

Title (en)

METHOD FOR FORMING A SHAPED PART AND SHAPED PART

Title (de)

VERFAHREN ZUR BILDUNG EINES FORMTEILS UND FORMTEIL

Title (fr)

PROCÉDÉ POUR LA FORMATION D'UNE PIÈCE MOULÉE, ET PIÈCE MOULÉE

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Application

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Abstract (en)

[origin: WO2018145926A1] The invention relates to a method for forming a shaped part from a lightweight metal or a lightweight metal alloy by extrusion of a slug performed along a pressing axis (X). According to the invention, it is provided that the shaped part is formed in at least one region with a deviation from a basic form that is rotationally symmetrical with respect to the pressing axis, this symmetry-deviating region extends over a wall portion (6.1) of the shaped part that is formed by backward cup extrusion with a normal vector extending predominantly orthogonally in relation to the pressing axis, and in the same extruding operation forming a structure (7) that surrounds the pressing axis, in particular encircles the pressing axis, on a sheet-like base (5) of the shaped part that adjoins the wall portion and has a normal vector extending predominantly in the direction of the pressing axis on the side thereof opposite from the wall portion, by forward cup extrusion, forward hollow extrusion or forward solid extrusion, wherein, in a region of lowest wall thickness of the wall portion at the transition to the base, the quotient of this wall thickness in [mm] and an average curvature (1/r) in [mm⁻¹], formed at the transition, is greater than 0.03, preferably greater than 0.1, more preferably greater than 0.3, in particular greater than 0.6 and/or, in an at least predominant region of the base-wall transition when seen in the circumferential direction, the ratio of the wall thickness to the base thickness is less than 1.0, preferably less than 0.85, in particular less than 0.7. The invention also relates to an extruded shaped part of a lightweight metal or a lightweight metal alloy.

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