

Title (en)

METHOD AND DEVICE FOR RESISTANCE WELDING STEEL SANDWICH SHEETS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM WIDERSTANDSSCHWEIßEN EINES SANDWICHBLECHS

Title (fr)

PROCÉDÉ ET DISPOSITIF DE SOUDAGE PAR RÉSISTANCE D'UNE TÔLE SANDWICH

Publication

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Application

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Abstract (en)

[origin: WO2016116188A1] The invention relates to a method for resistance welding of a steel sandwich sheet to at least one further component, said steel sandwich sheet having two metal cover layers and a thermoplastic layer arranged between the metal cover layers. According to the invention, the region of the steel sandwich sheet to be welded is heated in such a way that the thermoplastic layer softens and is displaced from the welding region by the pressing together of the cover layers. The cover layers and the further component are welded to each other by a flow of electric current for welding in a first circuit comprising a first source via a first and a second welding electrode, the first welding electrode being arranged on the side of the steel sandwich sheet and the second welding electrode being arranged on the side of the additional component. The aim of the invention is to provide a method which is simple to carry out and which can also have a short cycle time. Said aim is achieved in that the region of the steel sandwich sheet which is to be welded is heated by a flow of current for preheating in a second circuit, said second circuit comprises an electric conductor which is arranged between the first welding electrode and the sandwich sheet and a second source.

IPC 8 full level

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