Special Issue

Machine Tool Dynamics

Message from the Guest Editors

The dynamics of machine tools play an important role in productivity in machining processes, and the resulting part quality. The stability of the process against chatter strongly depends on the dynamic characteristics of the machine including the peripherals such as the tooling assembly. Various methods are used to measure, model and simulate the dynamics of machine tools. The results of these are essential in evaluating dynamic rigidity and machining process stability as well as weak parts and components of a machine tool. The research related to the theoretical, numerical and experimental modelling of machine tool dynamic properties will be covered in this Special Issue.

The main source of damping is at the interfaces and joints of the system. Several attempts to increase damping have been reported including passive dampers, the creation of highly damped interfaces, and the introduction of special materials, coatings and foams has been proposed. This Special Issue will cover different attempts to increase the damping of machine tools. For more information, please clink: mdpi.com/si/25492

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Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (JMMP)(ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to .IMMP.

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