Special Issue

Mechanical Tolerance Analysis in the Era of Industry 4.0

Message from the Guest Editors

Design changes or failures are mainly caused by the inaccurate prediction of the geometric deviations of the final products. Therefore, the ability to predict the geometric variation of a final product is a major challenge in many manufacturing sectors. These geometrical deviations add up with those due to physical phenomena, such as wear, thermal expansion, or part deformations, thus leading to further deterioration of product quality during use. The industry needs to face the management of geometrical deviations along the entire lifecycle of the product. In particular, the new Era of Industry 4.0 needs to revise the developed methods and models to be applied to the new digital factories, data-driven decision making, and new additive manufacturing thinking. In this Special Issue, we invite submissions on cutting-edge research and recent advances in the field of mechanical tolerance analysis in the era of Industry 4.0. Both theoretical and experimental studies are welcome, as well as comprehensive review and survey papers.

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Deadline for manuscript submissions

closed (28 February 2021)

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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