

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_126004
Title of the Manuscript:	Fatigue life prediction of wheels for CRH2 high speed train due to flexible tracks.
Type of the Article	

PART 1: Review Comments

Compulsory REVISION 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>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	<ul style="list-style-type: none"> The manuscript addresses critical safety concerns in railway operations by investigating wheel fatigue under varying conditions, contributing valuable insights to the scientific community. It employs advanced simulation techniques like finite element analysis and multibody dynamics, showcasing a robust approach to studying wheel performance. The findings emphasize the need for improved design and maintenance strategies in high-speed trains, which could significantly enhance safety and longevity. While the manuscript is strong, it could further benefit from clearer practical applications of its findings and a more concise presentation of complex methodologies. 	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, is mostly suitable as it clearly reflects the main focus of the study on fatigue life and the factors affecting it, specifically track flexibility.	
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.	The abstract of the article is comprehensive as it effectively outlines the significance of railway wheels, the challenges they face due to track irregularities and operational speeds, and the study's objective of predicting fatigue life. However, it could be enhanced by including a brief summary of the key findings, particularly how the results can inform design improvements or maintenance practices.	
Are subsections and structure of the manuscript appropriate?	The structure of the manuscript appears to be appropriate, as it is organized into clear sections that facilitate understanding of the research. The main sections include an Introduction, Materials and Methodology, Results and Discussion, and a Conclusion, which are standard for scientific articles.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	<ul style="list-style-type: none"> The study employs advanced simulation techniques, including finite element analysis and multibody dynamics, using tools like ANSYS and SIMPACK to accurately model the behavior of railway wheels under various conditions. It validates the simulation results against established equations, such as the Manson-Coffin equation, ensuring that the findings are grounded in recognized scientific principles. The research thoroughly examines the effects of track irregularities and operational speeds on wheel fatigue, providing a detailed understanding of how these factors influence wheel life. By addressing a critical issue in railway safety and performance, the manuscript contributes valuable insights that can inform better design and maintenance practices, underscoring its relevance to the scientific community. 	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	Some references are outdated. Overall, I recommend strengthening the theoretical foundation by adding more recent references, as the article currently includes only 18 sources.	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language quality of the manuscript is generally suitable for scholarly communication, but there are areas that require improvement to enhance clarity and professionalism.	
Optional/General comments	I suggest revising the English language and adding more references.	

PART 2:

	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)
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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