



ARCOTECH

AL-122(Cu-DHP) ROLLED PRODUCTS

CHEMICAL COMPOSITION(%)

Cu	≥99.90
P	0.015-0.04

ALLOY DESIGNATIONS

UNS	C12200
EN	Cu-DHP
JIS	C1220
BS	C106

COIL/ SHEET SPECIFICATIONS

Thickness (mm)	0.035-3.00
Width (mm)	6.00 - 406
Inner Diameter (mm)	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

CHARACTERISTICS

Al-122 is deoxidized high phosphorous residual copper commonly pure copper which has been deoxidized with phosphorous leaving relatively high residual phosphorous content.

Al-122 is not susceptible to hydrogen embrittlement but is relatively low conductivity.

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	60-75	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 ³)	Electrical conductivity (% IACS)	Thermal Conductivity (W/m.K)	Modulus of Elasticity Gpa	Specific Heat J/kg.K
8.92	81	340	132	385

ARCOTECH LTD

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AL-122 (Cu-DHP) 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	Excellent
Laser welding	Good

Corrosion Resistance

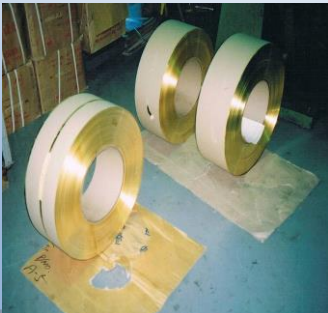
AL-122 generally less subject to corrosion than other engineering metals.

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

- Heat exchangers
- Transistors
- Strip for plating
- Mineral insulated cables
- Pipelines

AL-122 conform ROHS Directive

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

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