

Title (en)
METHOD FOR SHAPING STRUCTURES COMPRISED OF ALUMINUM ALLOYS

Title (de)
VERFAHREN ZUM UMFORMEN VON STRUKTUREN AUS ALUMINIUM-LEGIERUNGEN

Title (fr)
PROCEDE DE FORMAGE DE STRUCTURES EN ALLIAGES D'ALUMINIUM

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Abstract (en)
[origin: WO0226414A1] The invention relates to a method for shaping complex structures comprised of aluminum alloys, especially comprised of naturally hard AlMg alloys, naturally hard AlMgSc alloys, and/or of hardenable AlMgLi alloys. The aim of the invention is to provide a method of the aforementioned type with which complex structures comprised of the inventive alloys can be shaped in a simple manner, that is to say, while using the smallest number of process steps. Said structures are shaped in such a manner that they nearly assume their final shape without significant spring-back. At the same time, the loss of material should be held to a minimum. To this end, the inventive method involves the following steps: elastically shaping a part (1), which is to be reshaped, into a predetermined contour (2a) while subjecting the part to the action of an external force (F, P, p), and; heating the elastically shaped part (1) to a temperature (T1) that is greater than that required for effecting a creep shaping and stress relaxation of the alloy so that the part (1) is shaped while maintaining the contour (2a).

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