



# ARCOTECH

## AL-144(CuSn<sub>0.15</sub>) ROLLED PRODUCTS

### CHEMICAL COMPOSITION(%)

Cu+Sn	≥99.84
Sn	0.07 - 0.20
P	0.005-0.025

### ALLOY DESIGNATIONS

UNS	C14410
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IS	TBC**
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\*\* Tin Bearing Copper

### COIL/ SHEET SPECIFICATIONS

Thickness (mm)	0.035-3.00
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Width (mm)	6.00 - 406
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Inner Diameter (mm)	100-150-200-300-400-500
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Coil Weight (Kg/mm width)	1.00 - 4.00
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Sheet Length (m)	0.50 - 3.00
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\*Note: 1. Min. and Max. width depends on thickness of the strip  
2. Material temper depends on thickness of the strip

### CHARACTERISTICS

AL-144 has got excellent hot and cold forming characteristics

This grade of copper is much resistance to annealing and has got high tensile strength as compared to ETP copper and hence used for radiator fin applications in automobile industry.

### MECHANICAL PROPERTIES

Temper		Hardness , HV	Tensile Strength MPa	Yield Stress MPa	Elongation
Soft	O	≥65	≥220	≤150	≥25
½ Hard	H02	80-110	≥260	≥210	≥5
Hard	H04	110-140	≥320	≥ 260	≥2

### 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
8.92	75	340	120	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-144(CuSn<sub>0.15</sub>) 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

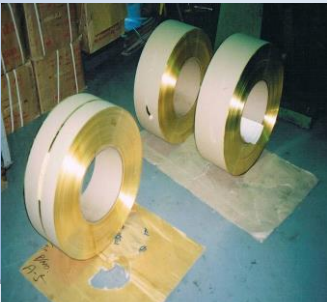
### Corrosion Resistance

Resistance to industrial atmosphere, water vapor, non oxidizing acids, alkalis, neutral saline solutions

Non resistant to oxidizing acids, hydrous ammonia and halogenated gases, hydrogen sulfide.

### Packaging

Standard seaworthy packaging or as per specific requirements of customer.



AL-144 conform ROHS Directive

### TYPICAL APPLICATIONS

- Radiator Fins for automobile industry
- Heat exchangers
- Terminal for automobile battery
- Connector pins
- Fuse boxes.

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

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