

Title (en)
A METHOD OF HOT-SHAPING AND HARDENING A SHEET STEEL BLANK

Title (de)
VERFAHREN ZUM HEISSFORMEN UND HÄRTEN EINES STAHLBLECHROHLINGS

Title (fr)
PROCÉDÉ DE FAÇONNAGE À CHAUD ET DE DURCISSEMENT D'UN FLAN DE TÔLE D'ACIER

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Application
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Abstract (en)
[origin: WO2013006108A1] A sheet steel blank is heated to the austenite range and formed in a cooled tool pair that rapidly cools the formed product until the product's temperature drops somewhat below the temperature Ms for the start of the formation of martensite. The cooling is rapidly interrupted and the product's temperature is raised until it exceeds Ms and is maintained there until the material comes to contain more than 50% by volume bainite. The short time under the Ms temperature favours the formation of bainite and shortens the holding time.

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