Alloy Application BrazeLet Ni613

BrazeLet Ni613, a nickel (Ni) based brazing alloy, features a best in class wetting behaviour on stainless steel material in vacuum or protective atmosphere. Its high level of alloyed chromium (Cr) results in a superior hot gas and acid corrosion resistance. The brazing alloy is best suited for brazing heat exchangers such as exhaust gas recirculation (EGR) cooler in automotive or tap water applications in home or industry.

Unlike the standardised Ni-based alloys, BrazeLet Ni613 is able to fill gap sizes of <0.05 mm to 0.2 mm without brittle phase lines or cracks. The resulting micro hardness of the brazing area is less than half of a Ni650 brazing gap. This leads to a more reliable and safe brazing.

The brazing paste BrazeLet Ni613D-9302 can be used for dispensing applications, typically found on heat exchanger inlet and outlet tubes, housing to core joints and hole plate to tube joints. It can be dispensed by using standard air pressure dispensing units. For better precision, screw dispense units are recommended.

The paste sticks on all bevel and vertical positions without the need of pre-drying but is easily removed using aliphatic solvents. BrazeLet Ni613D-9302 properties allow reliable application in a wide speed range as a result of the dispensing equipment / automatisation as well as the needle diameter. The paste can be delivered in 4 kg cartridges for use in automated applications or different sized cans for refilling of smaller cartridges for manual applications. For best performance, it is recommended to first stir it.