



# ARCOTECH

## AL-110(Cu-ETP) ROLLED PRODUCTS

### CHEMICAL COMPOSITION(%)

Cu	≥99.90
O	0.005-0.04

### ALLOY DESIGNATIONS

UNS	C11000
EN	Cu-ETP
JIS	C1100
BS	C101

### COIL/ SHEET SPECIFICATIONS

Thickness (mm) *	0.035-3.00
Width (mm)	6.00 - 406
Inner Diameter (mm)	75- 100-150-200-300-400-500
Coil Weight (Kg/mm width)	1.00 - 4.00
Sheet Length (m)	0.50 - 3.00

\*Note: 1. Min. and Max. width depends on thickness of the strip  
2. Material temper depends on thickness of the strip

### CHARACTERISTICSCS

AL-110 is electrolytic tough pitch copper has long been the standard type of commercial wrought copper used in the production of sheet, plate, strip, wire and rod.

This grade of copper has an extremely wide range of application based on its conductivity, corrosion resistance and beauty.

### MECHANICAL PROPERTIES

Temper		Hardness , HV	Tensile Strength MPa	Yield Stress MPa	Elongation %	
					T<0.1mm	T> 0.1mm
Ann.	O	40-60	200-250	≤100	≥20	≥35
1/4 Hard	H01	55-75	220-260	≤140	≥10	≥15
1/2 Hard	H02	70-90	240-290	≥180	≥5	≥10
Hard	H04	90-110	290-360	≥250	≥2	≥4
Extra Hard	H06	≥110	≥360	≥320	-	-

### PHYSICAL PROPERTIES

#### TYPICAL VALUES IN ANNEALED TEMPER AT 20 ° C

Density (g/cm <sup>3</sup> )	Electrical conductivity (% IACS)	Thermal Conductivity (W/m.K)	Modulus of Elasticity Gpa	Specific Heat J/kg.K
8.94	100	388	127	385

### ARCOTECH LTD

181, Sector-3, Industrial growth Centre, Rewari, Haryana, India. Ph: 01284-264160/161, Website :www.arcotech.in



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## AL-110(Cu-ETP) ROLLED PRODUCTS

### Fabrication Properties

Capacity for being cold worked	Excellent
Machinability	Less suitable
Capacity for being electroplated	Excellent
Capacity for being hot dip tinned	Excellent
Soft soldering	Excellent
Resistance welding	Less suitable
Gas shielded arc welding	Less suitable
Laser welding	Less suitable

### Corrosion Resistance

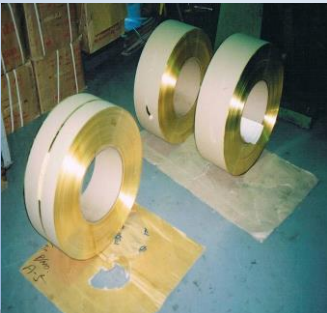
AL-110 generally less subject to corrosion than other engineering metals.

Resistant to industrial atmosphere ( formation of dark resp. protective layers) , industrial and drinking water( max. flow rate 4.5 to 6.0 ft/s), pure water vapor, non oxidizing acids, alkalis ( except for ammonia and cyanide containing compounds), neutral saline solutions

Non resistant to oxidizing acids, hydrous ammonia and halogenated gases, halogen sulfide, sea water especially with high flow rates.

### Packaging

Standard seaworthy packaging or as per specific requirements of customer.



### TYPICAL APPLICATIONS

- General Electrical Applications
- Stamped Parts
- Transformer Coils
- Cable Strips

AL-110 conform ROHS Directive

This data is general technical product information. Binding technical features are subject to the contract.

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