

Review Form 1.7

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_111497
Title of the Manuscript:	Surface Thermal Failure Prediction for gears in plastics materials and their composites: case of acetal Duracon and polyethylene HDPE with 40% birch wood fiber composite
Type of the Article	Original Research Article

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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>For predicting surface thermal breakdown in composite gears, the VDI method is an appropriate and novel methodology. The simulation tests on Duracon acetal gears and HDPE40B composite gears improve the findings' application and relevance. The creation of the C_w limiting curve and the heat map contributes significantly to understanding gear behavior. The association between operating circumstances, induced stresses, and operational cycles prior to failure adds to the research's depth.</p> <p>Too lengthy, Author may consider like this "Predictive Modeling and Analysis of Thermal Failure in Composite Gears Using VDI Method Approach"</p> <p>Yes</p> <p>Needs to change, Particularly unwanted subsections are there in section-4</p> <p>Yes, the way of presenting is unclear</p> <p>The citation of the references in the document lacked clarity. Additionally, the author should adhere to standard guidelines in the reference section.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>Not adequate, Should be checked thoroughly from abstract onwards.</p>	
<p>Optional/General comments</p>	<p>Table-1 : Units should not be mentioned repeatedly; References are missing for most of the tables and figures. (e.g., Table-3 and Table-4, It should be modified, Similarly Fig.2, Fig.3 , Fig.4, Fig.5 , Fig.6) Verify the equations part, use only necessary equations. The conclusion does not correspond to the abstract. Structure of the article should be revised.</p>	

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PART 2:

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

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