BrazeLet F300-20, a stainless 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 of heat exchangers, stainless oil coolers for commercial vehicles, exhaust gas recirculation (EGR) coolers in automotive or tap water applications in household or industry.

Unlike the standardised nickel (Ni) based alloys, BrazeLet F300-20 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 as well as more flexibility in part tolerances.

The brazing paste BrazeLet F300R-8501 can be used for roller coating fins or structured plates, typically found in flat heat exchanger designs. Depending on type of roller used the paste can be applied with thin layers either on top or on the side of the fin tips. Gap size between paste roll and scraper of 0.08 to 0.12 mm is recommended. The amount of paste is controlled by weight and is a function of the fins or structured plate design. BrazeLet F300R-8501 properties allow reliable application in a wide range of coating speeds, tested up to 20m/min. The oil based paste ensures reliable coating over time without drying on the roll. It has no settlement and no stirring is needed in the equipment. However, when opening a can from stock it is always recommended to stir the paste.

The coated fins can be dried with standard drying process (hot air) at 120°C-170°C. Here, the drying time depends on thermal mass, parts design and the used furnace and thus needs to be established. When dried, the paste has excellent adhesion to the metal sheet.

Customer support is provided every step of the way. We are deeply involved with you prior to delivery, offering expert advice to ensure an optimum solution. The Höganäs tech centres are well equipped to support all kinds of trials for roller coating applications and the parameters can be targeted at customers’ process. We can provide test series of components with paste applied the same way as in final production in order to make sure the customers’ productivity and quality requirements are fulfilled.