

Special Issue

Coordinate Measurements of Free-Form Surfaces

Message from the Guest Editor

This Special Issue concerns various aspects of measurements of free-form surfaces of complex products that are performed, among others, using CNC machine tools (on-machine measurement). The metrology of geometrical quantities and the coordinate measuring technique are the important parts of the product production process. The measurements of parts characterized by complex geometrical shapes are often conducted in, e.g., automotive and aviation industries. The accuracy of coordinate measurements of free-form surfaces depends on various factors, e.g., environmental conditions, algorithms of inspection software of measuring systems, and geometrical deviations of machines. In addition, users of coordinate measuring systems must plan the right measurement strategy to achieve the highest measurement accuracy. The measurement strategy may include different methods of distribution of measurement points, scanning velocities, and algorithms of probe radius correction.

Guest Editor

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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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