



SDI Review Form 1.6

Journal Name:	Advances in Research
Manuscript Number:	2014_AIR_11625
Title of the Manuscript:	Heat transfer and solidification of molten iron in a pipe
Type of the Article	Research

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	<p>Introduction is too long comparing with results and discussion.</p> <p>You should improve your results section.</p> <p>Flow modelling in pipe is very usual case for fluid flow area, you should describe your results with much deep considerations.</p> <ul style="list-style-type: none"> - You mentioned "frozen", but frozen and solidified are different. - Your results with temperature and velocity are not enough to explain your iron process. - I do not understand why you should do this modelling. I could not catch your purpose. (Usually, with low wall temperature, the solidification in pipe truly exists.) - Do you want to find optimum wall temperature for iron process? - You should verify your purpose of this research. - Your calculation the correct model for solicitation should be defined in the section of "numerical Solution" - How you verify the solidification process in your calculation? (by temperature or velocity?) 	<p>We think that all the issues described in the introduction are related to solidification of iron in pipes, and therefore should remain in this Section.</p> <p>We believe that the Results section describes the main phenomena.</p> <p>To correct this, "frozen" was changed by "solidified", and "freezing" by "solidification" in the whole manuscript.</p> <p>We do not agree. Main factors which determine the iron solidification are the inlet velocity and the heat transfer.</p> <p>The purpose is defined in Section 1: study the effect of the pipe wall temperature on the solidification and blocking phenomena.</p> <p>No, we want just to study the effect of the pipe wall temperature.</p> <p>We want to know the effect of the pipe wall temperature on the solidification and blockage. This is stated in Section 1.</p> <p>We do not understand this comment. The referred section contains the basic information required.</p> <p>The solidification front is determined using the iron solidification temperature.</p>
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		