



Manufacturers of Custom Welding Lines for Resale
www.selectrode.com

SELECTRODE 1281 Pure Copper Electrode

INTERNATIONAL CLASSIFICATIONS

AWS/ASME A 5.6 E Cu
DIN 1733: EL-CuMn2

FEATURES & APPLICATIONS

For joining and build-up on copper parts requiring corrosion resistance and thermal and/or electrical conductivity.

Pure copper electrode for joining and build-up

- Smooth arc characteristics allow easy joining of copper.
- Weld metal is extremely dense.
- High purity of weld metal allows for joining dissimilar grades of copper.

ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)

Microstructure: A multi-phase copper base structure with complex eutectoids.

Flux Color: Lt. Grey

Mn	Al	Si	Pb	Fe	Other	Cu
.09	.07	.08	.02	.15	.50	Bal

TYPICAL MECHANICAL PROPERTIES

Undiluted Weld Metal

Maximum Value Up to:

Tensile Strength	33,000 PSI (225 MPa)
Yield Strength	27,000 PSI (185 MPa)
Elongation	35%
Electrical Conductivity	25-45
Hardness	Brinell 50-60

WELDING CURRENT & INSTRUCTIONS

Recommended Current: DC Reverse (+)

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	100	140	170
Maximum Amperage	130	170	200

Welding Techniques: Preheat thicker sections to 750°-1100°F (400°- 600°C). Use as large an electrode as possible and maintain a short arc.

Welding Positions: Flat, Horizontal, Vertical up, Overhead

Deposition Rates:

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings
1/8 (3.25)	14" (350)	.8 oz. (22g)	20 (45)	25 (54)	115
5/32 (4.0)	14"(350)	1.1 oz (32g)	14 (31)	16 (36)	155
3/16 (5.0)	14" (350)	1.6 oz (45g)	10 (22)	13 (28)	185

APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	1/8 (3.25)	5/32 (4.0)	3/16 (5.0)
Length (mm)	14" (350)	14" (350)	14" (350)
Electrodes / lb	12	7	5
Electrodes / kg	27	15	11