

Title (en)

METHOD FOR INCREASING THE DYNAMIC STABILITY UNDER LOAD OF A TOOTHED STRUCTURAL COMPONENT

Title (de)

VERFAHREN ZUM ERHÖHEN DER DYNAMISCHEN BELASTBARKEIT EINES VERZAHNTEN BAUTEILS

Title (fr)

PROCEDE PERMETTANT D'AUGMENTER LA CHARGE DYNAMIQUE D'UN ELEMENT STRUCTURAL DENTE

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Application

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Abstract (en)

[origin: WO03016582A2] The invention relates to a method for increasing the dynamic stability under load of a toothed structural component, especially a toothed wheel, which stability depends on the carbon content. The carbon content profile in an edge zone of the structural component is adjusted in such a manner that the carbon content, starting from the surface, first increases towards the core of the structural component and, as of a certain depth, continuously decreases. A part of the edge layer is removed from areas of the structural component whose dynamic load capacity increases as the carbon content on the surface of the structural component increases.

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