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Technical data

Silver brazing filler metal

Argo-braze™ 85– Silver brazing filler metal

Product description

Argo-braze™ 85 is a highly specialised free flowing silver-manganese brazing filler metal. The product is suitable for brazing joints that will continuously operate at temperatures up to 260°C or in applications involving short time exposure to service temperatures of 425°C.

Being a copper free filler metal it is also suitable for use in applications involving contact with ammonia, such as the brazing of steel pipe joints in refrigeration systems.

It can be used to braze a wide range of materials - carbon steels, stainless steel, nickel alloys, cobalt based hard / wear resistant metals and tungsten carbide. It should be noted that joints produced by the alloy on stainless steel may not be resistant to attack by interfacial corrosion.

Composition: 85%Ag, 15%Mn

Conforms to: EN 1044 1999 AG501, AMS 4766, AWS BAg-23, ISO 17672:2010 Ag 485

Melting range: 960-970˚C

Uses for this product

This product can be used for the vacuum brazing of steam turbine blade components where elevated temperature strength is required and brazing temperatures are compatible with the heat treatment requirements of the parent material.

Conditions for use

Due to its high brazing temperature and manganese content Argo-braze™ 85 presents difficulties for flame brazing applications in air with a flux and as such the technique is only likely to be successful on small parts that can be heated rapidly to brazing temperature. Induction heating in air is a more favourable heating method due to the speed of heating that can be achieved. In both cases Tenacity™ No.125 Flux should be used as the flux.

While hydrogen based reducing atmosphere brazing is possible an extremely dry atmosphere is required to ensure filler metal wetting. Where the atmosphere is not sufficiently dry to allow filler metal wetting a flux can be used to promote wetting. When vacuum brazing with the product a partial pressure brazing technique needs to be used to suppress the vaporisation of both the silver and manganese content of the alloy.

Product availability

Special order only.

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