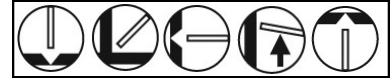


# FabCO<sup>®</sup> Triple 7



AWS A5.20: E71T-1C H8, E71T-1M H8, E71T-9C H8, E71T-9M H8  
 AWS A5.29: E81T1-GC H8, E81T1-GM H8

## WELDING POSITIONS:



### FEATURES:

- Fast-freezing slag
- Excellent slag removal
- Very low spatter levels
- Very smooth, stable “spray-like” arc
- “H8” low-hydrogen weld deposit
- Optimal on Argon/CO<sub>2</sub> mixes but also runs great on 100% CO<sub>2</sub>

### BENEFITS:

- Allows good puddle control and bead shape when welding out of position
- Reduces clean-up time and minimizes risk of inclusion
- Reduces clean-up time to help improve productivity
- Provides excellent operator appeal and bead appearance
- Helps minimize the risk of hydrogen-induced cracking
- Increased flexibility

### APPLICATIONS:

- Single or multi-pass welding
- Shipbuilding
- Storage and pressure vessels
- Non-alloyed and fine grain steels
- Railcar fabrication
- General fabrication
- Heavy-gauge sheet metal

**SLAG SYSTEM:** Fast-freezing, rutile-type, flux-cored wire

**SHIELDING GAS:** 100% Carbon Dioxide (CO<sub>2</sub>), 75-85% Argon (Ar)/Balance Carbon Dioxide (CO<sub>2</sub>), 35-50 cfm (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 <sub>2</sub>	75% Ar/25% CO <sub>2</sub>	AWS Spec
Carbon (C)	0.020	0.030	0.12
Manganese (Mn)	1.30	1.50	1.75
Silicon (Si)	0.48	0.59	0.90
Phosphorus (P)	0.012	0.011	0.030
Sulphur (S)	0.009	0.009	0.030
Boron (B)	0.0035	0.0045	Not specified

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>	AWS Spec
(GAS CHROMATOGRAPHY)	6.5 ml/100g	6.5 ml/100g	8.0 ml/100g Maximum

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

Mechanical Tests	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>	AWS Spec
Tensile Strength	82,500 psi (569 MPa)	87,000 psi (600 MPa)	70,000-95,000 psi (480-660 MPa)
Yield Strength	76,500 psi (527 MPa)	81,500 psi (564 MPa)	58,000 psi (400 MPa) Minimum
Elongation % in 2” (50 mm)	26%	26%	22% Minimum

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

CVN Temperatures	100% CO <sub>2</sub>	75% Ar/25% CO <sub>2</sub>	AWS Spec
Avg. at 0°F (-20°C)	97 ft•lbs (132 Joules)	93 ft•lbs (126 Joules)	20 ft•lbs (27 Joules) Minimum
Avg. at -20°F (-30°C)	47 ft•lbs (64 Joules)	67 ft•lbs (91 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 LLC 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 LLC.

# FabCO<sup>®</sup> Triple 7

Diameter Inches	(mm)	Weld Position	Amps	Volts	Wire-Feed Speed		Deposition Rate		Contact Tip to Work Distance	
					in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
0.045	(1.2)	All Position	145	19-24	200	(5.1)	3.9	(1.7)	3/4	(19)
0.045	(1.2)	All Position	200	20-25	325	(8.3)	6.6	(3.0)	3/4	(19)
0.045	(1.2)	All Position	225	21-26	415	(10.5)	8.2	(3.7)	1	(25)
0.045	(1.2)	Flat & Horizontal	275	24-29	530	(13.5)	10.1	(4.6)	1	(25)
0.045	(1.2)	Flat & Horizontal	300	26-31	605	(15.4)	12.1	(5.5)	1	(25)
0.052	(1.4)	All Position	150	19-24	160	(4.1)	4.4	(2.0)	3/4	(19)
0.052	(1.4)	All Position	220	20-25	240	(6.1)	6.7	(3.0)	1	(25)
0.052	(1.4)	All Position	255	21-26	290	(7.4)	8.0	(3.6)	1	(25)
0.052	(1.4)	Flat & Horizontal	325	24-29	450	(11.4)	12.3	(5.6)	1	(25)
1/16	(1.6)	All Position	150	19-24	120	(3.0)	4.0	(1.8)	3/4	(19)
1/16	(1.6)	All Position	225	20-25	150	(3.8)	6.3	(2.9)	1	(25)
1/16	(1.6)	All Position	250	21-26	220	(5.6)	9.0	(4.1)	1	(25)
1/16	(1.6)	Flat & Horizontal	275	22-27	235	(6.0)	9.6	(4.4)	1	(25)
1/16	(1.6)	Flat & Horizontal	350	25-30	335	(8.5)	13.8	(6.2)	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 75% Ar/25% CO<sub>2</sub> shielding gas with a flow rate between 35-50 cfh (17-24 l/min). When welding using higher CO<sub>2</sub> shielding gas mixtures within the recommended range or 100% CO<sub>2</sub> shielding gas, increase voltage by approximately 1-3 volts.
- **All positions include:** Flat, Horizontal, Vertical Up, and Overhead.

**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)	15-lb. (7kg) Spool	33-lb. (15kg) Spool	50-lb. (22.7kg) Spool	60-lb. (27.2kg) Coil	500-lb. (227kg) X-Pak	600-lb. (272.2kg) X-Pak
		<b>2400 (1089kg)</b>	<b>2376 (1078kg)</b>	<b>1600 (726kg)</b>	<b>1920 (871kg)</b>	<b>2000 (907kg)</b>	<b>2400 (1089kg)</b>
0.045	(1.2)	S246312-023	S246312-029	S246312-027	—	S246312-050	—
0.052	(1.4)	S246315-023	S246315-029	S246315-027	—	S246315-050	—
1/16	(1.6)	—	S246319-029	S246319-027	S246319-002	—	S246319-056

## CONFORMANCES AND APPROVALS:

- **AWS A5.20**, E71T-1C H8, E71T-1M H8, E71T-9C H8, E71T-9M H8
- **AWS A5.29**, E81T1-GC H8, E81T1-GM H8
- **AWS A5.20M**, E491T-1C H8, E491T-1M H8, E491T-9C H8, E491T-9M H8
- **AWS A5.29M**, E551T1-GC H8, E551T1-GM H8
- **ASME SFA 5.20**, E71T-1C H8, E71T-1M H8, E71T-9C H8, E71T-9M H8
- **ASME SFA 5.29**, E81T1-GC H8, E81T1-GM H8
- **ABS**, 100% CO<sub>2</sub> 3YSA H10
- **ABS**, 75% Ar/25% CO<sub>2</sub>, 3YSA H10
- **CWB**, E491T1-(C1A3, M21A3, M20A3)-CS1-H8 (E491T-9-H8, E491T-9M-H8)
- **DNV-GL**, (100% CO<sub>2</sub>, M21-ArC-20) III YMS
- **EN ISO 17632-A**: T46 3 P C1 2, T46 3 P M21 2
- **CE Marked** per CPR 305/2011
- **AWS D1.8/D1.8M**, 100% CO<sub>2</sub> & 75% Ar/25% CO<sub>2</sub>, (0.045" [1.2 mm], 0.052" [1.4 mm], & 1/16" [1.6 mm] diameter electrodes)

**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](mailto: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 also be downloaded online at [www.aws.org](http://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](http://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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