

TECHNICAL SHEET

Cu55ZnMn4Ni6

STELLA
WELDING ALLOYS

Product name

Cu55ZnMn4Ni6

Class of product

Copper based high-temperature brazing alloy

Corresponding standards

ISO 17672 -----
EN 1044 -----
AWS A5.8-04 -----
DIN 8513 -----

Nominal composition (weight %)

Cu: 54 - 56
Zn: Bal.
Ni: 5,5 – 6,5
Mn: 3,5 – 4,5
Si: 0,1 – 0,4

Physical and technical properties

Melting range (Solidus – Liquidus): 880 - 920 °C
Brazing temperature: ~ 930 – 1.040 °C
Density: ~ 8,9 g/cm³
Recommended joint gap: 0,05 – 0,15 mm

Range of application

Cu55ZnMn4Ni6 is a copper based, high temperature brazing alloy.

It is suitable to join steels, stainless steels, tool steels, nickel alloys and cemented carbides.

The alloy exhibits good ductility and high temperature strength.

Brazing procedures range from torch to induction. Because of its high zinc content the alloy is only marginally suited to furnace brazing.

The use of a proper high temperature flux is necessary.

Typical application of Cu55ZnMn4Ni6 are in the drilling tools sector for joining tool steel shanks to carbide bits, combining the brazing operation with the heat treatment of the tool steel body.

Characteristics Make-up

Rods
Wires
Strips
Rings
Preforms from Wire and from Strip

NOTE:

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