Unibraze 6011

(E6011)

DESCRIPTION:

Stable arc characteristics and good penetration are what you can expect to get from UNIBRAZE 6011 electrode. Designed for use with AC power sources, UNIBRAZE 6011 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

Unibraze Corporation 1050 Penner Crest Houston, TX 77055 1-800-364-6900 www.unibraze.com

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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 Inches	Diameter mm	Type of Power	Minimum Amps	Optimum* Amps	Maximum Amps
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 Inches	Diameter mm	Type of Power	Amps	Volts	Deposition Rate lbs/hr	Deposition Efficiency*%
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.

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