

Review of: "Numerical Study of Thermal Performance on Fin and Tube Heat Exchanger with Flat Rectangular and Sinusoidal Winglet Vortex Generators"

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Potential competing interests: No potential competing interests to declare.

The subject matter covered by the authors is of obvious interest to the industrial thermal engineering sector. It focuses on vortex generation in finned tube heat exchangers, a widely used method for reducing air-side thermal resistance.

However, as a numerical study, the manuscript has several shortcomings that require careful revision to make it look like a publishable paper and thus useful to the scientific community:

- It is clear that the authors used commercial Ansys software to solve their problem. It is therefore essential to have recourse to the validation phase in order to demonstrate the relevance of the parameters chosen in the software used. Without this stage, as in the case of this work, it is more unlikely than not that we will be able to comment on the results presented.
- It is imperative that a numerical study be presented using appropriate behavioural equations. In this context, the Navier-Stokes equations and the turbulence equations must be formulated rigorously. It is also essential that the study domain and the boundary conditions imposed are precisely defined.
- The authors could have improved the presentation of the various contours by using software to post-process the results.
- Overall, the temperature contours, which are crucial for the problem studied, are missing.
- The whole text needs to be thoroughly revised.