formation. Further work is still required to achieve this goal. Firstly, pyrometers are required to be installed at the caster to validate surface temperature predictions at locations closer to the unbending segments. This will allow quantification of cooling intensity of current spray water practices at No. 2 CC that are used at different speeds. The practices can then be modified to ensure crater end containment at all casting speeds. Secondly, the effect of unsteady state casting conditions, such as speed and width changes, on metallurgical length is yet to be determined. This will require modification of the FORTRAN code residing within CON1D to simulate these casting events. Additional caster trials may be required for validating these changes to the model. Efforts are continuing at ArcelorMittal Dofasco to meet these goals and to improve the accuracy of metallurgical length predictions for No. 2 CC.

Table I: Comparison between CON1D predicted metallurgical length at 1.8 m/min under steady state casting conditions and steady state casting conditions with process variability.

Casting Conditions	**Predicted Metallurgical Length (m) Vc = 1.8 m/min & Grade: LCAK**
Steady state casting with following conditions: - No Speed and Width changes - Aim Grade Chemistry - Aim Superheat - New Mold Copper Plates - No Spray Nozzle Plugging	31 m approx.
Steady state with following conditions: - No Speed and Width changes - Grade Chemistry with max for every element (Lowest Liquidus and Solidus Temperatures) - Max Superheat allowed per SOP - Scrap Mould Thickness (max variation in mold cooling) - Max Spray Nozzle Plugging (max variation in spray cooling)	32 m approx

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