Title (en)

METHOD FOR PRODUCING METALLIC COMPONENTS HAVING ADAPTED COMPONENT PROPERTIES

Title (de)

VERFAHREN ZUM ERZEUGEN METALLISCHER BAUTEILE MIT ANGEPASSTEN BAUTEILEIGENSCHAFTEN

Title (fr)

PROCÉDÉ DESTINÉ À PRODUIRE DES COMPOSANTS MÉTALLIQUES À PROPRIÉTÉS DE COMPOSANTS ADAPTÉES

Publication

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Application

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Abstract (en)

[origin: WO2019122372A1] The invention relates to a method for producing a steel sheet component according to a press hardening or shape hardening method, wherein the steel sheet component is produced such that a blank having at least one region made of a highly hardenable carbon-manganese-boron steel and at least one dual-phase steel is cold-formed, subsequently heated and quenched in a cooling press, or a blank having at least one region made of a highly hardenable carbon-manganese-boron steel and at least one region made of a dual-phase steel is heated to a temperature above the austenitization temperature of the highly hardenable steel material and is subsequently converted into the steel sheet component in a shaping and cooling press with one stroke or several strokes, wherein a dual-phase steel is used as the softer material and as a partner for the highly hardenable carbon-manganese-boron steel, the Ac3 value of said dual-phase steel being increased to such an extent that, at the required annealing temperatures for the austenitization of the carbon-manganese-boron steel, only a partial austenitization of the dual-phase steel takes place so that upon insertion into the cooling press, the dual-phase steel has a ferritic matrix and also comprises austenite.

IPC 8 full level

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