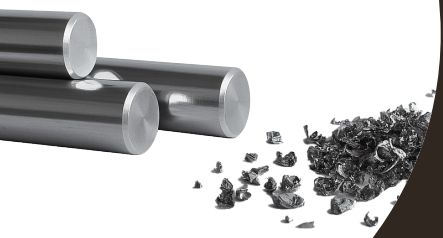

ARCAP ZEST®

$CuNi_{25}Zn_{14.5}$

Cu copper | Ni nickel | Zn zinc

ARCAP ZEST® is a Copper-Nickel-Zinc (CuNi25Zn14.5) alloy designed and produced by Lebronze alloys. This lead-free alloy exhibits high mechanical properties, excellent corrosion resistance, absolute non-magnetism and very good machinability. This alloy is a direct substitute to ARCAP® AP1D.

MATERIAL DESIGNATION

ISO	UNS	Others
CuNi25Zn14.5	NA	NA

CHEMICAL COMPOSITION (WEIGHT%)

Cu	Ni	Zn	Pb
Balance	25%	14.5%	< 0.01%

PHYSICAL PROPERTIES

General properties	
Density at 20 °C	8.8 g/cm³
Thermal conductivity at 20 °C	22 W/m.°C
Coefficient of thermal expansion from 20 to 200 °C	16 x 10^{-6}/°C
Young's modulus	165 GPa
Melting point	1150 °C
Relative magnetic permeability	1.0004
Electrical properties	
Resistivity at 20 °C	38 µΩ.cm
Electrical conductivity	4.5 %IACS

TYPICAL APPLICATIONS

Watch micro-component
Optic fiber connector
Aerospace instruments shielding

COMPATIBLE DOWNSTREAM PROCESS

Cold forming
Brazing
Soldering
Turning

KEY FEATURES

Strictly non-magnetic
Very good corrosion resistance
High machinability
Dimensional stability
No plating needed
Excellent polishing ability

STANDARD CAPABILITY*

Format	Size diameter Ø
Rods	1 - 60 mm
Wires	1 - 15 mm

**Dimensions outside these ranges on request*

MECHANICAL PROPERTIES

Temper	Yield Strength 0.2% (MPa)	Tensile Strength (MPa)	Elongation (%)
Other tempers on demand			
H14	≥ 560	≥ 600	≥ 1

Disclaimer : Data for information only, non-contractual