

Review Form 1.7

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_110354
Title of the Manuscript:	Mean wear approach for modeling and predicting wear for gears in plastics materials and their composites.
Type of the 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>In this study, the author studied the wear behavior of gear teeth made of plastic materials and their composites in order to develop a model of its prediction. Let readers have a better understanding of plastic gear wear behavior. This manuscript is important for scientific community. However, there're still few problems that need to be corrected. The details are as follows:</p> <p>(1). The contents of the abstract and the conclusions need to be modified, and the outstanding innovation of this work should be emphasized in detail.</p> <p>(2). There are many factors affecting the friction and sliding contact performance of the gear. The author didn't discuss the influence of lubrication on the friction performance of the plastic gear in the paper. The lubrication style, the type of lubricating oil and the lubrication state will have a significant influence on the friction performance of mechanical equipments.</p> <p>(3). The wear behavior modeling of metal gears is based on the classical Archard theory, assuming that the two metal gear surfaces are Hertz contact. Is the tooth surface contact of plastic gears the same as that of metal gears ? Reviewers have learned in other studies that the contact of plastic gears is non-Hertzian contact. Please author check the theoretical part again.</p> <p>(4).However, the reviewer believe that it is not rigorous enough. It is recommended that the author supplement the experiment or carry out finite element analysis, so that the comparison with the theoretical results is more convincing.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	Yes	
<p>Optional/General comments</p>		

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

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