TECHNICAL SHEET
Ag12

STELLA WELDING ALLOYS

Product name
Ag12

Class of product
Silver based brazing alloy, cadmium free

Corresponding standards

ISO 17672	Ag 212
EN1044	AG 207
AWS A5.8-04	-----
DIN8513	-----

Nominal composition (weight %)

Ag:	12
Cu:	48
Zn:	40
Si:	0,05 – 0,25

Physical and technical properties

Melting range (Solidus – Liquidus):	800 – 830 °C
Brazing temperature:	840 °C
Density:	8,4 g/cm^3
Tensile Strength (filler metal):	48 kg/mm^2
Recommended joint gap:	0,075 – 0,2 mm
Continuous service joint operating temp.:	-200 / +200 °C

Range of application
Ag12 is a cadmium-free, silver brazing alloy, with high melting point and good fluidity at brazing temperature.

It is usually used to join ferrous metals and steels.
It may be used to braze also copper and some copper alloys.

Due to its high melting point can be successfully used for the step-brazing technique.

When brazing in an oxidizing environment a proper high-temperature flux, such as AG5 or BR1, should be used.

Tensile strength of joints brazed with Ag12 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.

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	Spooled 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.

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