

Title (en)

METHOD FOR HEAT-TREATING A COMPONENT WHICH CONSISTS OF A METAL MATERIAL AND COMPRISES AT LEAST ONE SURFACE SECTION COATED WITH A GLAZE OR ENAMEL COATING

Title (de)

VERFAHREN ZUM WÄRMEBEHANDELN EINES AUS EINEM METALLWERKSTOFF BESTEHENDEN BAUTEILS MIT MINDESTENS EINEM MIT EINER GLASUR- ODER EMAILLE-BESCHICHTUNG BESCHICHTETEN FLÄCHENABSCHNITT

Title (fr)

PROCÉDÉ DE TRAITEMENT THERMIQUE D'UN COMPOSANT CONSTITUÉ D'UNE MATIÈRE MÉTALLIQUE ET POURVU D'UNE PARTIE DE SURFACE REVÊTUE D'UN REVÊTEMENT ÉMAILLÉ OU VERNISSÉ

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Application

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Abstract (en)

[origin: WO2017149380A1] The invention relates to a method for heat-treating a component (1) which consists of a metal alloy and in which or on which at least one surface section (7) is coated with a glaze or enamel coating (9). The component (1) is heated to a heating temperature which at least equals a minimum quenching temperature, and the component (1) is quenched starting from a temperature which at least equals the minimum quenching temperature in order to produce a higher-strength microstructure in the component (1). By using the method according to the invention, the pertinent components (1) can be heat-treated such that maximum strengths of the component (1) are reached and the glaze or enamel coating (9) is reliably prevented from chipping. For this purpose, the glaze or enamel coating (9) is pre-cooled to a pre-cooling temperature at least on the free surface (9') of the coating prior to the quenching process, said pre-cooling temperature maximally corresponding to the temperature at which the glaze or enamel coating (9) begins to soften, and the cooling rate at which the glaze or enamel coating (9) is cooled is lower than the target cooling rate during the quenching process.

IPC 8 full level

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