Johnson Matthey
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Technical data

Silver brazing filler metal

Argo-braze™ 40 – Silver brazing filler metal

Product description

Argo-braze™ 40 is a special-purpose silver-copper-zinc-nickel brazing filler metal. It has a comparatively long melting range and is consequently a good gap filling alloy that produces large fillets. It contains nickel that has been shown to improve wetting on cemented tungsten carbide and to reduce the tendency for interfacial corrosion on stainless steel.

Argo-braze™ 40 is primarily used for the brazing of tungsten carbide to steel where it provides an alternative in certain applications to Argo-braze™ 49H and Argo-braze™ 502 filler metals.

Argo-braze™ 40 can also be used to braze stainless steel, mild steel, cast iron and non-ferrous alloys. It should be noted that on the 300 series stainless steels it can offer a good degree of protection against interfacial corrosion, but on the 400 series freedom from interfacial corrosion cannot be guaranteed.

Argo-braze™ 40 is prone to liquate (separate into low and high melting constituents) if it is heated slowly through its melting range. For this reason rapid heating methods should be employed wherever possible.

Argo-braze™40 will fill joint gaps of between 0.1mm and 0.25mm at brazing temperature.

Composition: 40%Ag, 30%Cu, 28%Zn, 2%Ni

Conforms to: AWS A5.8 BAg-4, ISO 17672:2010 Ag 440

Melting range: 670-780˚C

Uses for this product

Argo-braze™ 40 is used for the brazing of tungsten carbide tips to steel backings. It can also be used on stainless steel, mild steel, cast iron and non-ferrous alloys. It has also been used to braze stainless steel parts in automotive applications.

Conditions for use

On small components Easy-flo™ Stainless Steel Grade Flux Powder or Easy-Flo™ 100 Flux Paste also sold as Mattiflux™ 100 Flux Paste are recommended. Where prolonged heating is required Tenacity™ No. 5 Flux Powder should be used.

Product availability

Brazing rods on request

Johnson Matthey PLC, Platinum Group Metal Services, Orchard Road, Royston, Herts, SG8 5HE, UK Rev.27/01/25.

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