself or other non-cracking hardbanding materials
- High grade raw materials / alloying elements
- Industry leading in-house manufacturing and quality control
- Casing friendly

Hardbanding Parameters

Wire Diameter:	1/16" (1.6 mm)
Current / Polarity:	DCEP / Reverse
Shielding Gas(es):	98% Ar - 2% O ₂
Gas Flow Rate:	35 CFH (16.5 l/min)
Welding Current	260 to 305 A (290 A recommended)
Welding Voltage:	26 to 29 V (29 V recommended)
Stick-out:	0.75" to 1.25" (19 mm to 32 mm), from contact tip
Torch Angle:	5 deg. to 20 deg.
Torch Offset :	0.375" to 1.5" (10 mm to 38 mm), depends on O.D.
Oscillation Width:	0.75" to 1.0" (19 mm to 25 mm), depends on O.D.
Oscillation Speed:	45 to 65 cycles per minute
Interpass Temp:	Maximum 850°F (454°C)
May use a grinder on the surface after temperature is below 100°F (38°C)	

Performance data

API® Standard 7CW Wear Test
Casing wear Mohr T95: **6.25%**
Friction factor: **0.33**

ASTM G65-A abrasion test
Gram loss one-layer: **0.20 - 0.25 g**

Hardness one-layer: **59 - 61 HRC**



DRILL-GUARD Nb hardbanding deposit on a tool-joint

Support

With over 50 years experience and operations in 28 countries, the Welding Alloys, fully supports their products and end-users by providing technical support within the field as well as in the office and training centers.

For technical expertise, contact:

sales@drill-guard.com

or

www.drill-guard.com

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