

Special Issue

Modelling and Simulation of Sheet Metal Forming Processes

Message from the Guest Editors

Modelling and simulation of sheet metal forming processes involve continuous developments in different areas, such as: (i) constitutive modelling, including hardening, anisotropy and damage; (ii) friction modelling; (iii) failure criteria; (iv) strategies for parameters identification of constitutive, friction and failure models; (v) numerical models for description of the contact with friction conditions, including deformable tools; (vi) numerical strategies for the analysis of multistep sheet metal forming processes; (vii) optimization procedures combined with numerical simulation, to define forming process parameters; (viii) numerical simulation combined with statistical analysis tools; and (ix) application to novel sheet metal forming processes and materials, such as warm forming and multi-layer sheets. The aim of this Special Issue is to collect full papers, communications and reviews, about modeling and numerical simulation of sheet metal forming processes, which may contribute to bridge the gap between dream and virtual reality.

Guest Editors

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Editors-in-Chief

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