

FONTARGEN AF 320 XL BF SILVER BRAZING ALLOY, CADMIUM FREE, FLUX COATED



Fontargen AF 320 XL BF is a high silver containing alloy with good flow characteristics and high ductility. It is suitable for brazing of stainless steel and copper alloys. Fontargen AF 320 XL BF suits to brazing joints operated at temperatures between -200°C and +200°C. Fontargen AF 320 XL BF offers a good corrosion resistance especially under high temperatures. Best color match while brazing stainless steel. The absence of cadmium makes it especially suitable for joints in the food industry. The boric acid free flux coating is the alternative to the existing products without SVHC-Substance Of Very High Concern.

Product features	Product benefits	User benefits
» Boric acid and Borax free flux coating	<ul style="list-style-type: none"> » Partly flexible » Excellent flowing characteristic » Easy removal of flux residues 	<ul style="list-style-type: none"> » Bending of the rod possible » No loss of flux coating during transport or in case of impact » Healthy and environment friendly » Less work for remove flux residues
» Low working temperature	» Low warpage on thin parts	<ul style="list-style-type: none"> » Time saving process » Interesting temperature window process » No annealing coloring on stainless steel
» High silver content	» Lowers down working temperature of the filler metal	» High ductility and tensile strength
» High service temperature	» No loss of strength at high temperatures (until 200°C)	» Possible usage on parts serviced at higher temperature
» Cadmium free	» Not hazardous to health	<ul style="list-style-type: none"> » Can be use in the food industry and drinking water applications » In line with safety tendency
» Small melting range	» Good flow properties	<ul style="list-style-type: none"> » Good capillarity effect, high quality of the joining » Fast brazing process



Typical applications

- » Heat elements
- » Plate heat exchangers
- » Measuring equipment / devices
- » Food industry
- » Electrical contacts

Mainly used for

- » Parts subject to diverse dynamics forces: (vibrations, dilatation, etc...)
- » Parts where no annealing coloring of stainless steel is important
- » Parts with high corrosion resistance requirements

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Classification			
AWS A5.8	EN ISO 17672	EN 1044	DIN 8513
BAG-36	Ag145Si	Ag104	L-Ag45Sn

Typical chemical composition, wt. %				
Cu	Ag	Zn	Sn	Si
Bal.	45	25.5	2.5	0.1

Mechanical properties						
Working Temperature	Melting Range	Specific weight	Elongation	Operating service temperatures of the joint	Max. service temperatures of the joint	Electrical conductivity
670°C	640°C/680°C	9.2 g/cm ³	12%	-200°C/+200°C	200°C	13 Sm/mm ²

Base materials
Unalloyed and alloyed steel, Nickel alloys, Brass, Bronze, Copper, Iron

Heat sources
Open flame, Induction, Resistance

Flux
FH 10 acc. to EN 1045 => F300 Series of Fontargen

Art. Nr.	Form	Dimensions (mm)	Packaging
30590	Rods	2.0 x 500	1 kg Box
42406	Rods	2.0 x 500	10 pcs. Plastic Tube

