

In-Depth Know-How

FONTARGEN A 320 silver brazing alloy, cadmium free

Fontargen A 320 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 A 320 suits to brazing joints operated at temperatures between -200°C and +200 °C. Fontargen A 320 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.

Product features	Product benefits	User benefits
» 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
» Cadmium free	» Not hazardous to health	 » Can be use in the food industry and drinking water applications » In line with safety tendency
» 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 A 320

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
82190	Rods	2.0 × 500	1 kg Box
42403	Rods	2.0 × 500	10 pcs. Plastic Tube



