

PROLINE

professional welding supplies



UltraFil™ RNi1M Seamless Flux Cored Wire

Key Features

- ▶ Premium copper coated gas shielded flux cored wire – excellent mechanical properties
- ▶ Seamless wire technology ensures hydrogen levels stay at H4/H5 levels even after long term storage
- ▶ Smooth spray transfer achieved at low welding current levels - minimal spatter
- ▶ Designed for use with mixed gas operation, Argon with 15-25% CO₂
- ▶ Diffusible hydrogen typically 3 mls per 100gms deposited metal (per AWS A4.3)

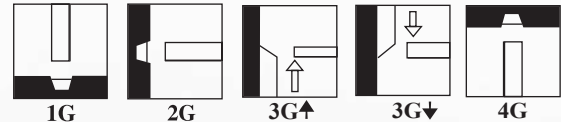
Typical Applications

- ▶ Full positional welding of low temperature higher toughness steels, low alloy medium to high strength steels, under matching the tensile strength of Q&T steels. Eg: Bisplate 60/70/80, and weathering grade steels where colour match (patina), is not essential.
- ▶ Suitable for X65 pipe, where Ni content is kept below 1% to conform with NACE MR0175.
- ▶ General and high integrity structural steel fabrication, offshore constructions, oil and gas, bridges, pipe spooling, vessels, mining and mineral processing equipment such as dragline/shovel components and crusher/sizer components, architectural constructions, and other heavy equipment where high toughness steels are used.
- ▶ Suitable for fillet, butt and build-up welding applications

Conformances

AWS A5.29	E81T1-Ni1M-JH4
AWS A5.29M	E551T1-Ni1M-JH4
AWS A5.36	E81T1-M21A8-Ni1-H4
	E81T9-M21A8-Ni1-H4
AWS A5.36M	E551T1-M21A6-Ni1-H4
	E551T9-M21A6-Ni1-H4
AS/NZS ISO 17632-A	T 46 6 1Ni P M 1 H5
AS/NZS ISO 17632-B	T 55 6 T1-1 M A-N2-U H5

Welding Positions



Shielding Gas

- ▶ M21 shielding gases
- ▶ Flow Rate: 15 - 20 L/min

Diameter / Packaging / Part Number / Settings

Diameter mm	Plastic S300 Spool 15kg	WFS m/min	WFS in/min	Voltage volts	Approx Current amps	Deposition Rate (max)	ESO (Stickout)
1.2	P/N: 17-1216	5.1 - 12.7	200-500	23-30	180-300	5.4 kg/hr	20 ± 5mm
1.6	P/N: 17-1616	3.6 - 8.9	140-350	21-31	235-400	5.9 kg/hr	

Polarity: DC Electrode Positive (DC+)

Typical Mechanical Properties

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -40°C	Charpy V-Notch J @ -60°C
Argon +20% CO ₂	550	610	27	130	80

Typical Weld Composition / Diffusible Hydrogen Content

	%C	%Mn	%Si	%Ni	%P	%S	Diffusible Hydrogen
Argon +20% CO ₂	0.05	1.28	0.33	0.90	0.010	0.003	3.0 mls / 100 gms

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