Overview on the Industrial Brazing

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Abstract

An overview of the state-of-art in research and industrial implementation of the innovative brazing of the thin plates, underscoring details of the experimental procedures, setups and results is targeted. Comparative analysis of the conclusions of various researches is aimed, as too. MIG Brazing (MIGB) started to be tested and industrially implemented (mainly in the automotive industry for galvanised steel plates), as well as other (hybrid) Brazing variants, namely AC-MIGB, LASER Brazing, LASER - MIGB, Plasma Brazing being meant to replace the MIG Welding, which usually introduces too much heat in the joint during the welding process.

Due to the actual trend, which requires a wider use of innovative brazing processes in various manufacturing processes of similar and dissimilar metallic and non-metallic materials, the paper aims at contributing to underscore the main features of the innovative brazing procedures, mainly targeting the optimisation of the technological factors, with the assurance of all the quality indicators of the joint. Final conclusions regarding the further trends in new brazing technologies, research and industrial applications are presented.

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