

## FONTARGEN AF 320 XS BF SILVER BRAZING ALLOY WITH SIGNIFICANTLY REDUCED FLUX COATING



Fontargen AF 320 XS 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. **With the extra thin flux coating especially suitable for soldering connections with low flux requirements.** Fontargen AF 320 XS BF suits to brazing joints operated at temperatures between -200°C and +200°C. Fontargen AF 320 XS BF offers a good corrosion resistance especially under high temperatures. 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 but without SVHC-Substance Of Very High Concern.

Depending on requirements, 4 additional flux coatings are available (see page 2)

Product features	Product benefits	User benefits
» Extra thin flux coating (XS variant)	» Low flux content	» Less work for remove flux residues » Reduction of corrosion risks
» Boric acid and Borax free flux coating	» Partly flexible » Excellent flowing characteristic » Easy removal of flux residues	» 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	» 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
» Small melting range	» Good flow properties	» 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

# FONTARGEN AF 320 XS BF

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
670°C	640°C/680°C	9.2 g/cm <sup>3</sup>	12%	-200°C/+200°C	200°C

Base materials
Unalloyed and alloyed steel, Cast iron, nickel, copper, copper alloys, nickel, nickel alloys

Heat sources
Open flame, Induction, Resistance

Flux
FH 10 acc. to EN 1045

Product / BF=Boric acid free	Form / Dimensions (mm)*	Colour	Flux coating
AF 320 XS BF	Rods 2.0 x 500	White	XS = Extra Thin
AF 320 XD BF	Rods 1.5 / 2.0 / 3.0 x 500	Yellow	XD = Very Thin
AF 320 D BF	Rods 1.5 / 2.0 / 3.0 x 500	Yellow	D = Thin
AF 320 BF	Rods 1.5 / 2.0 / 3.0 x 500	Yellow	Standard
AF 320 XL BF	Rods 1.5 / 2.0 / 3.0 x 500	Yellow	XL = Extra Large

\* Other dimensions on request

