



Speaker 3



Hannah Clarke

Development of formable steel grades through alternative steelmaking technologies

SPEAKER / LEAD AUTHOR:
Hannah Clarke

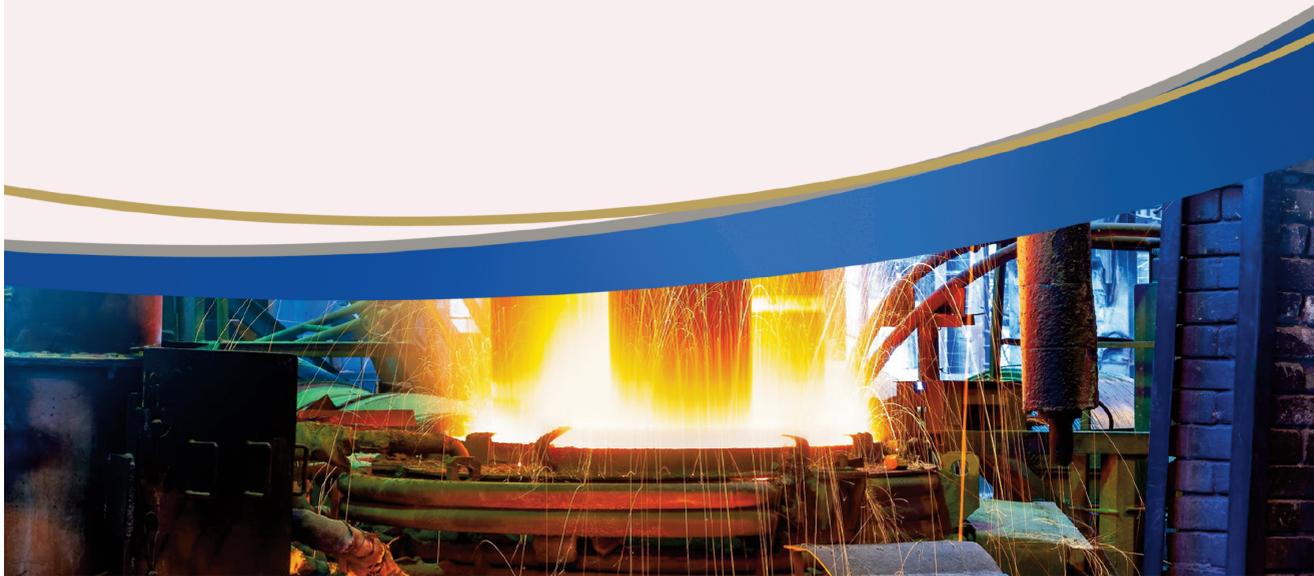
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ABSTRACT:

Steelmaking using an Electric Arc Furnace (EAF) has many environmental benefits compared to the traditional Blast furnace/Basic oxygen furnace (BF/BOF) steelmaking route, particularly a significant reduction in CO2 emissions. However, steel made in the EAF route typically has higher carbon and nitrogen levels. Interstitial free (IF) steel requires very low levels of carbon and nitrogen, making it a particular challenge for transitioning to EAF steelmaking. For this reason, the focus of my project is looking at ways to produce IF steel in an EAF. This study aims to investigate the impact of increasing nitrogen levels on the product performance of formable strip steels. Laboratory scale casts of IF steel with varying nitrogen content have been created, with the InTRAP technique, in which smaller lab casts are inserted into a larger transfer bar before hot rolling, used to allow processing parameters more representative of those at an industrial scale.

SESSION 1 : PROCESS DEVELOPMENT / SPEAKERS



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