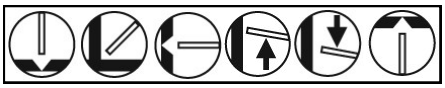
FabCOR® 1100

AWS A5.28: E110C-K4 H4
CWB: E76C-K4-H4

WELDING POSITIONS:



FEATURES:

- Excellent wetting characteristics
- High tensile strength electrode
- High deposition rates possible at low heat inputs
- Can be used with standard CV equipment
- All-position capability when using pulsed-spray transfer

BENEFITS:

- Assists in producing smooth weld beads with uniform fusion
- Suitable for quench and temper high-strength low-alloy steels
- Increases productivity, minimizes Heat Affected Zone (HAZ)
- Promotes versatility, reduces equipment cost
- Increases productivity, reduces clean-up time

APPLICATIONS:

- High-strength low-alloy steels
- Quench and temper steels
- Single or multi-pass welding
- Castings
- Heavy equipment
- Shipbuilding

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

SHIELDING GAS: 75-95% Argon (Ar)/Balance Carbon Dioxide (CO_2), 35-50 cfh (14-24 l/min)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

STANDARD DIAMETERS: 0.045” (1.2 mm), 1/16” (1.6 mm)

RE-DRYING: Not recommended

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

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis	75% Ar/25% CO_2	90% Ar/10% CO_2	AWS Spec
Carbon (C)	0.07	0.08	0.15
Manganese (Mn)	1.52	1.50	0.75-2.25
Silicon (Si)	0.52	0.50	0.80
Sulphur (S)	0.007	0.005	0.025
Phophorus (P)	0.004	0.003	0.025
Nickel (Ni)	1.92	1.84	0.50-2.50
Chromium (Cr)	0.18	0.24	0.15-0.63
Molybdenum (Mo)	0.47	0.46	0.25-0.65

Note: AWS specification single values are maximums.

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests	75% Ar/25% CO_2	90% Ar/10% CO_2	AWS Spec
Tensile Strength	118,000 psi (810 MPa)	128,000 psi (883 MPa)	110,000 psi (760 MPa) Minimum
Yield Strength	105,000 psi (725 MPa)	116,000 psi (800 MPa)	98,000 psi (680 MPa) Minimum
Elongation % in 2” (50 mm)	19%	17%	15% Minimum

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

CVN Temperatures	75% Ar/25% CO_2	90% Ar/10% CO_2	AWS Spec
Avg. at -60°F (-50°C)	43 ft•lbs (58 Joules)	28 ft•lbs (38 Joules)	20 ft•lbs (27 Joules) Minimum

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Diameter Inches	(mm)	Weld Position	Amps	Volts	Wire Feed Speed in/min	(m/min)	Deposition Rate lbs/hr	(kg/hr)	Contact Tip to Work Distance Inches	(mm)
0.045	(1.2)	Flat & Horizontal	200	24	225	(5.7)	5.6	(2.6)	5/8	(16)
0.045	(1.2)	Flat & Horizontal	250	25	310	(7.9)	8.1	(3.7)	5/8	(16)
0.045	(1.2)	Flat & Horizontal	300	27	445	(11.3)	11.8	(5.4)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	350	29	560	(14.2)	15.0	(6.8)	3/4	(19)
1/16	(1.6)	Flat & Horizontal	250	26	160	(4.1)	7.1	(3.2)	3/4	(19)
1/16	(1.6)	Flat & Horizontal	300	27	220	(5.6)	10.3	(4.7)	1	(25)
1/16	(1.6)	Flat & Horizontal	350	28	285	(7.2)	13.6	(6.2)	1	(25)
1/16	(1.6)	Flat & Horizontal	400	29	355	(9.0)	17.2	(7.8)	1	(25)
1/16	(1.6)	Flat & Horizontal	450	30	415	(10.5)	20.1	(9.1)	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.**
- **For out of position welding, short circuit or pulsed spray transfer mode must be used.**
- **Pulse waveforms are designed with nominal operating points that may result in average voltage and current values that differ from the above table. Generally, pulse processes can be expected to produce lower heat inputs than a standard CV process.**
- **See Above:** This information was determined by welding using 90% Ar/10% CO_2 shielding gas with a flow rate between 35-50 cfh (17-24 l/min). For the higher CO_2 shielding gas mixtures within the recommended range, increase listed voltages by 1-3 volts.

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 Inches	(mm)	33-lb. (15 kg) Spool	1000-lb. (453.6 kg) Recyclable X-Pak
Net Pallet Weight		**2376-lb. (1078 kg)**	**2000-lb. (907 kg)**
0.045	(1.2)	S280212-029	S280212-058
1/16	(1.6)	S280219-029	S280219-058

CONFORMANCES AND APPROVALS:
- **AWS A5.28,** E110C-K4 H4
- **AWS A5.28M,** E76C-K4 H4
- **ASME SFA 5.28,** E110C-K4 H4
- **CWB,** 75-95% Ar/Balance CO_2, E76C-K4-H4 (E110C-K4-H4)

TECHNICAL QUESTIONS? For technical support of Hobart Filler Metals products, contact the Applications Engineering department by phone toll-free at 1-800-532-2618 or by e-mail at Applications.Engineering@hobartbrothers.com

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, 8669 NW 36th St., Miami, FL 33166 (can be downloaded online at www.aws.org); OSHA Safety and Health Standards 29 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210

Safety Data Sheets on any Hobart Brothers LLC product may be obtained from Hobart Customer Service or at www.hobartbrothers.com.

Because Hobart Brothers LLC is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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HOBART FILLER METALS