FLUX-COR 2

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

061105 (Replaces 051122)

FLUX-COR 2 is designed for semi-automatic welding of carbon steels. It is also used for the welding of higher strength steels in applications where the properties of E70T-1 filler metal are deemed adequate. **FLUX-COR 2** features excellent arc stability over its entire recommended current range. Spatter is almost non-existent and the slag cover removes easily and cleanly, even from weld beads in deep grooves. The relatively fast-freezing nature of the slag facilitates welding)on modestly inclined surfaces and girth welds. Weld bead appearance is excellent; surfaces are smooth and uniformly rippled and tie-in is good in both the flat and horizontal positions. Overall welder appeal is excellent. **FLUX-COR 2** is recommended for single- and multiple-pass welding in the flat and horizontal positions with 100% CO_2 shielding gas.

PRODUCT CHARACTERISTICS:

- Faster freezing slag than Tuf-Cor 1
- Excellent arc stability
- Easy slag removal even in deep grooves
- Lower spatter than Tuf-Cor 1, especially at the lower amperage settings of the current range

SPECIFICATIONS:

E70T-1C, E70T-9C per AWS A5.20, ASME SFA 5.20
ABS to AWS E70T-1C

SHIELDING GAS:

100% CO_2, 35-50 cfh

WELDING POSITION:

Flat and Horizontal

STANDARD DIAMETERS:

5/64", 3/32"

WELD TEST PARAMETERS:

FLUX-COR 2 3/32" diameter electrode was welded using 100% CO_2 shielding gas with flow rate of 40 cfh. 425 amps (160 IPM), DCEP, and 29 volts with 1" electrical stickout and 300° ± 25°F interpass temperature. A total of five layers were welded with one pass of 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_2	0.04	1.15	0.62	0.009	0.011

TYPICAL MECHANICAL PROPERTIES:

Tensile Strength	91,000 psi (629 MPa)
Yield Strength	81,000 psi (560 MPa)
Elongation	23%
CVN @ 0°F (-18°C):	32 ft•lbs (43 J)
CVN @-20°F (-29°C)	31 ft•lbs (42 J)

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RECOMMENDED OPERATING PARAMETERS:

The information below was determined by welding performed with 100% CO_2 shielding gas at a flow rate of 35 cfh.

Diameter Electrical Stickout (ES) Position	Arc Voltage (volts)	Current DCEP (+) (amps)	Approx. Wire Feed Speed (in/min)	Deposition Rate (lbs/hr)
5/64” 1” ± 1/4” Flat and Horizontal	25 31 35	250 400 475	120 255 360	7.0 to 19.7
3/32” 1” ± 1/4” Flat and Horizontal	24 30 36	275 450 600	80 280 320	7.8 to 24.4

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 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.