Special Issue

Design and Behavior of Innovative Tools and Devices for Manufacturing Sheet Metal

Message from the Guest Editor

Use of sensors and actuators strongly influence the design of contemporary forming tools and their behavior during the forming processes. Furthermore, the partial heating or cooling of tool or some tool segments is implemented into the tools in order to improve local workpiece formability. This enables increase of part complexity and its production accuracy. The presentation of innovative concepts and design for all types of forming tools and devices for sheet materials with their sensors, actuators and control systems is highly welcome in this special issue. In the Special Issue, recent advances on the study of innovative tools and devices for forming of sheet materials are highlighted and discussed, including but not limited to the following topics:

- Forming of sheet metal and non-metal plates and foils
- Innovative forming tooling concepts
- Smart tooling
- Adaptable forming devices and tools
- Sensors and actuators in forming tools
- Diagnostic in forming processes
- Computer vision and process control in forming processes
- Temperature-controlled forming tools
- Cryogenic-assisted forming processes
- Innovative tools and devices for incremental forming

Guest Editor

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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