Special Issue

Intelligent Precision in Additive Manufacturing and Post-Processing

Message from the Guest Editors

Additive manufacturing (AM) has received tremendous attention, due to its ability to manufacture customised designs and the free-form fabrication of complex shapes. Although industries are now using AM processes, the precision of AM parts is still a major hurdle to full adoption and wider market acceptance. Lack of precision in additively manufactured parts has led to additional post-processing, which requires employing conventional subtractive manufacturing or non-conventional techniques to achieve a good surface finish and geometric accuracy. However, minimising post-processing operations on the AM parts is dependent on the precision of the AM process. Several other factors that affect precision include poor performance of the equipment, inappropriate selection of process parameters, lack of monitoring and controlling, and lack of understanding of the nature of AM processes. This Special Issue aims to provide a platform for the AM research community to contribute state-of-the-art developments in the field of precision for AM and its influence on post-processing.

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