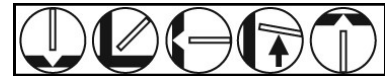


FabCO[®] 711M



AWS A5.20: AWS E71T-1C H8, E71T-1M H8

WELDING POSITIONS:



FEATURES:

- Stiff, driving arc action
- Fast freezing slag system
- Designed for 100% CO₂ and 75%/25% CO₂ shielding gas
- Easy slag removal

BENEFITS:

- Increases penetration, enhanced overhead capability
- Enhances vertical-up capability, improved bead contour
- Increased flexibility
- Reduces clean up time, minimizes risk of slag inclusions

APPLICATIONS:

- Non-alloyed and fine grain steels
- Shipbuilding
- Ship repair
- General fabrication
- Single and multiple pass welds

SLAG SYSTEM OR WIRE TYPE: Fast-freezing, rutile-type, flux-cored wire

SHIELDING GAS: 100% Carbon Dioxide (CO₂), 75% Argon (Ar)/25% Carbon Dioxide (CO₂), 35-50 cfh (17-24 l/min)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

STANDARD DIAMETERS: 0.045" (1.2 mm), 0.052" (1.4 mm), 1/16" (1.6 mm)

RE-DRYING: Not recommended

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

TYPICAL WELD METAL CHEMISTRY* (Chem Pad):

Weld Metal Analysis (%)	100% CO ₂	75% Ar/25% CO ₂	AWS Spec
Carbon (C)	0.04	0.06	0.12
Manganese (Mn)	1.16	1.135	1.75
Silicon (Si)	0.55	0.65	0.90
Phosphorus (P)	0.010	0.005	0.030
Sulphur (S)	0.009	0.007	0.030

Note: AWS specification single values are maximums.

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	100% CO ₂	75% Ar/25% CO ₂	AWS Spec
(GAS CHROMATOGRAPHY)	5.5 ml/100 g	4.5 ml/100 g	8.0 ml/100 g Maximum

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests	100% CO ₂	75% Ar/25% CO ₂	AWS Spec
Tensile Strength	89,000 psi (614 MPa)	94,000 psi (648 MPa)	70,000 - 95,000 psi (480-660 MPa)
Yield Strength	78,000 psi (538 MPa)	84,000 psi (579 MPa)	58,000 psi (400 MPa) Minimum
Elongation % in 2" (50 mm)	26%	25%	22% Minimum

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

CVN Temperatures	100% CO ₂	75% Ar/25% CO ₂	AWS Spec
Avg. at 0°F (-20°C)	40 ft•lbs (54 Joules)	35 ft•lbs (47 Joules)	20 ft•lbs (27 Joules) Minimum

*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 those obtained when welded and tested in accordance with the 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.

FabCO® 711M

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)
0.045	(1.2)	All Position	175	24	295	(7.5)	5.2	(2.4)	1/2	(13)
0.045	(1.2)	All Position	200	25	360	(9.1)	6.6	(3.0)	3/4	(19)
0.045	(1.2)	All Position	225	26	435	(11.0)	8.1	(3.7)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	250	28	515	(13.1)	9.5	(4.3)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	320	31	785	(19.9)	15.4	(7.0)	3/4	(19)
0.052	(1.4)	All Position	200	24	245	(6.2)	6.2	(2.8)	1/2	(13)
0.052	(1.4)	All Position	225	25	285	(7.2)	6.9	(3.1)	3/4	(19)
0.052	(1.4)	All Position	250	26	320	(8.1)	8.1	(3.7)	3/4	(19)
0.052	(1.4)	Flat & Horizontal	300	29	430	(10.9)	11.0	(5.0)	3/4	(19)
0.052	(1.4)	Flat & Horizontal	350	31	565	(14.4)	14.7	(6.7)	3/4	(19)
1/16	(1.6)	All Position	200	24	160	(4.1)	4.9	(2.2)	3/4	(19)
1/16	(1.6)	All Position	225	25	185	(4.7)	5.7	(2.6)	3/4	(19)
1/16	(1.6)	All Position	250	26	210	(5.3)	6.7	(3.0)	3/4	(19)
1/16	(1.6)	Flat & Horizontal	350	29	340	(8.6)	11.6	(5.3)	3/4	(19)
1/16	(1.6)	Flat & Horizontal	400	32	440	(11.2)	15.4	(7.0)	3/4	(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 100% CO₂ shielding gas with a flow rate between 35-50 cfh (17-24 l/min). When welding using 75% Ar/25% CO₂ shielding gas, reduce voltage by approximately one volt.
- **All positions include:** Flat, Horizontal, Vertical Up, and Overhead.

AVAILABLE 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		33-lb. (15kg)	60-lb. (27.2kg)
Inches	(mm)	Spool	Coil
0.045	(1.2)	S248812-029	—
0.052	(1.4)	S248815-029	—
1/16	(1.6)	S248819-029	S248819-002

CONFORMANCES AND APPROVALS:

- **AWS A5.20**, E71T-1C H8, E71T-1M H8
- **AWS A5.20M**, E491T-1C H8, E491T-1M H8
- **ASME SFA 5.20**, E71T-1C H8, E71T-1M H8
- **ABS**, 100% CO₂, 75% Ar/25% CO₂, 2YSA (0.045"-1/16" diameters)

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 36 St, # 130, Doral, FL 33166-6672 (can also 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 Company product may be obtained from Hobart Customer Service or at 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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