Title (en)
METHOD FOR DESIGNING AND MACHINING A GEAR, AND CORRESPONDING PROCESSING MACHINE AND SOFTWARE

Title (de)
VERFAHREN ZUM AUSLEGEN UND BEARBEITEN EINES ZAHNRADS, SOWIE ENTSPRECHENDE BEARBEITUNGSMASCHINE UND SOFTWARE

Title (fr)
PROCÉDÉ DE CONCEPTION ET D'USINAGE D'UNE ROUE DENTÉE, ET MACHINE D'USINAGE ET LOGICIEL CORRESPONDANTS

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Application
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Abstract (en)
[origin: WO2018149565A1] The invention relates to a method (200) for designing and machining a gear, having the following steps: a) designing (S1) a gear to be produced in a software-based computer-aided manner in order to obtain a function-oriented geometry (fG) of the gear, b) using a software-based computer-aided method (S2) for ascertaining a theoretically producible gear geometry which corresponds to the function-oriented geometry (fG) or which is used as an approximation of the function-oriented geometry (fG), c) providing production data (PD) which represents the theoretically producible geometry, d) machining (S3) a gear using the production data (PD) in a CNC-controlled processing machine (50), e) measuring (S4) the gear in order to obtain an actual data set (ID), f) carrying out a comparison (S5) of the actual data set (ID) with the production data (PD) in order to ascertain at least one correction variable (ΔPD), g) using (S6) the correction variable (ΔPD) in order to ascertain corrected production data from the production data (PD) or in order to carry out a machining correction in the processing machine (50), and h) post-machining the gear using the machining correction or using the corrected production data in order to machine at least one additional gear in the processing machine (50).

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