

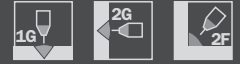


# PRODUCT DATA SHEET

## METAL-CORED GAS-SHIELDED WIRE

WCD 6808

### FABCOR® EDGE™ Ni1



#### SUMMARY

- > Virtually No Silicon Deposits At Weld Bead Toe Lines
- > Excellent Gap Bridging Capabilities
- > Higher Deposition Rates And Travel Speeds Than Solid Wire
- > Good Impact Toughness At Low Temperature

#### BENEFITS

- > Reduces Clean-Up Time, Minimizes Risk Of Inclusions
- > Minimizes Burn-Through, Reduces Part Rejection
- > Increases Productivity, More Parts Per Hour
- > Resists Cracking In Severe Applications

#### CLASSIFICATION

- > AWS A5.28: E80C-Ni1 H4
- > AS/NZS ISO 17632-B-T554T15-OMA-N1-UH5

#### APPLICATION

- > High-Strength Low-Alloy Steels
- > Nickel-Molybdenum Steels
- > Single Or Multi-Pass Welding
- > Heavy Equipment
- > Structural Fabrications
- > Weathering Steels

#### OTHER

- > **Wire Type:** Gas Shielded, Metal Powder, Metal-Cored Wire
- > **Shielding Gas:** 75-95% Argon (Ar)/Balance Carbon Dioxide (CO<sub>2</sub>), 17-24 l/min
- > **Type of Current:** Direct Current Electrode Positive (DCEP)
- > **Standard Diameters:** 1.2mm & 1.6mm
- > **Re-Drying:** Not Recommended
- > **Storage:** Product Should be Stored in a Dry, Enclosed Environment, and in its Original Intact Packaging

#### CONFORMANCES & APPROVALS

- > **AWS:** A5.28, E80C-Ni1 H4
- > **AWS:** A5.28M, E55C-Ni1 H4
- > **ASME:** SFA 5.28, E80C-Ni1 H4
- > **CWB:** 75-95% Ar/Balance CO<sub>2</sub>, 95-99% Ar/Balance O<sub>2</sub>, E55C-Ni1-H4 (E80C-Ni1-H4)

#### TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	S	P	Ni
0.05	1.10	0.57	0.011	0.013	1.00

#### TYPICAL DIFFUSIBLE HYDROGEN\*

HYDROGEN EQUIPMENT	75% Ar/25% CO <sub>2</sub>
Gas Chromatography	2.1 ml/100g

#### TYPICAL ALL WELD METAL MECHANICAL ANALYSIS (AS WELDED)

MECHANICAL TESTS	75% Ar/25% CO <sub>2</sub>
Tensile Strength	586 MPa
Yield Strength	503 MPa
Elongation	25%

#### TYPICAL CHARPY V-NOTCH IMPACT VALUES (AS WELDED)

CVN TEMP.	75% Ar/25% CO <sub>2</sub>
-45°C	60 Joules

#### PACKAGING DATA

WIRE SIZE (MM)	PART NUMBER	PACKAGING TYPE
1.2	S279512-029	15kg Spool
1.6	S279519-029	15kg Spool



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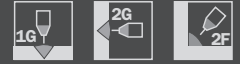


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### FABCOR<sup>®</sup> EDGE<sup>™</sup> Ni1



#### OPERATIONAL DATA

WIRE SIZE (MM)	WELD POSITION	AMPS	VOLTS	WIREFEED SPEED	DEPOSITION RATE	CONTACT TIP TO WORK DISTANCE (MM)
				M/MIN	KG/HR	
1.2	Flat & Horizontal	200	25	5.3	2.5	16
1.2	Flat & Horizontal	250	26	7.6	3.6	16
1.2	Flat & Horizontal	300	28	10.9	5.3	19
1.2	Flat & Horizontal	350	29	14.5	7.1	19
1.6	Flat & Horizontal	250	25	3.8	3.3	19
1.6	Flat & Horizontal	300	26	5.5	4.7	25
1.6	Flat & Horizontal	350	27	6.7	5.9	25
1.6	Flat & Horizontal	400	29	8.5	7.5	25
1.6	Flat & Horizontal	450	30	10.0	8.9	25

- Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.
- See Above: This information was determined by welding using 90% Argon (Ar)/10% Carbon Dioxide (CO<sub>2</sub>) shielding gas with a flow rate between 17-24 l/min. When welding using 95-99% Argon (Ar)/Balance Oxygen (O<sub>2</sub>) shielding gases in accordance with the requirements of AWS A5.28/A5.28M, decrease listed voltages by 1-2 volts. When welding using 75% Argon(Ar)/25% Carbon Dioxide (CO<sub>2</sub>) shielding gas, increase listed voltages by 1-3 volts.

The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Welding Industries of Australia expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the AWS A5.28 specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by Welding Industries of Australia.

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