

AWS E6011 (E4311*)

Hobart 335A

DESCRIPTION:

Stable arc characteristics and good penetration are what you can expect to get from **Hobart 335A** electrode. Designed for use with AC power sources, Hobart 335A has high operator appeal and produces a fine spray transfer that is ideal for all welding positions. Excellent choice for welding on steels that cannot be completely cleaned or where the steel is rusty or painted.

APPLICATIONS:

Galvanized steel work, general fabrication, railroad cars, shipbuilding and structural work.

FEATURES:

- Quick starting
- Superior arc drive
- Excellent wet-in
- Slag detaches easily

BENEFITS:

- Easy arc striking
- Excellent penetration
- Easy weld lay-in and smooth bead appearance
- Quick clean-up

TYPICAL WELD METAL PROPERTIES(Chem Pad):**

Weld Metal Analysis		AWS Spec (max)
Carbon (C)	0.14	not required
Manganese (Mn)	0.47	not required
Phosphorus (P)	0.009	not required
Sulphur (S)	0.009	not required
Silicon (Si)	0.18	not required

TYPICAL MECHANICAL PROPERTIES(AW):**

		AWS Spec (min)
Tensile Strength	77,700 psi (536 MPa)	60,000 psi
Yield Strength	63,200 psi (436 MPa)	48,000 psi
Elongation % in 2"	25%	22%
Reduction of Area	22% to 63%	not required

TYPICAL CHARPY-V-NOTCH IMPACT VALUES (AW):**

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

CONFORMANCES AND APPROVALS:

- AWS A5.1, E6011, ASME SFA 5.1, F-3, A-1
- ABS E6011
- CWB E4311
- Lloyd's Register of Shipping, 2m, 2Ym

* CWB classification

NOTE: The information contained or otherwise referenced herein is presented only as "typical" without guarantee of 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 A5.1 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 Company.



Hobart 335A

RECOMMENDED WELDING PROCEDURES:

GENERAL:	AC or electrode positive work, negative (DCEP)
ARC LENGTH:	Average length (1/8" to 1/4")
FLAT:	Stay ahead of puddle and use slight whipping motion
VERTICAL-UP:	Use slight whipping or weaving technique
VERTICAL-DOWN:	Use higher amperage and faster travel, staying ahead of the puddle
OVERHEAD:	Stay ahead of puddle and use slight whipping motion
STORAGE:	Dry at room temperature, humidity below 50% should be avoided; at no time should this electrode be stored in an oven above 130°F
RECONDITIONING:	Not recommended

RECOMMENDED OPERATING PARAMETERS:

Diameter		Type of Power	Minimum Amps	Optimum* Amps	Maximum Amps
Inches	mm				
3/32	2.4	AC or DCEP	60	60	90
1/8	3.2	AC or DCEP	80	100	125
5/32	4.0	AC or DCEP	130	140	160
3/16	4.8	AC or DCEP	160	180	190

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

TYPICAL DEPOSITION DATA (at optimum):

Diameter		Type of Power	Amps	Volts	Deposition Rate lbs/hr	Deposition Efficiency*%
Inches	mm					
3/32	2.4	AC	60	25	1.62	66.5
1/8	3.2	AC	100	24	2.57	67.2
5/32	4.0	AC	140	25	3.28	65.7
3/16	4.8	AC	180	25	3.86	69.1

*Allowance made for 2" stub loss included.

AVAILABLE DIAMETERS AND PACKAGES:

Diameter		Length		5-Lb. Plastic Pak	10-Lb. Plastic Pak	50-lb. Carton
Inches	mm	Inches	mm			
3/32	2.4	14"	355	S112232-045	S112232-089	S112232-031
1/8	3.2	14"	355	S112244-045	S112244-089	S112244-031
5/32	4.0	14"	355	S112251-045	S112251-089	S112251-031
3/16	4.8	14"	355	—	—	S112258-031

Material Safety Data Sheets on any Hobart Brothers Company product may be obtained from Hobart Customer Service.

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

