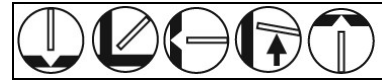


# FabCO® XL-550



AWS A5.20: E71T-1CJ H4, E71T-9CJ H4, E71T-12CJ H4  
 AWS A5.36: E71T12-C1A5-CS2-H4, E71T12-C1P5-CS2-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:

- High impact toughness at low temperatures
- Low diffusible hydrogen weld deposit
- High average CTOD value
- High-deoxidizer formulation
- Easy slag removal

### BENEFITS:

- Resists cracking in severe applications
- Minimizes risk of underbead cracking
- Resists crack formation and propagation
- Reduces surface preparation requirements, increases productivity
- Reduces clean-up time, minimizes risk of inclusion

### APPLICATIONS:

- Non-alloyed and fine grain steels
- Single or multi-pass welding
- Structural applications
- Earthmoving equipment
- Storage vessels
- Shipbuilding
- Offshore
- Thick section weldments

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

**SHIELDING GAS:** 100% Carbon Dioxide (CO<sub>2</sub>), 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 <sub>2</sub> | 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 <sub>2</sub> | AWS Spec            |
|----------------------|----------------------|---------------------|
| (GAS CHROMATOGRAPHY) | 3.4 ml/100g          | 4.0 ml/100g Maximum |

### TYPICAL MECHANICAL PROPERTIES\*:

| Mechanical Tests           | As Welded            |                                 | PWHT 13 Hrs. @ 1150°F (621°C) |               |                                 |
|----------------------------|----------------------|---------------------------------|-------------------------------|---------------|---------------------------------|
|                            | 100% CO <sub>2</sub> | AWS Spec                        | 100% CO <sub>2</sub>          | AWS A5.20     | AWS A5.36                       |
| Tensile Strength           | 83,000 psi (572 MPa) | 70,000-90,000 psi (490-620 MPa) | 81,000 psi (558 MPa)          | Not Specified | 70,000-90,000 psi (490-620 MPa) |
| Yield Strength             | 76,000 psi (524 MPa) | 58,000 psi (400 MPa) Minimum    | 70,000 psi (483 MPa)          | Not Specified | 58,000 psi (400 MPa) Minimum    |
| Elongation % in 2" (50 mm) | 25%                  | 22% Minimum                     | 28%                           | Not Specified | 22% Minimum                     |

### TYPICAL CHARPY V-NOTCH IMPACT VALUES\*:

| CVN Temperatures      | As Welded               |                                |                                | PWHT 13 Hrs. @ 1150°F (621°C) |               |                                |
|-----------------------|-------------------------|--------------------------------|--------------------------------|-------------------------------|---------------|--------------------------------|
|                       | 100% CO <sub>2</sub>    | AWS A5.20                      | AWS A5.36                      | 100% CO <sub>2</sub>          | AWS A5.20     | AWS A5.36                      |
| Avg. at 0°F (-20°C)   | 109 ft•lbs (148 Joules) | 20 ft•lbs. (27 Joules) Minimum | Not Specified                  | —                             | Not Specified | Not Specified                  |
| Avg. at -40°F (-40°C) | 90 ft•lbs (122 Joules)  | 20 ft•lbs. (27 Joules) Minimum | Not Specified                  | 77 ft•lbs (104 Joules)        | Not Specified | Not Specified                  |
| Avg. at -50°F (-45°C) | 85 ft•lbs (115 Joules)  | Not Specified                  | 20 ft•lbs. (27 Joules) Minimum | 71 ft•lbs (96 Joules)         | Not Specified | 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 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® XL-550

| 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      | 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 (CO<sub>2</sub>) 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.

| Diameter |       | 33-lb. (15kg) | 60-lb. (27.2kg) |
|----------|-------|---------------|-----------------|
| Inches   | (mm)  | Spool         | 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
- **AWS A5.36**, E71T12-C1A5-CS2-H4, E71T12-C1P5-CS2-H4
- **AWS A5.36M**, E491T12-C1A5-CS2-H4, E491T12-C1P5-CS2-H4
- **ABS**, 100% CO<sub>2</sub>, 4YSA H5
- **CWB**, 100% CO<sub>2</sub>, E491T1-C1A4-CS1-H4; E491T1-C1A4-CS2-H4; (E491T-9-H4; E491T-12J-H4) [1.2 mm - 1.6 mm diameter electrodes]
- **DNV-GL**, 100% CO<sub>2</sub>, IV Y40MS (H5)
- **Lloyd's Register**, 100% CO<sub>2</sub>, 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 [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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**Revision Date: 190927** (Replaces 190531)

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