

Title (en)
PROCESS OF MANUFACTURING A PART FROM AN AIR HARDENABLE STEEL AND THE PART MANUFACTURED BY THE PROCESS

Title (de)
VERFAHREN ZUM HERSTELLEN EINES BAUTEILS AUS EINEM LUFTHÄRTBAREN STAHL UND EIN DAMIT HERGESTELLTES BAUTEIL

Title (fr)
PROCÉDÉ DE FABRICATION D'UN PART D'UN ACIER AUTOTREMPANT ET UN PART PRODUIT SELON CETTE PROCÉDÉ

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EP 10739473 A 20100621

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• DE 102010024664 A 20100618

Abstract (en)
[origin: WO2011000351A1] The invention relates to a method for producing a component of an air-hardenable steel. The steel is composed of the following elements (contents in mass %): C < 0.20; Al < 0.08; Si < 1.00; Mn 1.20 to < 2.50; P < 0.020; S < 0.015; N < 0.0150; Cr 0.30 to < 1.5; Mo 0.10 to < 0.80; Ti 0.010 to < 0.050; V 0.03 to < 0.20; B 0.0015 to < 0.0060; the remainder being iron including the usual elements present in steel. According to the invention, a hot- or cold-rolled sheet steel or steel pipe section is heated to a temperature of dblank = 800 to 1050 °C and is subsequently formed in a shaping tool into a component. After removal from the tool, it is cooled in air wherein, after the removal from the shaping tool, the component still has a temperature above dremoval = 200 °C and below 800 °C and achieves the required mechanical properties during the air-cooling process.

IPC 8 full level
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Cited by
DE102019126378A1; WO2017152907A1; WO2018153755A1; DE102016107152A1; WO2017182382A1; DE102016102504A1; WO2017137304A1; US10876195B2; DE102019100140A1; WO2020141147A1; WO2021063899A1; US11795535B2

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DOCDB simple family (publication)
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