|  |  |
| --- | --- |
|  | |
| Book Name: | [Current Approaches in Engineering Research and Technology](https://www.bookpi.org/bookstore/product/current-approaches-in-engineering-research-and-technology-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_3053** |
| Title of the Manuscript: | **Cost Analysis Based Algorithm for Load Shared Multiple Induction Motor Set-up** |
| Type of the Article | **Book chapter** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PART 1: Review Comments | | | | |
| Compulsory REVISION comments | Reviewer’s comment | | | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **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.** | * The objective of this article is crucial, and I strongly support the advancement of research in this field. The use of motors in industry is constantly increasing, and motor failures will become a major concern. * Motors, along with their control systems, are continuously evolving, even in the event of a failure. The integration of intelligent sensors, capable of reporting the condition of motors before problems arise, helps improve and ensure the smooth operation of processes. * The reliability of motors is essential to ensure the quality of processes. * To guarantee this reliability, it is essential to ensure the proper functioning of the motor. | | |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | * The tilt should be slightly adjusted if you want, otherwise you can keep it as is.   Cost-Analysis-Based Strategy for Load Balancing in Multi-Induction Motor Systems | | |  |
| 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. | You can change the part in yellow to my suggestion if you want; otherwise, you can keep it**.**  Abstract: Majority of the industrial processes are generally carried out using a motor-drive arrangement. The quality of the final output of a process largely depends on the performance and reliability of the motor drive sets. Failure of motor running the process can result in a complete shutdown of the process. Certain processes may not even afford to offer downtime for maintenance. Downtime of motors can severely affect the quality of the endproduct of a process. Although there are many tools and algorithms to predict the failure and maintenance patterns for motor, this paper presents a novel means to increase the reliability of motor-drive arrangements. It also presents a cost analysis framework in choosing a motor-drive arrangement for a particular load.  This article proposes an innovative approach to improving the reliability of drive systems. It also provides a cost analysis framework to select an appropriate drive system for a specific load | | |  |
| **Are subsections and structure of the manuscript appropriate?** | **Yes** | | |  |
| **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.** | To assess the scientific rigor of the manuscript, I found it to be scientifically sound and technically reliable for several reasons. Firstly, the authors employed a rigorous methodology that adheres to the established protocols in the field, ensuring the reliability of their results. Furthermore, the data analysis is acceptable. Overall, these elements collectively enhance the technical credibility of the manuscript. | | |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | Yes, you can add recent references to see comparisons with existing work and conduct an analysis of the results. For example, choose a reference from 2022-2023 and examine what the author has done in relation to your manuscript. Analyze and compare | | |  |
| Minor REVISION commentsIs the language/English quality of the article suitable for scholarly communications? | For me, it's acceptable. We just need to check the readability of Tables 1 and 2. | | |  |
| Optional/General comments | Improvement of the Conclusion  To enhance the conclusion, it would be relevant to integrate perspectives on the use of intelligent controls for induction motors, in order to address the failure issues associated with this type of motor.   * The implementation of machine learning algorithms can help predict failures before they occur. By analyzing real-time data, these systems could adjust operating parameters to optimize performance and reduce the risk of breakdown. * Compare the results obtained with those from other algorithms. This can provide insights into the strengths and weaknesses of your approach compared to other methods. * Based on the comparison results, identify areas where your algorithm can be enhanced. This may include adjustments to parameters or the integration of additional learning techniques to strengthen its robustness | | |  |
| **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?** | | *(If yes, Kindly please write down the ethical issues here in details)* |  | |

|  |  |
| --- | --- |
| Reviewer Details: | |
| Name: | **Boudallaa Abdelhak** |
| Department, University & Country | **National School of Applied Sciences (ENSAK), Morocco** |