# FabCO<sup>®</sup> XTREME<sup>®</sup> 95



AWS A5.29: E91T5-GC H4

# **BENEFITS**



#### **FEATURES:**

- · Highly deoxidizing slag system
- Ability to produce very small leg fillet welds in all positions
- High impact toughness and low hydrogen weld deposits
- Very tolerant of primer and coatings without porosity

Piping

- · Less distortion and over-welding
- Superior properties and weld soundness

## **APPLICATIONS:**

- Shipbuilding
- Bridges
- Onshore Pipe

- Tanks
- Machinery
- Heavy Equipment

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

**SHIELDING GAS:** 100% Carbon Dioxide (CO<sub>2</sub>), 35-40 cfh (17-19 l/min) **TYPE OF CURRENT:** Direct Current Electrode Negative (DCEN)

**STANDARD DIAMETERS:** 0.045"(1.2 mm)

**RE-DRYING:** Not Recommended

STORAGE: Product should be stored in a dry, enclosed environment and in its original intact packaging

# TYPICAL WELD METAL CHEMICAL COMPOSITION\* (Chem Pad):

Weld Metal Analysis (%)	100% CO <sub>2</sub>
Carbon (C)	0.08
Manganese (Mn)	1.44
Silicon (Si)	0.17
Phosphorus (P)	0.010
Sulphur (S)	0.004
Nickel (Ni)	2.16
Chromium (Cr)	0.03
Molybdenum (Mo)	0.44

## TYPICAL WELD METAL DIFFUSIBLE HYDROGEN\*:

Hydrogen Equipment	100% CO <sub>2</sub>	AWS Spec.
(Gas Chromotography)	2.95 ml/100 g	4 ml/100 g Maximum

# Typical Mechanical Properties\* [Aged 48 Hr. @ 200°F (93°C)]:

Mechanical Tests	100% CO <sub>2</sub>
Tensile Strength	96,400 psi (664 MPa)
Yield Strength	87,900 psi (606 MPa)
Elongation % in 2" (50 mm)	26%

<sup>\*</sup>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 the 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.

# TYPICAL CHARPY V-NOTCH IMPACT VALUES [As Welded]\*:

CVN Temperatures	100% CO <sub>2</sub>
Avg. @ -40°F (-40°C)	100 ft-lbs (136 Joules)
Avg. @ -75°F (-60°C)	88 ft-lbs (119 Joules)

# TYPICAL CHARPY V-NOTCH IMPACT VALUES [PWHT 8 Hrs @ 1150°F (621°C)]:

CVN Temperatures	100% CO <sub>2</sub>
Avg. @ -75°F (-60°C)	100 ft-lbs (136 Joules)

### **TYPICAL OPERATING PARAMETERS\*:**

Diam	Diameter Wire Feed Speed		nd Spood	Deposition Rate		Contact Tip to Work				
Dian	ielei	Weld Position	Amps			wite reed Speed		lion Nate	Dista	ance
Inches	(mm)				in/min	(m/min)	lbs/hr	(kg/hr)	Inches	(mm)
0.045	(1.2)	All Position	170	18	225	(5.7)	5.1	(2.3)	1/2	(13)
0.045	(1.2)	All Position	185	19	250	(6.4)	5.7	(2.6)	1/2	(13)
0.045	(1.2)	All Position	200	20	290	(7.4)	6.6	(3.0)	1/2	(13)
0.045	(1.2)	Flat & Horizontal	220	21	300	(7.6)	6.8	(3.1)	5/8	(16)
0.045	(1.2)	Flat & Horizontal	240	23	350	(8.9)	8.0	(3.6)	5/8	(16)

- Maintaining a proper welding procedure including pre-heat and interpass temperatures may be critical depending on the type and thickness of the steel being welded.
- See Above: This information was determined by welding using 100% 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, Vertical Down, and Overhead

**AVAILABLE DIAMETERS AND PACKAGES:** For a complete list of diameters and packaging, please contact Hobart Brothers at (800) 424-1543 or (937) 332-5188

Diameter		10-lb. (4.5 kg)	33-lb. (15 kg)		
Inches	(mm)	Vacuum-packaged	Vacuum-packaged		
Net Pallet Weight		1920-lb. (871 kg)	2376-lb. (1078 kg)		
0.045	(1.2)	S290412-032	S290412-053		

#### **CONFORMANCES AND APPROVALS**

• AWS A5.29, E91T5-GC H4

**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

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 36 St, Miami, FL 33166-6672 (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 Company is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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