

Title (en)

DEVICE FOR DRIVING A FASTENING ELEMENT INTO A BASE AND USE OF SAID DEVICE

Title (de)

GERÄT ZUM SETZEN EINES BEFESTIGUNGSELEMENTES IN EINEN SETZUNTERGRUND UND VERWENDUNG DES GERÄTES

Title (fr)

APPAREIL POUR PLACER UN ELEMENT DE FIXATION DANS UNE BASE D'APPUI ET UTILISATION DUDIT APPAREIL

Publication

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Application

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Priority

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Abstract (en)

[origin: DE19800847A1] The invention relates to a device for driving fastening elements into a base for the purpose of fastening structural components. Said device has a working piston whose range of acceleration and deceleration can be adapted to different conditions whilst maintaining an optimal driving depth (31) and minimal piston length (32). This applies to mechanical, pyrotechnical, pneumatic, electromagnetic and electrothermal working piston drive mechanisms. These devices can be configured for manual use or for production robots, and are characterised mainly in that the working stroke is limited by a piston sleeve (35) which is connected to the piston plate (11), a land (39) which is connected to a ring element (38) or a combination of the two. A chamber is therefore formed on the piston plate side (48a) and the ring side (48b). Said chamber accommodates an e.g. mechanical return device (8) which is subjected to its own load only during the driving-in and gauging processes. The remaining piston energy is cushioned by a buffer (30). The modular configuration of the piston plate (11) and the piston shaft (10) means that the components can be optimised independently in terms of shape and material. The piston mass can be varied considerably. The device can be configured with any degree of rigidity and can be adapted to different fastening elements, bases and driving-in conditions.

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