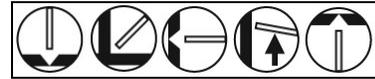


FabCO[®] 750M



AWS A5.29: E111T1-K3M J H4

WELDING POSITIONS:



FEATURES:

- Low spatter and easy slag removal
- Low fume generation rates
- Excellent arc characteristics
- Low diffusible hydrogen weld deposit
- High impact strengths at low temperatures

BENEFITS:

- Reduces clean-up time, minimizes risk of inclusions
- Increases operator appeal, improves the working environment
- Assist in producing smooth weld beads with uniform fusion
- Minimizes risk of underbead cracking
- Resists cracking in severe applications

APPLICATIONS:

- High-strength low-alloy steels
- Single or multi-pass welding
- ASTM A514 [\leq 2-1/2" (65mm)]
- API 5L Grade X100 Pipe
- Overmatched API 5L Grade X80 Pipe
- ABS EQ 56, 63, 70
- Jackup rig construction

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

SHIELDING GAS: 75-80% Argon (Ar)/Balance Carbon Dioxide (CO₂)

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP)

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 CHEMISTRY* (Chem Pad):

Weld Metal Analysis	75% Ar/25% CO ₂	AWS Spec
Carbon (C)	0.067	0.15
Silicon (Si)	0.34	0.8
Sulphur (S)	0.009	0.030
Phosphorus (P)	0.011	0.030
Manganese (Mn)	1.725	0.75 - 2.25
Chromium (Cr)	0.036	0.15
Molybdenum (Mo)	0.342	0.25 - 0.65
Nickel (Ni)	1.919	1.25 - 2.6
Boron (B)	0.003	Not specified
Vanadium (V)	0.004	0.005

Note: AWS specification single values are maximums, unless otherwise noted. Minimum values are indicated by †.

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	75% Ar/25% CO ₂	AWS Spec
(GAS CHROMATOGRAPHY)	3.5 ml/100 g	4.0 ml/100 g Maximum

TYPICAL MECHANICAL PROPERTIES* (As Welded, Vertical Up):

Mechanical Tests	75% Ar/25% CO ₂	AWS Spec
Tensile Strength	117,000 psi (807 MPa)	110,000-130,000 psi (760-900 MPa)
Yield Strength	105,000 psi (724 MPa)	98,000 psi (680 MPa) Minimum
Elongation % in 2" (50 mm)	18%	15% Minimum

TYPICAL CHARPY V-NOTCH IMPACT VALUES* (As Welded, Vertical Up):

CVN Temperatures	75% Ar/25% CO ₂	AWS A5.29	AWS A5.36
Avg. at -22°F (-30°C)	62 ft•lbs (84 Joules)	Not specified	Not specified
Avg. at -40°F (-40°C)	59 ft•lbs (80 Joules)	Not specified	Not specified
Avg. at -60°F (-50°C)	50 ft•lbs (68 Joules)	Not specified	20 ft•lbs (27 Joules)
Avg. at -76°F (-60°C)	45 ft•lbs (61 Joules)	Not specified	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 A5.29 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.

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Diameter Inches (mm)		Weld Position	Amps	Volts	Wire-Feed Speed in/min (m/min)		Deposition Rate lbs/hr (kg/hr)		Contact Tip to Work Distance Inches (mm)	
0.045	(1.2)	All Position	175	24	255	(6.5)	5.4	(2.5)	3/4	(19)
0.045	(1.2)	All Position	200	24	315	(8.0)	6.7	(3.0)	3/4	(19)
0.045	(1.2)	All Position	225	25	365	(9.3)	7.7	(3.5)	3/4	(19)
0.045	(1.2)	Flat & Horizontal	250	26	435	(11.0)	9.2	(4.2)	3/4	(19)

- **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 with 75% Ar/25% CO₂ 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)		10-lb. (4.5kg) Spool	33-lb. (15kg) Vacuum Packed Spool
0.045	(1.2)	S289812-032	S289812-053

CONFORMANCES AND APPROVALS:

- **AWS A5.29**, E111T1-K3M J H4
- **AWS A5.29M**, E761T1-K3M J H4
- **ASME SFA 5.29**, E111T1-K3M J 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

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 trademark of Hobart Brothers LLC, Troy, Ohio.

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