

AMTEC 600 PURE COPPER ELECTRODE

ELECTRODE DC REVERSE ONLY



General Characteristics

Amtec 600 is a pure copper electrode for joining and build-up of copper parts requiring corrosion resistance and thermal and/or electrical conductivity. This electrode is over 99% commercially pure copper to match the copper base metal being welded. It has smooth arc characteristics, allowing easy joining of copper. The high purity of the weld metal allows for joining dissimilar grades of copper. Preheat of 1000°F is always required when welding on copper. No exceptions.

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

Diameter		Amps(approx.)
(Inch)	(MM)	
1/8	3.25	100-130
5/32	4.0	140-170

Procedure

Clean the weld zone of all contaminants. Maintain a short arc and hold the electrode almost vertically. Use the largest electrode possible for the job to be able to weld in 1 pass as opposed to multiple passes. Items up to 1/4 inch thickness can be butt welded. For larger sections a single Vee with an included angle of 80° should be used, and a preheat of 1000°F is critical for successful welding of copper.

Application

Use Amtec 600 for fabrication and maintenance of copper and copper alloys where dense, porosity free deposits are required. Used to surface, build-up and fabricate electrolytic and deoxidized copper parts. Ideal for applications requiring high corrosion resistance and thermal or electrical conductivity.

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Subject to change without notice

Tip Color – Plain
Amtec 600 Imprint
Light Gray Coating