

<b>Technical data sheet</b>  <small>EN021024GB</small>	<b>Cored welding Wire</b>  <b>HARDFACE NICARBW</b>	 <b>Welding Alloys</b>
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### CLASSIFICATION

EN 14700: T Ni20

### DESCRIPTION

- Cored hardfacing wire containing 40 to 60% tungsten carbides (according to wire diameter).
- Special Ni-B-Si matrix
- Optimised combination of toughness and wear resistance due to the heterogeneous weld metal composed of tungsten carbides distributed in a hard and very tough matrix
- Excellent flow and wetting characteristics
- Smooth and clean weld bead appearance
- Can be used with or without external gas shielding

### APPLICATIONS

Dedicated to applications requiring extreme abrasion resistance combined with corrosion resistance

#### Examples

Bucket teeth, wood chipper spouts, scrapper blades, crusher bars, components for agriculture, conveyor screws, trenchers, drilling tricones, ...

### TYPICAL ALL-WELD METAL ANALYSIS

Composite deposit containing tungsten carbide particle in a Nickel-boron-silicon matrix	<b>WC content</b>
	40 to 60% depending on $\varnothing$

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness : 45 – 55 HRC  
Tungsten carbides : 2000 – 2800 HV  
Ni matrix : 400 – 550 HV

### CONDITIONS OF USE

Current type	Shielding gas	
DC+	EN ISO 14175	Self shielded
		I1: 100 % argon
		M12: Ar + 0.5 – 5 % CO <sub>2</sub>
		M21: Ar + 15 – 25 % CO <sub>2</sub>

Surfaces to be welded should be free of rust, scale, oil or any other contamination  
Work with low heat input to avoid melting or sinking of the tungsten particles

### OPERATING CONDITIONS

#### Gas shielded

Diameter [mm]	Current [A]	Voltage [V]	Stick-out [mm]
1.2	90 - 150	16 - 22	15 - 30
1.6	110 - 180	16 - 22	15 - 30
2.0	130 - 190	20 - 21	15 - 30
2.4	150 - 280	21 - 23	15 - 30
2.8	250 - 320	21 - 23	15 - 30

Recovery: 98 %

### WELDING POSITIONS

Flat

### PACKAGING

Diameter	1.2 - 2.4 mm		2.4 - 2.8 mm	
Standard packaging (EN ISO 544)	BS 300 spool		B 450 coil	Drum
Weight	15 kg		25 kg	Up to 330 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.