Special Issue

Towards Sustainable Machining and Manufacturing: Process Optimization and Green Technologies

Message from the Guest Editors

This Special Issue explores how to make machining and manufacturing more sustainable by focusing on process optimization and green technologies. Optimizing processes involves minimizing waste, energy consumption, and environmental impact, and using recycled materials to a greener manufacturing approach. Sustainability in machining can be achieved by promoting environmental friendly practices such as dry machining, Minimum Quantity Lubrication (MQL), cryogenic cooling, and biodegradable or vegetablebased cutting fluids, etc. Combining two or more of these techniques can further enhance sustainability. The manufacturing sector is moving towards more sustainable practices, hence the growing interest in sustainability assessment., and the sustainability index is a tool that helps measure the sustainability of manufacturing process considering their environmental, economic, and social impacts.

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