

Title (en)
THERMALLY TREATING A COATED COMPONENT

Title (de)
THERMISCHES BEHANDELN EINES BESCHICHTETEN BAUTEILS

Title (fr)
TRAITEMENT THERMIQUE D'UN COMPOSANT REVÊTU

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Application
EP 21708199 A 20210224

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Abstract (en)
[origin: WO2021175686A1] The invention relates to a method for thermally treating a coated component (2), having the steps of: a) thermally treating the component (2) in a first continuous furnace (3) that is divided into a first zone (6) and a second zone (7), which adjoins the first zone and through which the component (2) passes afterwards, in the transport direction (r) of the component (2), wherein the component (2) is heated to a first temperature (T1) lying above the ACS temperature (TAC3) of the component (2) in the first zone (6) and is cooled to a second temperature (T2) lying below the AC3 temperature (TACS) of the component (2) in the second zone (7), b) transferring the component (2) from the first continuous furnace (3) into a temperature control station (4), and c) thermally treating the component (2) in the temperature control station (4). A first region of the component (2) is exposed to a temperature which on average lies above the AC3 temperature (TAC3) of the component (2), and a second region of the component (2) is cooled. By virtue of the aforementioned thermal treatment which varies from section to section, the coated component (2) obtains a ductility which varies from section to section, said ductility being advantageous in B pillars for motor vehicles for example. By heating the component to a temperature above AC3 and then cooling the component to a temperature below AC3 in the first continuous furnace (3), a particularly readily adjustable thickness of the interdiffusion layer of the coating of the component (2) is achieved.

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