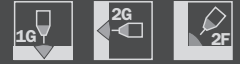


FABCOR® 86R



SUMMARY

- > High Deposition Rates and Efficiencies
- > Virtually no Slag Coverage
- > Outstanding High-Production Performance
- > Smooth Arc Characteristics
- > Low Diffusible Hydrogen Weld Deposit
- > Low Smoke and Spatter Levels
- > Excellent for Both CV and Pulsed Welding

BENEFITS

- > Improves Productivity Compared to Solid Wire or Flux-Cored Electrodes
- > Reduces Clean-Up Time, Improves Productivity
- > Excellent for Robotic Welding
- > Improved Operator Appeal, Assists in Maintaining Consistent Weld Quality
- > Minimizes Risk of Hydrogen-Induced Cracking
- > Improves Operator Appeal and Productivity
- > Promotes Versatility in Procedure Development

CLASSIFICATION

- > AS/NZS ISO 17632-B - T494T15-OMA-UH5
- > AWS A5.18: E70C-6M H4

DESCRIPTION AND APPLICATION

A metal cored wire with higher deoxidization elements allow this wire to have greater tolerance for mill scale welding applications. Single and multiple pass applications.

- > Automatic and Mechanized Welding
- > Non-Alloyed and Fine Grain Steels
- > Earthmoving Equipment
- > Shipbuilding
- > Storage Vessels
- > Steel Structures
- > General Fabrication
- > Rail Cars

OTHER

- > **Wire Type:** Gas Shielded, Metal Powder, Metal-Cored Wire
- > **Shielding Gas:** 75-95% Argon (Ar)/Balance Carbon Dioxide (CO₂), 95% Argon (Ar)/5% Oxygen (O₂), 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

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	S	P
0.03	1.44	0.67	0.015	0.008

TYPICAL DIFFUSIBLE HYDROGEN *

HYDROGEN EQUIPMENT	75% Ar/25% CO ₂
Gas Chromatography	2.0 ml/100g

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS (AS WELDED)

MECHANICAL TESTS	75% Ar/25% CO ₂
Tensile Strength	558 MPa
Yield Strength	476 MPa
Elongation	30%
CVN Impact Values	101J @ -30°C 54J @ -40°C

PACKAGING DATA

WIRE SIZE (MM)	PART NUMBER	PACKAGING TYPE
1.2	S249412-029	15kg Spool
1.2	S249412-050	227kg X-pak
1.6	S249419-029	15kg Spool

CONFORMANCES & APPROVALS

- > **ABS:** 80% Ar/20% CO₂, 3YSA (0.035" - 1/16" diameter electrodes)
- > **Bureau Veritas:** 80% Ar/20% CO₂, S3YMH5 (1.2mm - 1.6mm diameter electrodes)
- > **DNV:** 80% Ar/20% CO₂, III Y40MS(H5)
- > **CE:** Marked per CPR 305/2011 (1.2mm - 1.6mm diameter electrodes)
- > **Lloyd's Register:** 80% Ar/20% CO₂, 3Y40S H5
- > **AWS:** D1.8/D1.8M, 75% Ar/25% CO₂, (1.2mm - 1.6mm diameter electrodes)



PRODUCT DATA SHEET

METAL-CORED GAS-SHIELDED WIRE

WCD 6808

FABCOR® 86R



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	27	6.1	2.7	19
1.2	Flat & Horizontal	250	29	8.7	3.9	19
1.2	Flat & Horizontal	300	32	10.7	5.1	19
1.2	Flat & Horizontal	350	35	14.5	7.1	19
1.2	Flat & Horizontal	400	36	18.4	9.0	19
1.6	Flat & Horizontal	250	29	4.1	3.2	25
1.6	Flat & Horizontal	300	31	5.2	4.3	25
1.6	Flat & Horizontal	350	32	6.5	5.4	25
1.6	Flat & Horizontal	400	34	8.1	7.0	25
1.6	Flat & Horizontal	500	36	12.7	11.1	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 75% Ar/25% CO₂ shielding gas with a flow rate between 17-24 l/min. When using 90% Ar/10% CO₂ shielding gas, reduce voltage 1-3 Volts.

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Issue CA - March 2021



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