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| 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\_2645** |
| Title of the Manuscript: | **Taguchi Full Factorial Design of Experiments Optimisation of Cutting Parameters for Energy Efficiency and Surface Roughness during the Dry Turning of EN19 Material** |
| Type of the Article | **Book chapter** |

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| 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 manuscript has some importance regarding the material and process. However, it lacks some sort of analysis and no advance technique is used. The results are not properly discussed. All the analysis, results, and literature are not properly discussed. Please invest some time to revise and explain it.** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **The title is not suitable. I suggest “**Optimization of Cutting Parameters for Enhanced Energy Efficiency and Surface Finish in Dry Turning of EN19 Steel Using Taguchi Full Factorial Design” |  |
| 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 have a lot of grammatical errors. There is so repetition of words, sentences, poor words selection. The whole abstract should revise. For example, in the sentence “During metal machining, the satisfactoriness of cost-quality-time matrix convergence effectively depends on the supreme selection of cutting parame- ters”, the word “properly or precise selection” should be written instead of supreme selection. Etc. utility material should be replaced by work material.** |  |
| **Are subsections and structure of the manuscript appropriate?** | **Not appropriate. The flow of the article should be abstract, introduction, materials and design, research methodology (ANOVA and S/N Ratio), experimental results, results and discussions, confirmatory experiments, conclusions. I suggest, that in methodology, the all the analysis used should be provided and the focus on ANOVA.** |  |
| **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.** | **1. Keyword and Abbreviations should be use first, and later on, only abbreviations should be used throughout. E.g., analysis of variance (ANOVA).**  **2. The English is very poor throughout and should be revise. Also check the table captions and revise it.**  **3. “Whereas there are several different possible S/N ratios the main standard ones which were also considered for this research were [24]: (a) Biggest-is-Best quality characte- ristic given by equation Equation (1)” it is unclear what do you mean by this? Also, “larger-the-better” should be replaced.**  **4. All the equations should be written in Math type editable format. Table format is not same for all. Equation (4) is not correct.**  **5. For surface roughness, the R-squared value is only 39%? It is not acceptable; the results should be revised. The experiments and results for the surface roughness should be double check.**  **6. In table 11 (a), the variation should be less than 5%, but here it is 8.4% which is not acceptable. The reason is that model for surface roughness is wrong. Either remove it or repeat the experiments otherwise.**  **You can read and cite the following articles for the reference, (1) Hanif, M., Wasim, A., Shah, A.H. et al. Optimization of process parameters using graphene-based dielectric in electric discharge machining of AISI D2 steel. Int J Adv Manuf Technol 103, 3735–3749 (2019). https://doi.org/10.1007/s00170-019-03688-0, (2) P. Janagarathinam, M. Subramanian, C. S. Dhanalakshmi, and P. Madhu, Investigation of machining rate and surface roughness in wire EDM of Al6063/WC/ZrO2 composite using response surface methodology. Materials Research Express, 2024. 11(2): 026504** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | **Sufficient but not recent. The reference should be updated (at least last five years).** |  |
| Minor REVISION commentsIs the language/English quality of the article suitable for scholarly communications? | The English is very poor throughout and should be revise. Also check the table captions and revise it. |  |
| Optional/General comments |  |  |

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| **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)* |  |

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| **Reviewer Details:** | |
| Name: | **Muhammad Hanif** |
| Department, University & Country | **Shenzhen University, Pakistan** |