

# Dual Core 81 R

Rutile CORED/FCAW

## Standards

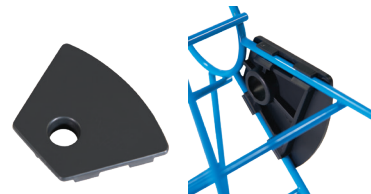
EN/ISO-Standard - 17632-A

AWS-Standard - A5.29

EN/ISO-Classification - T 50 (46) 6 (4) 1Ni P M21 (C1) 1 H5

AWS-Classification - E81T1-Ni1M(C1)-J H4

- Seamless rutile flux cored wire suitable for applications where low temperature notch toughness is required.
- The wire has excellent weld puddle manipulation and superior out-of-position weldability.
- Provides low spatter and an easy slag removal for single or multiple pass applications.
- Due to the seamless technology the typical diffusible hydrogen content is <3.0 ml 100 g.
- Extremely low hydrogen levels giving more resistance to cracking.
- Test certificates supplied as 3.1 which is actual weld chemistry + mechanicals according EN 10204:2004.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on steel structures, pipelines, shipbuilding, non-alloy and fine grain steels, pressure vessels, offshore, mechanical engineering, heavy transport and general fabrication etc.
- **Test Certificates can be found online @wilkinsonstar247.com**



Optional Plastic Alignment Hole Clip  
Order Code: BS300-CLIP

## Typical Base Materials

Steel type	EN
Shipbuilding steels	A, B, D, AH 32 - EH 36
Unalloyed structural steels	S185 - S355, A 106 Gr.B, A 333 Gr. 6
Boiler steels	P235GH - P485GH up to A516; A537, A455
Pipe steels	P235T1/T2 - P485NL2; L210 - L485MB up to A 572
Fine grain steels	S235 - S500 (NL1,2) up to A 572
Steel acc. API-standard	X42 - X70

\* Illustrative, not exhaustive list

## Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

## Shielding Gases

EN ISO 14175 - C1, M21

## Polarity

DC (+)

## Chemical Composition % (Typical)

C %	Si %	Mn %	P %	S %	Cr %	Ni %	Mo %	Cu % <sup>a</sup>	Al %	V %	Ti %	Nb %
0.03	0.35	1.09	0.009	0.015	0.033	0.806	0.006	0.133	0.006	0.015	0.034	0.015

a (Includes copper coating)

## Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010500353	1.20	16	BS300 PLW	64

Drums also available.

## Welding Parameters

Ø mm	1.00	1.20
Current (A)	140-230	160-280
Voltage (V)	19-25	21-29

## Mechanical Properties

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
620	550	26	90	-40°C
			60	-60°C

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

**Liability:** Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.

