Special Issue

Error Measurement, Analysis, and Compensation Technology for CNC Machine Tools

Message from the Guest Editors

CNC machine tools represent the core competitiveness of a country's manufacturing industry. They play an important role in national defense, aerospace, and automobile manufacturing. With the development of intelligent manufacturing, the demands regarding the accuracy of CNC machine tools have been increasing. Many factors influence the machining accuracy of CNC machine tools, including geometric errors, thermal errors, cutting force deformation errors, servo tracking errors, and so on. Error measurement, analysis, and compensation is one of the important ways to enhance the accuracy of the CNC machine tools. The objective of this Special Issue is to discover the most recent and significant developments in error measurement, error analysis, error modeling, and compensation for CNC machine tools. This Special Issue encourages and welcomes original research articles with a significant contribution to numerical, theoretical, and experimental analysis. Review articles related to these application areas are also invited.

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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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