

Product Information

Copper nickel brass hard solder, B-Cu48ZnNi(Si)

For hard soldering of steel , copper, nickel, casting material

ISO 3677, DIN EN 1044; CU305
L-CuNi10Zn42, DIN 8513
Material-No.: 2.0711

Copper nickel brass hard solder "blank", Copper nickel brass hard solder "UM",
Art.-No.: 3020..../3021....

All information about our products are the result of our long standing experience, which we would like to pass on to our customers. Since we do not have any influence on the application with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not represent warranted properties.

Copper nickel brass hard solder, B-Cu48ZnNi(Si), (L-CuNi10Zn42)
 Copper nickel brass hard solder "UM", B-Cu48ZnNi(Si), (L-CuNi10Zn42)

Description

Hard solder with perfect strength for soldering steel, copper, nickel and casting as well as welding rods for welding brass and bronze.

Properties

FELDER copper nickel brass hard solder has excellent flow characteristics. Due to the Mn-, Si- and Sn-contents the solder shows an optimal resistance against corrosion and prevents cracking.

Composition (weight-%)	:	Cu	46,0	-	50,0
		Ni	8,0	-	11,0
		Si	0,1	-	0,3
		Zn	rest		
Working temperature	:		≥ 900°C		
Melting range	:	solidus:	890°C		
		Liquidus:	920°C		
Density	:		8,7 g/cm ³		
Tensile strength of soldering	:		at chrome nickel steel up to 800 N/mm ² at structural steel approx.. 400 - 450 N/mm ²		
Hardness HB	:		150 -180		

Application field

For hard soldering of steel, casting, copper, nickel. The soldering joints are applicable with operating temperatures up to 450°C. In addition our copper nickel brass hard solder suitably for welding brass and bronze excellent. It is use to manufacture wear resistant coatings, too.

Application advices

Soldering parts must be free of oxide layers, tinder dross, oils and greases. When using blank rods, we recommended using the hard solder paste "Universal" or hard solder powder "Universal".

Copper nickel brass hard solder, B-Cu48ZnNi(Si), (L-CuNi10Zn42)
Copper nickel brass hard solder "UM", B-Cu48ZnNi(Si), (L-CuNi10Zn42)

When using flux-coated hard solder (coppernickel brass hard solder "UM"):
 Work piece is heat up of up to 400°C, apply solder rod and let the flux melt. Heat up to working temperature and let the solder melt off. The flame of the solder burner should be adjusted neutral. The flux residues have to be removed thoroughly; they are water soluble.
 Attention must be paid to short soldering times in the temperature range approx. 600 -1000°C, because of the risc of chromium-carbide precipitation.

Delivery forms

Delivery forms	Dimensions
1000 mm rods blank	Ø 2,0 mm
	Ø 3,0 mm
	Other diameter on request
500 mm rods flux-coated hardsolder „UM“ FH 21 acc. DIN EN 1045	Ø 2,0 mm
	Ø 2,5 mm
	Ø 3,0 mm
	Ø 4,0 mm

Further information

Protect against humidity.

Please do not hesitate to contact us for any further information.