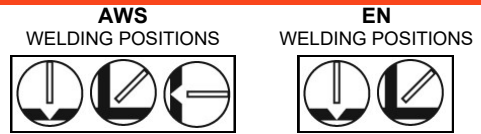


FabCO® 70XHP



AWS A5.20: E70T-1CJ H8, E70T-9CJ H8, E70T-12CJ H8
E70T-1MJ H8, E70T-9MJ H8
EN17632-B: T55 2 T1 0 C/M A H10



FEATURES:

- Optimal weld bead profile
- High deposition rates
- Low fume generation rate
- Minimal spatter
- Maintains CVN toughness after stress relief

BENEFITS:

- Reduces over-welding and welding costs
- Increases productivity
- Improves the welding environment and operator appeal
- Increases deposition efficiency and minimizes clean-up
- Exceeds 20 ft•lbs (27 J) CVN impact strength @ -40°F (-40°C) after 2 Hrs. of stress relief @ 1150°F (620°C)

APPLICATIONS:

- Non-alloyed and fine grain steels
- Steel structures
- Earthmoving equipment
- Heavy fabrication
- Single and multi-pass welding
- Storage vessels
- Railroad cars
- Shipbuilding

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

SHIELDING GAS: 100% Carbon Dioxide (CO₂), 75% Argon (Ar)/25% Carbon Dioxide (CO₂), 35-50 cfh (14-24 l/min)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

STANDARD DIAMETERS: 1/16" (1.6 mm), 3/32" (2.4 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	AWS Spec (T-12)	75% Ar/25% CO ₂	AWS Spec (T-9)
Carbon (C)	0.04	0.12	0.03	0.12
Manganese (Mn)	1.47	1.60	1.70	1.75
Silicon (Si)	0.52	0.90	0.52	0.90
Phosphorus (P)	0.010	0.030	0.008	0.030
Sulphur (S)	0.010	0.030	0.010	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)	6.5 ml/100 g	7.0 ml/100 g	8.0 ml/100 g Maximum

TYPICAL MECHANICAL PROPERTIES*: (Note: AWS specification values refer to the T-12 designator requirements)

Weld Metal Analysis	As Welded			PWHT 2 Hrs @ 1150°F (620°C)		
	100% CO ₂	75% Ar/25% CO ₂	AWS Spec	100% CO ₂	75% Ar/25% CO ₂	AWS Spec
Tensile Strength	81,000 psi (558 MPa)	85,000 psi (586 MPa)	70,000-90,000 psi (490-620 MPa)	78,000 psi (538 MPa)	82,000 psi (565 MPa)	Not Specified
Yield Strength	68,000 psi (469 MPa)	72,000 psi (496 MPa)	58,000 psi (390 MPa) Minimum	62,000 psi (427 MPa)	68,000 psi (469 MPa)	Not Specified
Elongation % in 2" (50 mm)	28%	27%	22% Minimum	30%	28%	Not Specified

TYPICAL CHARPY V-NOTCH IMPACT VALUES*:

CVN Temperature	As Welded			PWHT 2 Hrs @ 1150°F (620°C)		
	100% CO ₂	75% Ar/25%	AWS Spec	100% CO ₂	75% Ar/25%	AWS Spec
Avg. at -20°F (-30°C)	42 ft•lbs (57 Joules)	40 ft•lbs (54 Joules)	20 ft•lbs (27 Joules) Minimum	47 ft•lbs (64 Joules)	43 ft•lbs (58 Joules)	Not Specified
Avg. at -40°F (-40°C)	35 ft•lbs (47 Joules)	30 ft•lbs (41 Joules)	20 ft•lbs (27 Joules) Minimum "J" Requirements	38 ft•lbs (52 Joules)	33 ft•lbs (45 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 A5.20 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® 70XHP

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)
1/16	(1.6)	Flat & Horizontal	225	27	215	(5.5)	7.5	(3.4)	1	(25)
1/16	(1.6)	Flat & Horizontal	250	28	250	(6.4)	8.9	(4.0)	1	(25)
1/16	(1.6)	Flat & Horizontal	275	29	290	(7.4)	10.4	(4.7)	1	(25)
1/16	(1.6)	Flat & Horizontal	300	31	330	(8.4)	11.8	(5.4)	1	(25)
1/16	(1.6)	Flat & Horizontal	350	32	405	(10.3)	14.7	(6.7)	1	(25)
3/32	(2.4)	Flat & Horizontal	350	27	120	(3.0)	11.3	(5.1)	1	(25)
3/32	(2.4)	Flat & Horizontal	425	30	210	(5.3)	16.0	(7.3)	1	(25)
3/32	(2.4)	Flat & Horizontal	500	32	270	(6.9)	20.6	(9.3)	1	(25)
3/32	(2.4)	Flat & Horizontal	575	34	330	(8.4)	25.3	(11.5)	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 100% CO₂ shielding gas with a flow rate between 35-50 cfh (14-24 l/min). For 75% Ar/25% CO₂ shielding gas, reduce voltage by 1-2 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	60-lb. (27kg)
Inches (mm)	Coil
1/16 (1.6)	S240919-002
3/32 (2.4)	S240929-002

CONFORMANCES AND APPROVALS:

- **AWS A5.20**, E70T-1CJ H8, E70T-1MJ H8, E70T-9CJ H8, E70T-9MJ H8, E70T-12CJ H8
- **AWS A5.20M**, E490T-1CJ H8, E490T-1MJ H8, E490T-9CJ H8, E490T-9MJ H8, E490T-12CJ H8
- **ASME SFA 5.20**, E70T-1CJ H8, E70T-1MJ H8, E70T-9CJ H8, E70T-9MJ H8, E70T-12CJ H8
- **EN17632-B**: T55 2 T1 0 C/M A H10

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.

FabCO is a registered trademark of Hobart Brothers LLC, Troy, Ohio.

Revision Date: 200817 (Replaces 180130)

700-B, INDEX

