

Handy Flo[®] 462

GENERAL DESCRIPTION

Handy Flo 462 is a clean burning binder systems used in controlled atmosphere furnace brazing of steel assemblies, particularly in atmospheres of low hydrogen and high nitrogen. The recommended percentages of hydrogen and nitrogen are on the order of 10% and 90%, respectively. When blended with an appropriate copper, bronze or nickel base braze filler metal, the system will form high strength joints on most ferrous and non-ferrous base metals.

Handy Flo 462 is specifically recommended for use in an atmosphere furnace with a dew point temperature of -10°F to +10°F. Handy Flo 462 is a restrictive system. The binder system exhibits excellent slump characteristics, whereby the paste deposit will remain in place during the initial stages of heating and not slump out of the joint area. The product has been formulated for dispensing applications using automated dispensing equipment.

PRODUCT APPLICATION

Handy Flo 462 is recommended for use with braze filler metals that flow above 1900°F (1038°C) and include: pure copper, bronze alloys, copper-nickel alloys and copper/cuprous oxide.

BRAZING CHARACETRISITCS

Handy Flo 462 offers excellent vertical slump characteristic. The paste deposit will remain in place and will not spatter during the initial stages of the heating process. It is a restrictive system with no flashing ability once in molten form. Handy Flo 462 dries slowly and will not flake off the parts prior to heating operation; this allows pre-pasting of assemblies several hours prior to brazing operation. Handy Flo 462 is exceptionally clean burning. There is no residue following the brazing process. This product is not recommended for dry hydrogen (H₂) atmosphere or vacuum.

WARRANTY & STORAGE

Lucas-Milhaupt, Inc. warrants their Brazing and Soldering Paste products for 90 days from the date of shipment if stored in the original unopened container. Optimal storage conditions would be 65°F (18°C) - 75°F (24°C), clean and dry. It is recommended that the paste products are stored away from direct heat. Paste may require mixing to regain a homogenous mixture before application.

The 90 day warranty should not be interpreted as the shelf or useful life of the product. The paste products may be used well beyond the 90 day warranty, unless customer testing or production results indicate unsatisfactory performance of the product.

AVAILABLE PACKAGING

Handy Flo products are available in various size syringes, jars and cartridges. Paste may also be obtained in large containers prepackaged for immediate pneumatic dispensing operations

AVAILABLE FORMS

Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.

SPECIFICATIONS

Handy Flo 462 conforms to the following specifications: N/A

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 83-462;84-350 (X6482).

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Material Safety Data Sheet for Handy Flo 462.

WARRANTY CLAUSE

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