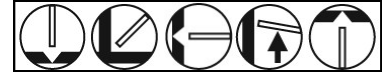


Hobart® Maxal® 1100



AWS A5.10: ER1100, R1100

WELDING POSITIONS:



FEATURES:

- Highest ductility/formability
- Highest electrical and thermal conductivity

BENEFITS:

- Excellent corrosion resistance
- Moderate shrinkage rate
- Good hot cracking sensitivity in most applications
- Low welding smut and discoloration

APPLICATIONS:

- Electrical conductors
- Chemical storage tanks
- Piping and tubing for chemicals
- Refrigeration
- Food handling equipment
- Heat exchangers

SHIELDING GAS: 100% Argon (Ar) or Argon/Helium mixtures, typical: GMAW - 35-50 cfh (14-24 l/min), GTAW 20-30 cfh (10-14 l/min).

TYPE OF CURRENT: Direct Current Electrode Positive (DCEP) for GMAW, AC for GTAW

STANDARD DIAMETERS: 0.035" (0.9 mm), 1/16" (1.6 mm)

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

TYPICAL CHEMICAL VALUES*:

Weld Metal Analysis (%)	ER & R 1100
Silicon (Si)	(a)
Iron (Fe)	(a)
Copper (Cu)	0.05-0.20
Manganese (Mn)	0.05
Magnesium (Mg)	—
Zinc (Zn)	0.10
Titanium (Ti)	—
Beryllium (Be)	<0.0003
Others Each	0.05
Others Total	0.15
Aluminum (Al)	99.0

(a) Si + Fe shall not exceed 0.95%

NOTE: *Single values are maximums.

TYPICAL PROPERTIES:

Melting Range	Density	Electrical/Thermal Conductivity
1190-1215°F	0.098 lbs/in ³	58% IACS/1625 EU

As Welded UTS Typical	Anodized Color	Elevated Temp. Applications +150°F
13.5 ksi	Yellow	YES

*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 A5.10 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.

Hobart® Maxal® 1100

Diameter		Base Material Thickness		Amps		Volts		Wire-Feed Speed (ipm)	
Inches	(mm)	Inches	(mm)	4xxx	5xxx	4xxx	5xxx	4xxx	5xxx
0.035	(0.9)	1/16	(1.6)	90	100	23	21	300	350
0.035	(0.9)	1/8	(3.2)	130	140	24	22	400	450
1/16	(1.6)	1/4	(6.4)	200	210	26	24	170	200
1/16	(1.6)	3/8	(9.5)	230	240	27	25	200	230
1/16	(1.6)	1/2	(12.7)	260	270	28	26	240	270
1/16	(1.6)	3/4	(19.1)	280	290	29	27	260	300
1/16	(1.6)	1	(25.4)	300	310	30	28	280	320

Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of aluminum being welded.

See Above: This information was determined by welding using 100%Argon shielding gas with a flow rate between 35-50 cfh (14-24 l/min).

AVAILABLE 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		16-lb. (7.3 kg)	22-lb. (20 kg)	300-lb. (136 kg)	10-lb. (4.5 kg)
Inches	(mm)	Wire Basket	Plastic Spool	Drum	36-In Long Cut Length TIG Rod
0.035	(0.9)	110003512	—	—	—
1/16	(1.6)	—	110006212P22	110006223M	110006270

300 lb drum dimensions: diameter = 23-1/2"; height = 36"

CONFORMANCES AND APPROVALS:

- AWS A5.10, ER1100, R1100
- ASME SFA 5.10, ER1100, R1100
- AWS A5.01 Class S1, Schedule F
- CWB, ER1100 (0.9 mm - 1.6 mm)
- vd TUV 1153

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.

Hobart is a registered trademark of Hobart Brothers LLC, Troy, Ohio.

Revision Date: 190531 (Replaces 190102)

624-A, INDEX

