



Korrektur thermoelastischer Verformungen durch den Einsatz der adaptiven FEM

By Janine Glänzel

Verlag Wissenschaftliche Scripten Dez 2015, 2015. Taschenbuch. Book Condition: Neu. 1.1 x 21 x 14.7. Neuware - In the presented work it was shown that a mathematical model based on the methods of adaptive finite element could be developed for the calculation of thermo-elastic deformations of workpieces in production processes. This algorithm can also be applied for the position correction of successive drilling while taking into account thermal influences. The calculated correction values improve the quality of the production process as a result of the precisely positioned tool. In a subadditive approach of the correction algorithm, an additional algorithm was developed for the determination of roundness tolerance of the hole contour which can occur after the cooling process of the workpiece. Optimization considerations showed that the roundness tolerance of the hole can be minimized with an optimal travel time of the tool; to calculate the optimal travel time, a simulation approach was developed. The calibration of the correction method was established during the experiments, which were carried out to determine the important parameters of heat flux density and the heat Exchange coefficient, whereby the temperature field of the adaptive finite element simulation was best reproducible. In this respect, the thermo-elastic...



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It is an incredible book which i actually have ever go through. it had been writtern extremely completely and helpful. You can expect to like the way the blogger publish this book.

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Simply no words to spell out. It can be rally fascinating through studying period of time. You will not really feel monotony at at any moment of your own time (that's what catalogues are for concerning if you ask me).

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