

Review of: "Optimized Material Removal and Tool Wear Rates in Milling API 5ST TS-90 Alloy: AI-Driven Optimization and Modelling with ANN, ANFIS, and RSM"

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Potential competing interests: No potential competing interests to declare.

This paper performed to Optimized Material Removal and Tool Wear Rates in Milling API 5ST TS-90 Alloy: AI-Driven Optimization and Modelling with ANN, ANFIS, and RSM. The article is, in general, well written but there are some issues that authors should consider to revise in order to improve its quality. Some comments were done in this way:

- Abstract should be expanded sentences related to the results. The results of the study should be given as numerical percentages.
- The introduction is very short, it should be expanded by adding current literature studies. The paper should be also supported by a literature search including relevant and recent papers. The following recent articles related to optimization may be cited.

<https://doi.org/10.30919/es961>.

<https://doi.org/10.3390/machines10121131>.

<https://doi.org/10.5281/zenodo.8020553>.

- The article should be edited completely according to the journal writing guide.
- Throughout the article, the words table and figure should start with capital letters (Table, Figure).
- Revise Figure 1. Make it more scientific. Convert it to a closer-scale image where the test elements are marked.
- Which activation function was used in the ANN model?
- Analyzes should be made for different activation functions. Of these, the function that gives the highest MSE should be preferred. The following work can be viewed and cited in this study.

<https://doi.org/10.1007/s10443-012-9286-3>.

- Training and test data should be given with a table.
- What are the learning rate and other parameters?
- Standards of test samples and deniers should be given.
- Conclusions should be written in more detail adding numeric data.

After the corrections have been made, I ask that they be sent to me for review.

