Technical data sheet 100217	PREMIUM HARDBANDING CORED WIRES # DRILL-GUARD Ti	Welding Alloys Group

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

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

Best in Class: tool joint protection

Superior wear performance

Titanium, vanadium, and niobium carbides

Crack-free

Non-spalling or flaking

Re-applicable

High grade raw materials / alloying elements

Industry leading in-house manufacturing and quality control

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NS-1™ Product
LEVEL 3

API® Standard 7CW Wear Test
Frictional Factor: 0.26
Hardband O.D. Loss: 0.001 in
Tool Joint Weight Loss: 0.000 lbs

Hardness: 55 to 58 Rockwell “C”

Hardbanding Parameters

Wire Diameter:	1/16" (1.6mm)
Current / Polarity:	DCEP / Reverse
Shielding Gas(s):	98% Ar - 2% CO_2 alternative: 98% Ar – 2% O_2
Gas Flow: Rate:	45 CFH (21 LPM)
Welding Amps:	275 to 290 amps (285 amps recommended)
Welding Voltage:	23 to 28 volts (25 volts recommended)
Wire Stickout "S":	0.75" to 1.00" (19mm to 25mm), from contact tip
Torch Angle "A":	5 deg. to 15 deg.
Torch Offset 'O":	0.375" to 1.0" (10mm to 25mm), depends on O.D.
Oscillation Width:	0.75" to 1.0" (19mm to 25mm), depends on O.D.
Oscillation Speed:	45 to 75 cycles per minute
Spindle Speed:	See Chart, depends on O.D.
Preheat:	See Charts, depends on O.D. and drilling tool
Interpass Temp:	Maximum 850ºF (454ºC)
* May use a grinder on the surface after temperature is below 100ºF (38ºC) *	

Support:

With over 50 years experience and operations in 28 countries, the Welding Alloys Group, 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