

### Review Form 3

Journal Name:	<a href="#">Journal of Engineering Research and Reports</a>
Manuscript Number:	Ms_JERR_129851
Title of the Manuscript:	Numerical analysis of welding heat source temperature field
Type of the Article	Short communication

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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**PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>		
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>		
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>		
<b>Is the manuscript scientifically, correct? Please write here.</b>		
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>		

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<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>		
<p><b>Optional/General</b> comments</p>	<p>Comments and Suggestions for Authors</p> <ol style="list-style-type: none"> <li>1. The introduction does not explain the problem that the authors are solving. The change in temperature field during welding of T-joints for low-alloy steels has already been well studied.</li> <li>2. This paper presents numerical results. A comparison with experimental results is necessary. Some calculation results seem to be not quite correct. The estimated welding time of T-joint of Q235 thick plate is 2000 seconds (Fig. 3). This is not true.</li> <li>3. In Table 1 it is necessary to present units of measurement.</li> <li>4. It is necessary to provide a table with geometric parameters, technological parameters and physical and chemical parameters of the material being modeled.</li> <li>5. For a proper understanding of the operation of the "birth-death" calculation model, it would be correct to present the temperature fields in different sections at different moments in time.</li> <li>6. The conclusions do not quite understand the terms "trend of diffusion" (diffusion processes are not considered in the work), and "field with a steeper temperature gradient behind the heat source than in front will be formed on the weldment" (usually it is the other way around - during welding, the temperature gradient in front of the weld pool is much higher than behind it).</li> </ol>	

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> (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)</p>
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

**Reviewer Details:**

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