

Title (en)

METHOD FOR THE HOT FORMING OF A STEEL COMPONENT

Title (de)

VERFAHREN ZUR WARMUMFORMUNG EINES STAHLBAUTEILS

Title (fr)

PROCÉDÉ DE FORMAGE À CHAUD D'UN ÉLÉMENT EN ACIER

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Application

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Abstract (en)

[origin: WO2016198186A1] The invention relates to a method for the hot forming of a steel component (1). The steel component is heated into a range of complete or partial austenitization in a heat treatment step (II). The heated steel component (1) is both hot-formed and quench-hardened in a forming step (III). A first pre-treatment step (Ia) precedes the heat treatment step (II) in terms of process, in which first pre-treatment step the steel component (1) is provided with a corrosion-resistant protective layer (15) in order to protect against scaling in the heat treatment step (II). According to the invention, before the heat treatment step (II) is performed, a surface oxidation process occurs in a second pre-treatment step (Ib), in which surface oxidation process a weakly reactive, corrosion-resistant oxidation layer (17) is formed on the scale protection layer (15), by means of which oxidation layer abrasive tool wear is reduced in the forming step (III).

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