

Contribution ID: 244

Type: Oral Presentation

Smart controlled actuator to homogenize the temperature of the transfer bar

Tuesday 7 October 2025 18:20 (20 minutes)

An RFCS funded project, SmartCool (RFCS-PDR 101057274) has been launched together with major European steel producers and research centres. The aim of this project is to develop a selective transfer bar cooling that is intelligently controlled to correct in real time transfer bar temperature distortions during production. A step by step approach has been initiated at the design phase and various laboratory characterization trials have been conducted with small scale and full scale prototype headers before moving to the industrialization phase.

At the time of submitting the abstract, a newly developed selective cooling header has been installed online, in the hot strip mill of ArcelorMittal Ghent and commissioning trials are on-going. During the next months, an intensive test schedule will be performed to evaluate the selective cooling performance and effectiveness to correct the temperature homogeneity of the transfer bar.

A more homogenous transfer bar temperature over the width will be a huge improvement for the mastering of strip steering at the finishing mill. It will reduce the occurrence of rolling incidents and will contribute to an improved shape control (flatness) and more homogeneous final material properties which are particularly important for AHSS production.

Primary author: ADRIAEN, Pepijn (CRM Group)
Co-author: Mr DE VRIENDT, Tony (ArcelorMittal Belgium NV)
Presenter: ADRIAEN, Pepijn (CRM Group)
Session Classification: Rolling Mill Technology & Process Optimization

Track Classification: Rolling of long and flat product