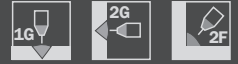




PRODUCT DATA SHEET

METAL-CORED GAS-SHIELDED WIRE

FABCOR® 86R



SUMMARY

- > High deposition rates and efficiencies
- > 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
- > Excellent for robotic welding
- > Improved operator appeal, assists in maintaining consistent weld quality
- > Minimises risk of hydrogen-induced cracking
- > Improves operator appeal
- > Promotes versatility in procedure development

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

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
- > **Re-Drying:** Not Recommended
- > **Storage:** Product Should be Stored in a Dry, Enclosed Environment, and in its Original Intact Packaging

CLASSIFICATION

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

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S
0.03	1.44	0.67	0.008	0.015

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
Yield Strength	476 MPa
Tensile Strength	558 MPa
Elongation	30%
CVN Impact Values	101J @ -30 °C 54J @ -40 °C

PACKAGING DATA

WIRE SIZE (MM)	PACKAGING TYPE	PART NUMBER
1.2	15kg Spool	MIGFCFC86R12

CONFORMANCES & APPROVALS

- > **ABS:** 80% Ar/20% CO₂, 3YSA (0.035" - 1/16" diameter electrodes)
- > **Bureau Veritas:** 80% Ar/20% CO₂, S3YMH5 (0.9mm - 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,



weldwell.co.nz 0800 WELDWELL



PRODUCT DATA SHEET

METAL-CORED GAS-SHIELDED WIRE

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

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.

The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Weldwell expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with the AWS and or AS/NZS specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique by Weldwell.

Issue CA - May 2019



weldwell.co.nz 0800 WELDWELL