



# FLUX-COR 7

**GAS-SHIELDED FLUX-CORED WIRE**  
**AWS E70T-1C, E70T-9C**

061107 (replaces-051122)

**FLUX-COR 7** offers excellent arc stability over the complete recommended welding range. Spatter is very low, the slag removes easily and cleanly, and bead appearance is excellent. High deoxidization enables **FLUX-COR 7** to weld over mill scale, rust and other contaminants better than most T-1 wires. However, this level of deoxidization will also cause increased hardening as multiple layers are welded and caution should be exercised in welding thick or highly restrained joints. **FLUX-COR 7** is used for single-and multiple-pass welding in the flat and horizontal positions using 100% CO<sub>2</sub> shielding gas.

## PRODUCT CHARACTERISTICS:

- Good performance over the entire range of amperage
- More deoxidization than the usual E70T-1 for improved performance on rusted and scaled plate
- Excellent weld bead configuration on horizontal fillets
- An outstanding general purpose E70T-1
- Caution should be exercised on heavy multiple-pass weldments

## SPECIFICATIONS:

E70T-1C, E70T-9C per AWS A5.20, ASME SFA 5.20  
ABS 2SA, 2YSA H10

## SHIELDING GAS:

100% CO<sub>2</sub>, 35-50 cfh

## WELDING POSITION:

Flat and horizontal

## STANDARD DIAMETERS:

1/16", 5/64", 3/32"

## WELD TEST PARAMETERS:

**FLUX-COR 7** 3/32" diameter electrode was welded using 100% CO<sub>2</sub> shielding gas with flow rate of 40 cfh, 400 amps (150 IPM), DCEP, and 27 volts with 1" electrical stickout and 300° ± 25°F interpass temperature. A total of five layers were welded with one pass for Layer 1, two passes each for Layers 2 through 5. The direction of travel was reversed for each layer.

## TYPICAL UNDILUTED WELD METAL CHEMISTRY\*:

	C	Mn	Si	P	S
100% CO <sub>2</sub>	0.03	1.60	0.68	0.007	0.012

## TYPICAL MECHANICAL PROPERTIES\*:

Tensile Strength: 91,000 psi (626 MPa)  
Yield Strength: 78,000 psi (537 MPa)  
Elongation: 24%  
CVN @ 0°F (-18°C): 43 ft•lbs (59 J)  
CVN @ -20°F (-29°C): 36 ft• lbs (48 J)

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers Company expressly disclaims any liability incurred from any reliance thereon. Typical data are obtained when welded and tested in accordance with AWS A5.20 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 Hobart Brothers Company.

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## RECOMMENDED OPERATING PARAMETERS:

The information below was determined by welding performed with 100% CO<sub>2</sub> shielding gas at a flow rate of 35 cfh.

Diameter Electrical Stickout Position (ES)	Arc Voltage (volts)	Current DCEP (+) (amps)	Approx. Wire Feed Speed (in/min)	Deposition Rate (lbs/hr)
1/16" 3/4" ± 1/4" Flat and Horizontal	26	200	176	6.1
	27	250	240	8.3
	<b>28</b>	<b>300</b>	<b>321</b>	<b>11.2</b>
	30	350	400	16.8
	32	400	482	17.4
5/64" 1" ± 1/4" Flat and Horizontal	25	225	110	6.0
	28	300	175	9.6
	<b>31</b>	<b>400</b>	<b>275</b>	<b>15.6</b>
	32	450	325	18.9
35	500	385	22.0	
3/32" 1" ± 1/4" Flat and Horizontal	24	250	80	6.8
	27	350	100	10.8
	<b>30</b>	<b>450</b>	<b>125</b>	<b>16.4</b>
	32	500	200	18.9
	37	600	260	25.0

**Bold:** Optimum parameters for welder appeal.

### Notice:

Actual use of the product may produce varying results due to conditions and welding techniques over which Corex has no control, including, but not limited to, plate chemistry, weldment design, fabrication methods, electrode size, welding procedure, service requirements and environment. The purchaser is solely responsible for determining the suitability of Corex products for the purchaser's own use. Any prior representations shall not be binding. Corex disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

### Caution:

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