

Title (en)
SELF-PIERCING RIVET SETTING MACHINE

Title (de)
VORRICHTUNG ZUM STANZNIETEN

Title (fr)
MACHINE DE POSE DE RIVETS AUTOPERFORANTS

Publication
EP 1379343 A1 20040114 (EN)

Application
EP 02717783 A 20020409

Priority
• JP 2001117912 A 20010417
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Abstract (en)
[origin: WO02083337A1] To provide a self-piercing rivet setting machine capable of handling even a particular workpiece which has a standing wall requiring an extended distance between a punch and a die, without any need for providing a larger C-shaped frame. A self-piercing rivet setting machine (1) comprises a C-shaped frame (3), punch (9) disposed at one end of the C-shaped frame (3), and a die (10) disposed at the other end of the C-shaped frame (3). The punch is attached to the edge of a receiver unit (14) and it is pressed against the die by a punch-driving unit (11). A plurality of workpieces are placed between the punch and the die to be connected with each other by driving a self-piercing rivet in the workpieces to cause the self-piercing rivet to pierce the workpieces. The receiver unit (14) includes a hollow shaft (17) having one end connected with a feeding tube (13) extending from a feeding device. The hollow shaft (17) is supported by a support tube (15) of the C-shaped frame (3). The receiver unit (14) further includes a receiver head (18) having an edge to which the punch is attached. The receiver head (18) is formed to receive the self-piercing rivet fed from the other end of the hollow shaft (17) and to allow the received self-piercing rivet fed from the other end of the hollow shaft (17) and to allow the received self-piercing rivet to be held by the punch one by one. The hollow shaft (17) is supported to the support tube (15) slidably in the axial direction and rotatably in the circumferential direction thereof. The receiver head 18 is connected to the hollow shaft (17) to be selectively moved to either a first position (fig. 1) where the punch is face with the die or a second position (fig. 2) where the punch is spaced apart from the die, according to the sliding and rotating of the hollow shaft.

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