

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.

Overall, the article contains valuable research on milling process modeling and optimization. Addressing the below points will enhance the clarity and comprehensibility of the article for readers and reviewers.

Could you provide more information about the specific goals of this study? What were the key research objectives?

What criteria were used to evaluate the performance of the RSM, ANN, and ANFIS models, and can you provide the specific values for the error indicators (MABE, MAPE, RMSE, R2) to assess the accuracy of these models?

The study conducted experiments using a ZX6350C milling machine with specific parameters. Were there any limitations or constraints related to the milling machine or the experimental setup that might affect the generalizability of the findings?

Were there any challenges or limitations in collecting data during the experiments, and how was data quality ensured?

Can you provide information on the size of the dataset used for training and validation of the ANN and ANFIS models?

In order to enrich the literature and other parts of the article (such as model descriptions), authors can use articles related to their topic. The following articles are recommended:

- [Estimating biofuel density via a soft computing approach based on intermolecular interactions](#)
- [Estimating the heat capacity of non-Newtonian ionanofluid systems using ANN, ANFIS, and SGB tree algorithms](#)
- [On the prediction of geochemical parameters \(TOC, S1 and S2\) by considering well log parameters using ANFIS and LSSVM strategies](#)
- [An insight into the estimation of drilling fluid density at HPHT condition using PSO-, ICA-, and GA-LSSVM strategies](#)
- [On the prediction of filtration volume of drilling fluids containing different types of nanoparticles by ELM and PSO-LSSVM based models](#)
- [Predicting the condensate viscosity near the wellbore by ELM and ANFIS-PSO strategies](#)
- [Surface tension of binary mixtures containing environmentally friendly ionic liquids: insights from artificial intelligence](#)
- [On the prediction of methane adsorption in shale using grey wolf optimizer support vector machine approach](#)

What were the factors considered in the design of experiments (depth of cut, spindle speed, and feed rate), and how were these factors chosen?

The article states that the quadratic model for MRR achieved an R-squared (R2) value of 0.9996. This is an extremely

high value and might indicate overfitting. How were the data split between training and testing sets, and what measures were taken to avoid overfitting in the modeling process?