



ARCOTECH

AL-65(CuZn35) ROLLED PRODUCTS

CHEMICAL COMPOSITION(%)

Cu	64.00-66.00
Fe	≤0.05
Pb	≤0.05
Ni	≤0.10
Zn	REM

ALLOY DESIGNATIONS

UNS	C27000
EN	CuZn35
JIS	C2680
BS	CZ107

COIL/ SHEET SPECIFICATIONS

Thickness (mm) *	0.050- 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

Commercial Name is Yellow Brass

AL-65 is the major brass for the cold forming process. The forming properties of this alloy meet the demand of many applications and hence this is the most used alloy.

MECHANICAL PROPERTIES

Temper		Hardness , HV	Tensile Strength MPa	Yield Stress MPa	Elongation %	Grain Size
Ann.	O	60-75	285-340	≤170	≥45	0.035-0.100
1/4 Hard	H01	75-90	340-370	≥170	≥40	0.015-0.050
1/2 Hard	H02	95-125	390-450	≥220	≥28	≤0.015
3/4 Hard	H03	125-145	440-490	≥370	≥10	≤0.010
Hard	H04	140-160	480-550	≥410	≥5	≤0.010
Extra Hard	H06	160-185	540-630	≥460	-	≤0.005
Spring Hard	H08	≥185	≥630	≥550	-	≤0.005

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
8.47	27	116	110	380

ARCOTECH LTD

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AL-65(CuZn35) ROLLED PRODUCTS

Fabrication Properties

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

CORROSION RESISTANCE

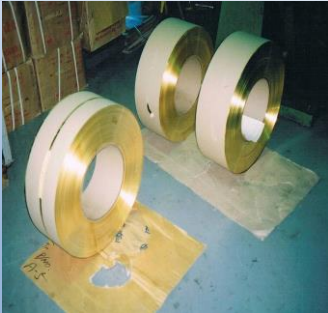
AL-65 is good corrosion resistant to water, water vapor, different saline solutions, many organic liquids, land, sea and industrial atmosphere.

Not resistant to acids, hydrous sulphur compounds, and hydrous ammonia in non-stress relieved conditions.

A heat treatment can help in avoid stress corrosion cracking.

Packaging

Standard seaworthy packaging or as per specific requirements of customer.



TYPICAL APPLICATIONS

- Radiator cores, Radiator tanks
- Sockets shells, Flashlight shells, Lamp fixtures, Reflectors
- Springs, Chain, Bead chain
- Connectors
- Stamped parts

AL-65 conform ROHS Directive

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

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