Contribution ID: **57** Type: **Poster Presentation**

Improvement of Breakout Prevention for startup stability enhancement in high productivity thin slab casters

Tuesday 7 October 2025 19:58 (1 minute)

The continuous casting process is crucial in metallurgy, yet its startup phase is often plagued by significant fluctuations and instabilities, complicating the reliable prediction of potential breakouts. Traditional breakout detection systems are typically activated only after steady-state conditions are achieved, which means they engage only after a considerable length of material has been cast.

Addressing this challenge, the SMS group introduces an enhancement to its HD mold system, renowned for ensuring product quality. This innovative extension reliably detects sticking breakouts during the critical startup phase. By providing real-time monitoring and control from the onset of casting, this system significantly enhances safety and operational efficiency, setting a new standard in continuous casting technology.

Primary author: Dr PURSCHE, Thomas (SMS group)

Co-authors: Mr GRAHAM, Joshua (Steel Dynamics); Mr ARZBERGER, Matthias (SMS group); Mr DEITZ, Ryne (Steel Dynamics)

Presenter: Dr PURSCHE, Thomas (SMS group)

Session Classification: Poster Session

Track Classification: Steelmaking - Continuous casting, near-net shape casting and ingot casting