

Title (en)

METHOD AND FORMING TOOL FOR HEAT-FORMING, AND CORRESPONDING WORK PIECE

Title (de)

VERFAHREN UND UMFORMWERKZEUG ZUM WARMUMFORMEN SOWIE ENTSPRECHENDES WERKSTÜCK

Title (fr)

PROCÉDÉ ET OUTIL DE FORMAGE À CHAUD ET PIÈCE CORRESPONDANTE

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Application

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Abstract (en)

[origin: WO2015197469A1] The invention relates to a method for heat-forming a work piece (1), in particular a blank made of sheet steel, wherein: the work piece (1) is heated before being formed; the heated work piece (1) is then heat-formed in a forming tool (2), having two tool components (3, 4) in the form of a die (3) and a punch (4), by coming into contact with both tool components (3, 4); and then at least sections of the formed work piece (1) are directly exposed to a gas surrounding the forming tool (2), thereby quenching said work piece. According to the invention, in order to achieve the highest possible fatigue strength with low weight and reduced production costs, after the forming process, at least one tool component part (4.1) of the one tool component (4) is moved away from the side (1a) of the formed work piece (1) facing the tool component (4), while the side (1b) of the formed work piece (1) facing away from said tool component (4) remains entirely in contact with the other tool component (3). The invention also relates to a corresponding forming tool (2) and a corresponding work piece (1).

IPC 8 full level

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