

Title (en)
DEVICE AND METHOD FOR INCREASING THE SPEED AND INCREASING THE STABILITY OF THE WELDING PIN IN FRICTION STIR WELDING

Title (de)
VORRICHTUNG UND VERFAHREN ZUR ERHÖHUNG DER SCHNELLIGKEIT UND DER ERHÖHUNG DER STANDFESTIGKEIT DES SCHWEIßPINS BEIM RÜHRREIBSCHWEIßEN.

Title (fr)
DISPOSITIF ET PROCÉDÉ POUR AUGMENTER LA RAPIDITÉ ET LA STABILITÉ DE LA BROCHE DE SOUDAGE LORS DU SOUDAGE PAR FRICTION-MALAXAGE

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Application
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Abstract (en)
[origin: CA3119929A1] The invention relates to a device and method for increasing the speed and increasing the stability of the welding pin in friction stir welding with the following device features: a) a tool drive (1) has a retaining flange (2) for a cone-shaped tool cover (3) with a union nut (4); b) an annular retaining ring (12) surrounds a pin shank (6) with a tool shoe (7) secured to the diameter of the retaining ring (12), wherein the tool shoe (7) has a smoothing and compressing surface (11) in the region of the pin tip (10) for smoothing the weld seam, wherein the pin shank has the width of the tool shoe (7); c) the pin tip (10) has an annular friction surface (9) which surrounds a screw conveyor (8) for the output of material transport from the pin tip (10), which has a thread running in the opposite direction to the thread of the pin tip (10).

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