

# FabCOR<sup>®</sup> 702



AWS A5. 18: E70C-3C

WELDING POSITIONS:



## FEATURES:

- Metal-cored electrode provides higher deposition rates than solid wire
- Specially formulated for CO<sub>2</sub> shielding gas
- Slag-free welds

## BENEFITS:

- Helps increase travel speeds and productivity
- Helps reduce shielding gas cost, suitable for use with high-penetration “buried-arc” transfer
- Significantly reduces clean-up time compared to flux-cored arc welding

## APPLICATIONS:

- Single or multi-pass welding
- General fabrication
- Structural fabrication
- Storage vessels
- Heavy equipment
- Railcar fabrication

**WIRE TYPE:** Gas-shielded, metal-powder, metal-cored wire

**SHIELDING GAS:** 100% Carbon Dioxide (CO<sub>2</sub>), 35-50 cfh (17-24 l/min)

**TYPE OF CURRENT:** Direct Current Electrode Positive (DCEP)

**STANDARD DIAMETERS:** 1/16” (1.6 mm), 7/64” (2.8 mm)

**RE-DRYING:** Not recommended

**STORAGE:** Product should be stored in a dry, enclosed environment, and in its original packaging

## TYPICAL WELD METAL CHEMISTRY\* (Chem Pad):

Weld Metal Analysis (%)	100% CO <sub>2</sub>	AWS Spec
Carbon (C)	0.08	0.12
Manganese (Mn)	1.45	1.75
Silicon (Si)	0.63	0.90
Phosphorus (P)	0.006	0.03
Sulphur (S)	0.025	0.03

**Note:** AWS specification single values are maximums.

## TYPICAL MECHANICAL PROPERTIES\* (As Welded):

Mechanical Tests	100% CO <sub>2</sub>	AWS Spec
Tensile Strength	93,000 psi (641 MPa)	70,000 psi (480 MPa) Minimum
Yield Strength	78,000 psi (538 MPa)	58,000 psi (400 MPa) Minimum
Elongation % in 2” (50 mm)	23%	22% Minimum

## TYPICAL CHARPY V-NOTCH IMPACT VALUES\* (As Welded):

CVN Temperatures	100% CO <sub>2</sub>	AWS Spec
Avg. at 0°F (-20°C)	35 ft•lbs (47 Joules)	20 ft•lbs (27 Joules) Minimum

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Diameter		Weld Position	Amps	Volts	Wire Feed Speed		Deposition Rate		Contact Tip to Work Distance	
Inches	(mm)				in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
1/16	(1.6)	Flat & Horizontal	300	30	240	(6.1)	8.7	(3.9)	1	(25)
1/16	(1.6)	Flat & Horizontal	415	33	400	(10.2)	16.6	(7.5)	1	(25)
1/16	(1.6)	Flat & Horizontal	460	37	470	(11.9)	19.5	(8.8)	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 100% Carbon Dioxide (CO<sub>2</sub>) shielding gas with a flow rate between 35-50 cfh (17-24 l/min).

**STANDARD DIAMETERS AND PACKAGES:** For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543, or (937) 332-5188 for International Customer Service.

Diameter		60-lb. (27.2kg) Coil
Inches	(mm)	
1/16	(1.6)	S248419-002
7/64	(2.8)	S248439-002

**CONFORMANCES AND APPROVALS:**

- **AWS A5.18**, E70C-3C
- **AWS A5.18M**, E48C-3C
- **ASME SFA 5.18**, E70C-3C
- **ABS**, 3YSA H10, (0.045" - 1/16" diameters)

**CAUTION:**

Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standard Z49.1, "Safety in Welding and Cutting," published by the American Welding Society, 550 NW LeJune Road, Miami, FL 33126; OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Material Safety Data Sheets on any Hobart Brothers Company product may be obtained from Hobart Customer Service or at [www.hobartbrothers.com](http://www.hobartbrothers.com). Because Hobart Brothers Company is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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