

### 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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#### **Important Policies Regarding Peer Review**

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#### **PART 1: Comments**

	Reviewer's comment	Author's Feedback <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>	The study is highly relevant to the field of welding, as understanding the temperature distribution during welding is crucial for controlling weld quality and preventing defects. While the manuscript is largely well-written, there are a few minor grammatical errors and awkward phrasings that should be addressed. Proofreading for language consistency would improve the manuscript's overall quality.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	As per my suggestion, better make a small change in title as "Thermal Field Simulation of Welding in Q235 thick plate T-Joint with Birth and Death Element methods using ANSYS"  This revised title is more specific and highlights all the fields of your work <ul style="list-style-type: none"> <li>• The software used (ANSYS).</li> <li>• The material and weld type (Q235 thick plate T-joint).</li> <li>• The modeling techniques (birth and death element technology).</li> </ul>	

**Review Form 3**

<p><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></p>	<p>The abstract currently includes a description of the results, but it could be more concise while emphasizing the key findings. The description of how the temperature diffuses and the formation of a quasi-steady-state temperature field is important but could be streamlined for clarity.</p>	
<p><b>Is the manuscript scientifically, correct? Please write here.</b></p>	<p>The manuscript is generally scientifically correct in terms of its methodology and understanding of the welding temperature field, with the use of ANSYS software, thermal analysis, and standard welding heat source models. However, it would benefit from further clarification on some technical aspects (e.g., birth and death element technology), validation with experimental data, and more detailed material and boundary condition descriptions.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>To strengthen the manuscript, it would be beneficial to include more recent references, particularly those from the last 5 years, which cover advancements in welding simulation techniques, the latest software tools like ANSYS, and emerging trends such as machine learning applications in welding. Adding these recent studies would ensure the manuscript reflects the current state of research in the field.</p>	
<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p style="text-align: center;">ok</p>	
<p><b><u>Optional/General</u> comments</b></p>	<p>Revisions should be modified in the thesis to make your research clear</p>	

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> <i>(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)</i></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:**

<p>Name:</p>	<p><b>M V N Srujan Manohar</b></p>
<p>Department, University &amp; Country</p>	<p><b>Malla Reddy University, India</b></p>