Title (en)

SHORT-TIME ARC WELDING SYSTEM AND METHOD

Title (de

KURZZEIT-LICHTBOGENSCHWEISSSYSTEM UND -VERFAHREN

Title (fr)

SYSTEME ET PROCEDE DE SOUDAGE A L'ARC DE COURTE DUREE

Publication

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Application

EP 03704615 A 20030214

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Abstract (en)

[origin: WO03070412A1] The invention relates to a short-time arc welding system (10) and method for welding elements (32) on parts (34a). The system is equipped with: a robot (12) having at least one arm (16) that can move in at least one coordinate axis (x, y, z); a welding head (22), which is mounted on the arm (16) and on which a holding device (30) for holding an element (32) and a lifting device (36) for advancing and returning the holding device (30) with regard to the welding head (22) are provided, and; a measuring system (31a, 44, 46) for determining the relative position between a part (34) and an element (32), which is to be welded onto the part (34) and is held by the holding device (30). The measuring system has a stand (31a), which is mounted on the welding head (22) and which is designed to be, during operation, in contact with the part (34a) in order to determine the relative position between the element (32) and the part (34). The inventive system is also equipped with a storage device (46), inside of which a number of welding positions can be stored. The measuring system additionally comprises positioning means (50) for positioning the stand (31a) with regard to an element (32) held inside the welding head (22) in a multitude of at least two different operating positions (a-c), and the measuring system (46) is designed for positioning the stand (31a) each time into an appropriate operating position for each stored welding position.

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