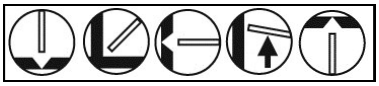
MEGAFIL® 550 R

AWS A5. 29: E91T1-K2 MJ H4
EN 17632-A: T 55 6 Mn1Ni P M 1 H5

WELDING POSITIONS:



FEATURES:

- Seamless flux-cored electrode
- Low hydrogen weld deposit
- Fast-freezing slag
- Smooth arc characteristics
- Easy slag removal
- Good impact toughness

BENEFITS:

- Very low moisture reabsorption after extended exposure
- Minimizes risk of hydrogen-induced cracking
- Excellent out-of-position performance
- Assists producing welds of consistent appearance and quality
- Reduces clean-up time, minimizes risk of inclusions
- Minimizes risk of cracking in critical applications

APPLICATIONS:

- Single or multi-pass welding
- Offshore
- Pipelines
- Non-alloyed and fine grain steel
- Heavy equipment
- Pressure vessels
- General fabrication
- Equipment repairs and modifications
- Structural fabrication

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

SHIELDING GAS: 75-80% Argon (Ar)/Balance Carbon Dioxide (CO_2), 35-50 cfh (17-24 l/min)

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 (%)	80% Ar/20% CO_2	AWS Spec
Carbon (C)	0.05	0.15
Manganese (Mn)	1.47	0.50-1.75
Silicon (Si)	0.36	0.80
Phosphorus (P)	0.01	0.030
Sulphur (S)	0.01	0.030
Nickel (Ni)	1.62	1.00-2.00

Note: AWS specification single values are maximums.

TYPICAL DIFFUSIBLE HYDROGEN*:

Hydrogen Equipment	80% Ar/20% CO_2	AWS Spec
(GAS CHROMATOGRAPHY)	2.89 ml/100 g	4.0 ml/100 g Maximum

TYPICAL MECHANICAL PROPERTIES* (As Welded):

Mechanical Tests	80% Ar/20% CO_2	AWS Spec
Tensile Strength	96,000 psi (661 MPa)	90,000-110,000 psi (620-760 MPa)
Yield Strength	88,500 psi (610 MPa)	78,000 psi (540 MPa) Minimum
Elongation % in 2” (50 mm)	25%	17% Minimum

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

CVN Temperatures	80% Ar/20% CO_2	AWS Spec
Avg. at -20°F (-30°C)	96 ft•lbs (130 Joules)	20 ft•lbs (27 Joules) Minimum “J” Requirement
Avg. at -40°F (-40°C)	84 ft•lbs (114 Joules)	Not specified

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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	180	24	215	(5.4)	7.1	(3.2)	5/8	(16)
0.045	(1.2)	All Position	210	25	250	(6.3)	8.9	(4.1)	3/4	(19)
0.045	(1.2)	All Position	230	26	335	(8.5)	10.2	(4.6)	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 using 80% Argon (Ar)/20% Carbon Dioxide (CO_2) 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 Inches	(mm)	35-lb. (15.9kg) Spool
0.045	(1.2)	55015

CONFORMANCES AND APPROVALS:
- **AWS A5.29,** E91T1-K2 MJ H4
- **AWS A5.29M,** E621T1-K2 MJ H4
- **ASME SFA 5.29,** E91T1-K2 MJ H4
- **ABS,** 82% Ar/18% CO_2, 5YQ550SA H5
- **DNV,** 82% Ar/18% CO_2, V Y55MS
- **EN 17632-A:** T 55 6 Mn1Ni P M 1 H5
- **Lloyd's Register,** 82% Ar/18% CO_2, 5Y55S H5

TECHNICAL QUESTIONS? For technical support of **Hobart MEGAFIL products, visit** www.HobartBrothers.com/MEGAFIL OR 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

Material Safety Data Sheets on any Hobart Brothers Company 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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HOBART FILLER METALS