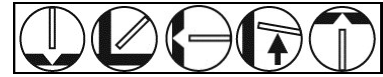


Hobart[®] MAXAL[®] 5183



AWS A5.10: ER5183, R5183

WELDING POSITIONS:



FEATURES:

- Very high strength (41 ksi typical)
- High ductility/toughness/fatigue strength
- Moderate ductility/formability
- Lower electrical conductivity and thermal conductivity

BENEFITS:

- Excellent corrosion resistance when welding 5083 base material
- Higher column strength/better feedability
- Very good color match after anodizing with 5xxx/6xxx base materials

APPLICATIONS:

- 5083 and lower strength alloys (40 ksi minimum UTS)
- Pressure vessels
- Shipbuilding
- Cryogenic tanks

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

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

STANDARD DIAMETERS: 0.035" (0.9 mm), 3/64" (1.2 mm), 1/16" (1.6 mm), 3/32" (2.4 mm), 1/8" (3.2 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 5183
Silicon (Si)	0.40
Iron (Fe)	0.40
Copper (Cu)	0.10
Manganese (Mn)	0.50-1.0
Magnesium (Mg)	4.3-5.2
Chromium (Cr)	0.05-0.25
Zinc (Zn)	0.25
Titanium (Ti)	0.15
Beryllium (Be)	<0.0003
Others Each	0.05
Others Total	0.15
Aluminum (Al)	Remainder

*Unless noted-single values are maximums.

TYPICAL PROPERTIES:

Melting Range	Density	Electrical/Thermal Conductivity
1075-1180°F	0.096 lbs/in ³	29% IACS/810 EU

As Welded UTS Typical	Anodized Color	Elevated Temp. Applications +150°F
41 ksi	Clear/White	NO

*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 A5.10 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 Company.

Hobart® MAXAL® 5183

Diameter		Base Material Thickness		Amps		Volts		Wire-Feed Speed (ipm)	
Inches	(mm)	Inches	(mm)	4xxx	5xxx	4xxx	5xxx	4xxx	5xxx
0.030	(0.8)	1/16	(1.6)	90	100	20	18	260	300
0.030	(0.8)	3/32	(2.4)	110	120	22	21	350	400
0.030	(0.8)	1/8	(3.2)	130	140	23	21	450	500
0.030	(0.8)	3/16	(4.8)	150	160	24	22	550	600
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
3/64	(1.2)	3/32	(2.4)	110	120	25	24	170	220
3/64	(1.2)	1/8	(3.2)	150	160	26	25	270	330
3/64	(1.2)	1/4	(6.4)	190	220	26	25	320	370
3/64	(1.2)	3/8	(9.5)	220	230	27	25	390	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

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		1-lb. Spool	16-lb. Reel	16-lb. Plastic	22-lb. Plastic	300-lb. Drum	36-In Cut Length (10-lb)
Inches	(mm)						
0.035	(0.9)	518303504				518303523	
3/64	(1.2)	518304704	518304712	518304712P	518304712P22	518304723	
1/16	(1.6)		515306212	518306212P			518306270
3/32	(2.4)						518309470
1/8	(3.2)						518312570

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

100 lb drum dimensions: diameter = 23-1/2"; height = 18"

CONFORMANCES AND APPROVALS:

- AWS A5.10, ER5183, R5183
- ASME SFA 5.10, ER5183, R5183
- AWS A5.01 Class S1, Schedule F
- CWB
- ABS
- vd TUV
- DB

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, 550 NW LeJune Road, Miami, FL 33126; 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.

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

Revision Date: 130801 (Replaces 110705)

624-E, INDEX

