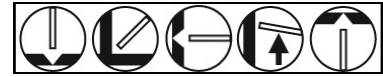


# Hobart® 18AC



AWS E7018 H8 (E4818\*)

**WELDING POSITIONS:**



**FEATURES:**

- Excellent restriking characteristics
- Self-removing slag
- Flat bead contour
- Good wetting action
- Reliable starts and restarts
- Very stable arc

**BENEFITS:**

- Reduces frustration caused by electrode sticking; ideal for beginning welders and hobbyists, job shops and farms; great for tack or skip welds
- Allows more arc time; reduces clean-up time
- Results in excellent weld bead appearance
- Prevents cold laps or undercutting
- Provides better welds due to no porosity
- Easy to control; minimal spatter; smooth and quiet

**APPLICATIONS:**

- Low, medium, high carbon steels
- High strength, low alloy steels
- Shops
- Skip or tack welds
- Farms
- Hobbyists

**TYPE OF CURRENT:** AC, Direct Current Electrode Positive (DCEP), or Direct Current Electrode Negative (DCEN)

**ARC LENGTH:** Very short (less than half the diameter of the electrode)

**FLAT:** Angle electrode 10-15° from 90°

**VERTICAL-UP:** Use weaving technique

**VERTICAL-DOWN:** Not recommended

**OVERHEAD:** Use slight weaving motion within the puddle

**STORAGE:** 220° to 350°F

**RECONDITIONING:** If exposed to the atmosphere for extended periods, the electrode should be reconditioned for one hour at 575°F

**TYPICAL WELD METAL CHEMISTRY\* (Chem Pad):**

Weld Metal Analysis (%)		AWS Spec (max)
Carbon (C)	0.05	0.15
Manganese (Mn)	0.75	1.60
Silicon (Si)	0.33	0.75
Phosphorus (P)	0.010	0.035
Sulphur (S)	0.020	0.035
Nickel (Ni)	0.08	0.30
Chromium (Cr)	0.06	0.20
Molybdenum (Mo)	0.01	0.30
Vanadium (V)	0.02	0.03
Mn + Ni + Cr + Mo + V	0.92	1.75

**Note:** AWS specification single values are maximums.

**TYPICAL MECHANICAL PROPERTIES\* (As Welded):**

Mechanical Tests		AWS Spec (min)
Tensile Strength	88,000 psi (607 MPa)	70,000 psi (483 MPa)
Yield Strength	77,000 psi (532 MPa)	58,000 psi (400 MPa)
Elongation % in 2" (50 mm)	30%	22%

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

		AWS Spec (min)
Avg. @-20°F (-29°C)	30 ft•lbs (41 Joules)	20 ft•lbs (27 Joules)

\*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 the AWS A5.1 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® 18AC

Diameter Inches (mm)	Type of Current	Minimum Amps	Optimum Amps	Maximum Amps
3/32 (2.4)	AC, DCEP or DCEN	70	90	110
1/8 (3.2)	AC, DCEP or DCEN	90	130	165
5/32 (4.0)	AC, DCEP or DCEN	125	170	220

\*For out-of-position welding, reduce amperage shown by 15%.

Diameter Inches (mm)	Type of Current	Amps	Volts	Deposition Rate lbs/hr (kg/hr)	Deposition Efficiency %
3/32 (2.4)	AC	90	22	2.03 (0.9)	62
1/8 (3.2)	AC	130	25	2.58 (1.2)	65
5/32 (4.0)	AC	170	27	3.19 (1.4)	65

\*Allowance made for 2" stub loss included.

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

**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)	5-lb. (2.3kg) Plastic Pak	10-lb. (4.5kg) Plastic Pak	50-lb. (22.7kg) Can
3/32 (2.4)	S119832-045	S119832-089	S119832-035
1/8 (3.2)	S119844-045	S119844-089	S119844-035
5/32 (4.0)	S119851-045	—	S119851-035

## CONFORMANCES AND APPROVALS:

- AWS A5.1, E7018 H8
- ASME SFA 5.1, F-4, A-1 E7018

**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](mailto: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](http://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](http://www.hobartbrothers.com).

Because Hobart Brothers LLC is constantly improving products, Hobart reserves the right to change design and/or specifications without notice.

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