

# PROLINE

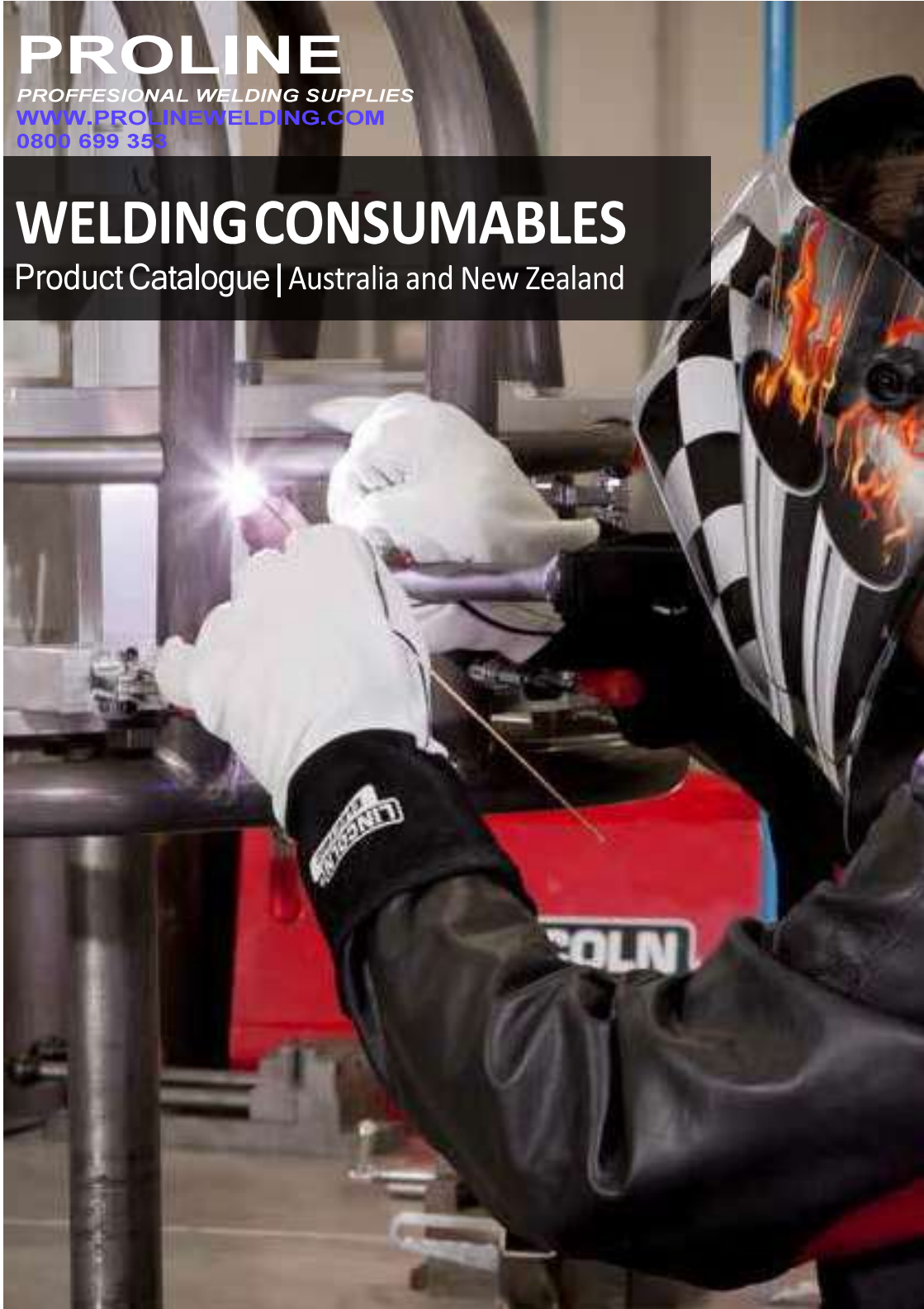
PROFFESIONAL WELDING SUPPLIES

[WWW.PROLINEWELDING.COM](http://WWW.PROLINEWELDING.COM)

0800 699 353

## WELDING CONSUMABLES

Product Catalogue | Australia and New Zealand



## Outershield® 81Ni1-H

### Key Features

- All positional (except 2.0mm) gas shielded 1.0% Ni, alloyed flux cored wire
- Exceptional mechanical properties (Impact properties >47J @ -50°C)
- Superior product consistency, optimal alloy control, outstanding operator appeal
- Meets NACE MR-0175 requirements

### Conformances

**AWS A5.29/A5.29M:** E81T1-Ni1M J H4  
**AS/NZS ISO 17632-B:** T55 5 T1-1 MA N2 UH5  
**Lloyds Register:** 4Y40SH5  
**DNV:** IV YMSH5

### Typical Applications

- Suitable for offshore and similar applications
- Boiler and pressure vessels
- Low alloy high strength steels

### Welding Positions



### Shielding Gas

- M21 : 75-85% Argon / 15-25% CO<sub>2</sub>
- Flow Rate: 15-20 L/min

### Diameter / Packaging / Settings

Diameter mm	Part Number	Packaging	WFS in/min	Voltage volts	Current amps	CTWD mm
1.2	941378N	Spool S300 VFB 16kg	175-600	20-32	130-300	15-20
1.6	941380N	Spool S300 VFB 16kg	125-400	22-32	170-400	20-25
1.8	941382	Spool S300 VFB 14kg	125-350	23-32	200-425	20-25
2.0	941381N	Spool S300 VFB 16kg	125-325	23-32	220-450	20-25

### Mechanical Properties - As required per AWS A5.29

	Yield Strength MPa	Tensile Strength MPa	Elongation %	Charpy V-Notch J @ -40°C
Requirements - AWS E81T1-Ni1M-J H4. As Welded with M21 gas	470 min	550 min	19 min	27 min
Typical Results	530	600	24	90

### Deposit Composition

	%C	%Mn	%Si	%S	%P	%Ni	Diffusible Hydrogen
Typical Results	0.05	1.3	0.20	0.010	0.013	0.92	3 mls / 100 g