



ARCOTECH

AL-N12 (Ni-Silver) ROLLED PRODUCTS

CHEMICAL COMPOSITION, %	
Cu	61-65
Ni	11-13
Zn	Rem.
Fe	≤0.25
Mn	≤ 0.5

ALLOY DESIGNATIONS	
UNS	C74500
EN	CuNi12Zn24
JIS	C7541
BS	NS104

COIL SHEET SPECIFICATIONS

Thickness (mm)	0.10- 3.0
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 - 3.00

*Note: Min. and Max. width depends on thickness of the strip

CHARACTERISTICS

AL-N12 is lead free Nickel silver with excellent cold forming properties, high mechanical strength and excellent welding and soldering properties.

Resistance to tarnishing and corrosion properties are good due to high nickel content

MECHANICAL PROPERTIES

Temper		Hardness , HV	Tensile Strength MPa	Elongation % Min.
Ann.	O	≤105	380-420	40
1/2 Hard	H02	≥130	420-520	20
Hard	H04	≥160	520-600	10
Extra Hard	H06	≥170	600-680	4

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)
8.69	8	40	125	380

ARCOTECH LTD

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



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Fabrication Properties

Capacity Being Cold Worked	Excellent
Machinability	Less Suitable
Capacity for Being Electroplated	Excellent
Capacity for Being Hot Dip Tinned	Excellent
Soft Soldering	Excellent
Resistance Welding	Excellent
Gas Shielded Arc Welding	Excellent
Laser Welding	Good

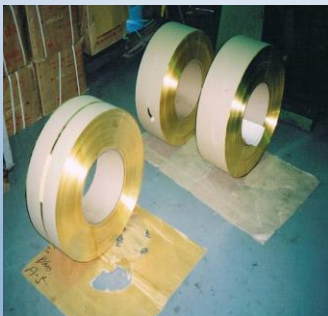
CORROSION RESISTANCE

Good resistance to atmospheric influences, organic compounds, neutral and alkaline saline solutions.

Less sensitive to stress corrosion cracking as compared to brass

Packaging

Standard seaworthy packaging or as per specific requirements of customer.



TYPICAL APPLICATIONS

- Deep Drawn Parts
- Contact Springs
- Connectors
- Keys
- Cutlery

AL-N12 conform ROHS Directive

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

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