

Title (en)

METHOD FOR PRODUCING A LOCALLY BORONIZED OR CHROMIZED COMPONENT

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES LOKAL BORIERTEN ODER CHROMIERTEN BAUTEILS

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE PIÈCE RECOUVERTE DE BORE OU DE CHROME LOCALEMENT

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Application

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Abstract (en)

[origin: WO2015058932A1] The invention relates to a method for producing a component (1) which is made of a low-alloyed steel material and is exposed to pressure and wear at least in a locally limited region, said method comprising the following method steps: a) machining the component (1) in a state in which it has not been heat-treated, b) locally covering the component (1) with a powder (2) comprising essentially either boron or chromium, c) heat-treating the component (1) covered locally with powder (2) for the locally limited diffusion either of boron atoms from the boron-comprising powder or of chromium atoms from the chromium-comprising powder (2) into the marginal layer of the component (1) at a first temperature, which is greater than the austenitization temperature of the low-alloyed steel material, d) cooling the component (1) to room temperature and removing the powder (2), and e) heat-treating the component (1) again to set either a martensitic or a bainitic microstructure (4) at a second temperature, which is lower than the first temperature.

IPC 8 full level

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