FabCO[®] XL-550



AWS A5.20: E71T-1CJ H4, E71T-9CJ H4, E71T-12CJ H4 EN ISO 17632-A T42 4 P C1 2 H5 EN ISO 17632-B T49 4 T1-1 C1 AP H5

Welding Positions:

FEATURES:	BENEFITS:	
 High impact toughness at low temperatures Low diffusible hydrogen weld deposit High average CTOD value High-deoxidizer formulation Easy slag removal 		bead cracking
	noving equipment • Shipl	age vessels • Offshore building • Thick section weldments

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

SHIELDING GAS: 100% Carbon Dioxide (CO₂), 35-50 cfh (17-24 I/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	AWS Spec
Carbon (C)	0.04	0.12
Manganese (Mn)	1.26	1.60
Silicon (Si)	0.26	0.90
Phosphorus (P)	0.008	0.030
Sulphur (S)	0.007	0.030
Nickel (Ni)	0.38	0.50
Boron (B)	0.0057	Not specified

Note: AWS specification single values are maximums.

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	100% CO ₂	AWS Spec
(Gas Chromatography)	3.4 ml/100g	4.0 ml/100g Maximum

TYPICAL MECHANICAL PROPERTIES*:

Mechanical Tests	As Welded			
	100% CO ₂	AWS Spec		
Tensile Strength	83,000 psi (572 MPa)	70,000-90,000 psi (490-620 MPa)		
Yield Strength	76,000 psi (524 MPa)	58,000 psi (400 MPa) Minimum		
Elongation % in 2" (50 mm)	25%	22% Minimum		

TYPICAL CHARPY V-NOTCH IMPACT VALUES*:

	As Welded				
CVN Temperatures	100% CO ₂ AWS A5.20				
Avg. at 0°F (-20°C)	109 ft•lbs (148 Joules)	20 ft•lbs. (27 Joules)			
Avg. at -40°F (-40°C)	90 ft •lbs (122 Joules)	20 ft•lbs. (27 Joules)			
Avg. at -50°F (-45°C)	85 ft •lbs (115 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 LLC.

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Diam Inches	eter (mm)	Weld Position	Amps	Volts		e-Feed beed (m/min)		osition ate (kg/hr)	Contact Work Di Inches	
0.045	(1.2)	All Position	200	24	280	(7.1)	4.0	(1.8)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	225	26	355	(9.0)	5.0	(2.3)	1	(25)
0.052	(1.4)	All Position	225	24	285	(7.2)	6.7	(3.0)	3/4	(19)
0.052	(1.4)	Flat & Horizontal	250	27	335	(8.5)	7.5	(3.4)	1	(25)
1/16	(1.6)	All Position	225	24	195	(5.0)	6.8	(3.1)	1	(25)
1/16	(1.6)	Flat & Horizontal	275	26	270	(6.9)	9.6	(4.4)	1	(25)

• Maintaining a proper welding procedure - including preheat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.

• See Above: This information was determined by welding with 100% Carbon Dioxide (CO₂) shielding gas with a flow rate between 35-50 cfh (17-24 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.

Diam Inches	eter (mm)	33-lb. (15kg) Spool	60-lb. (27.2kg) Coil
0.045	(1.2)	S245112-053	—
0.052	(1.4)	S245115-053	—
1/16	(1.6)	S245119-029	S245119-002

CONFORMANCES AND APPROVALS:

- AWS A5.20, E71T-1CJ H4, E71T-9CJ H4, E71T-12CJ H4
- AWS A5.20M, E491T-1CJ H4, E491T-9CJ H4, E491T-12CJ H4
- ASME SFA 5.20, E71T-1CJ H4, E71T-9CJ H4, E71T-12CJ H4
- ASME SFA 5.20M, E491T-1CJ H4, E491T-9CJ H4, E491T-12CJ H4
- ABS, 100% CO₂, 4YSA H5
- **CWB**, 100% CO₂, E491T1-C1A4-(CS1, CS2)-H4 (E491T-9J-H4) (E491T-12J-H4) [1.2 mm 1.6 mm diameter electrodes]
- DNV-GL, 100% CO₂, IV Y40MS (H5)
- Lloyd's Register, 100% CO₂, 4Y40S H5
- CE Marked per CPR 305/2011
- EN ISO 17632-A: T42 4 P C1 2 H5 [1.2 mm diameter electrodes]
- EN ISO 17632-B: T49 4 T1-1 C1 AP H5 [1.2 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 <u>Applications.Engineering@hobartbrothers.com</u>

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

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