

TECHNICAL SHEET

Ag40Ni

Product name

Ag40Ni

Class of product

Silver based brazing alloy, cadmium-free

Corresponding standards (external brazing layers)

ISO 17672	Ag 440
EN 1044	-----
AWS A5.8-04	BAG-4
DIN 8513	-----

Nominal composition of external brazing layers (weight %)

Ag:	40
Cu:	30
Zn:	28
Ni:	2

Physical and technical properties

Melting range (Solidus – Liquidus):	670 – 780 °C
Brazing temperature:	~ 790 °C
Density:	8,9 g/cm ³
Recommended joint gap:	0,1 – 0,25 mm
Continuous service joint operating temp.:	-200 / +200 °C

Range of application

Ag40Ni is a special application, cadmium-free, silver brazing alloy, with good flow properties.

It can be used to join ferrous, non ferrous and dissimilar metals and alloys, such as steel, copper, copper alloys, nickel, nickel alloys.

It is particularly suited to join stainless steels and tungsten carbide cutting tips.

The nickel addition to the alloy retards joint or interface corrosion of the brazed assembly and improves bond strength.

Brazing procedures range from flame to induction techniques.

When brazing in an oxidizing environment a proper flux should be used.

Tensile strength of joints brazed with Ag40Ni will generally exceed base metals strength. Joint strength is however a function of various factors, such as: type of base metals to be joined, type of joint, joint clearance, brazing procedure, etc.

The main applications of this alloy are found in the joining of 300 series stainless steels in the food, medical and dental fields and in tool industry for the brazing of carbide tipped tools.

Characteristics Make-up

Rods:	Ø 0,5 ⇒ 4,0 mm	Length: 500 / 1.000 mm
Flux Coated Rods:	Ø 1,5 ⇒ 3,0 mm	
Wires:	Ø 0,25 ⇒ 3,0 mm	Spoiled and coiled
Strips:	Thickness: 0,1 ⇒ 1 mm	Width: 1,3 ⇒ 80 mm
Rings		
Preforms from Wire and from Strip		
Pastes & Powders		

Other dimensions are available upon request.

NOTE:

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