PRODUCT DATA SHEET

FLUX CORED GAS SHIELDED WIRES

WCD 7077

FabCO 811N1

SUMMARY

- Fast-Freezing Slag
- Nominal 1% Nickel Deposit
- Excellent Impact Toughness
- High Impact Strengths at Low Temperatures
- Low-Hydrogen Deposit
- Low Spatter and Excellent Slag Removal
- Excellent Out of Position Performance
- Suitable to Replacement to E8018-C3 Stick (MMAW) Electrodes
- Resists Cracking in Severe Applications
- Assists in Minimizing the Risk of Hydrogen-Induced Cracking
- Improves Operator Appeal, Reduces Clean-Up Time

CLASSIFICATION

- AS/NZS ISO 17632-B - T554T1-1C/MA-N2-UH5
- AWS A5.29: E81T1-Ni1CJ H4, E81T1-Ni1MJ H4

DESCRIPTION AND APPLICATION

The FabCO 811N1 is designed for mining and earthmoving equipment and other fabrication where low temperature impact values are needed. The improved slag system of this wire provides the superior welder appeal of acid slag (-T1) products and the mechanical properties normally associated with basic slag wires. Weld metal diffusible hydrogen levels are kept low, making this an excellent choice for the more demanding applications. The wire can be used with either 100% CO_2 or a 75% Ar/25% CO_2 gas mixture for shielding.

It is recommended for weathering-steel fabrication where colour match is not required.

OPERATIONAL DATA

WIRE SIZE (MM)	WELDING CURRENT RANGE (A)	ARC VOLTAGE RANGE *(V)
1.2	125 - 250	24 - 28
1.6	150 - 300	24 - 27

Recommended electrical stick out is 15-20mm.
Welding Current DC +
*Voltage is determined by arc current and wire arc length.
Welding currents and voltage shown are operational guides only.

SHIPPING APPROVAL

AWS A5.29 E81T1-NiCJ H4, E81T1-NiMJ H4
AWS A5.29M E551T1-Ni1CJ H4, E81T1-Ni1MJ H4
ABS 100% CO_2, 3YSA **CWB** 100% CO_2, E551T1-Ni2C-JH8
CWB 75-80% Ar/Balance CO_2, E551T1-Ni2M-JH8
AWS D1.8 75% Ar/25% CO_2 (1/16" diameter electrode)

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

SHIELDING GAS	C	Mn	P	S	Si	Ni
100% CO_2	0.03	1.09	0.007	0.005	0.32	1.01
75% Ar/25% CO_2	0.06	1.39	0.009	0.008	0.53	1.00

TYPICAL DIFFUSIBLE HYDROGEN

Hydrogen Equipment	100% CO_2	75% Ar/25% CO_2
Gas Chromatography	2.4ml/100g	3.0ml/100g

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Gas Type	100% CO_2	75% Ar/25% CO_2
Yield Stress	503 MPa	586 MPa
Tensile Strength	572 MPa	641 MPa
Elongation	26%	25%
CVN Impact Values	88J @ -40°C	54J @ -40°C

In as welded condition.

APPLICATIONS

- High-Strength Low-Alloy Steels
- Excellent Impact Toughness
- Heavy Equipment Fabrication
- Single and Multi-Pass Welding
- Weathering Steels when Color-Match is not Required
- Structural Fabrication
- Bridge Fabrication
- Shipbuilding

PACKAGING DATA

WIRE SIZE (MM)	PACK SIZE AND TYPE	PART NO.
1.2	15kg Spool	S283612-029
1.6	15kg Spool	S283619-029

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