Special Issue

Continuous Casting and Hot Ductility of Advanced High-Strength Steels

Message from the Guest Editor

AHSS (advanced high-strength steels) are a very attractive option for the automobile industry. They have exceptional strength and ductility, which allow them to be fabricated without cracking, enabling thinner-gauge steel to be used. The weight reduction leads to a reduction in petrol consumption and harmful emissions. and for electrically operated automobiles, reduced energy requirements. However, their high production and material costs combined with their difficulty in continuous casting, restricts their more widespread usage. The aim of this Special Issue is to primarily select papers which deal with the ease of continuously casting these steels, but papers on their room-temperature properties will also be considered, as often the compositions giving excellent properties give poor hot ductility. The scope of this Special Issue covers the hot ductility of these steels and the latest innovations which may affect the ability to cast them.

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Deadline for manuscript submissions

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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.

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