



Progress in Digital Twin Integration for Smart Machining

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Message from the Guest Editor

The manufacturing industry is confronted with increasing demands of digitalization and ever-increasing global competitiveness. Successful development and implementation of digital twin for machining processes as key enablers for quality assurance require close collaboration between the physical world and virtual world, realistic digitization, and model reliability of the virtual representation.

This Special Issue aims to bring researchers together concerning the latest advances and progress in the integration of digital models, digital shadows, or digital twin using physics-based models, surrogate models, and supervised machine learning methods. This Special Issue invites the submission of high-quality research articles related to Progress in Digital Twin Integration for Smart Machining, including but not limited to:

- Digital representation of machining process including mathematical, simulation models, etc.;
- Discretized force model, cutting tool discretization;
- Dynamic force model, surface location error model;
- Digital shadow or digital twin;
- Digital models with one-way or two-way automated data flow between physical and digital machining.





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Message from the Editor-in-Chief

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