



SDI Review Form 1.6

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_46575
Title of the Manuscript:	Conceptual Design and Finite Element Analysis of a Five Minute Mini D.C Powered Air Compressor for Inflating Automobile Tyres
Type of the Article	

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
Compulsory REVISION comments	1) Remake the abstract as recommended below. 2) Please, review units in this research. 3) Please, check the comments in the item "Minor Revision".	
Minor REVISION comments	<p>Title: Five minute or Five minutes?</p> <p>Abstract: Five minute or Five minutes? Please review the abstract; it is not necessary to put the words aims, study design, place and duration of this study, methodology, results, conclusion in the abstract. The abstract should contain all of this information without spaces and paragraphs. The authors can place where and when the study was carried out in the text and not in the abstract. ...maximum stress is $3,7 \times 10^6 \text{ N.m}^2$. Correct: $3.7 \times 10^6 \text{ N/m}^2$ or 3.7 MPa? Please, review. ...the material used which is $4.7 \times 10^6 \text{ N.m}^2$. Correct $4,7 \times 10^6 \text{ N/m}^2$ or 4.7 MPa? Please, review. maximum stress $2.48 \times 10^6 \text{ N.m}^2 \text{ MPa}$?. Correct 2.48 MPa. Please, review. In the paper, it must contain the tyre specification R206/65R15. The authors need to include the maximum load and speed at which a tyre can be safely. It would be important to mention in this research why this tyre specification was chosen?</p> <p>2nd Page: ...the tyre below 2 Psi, change to 2 psig. ...comprises tyre and rim filled with compressed air. Only the tyre is filled with air or nitrogen, please, review. 2nd Page last paragraph: [5] developed....Change to: Kayisoglu B, et al.; [6] researched....Change to: Latha OH, et. al.; [7] designed....Change to: Mushiri T, et. al.; Include figure 1 in the text. [8] designed....Change to: Rathi K, Shitole A</p> <p>3rd Page: [9] used finite....Change to: Farayibi PK used finite.... 2nd paragraph - ...tire is too tedious. Change to: tyre is too tedious. ...tire pressure...Change to: tyre pressure... deflated spare tire....Change to: deflated spare tyre. Include space between ...powered air compressor and Material and Methods.</p> <p>2.1 Design Concept Description A 5minute....change to: A 5 minutes. 50 kpsi to 50 kpsig. automobile tyre just in five minute. Change to: automobile tyre just in five minutes. Justify in the text "as the inlet valve. It was screw to the cylinder head using a regular flat head thread screw. To prevent pressure losses". All the text is in Arial 10. This part of the text is Arial 11 "a polymer O-Ring was recessed into the cylinder head, ensuring air-tight between the shim-steel and the aluminium cylinder head. Another O-Ring was used for the". Please, standardize. Eliminate space between: The gear was and chosen as the coupling. Standardize 12 v in this research.</p> <p>2.2 Design Considerations Include space between ...battery terminals and 2.2 Design Considerations. In item 2.3 it would be important to place the materials considered for each component. It is recommended to include one more column in table 1 by placing the materials used. Page 7. Please, review units. Missing unit..... maximum strain of 1.38×10^{-5}</p>	



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	Place figures 9 and 10 in the same page. Place figures from 11 to 14 in the same page. Conclusion: In this study, a Five-minute or Five-minutes? Please, review units. I could not find the specification for the selected tyre in this research. Could you please include this information in the text.	
Optional/General comments	Great research. It would be very important to make an economic feasibility analysis of the implementation of these compressors in automobiles, evaluating the project proposed in this research.	

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>	

Reviewer Details:

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