



# ARCOTECH

## AL-90(CuZn10) ROLLED PRODUCTS

CHEMICAL COMPOSITION(%)	
Cu	89.00-91.00
Fe	≤0.05
Pb	≤0.02
Ni	≤0.10
Zn	REM

ALLOY DESIGNATIONS	
UNS	C22000
EN	CuZn10
JIS	C2200
BS	CZ101

### COIL /SHEET SPECIFICATIONS

**Thickness (mm)\*** 0.040- 4.0

**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 - 4.00

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

### CHARACTERISTICS

Commonly known as Commercial Bronze.

AL-90 has very cold forming characteristics. This alloy has higher strength than pure copper.

Al-90 has good welding and brazing properties as well as good resistance to stress corrosion cracking and dezincification.

### MECHANICAL PROPERTIES

Temper		Hardness , HV	Tensile Strength MPa	Yield Stress MPa	Elongation %	Grain Size
Ann.	O	50-70	240-280	≤140	≥36	≤0.060
1/4 Hard	H01	70-90	280-320	≥200	≥20	≤0.045
1/2 Hard	H02	90-110	325--360	≥250	≥13	≤0.015
Hard	H04	≥110	≥350	≥290	≥4	≤0.010

### 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
8.80	43	184	124	376

### ARCOTECH LTD

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



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## AL-90(CuZn10) 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	Good
Gas shielded arc welding	Good
Laser welding	Fair

### Corrosion Resistance

Al-90 has good resistance to fresh water, natural or alkaline saline solutions, organic compounds as well as land, sea and industrial atmosphere.

This alloy is less sensitive to dezincification and stress corrosion cracking.

Non resistance to acids, hydrous sulphur compounds, hydrous ammonia in the non stress relieved condition.

### Packaging

Standard seaworthy packaging or as per specific requirements of customer.



### TYPICAL APPLICATIONS

- Small Arms Cartridges, Artillery Projectile Rotating Bands, Press Fit, Primer Caps
- Costume Jewelry and Ornamental Trim.
- Components for Electrical Industry
- Screw shells, bolts, Line Clamps, Rivets
- Marine hardware

AL-90 conform ROHS Directive

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

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