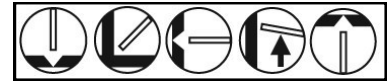


FabCO[®] Element[™] 71C



AWS A5.29: E71T1-GC H8

WELDING POSITIONS:



FEATURES:

- Enhanced out of positional capability
- Low spatter and fume
- Extremely low manganese emissions
- Enhanced slag release

BENEFITS:

- Increased operator appeal
- Improved operator comfort and productivity
- Economical replacement for E71T-1/-9 that will assist with conformance to environmental regulations
- Reduced clean-up time and risk of inclusions

APPLICATIONS:

- Shipbuilding
- Heavy equipment
- Structural steel
- General fabrication

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

SHIELDING GAS: 100% Carbon Dioxide (CO₂) 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 intact packaging.

TYPICAL WELD METAL PROPERTIES* (Chem Pad):

Weld Metal Analysis	100% CO ₂	AWS A5.29
Carbon (C)	0.05	Not specified
Manganese (Mn)	0.22	0.500±
Silicon (Si)	0.58	1.000
Sulphur (S)	0.008	0.030
Phosphorus (P)	0.009	0.030
Nickel (Ni)	1.43	0.500±
Chromium (Cr)	0.030	0.30±
Molybdenum (Mo)	0.006	0.20±
Vanadium (V)	0.013	0.10±

Note: Unless otherwise noted, AWS specification single values are maximum. Product must contain a minimum content of one or more of the elements indicated by ±.

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	100% CO ₂	AWS Spec
(GAS CHROMATOGRAPHY)	5.3 ml/100 g	8.0 ml/100 g Maximum

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests	100% CO ₂	AWS Spec
Tensile Strength	76,000 psi (524 MPa)	70,000-95,000 psi (480-620 MPa)
Yield Strength	68,600 psi (473 MPa)	58,000 psi (400 MPa) Minimum
Elongation % in 2" (50 mm)	27%	20% Minimum

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

CVN Temperatures	100% CO ₂	AWS A5.29
Avg. at -20°F (-30°C)	66 ft•lbs (89 Joules)	Not specified
Avg. at -40°F (-40°C)	52 ft•lbs (71 Joules)	Not specified

*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 AWS A5.29 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.

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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 Positions	175	24	300	(7.6)	6.4	(2.9)	3/4	(19)
0.045	(1.2)	All Positions	225	25	385	(9.8)	8.2	(3.7)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	275	27	480	(12.2)	10.2	(4.6)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	300	29	600	(15.2)	12.7	(5.8)	3/4	(19)
1/16	(1.6)	All Positions	220	24	175	(4.4)	6.4	(2.9)	3/4	(19)
1/16	(1.6)	All Positions	300	26	275	(7.0)	10.2	(4.6)	3/4	(19)
1/16	(1.6)	Flat & Horizontal	365	28	375	(9.5)	14.2	(6.4)	1	(25)
1/16	(1.6)	Flat & Horizontal	425	29	475	(12.1)	18.4	(8.3)	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:** The information above was determined by welding using 100% CO₂ shielding gas with a flow rate between 35-50 cfh (14-24 l/min).
- **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		33-lb. (15kg) Fiber Spool
Inches	(mm)	
0.045	(1.2)	S297912-029
1/16	(1.6)	S297919-029

CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E71T1-GC H8
- **AWS A5.29M**, E491T1-GC H8
- **ASME SFA 5.29**, E71T1-GC H8
- **ABS**, 100% CO₂, 3YSA H10
- **CWB**, 100% CO₂, E491TG-C1Z-G-H8 (E491T-G-H8)

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 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 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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Revision Date: 210414 (Replaces 190315)

