

Title (en)

METHOD FOR INCREASING THE STABILITY AND/OR LOAD CARRYING ABILITY OF WORK PIECES BY MEANS OF FRICTION WELDING

Title (de)

VERFAHREN ZUR ERHÖHUNG DER FESTIGKEIT UND/ODER BELASTBARKEIT VON WERKSTÜCKEN DURCH DIE METHODE DES REIBSCHWEISSENS

Title (fr)

PROCEDE POUR AUGMENTER LA RESISTANCE ET/OU LA LIMITE DE CHARGE DE PIECES USINEES PAR LA METHODE DU SOUDAGE PAR FRICTION

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Application

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Abstract (en)

[origin: WO2005018865A1] The invention relates to a method for at least locally increasing the stability and/or load carrying ability of work pieces (10), whereby first of all a first work piece (11) is produced by means of a conventional manufacturing method. The inventive method is characterized by the following steps: a) the first work piece (11) is then provided with a hole (13) in the area where stability and/or load carrying ability are to be increased; b) a second work piece (12) which consists of a stability- and/or load carrying ability-increasing material is introduced into the hole (13); c) in this state, the second work piece (12) is rubbed relative to the first work piece (11) according to the friction welding method until the welding temperature is reached which lies below the melting temperature of the two work pieces (11, 12), thereby obtaining a friction-welded connection between the first work piece (11) and the second work piece (12) and producing the work piece (10).

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