

Title (en)
MANUFACTURING METHOD FOR HOT STAMPING COMPONENT HAVING ALUMINIUM-SILICON ALLOY COATING, AND HOT STAMPING COMPONENT

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER HEISSPRÄGEKOMPONENTE MIT ALUMINIUM-SILIZIUM-LEGIERUNGSBESCHICHTUNG UND HEISSPRÄGEKOMPONENTE

Title (fr)
PROCÉDÉ DE FABRICATION D'UN ÉLÉMENT D'ESTAMPAGE À CHAUD DOTÉ D'UN REVÊTEMENT EN ALLIAGE ALUMINIUM-SILICIUM, ET ÉLÉMENT D'ESTAMPAGE À CHAUD

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Application
EP 19847997 A 20190906

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• CN 2019104708 W 20190906

Abstract (en)
A manufacturing method for a hot stamping component having an aluminium-silicon alloy coating, and a hot stamping component, said method comprising the following steps: a steel plate coated with an aluminium-silicon alloy coating is machined into a blank having a shape required for a part, and the blank is subjected to heat treatment and hot stamping. The blank heat treatment is two-stage or three-stage heating, and the temperature of the heating increases in steps. The steel plate coated with the aluminium-silicon alloy coating comprises a substrate, and the aluminium-silicon alloy coating on at least one surface of the substrate. The present method fully takes into account the characteristics of the aluminium-silicon coating, effectively solves the problem of aluminium-silicon coating roller adhesion, reduces the probability of heat treatment furnace roller nodulation, increases roller service life, and also ensures the integrity of the hot stamping component coating, and the mechanical properties, welding performance, coating performance and corrosion resistance of the component.

IPC 8 full level
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