Special Issue

Friction, Wear and Lubrication of Tool Steels in Metal Forming and Machining

Message from the Guest Editors

Metal forming and machining operations are important industries where new challenges arise constantly due to the development of materials and the current stringent requirements associated with environmental laws. The need for a more sustainable future calls for energy savings, reduced waste, and "green" solutions, which all together proportionally increase the challenges in friction, wear and lubrication in the metal forming and machining operations. Tooling is a critical aspect in both forming and machining, and thus, significant focus is given to understanding the tribological phenomena in the complex tool-workpiece contact, with the aim of increasing tool life, as well as process quality, and efficiency. This Special Issue aims to gather current salient research related to tool steels used in metal forming and machining operations. The issue covers aspects related to wear, friction and lubrication, both from a fundamental as well as from an applied research point of view.

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Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. Lubricants invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in Lubricants.

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