

Special Issue

Mult-Axis Machining and CNC Systems: Innovations and Advancements

Message from the Guest Editors

Multi-axis machine tools are at the forefront of high-end equipment in the mechanical manufacturing industry. Beyond the widely recognized five-axis machines, the integration of multi-axis systems with advanced components such as galvanometers, electrochemical heads, and other micro-motion systems has significantly enhanced the flexibility and precision of modern manufacturing processes. This Special Issue seeks to provide a comprehensive platform for showcasing cutting-edge research and developments in new CNC architectures, innovative control methodologies, and advanced machine configurations for multi-axis machine tools and their control systems. Additionally, this Special Issue aims to address critical challenges in the field, including the enhancement of static accuracy through optimized structural design, the improvement of dynamic performance via novel servo control principles, and the increase in machining efficiency through advanced trajectory and motion planning techniques.

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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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