

Technical data

Silver brazing filler metal

Silver-flo™ 60 – Cadmium free silver brazing filler metal

Product description

Silver-flo™ 60 is a cadmium free silver brazing alloy. It has a short melting range and a relatively low zinc content. In addition Silver-flo™ 60 has a brazing temperature that is above the annealing or stress relieving temperature of many copper-nickel alloys. Consequently Silver-flo™ 60 is recommended for use on cupro-nickel (in particular 70:30 cupro-nickel) and high nickel content copper alloys where intergranular penetration or stress cracking may otherwise be a problem.

Silver-flo™ 60 also offers resistance to dezincification in marine environments.

This alloy also provides a good colour match for stainless steel but should only be used for this application where crevice corrosion in the joints is not considered to be a service hazard.

The optimum joint gap for this filler metal at brazing temperature is normally 0.05-0.20mm.

Composition: 60%Ag, 26%Cu, 14%Zn

Specification: JM proprietary (formerly EN 1044 1999 AG202, BS 1845 (1984) AG13, DIN 8513 L-Ag60)*

Melting range: 695-730 °C

*Please note that the current standard for brazing filler metals ISO17672 does not contain a direct equivalent for this composition and the standards EN 1044 1999 AG202, BS 1845 (1984) AG13, DIN 8513 L-Ag60 are now obsolete.

Uses for this product

Silver-flo™ 60 is principally used on cupro-nickel (in particular 70:30 cupro-nickel), high nickel content copper alloys as well as a range of nickel chromium and nickel chromium iron alloys.

This filler metal can be used to join all the common engineering materials (excluding aluminium) – such as copper, copper alloys (including, brasses, bronzes, gun metal, nickel silvers, aluminium bronze, copper nickel) and steel (including, mild, carbon, tool steel, stainless steels and low alloy steel). It is not normally recommended for brazing tungsten carbide and PCD segments where lower melting or specialised silver brazing filler metals containing nickel / manganese are often preferred.

Conditions for use

This filler metal is mainly used for brazing in air with a flux. However, flux selection is application dependent. In most cases Easy-flo™ flux can be used in conjunction with Silver-flo™ 60. Please refer to JM technical department or flux product datasheets before selecting a flux.

Product availability

Rod	0.7mm, 1,5mm diameter
Wire, Strip, Foil, Flux coated rod	On request
Others	Rings, preformed shapes, brazing paste – on request

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