FONTARGEN A3015

COPPER PHOSPHORUS SILVER BRAZING ALLOY

Fontargen A3015 is a high silver containing alloy with good flow characteristics and very ductile. It is suitable for gap brazing of copper and copper alloys. The homogeneous dispersion of the phosphorus increases the ductility of the wire. Fontargen A3015 suits to brazing joints operated at temperatures between -70°C and +150 °C. Fontargen A3015 offers a good corrosion resistance except when in contact with sulfurous environment, especially under high temperatures. Due to the formation of brittle intermetallic compounds which can cause failures of the joint, phosphorus containing filler metals should not be used on Fe- and Ni- containing base alloys.

Product features	Product benefits	User benefits
» Very low phospho-rus content	» Very good ductility » Low filler metal working temperature	» Suitable for gap bridging and modelling works » Low brazing temperature process
» Silver content	» Lowers down working temperature of the filler metal » Allows dropping down phosphorus content	» Good mechanical characteristics
» Homogeneous dispersion of the phosphorus	» Reproductive flow characteristics » No phosphorus nest » Preforms manufacturing for half and/or full automated processes possible	» Good control of the wetting process » Easy bending of wires and rods if necessary
» Auto fluxing on Cu/ Cu applications	» Due to the presence of phosphorus in the alloy, there is no need of flux when brazing copper to copper. » However, when joining other base materials (e.g. bronzes / brasses), using an appropriated flux is necessary	» No post braze cleaning needed when brazing copper to copper
» Operation temperatures	» Determined by notched flexural impact test acc. to DIN EN 10045	» Can be used for joints/parts operated at temperatures between -60°C and +150°C

Typical applications

» Heat exchangers / Evaporators / Coils
» Domestic & Industrial Refrigerators
» Air Conditioners
» Water heaters / Boilers

Mainly used for

» Modelling works
» Parts subject to diverse dynamics forces: (vibrations, dilatation, etc...)

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Classification		
AWS A5.8	**EN ISO 17672**	**DIN 8513**
BCuP-5	CuP284	L-Ag15P

Typical chemical composition, wt. %			
Cu	**Ag**	**P**	**Others**
Bal.	15.0	5.0	0.15

Mechanical properties					
Working Temperature	**Melting Range**	**Specific weight**	**Elongation**	**Operating service temperatures of the joint**	**Recommended joint gap**
710°C	645°C/800°C	8.4g/cm^3	10%	-70°C/+150°C	0.05mm/ 0.2mm

Base materials
Brass, Bronze, Copper

Heat sources
Open flame, Induction, Resistance, Furnace

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

Productname	Form	Dimensions (mm)*	Packaging*
A3015	Rods/Wire/Rings	1.5 / 2.0 / 2.5 / 3.0 x 500	Bundle / Spool / Box / Bucket

* Other dimensions / packaging on request