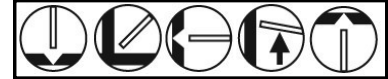


# FabCO<sup>®</sup> XTREME<sup>®</sup> 120



AWS A5.29: E121T5-GC H4

## WELDING POSITIONS:



### FEATURES:

- High Strength
- Excellent impact properties
- Low hydrogen (<4 ml/100g)

### BENEFITS:

- High quality welds that require high strength
- Provides increased weld toughness for critical welds at low temperatures
- Minimizes crack susceptibility

### APPLICATIONS:

- Shipbuilding
- Bridge construction
- Storage vessels
- Earthmoving equipment
- Structures
- Piping

**SLAG SYSTEM:** Fast-freezing, highly basic

**SHIELDING GAS:** 100% Carbon Dioxide (CO<sub>2</sub>), 35-50 cfh (14-24 l/min)

**TYPE OF CURRENT:** Direct Current Electrode Negative (DCEN)

**STANDARD DIAMETERS:** 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>
Carbon (C)	0.07
Manganese (Mn)	1.35
Silicon (Si)	0.14
Phosphorus (P)	0.008
Sulphur (S)	0.005
Chromium (Cr)	0.33
Nickel (Ni)	3.90
Molybdenum (Mo)	0.22
Aluminum (Al)	0.45

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

### TYPICAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	100% CO <sub>2</sub>
(GAS CHROMATOG-	3.4 ml/100g

### TYPICAL MECHANICAL PROPERTIES\* (Aged 48 hrs@220°F):

Mechanical Tests	100% CO <sub>2</sub>
Tensile Strength	125,600 psi (866 MPa)
Yield Strength	110,700 psi (763 MPa)
Elongation % in 2" (50 mm)	17.8%

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

CVN Temperatures	100% CO <sub>2</sub>
Avg. at -76°F (-60°C)	74.7 ft •lbs (101.2 Joules)

\*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Hobart Brothers Company 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 Company.

# FabCO<sup>®</sup> XTREME<sup>®</sup> 120

Diameter Tip-to-Plate Distance Position	Arc Voltage (volts)	Current DCEN (-)	Wire-Feed Speed		Deposition Rate	
			in/min	(m/min)	lbs/hr	(kg/hr)
1/16" 1/2" to 3/4" Flat and Horizontal	22	180	120	(3.05)	3.5	(1.60)
	24	240	180	(4.57)	6.3	(2.86)
	25	285	250	(6.35)	9.0	(4.08)
1/16" 1/2" to 3/4" Vertical and Overhead	22	180	120	(3.05)	3.5	(1.60)
	23	195	135	(3.43)	4.3	(1.95)
	23	210	150	(3.81)	4.9	(2.22)

- **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% CO<sub>2</sub> 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 Inches (mm)	33-lb. (15kg) Vacuum-Packed Spool
1/16 (1.6)	S290019-053

#### CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E121T5-GC H4
- **ABS to AWS**, E121TG-GC H4
- **DNV-GL**, V Y69M(H5)

**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 Company product may be obtained from Hobart Customer Service or at [www.hobartbrothers.com](http://www.hobartbrothers.com).

Because Hobart Brothers Company is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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