

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.

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

Comments and Suggestions for Authors

The purpose of the simulation described in this paper by the authors is to enhance the heat transfer in the air side using conventional rectangular and sinusoidal sine wave vortex generators. Based on the comparative numerical analysis, sinusoidal and conventional rectangular winglets show good heat transfer enhancement in that they have a large pressure loss penalty.

All presented results are well discussed. It is also easy to understand. So, this paper is interesting and well written. Also, the paper structure is suitable, and the authors have divided the structure as: introduction, previous studies as a separated part, numerical methodology, results and discussions, and conclusion.. In addition, the equations, figures, and tables are clear and useful. So, I am encouraged to accept the manuscript after making major corrections.

Recommendation: Revisions Required

1. The authors should describe the potential significance of their findings in more detail in their abstract. The primary contributions must also be stated explicitly. The problem statement and contribution should be included in the abstract, in my opinion.
2. The authors should update their conclusion to include relevant key findings.
3. I hope you could compare your work to the studies that were close to it, or perhaps you could describe what your contribution was that made your paper stand out. You can check your results against previously published papers.
4. Is there a specific industry use for your application?
5. The paper's uniqueness must be properly mentioned. By including pertinent details and offering answers to fundamental issues like: What is missing (i.e., research gaps), the Introduction may establish a strong argument for why

the study is valuable in addition to a clear explanation of its contribution or uniqueness. What, why, and how must be done? Like I mentioned, requires The Abstract and Conclusions sections should both contain succinct, concise descriptions of the work's contribution. By another definition (the abstract should be succinctly prepared to convey the aim of the study, the main findings, and important recommendations), please include the primary conclusions and the study's goal in the abstract.

6. Please pay attention to how the equations and figures are formatted because Word's Office version may differ.

7. I assume you should use the following keywords: "Passive technique," "swirl devices," "Thermal efficiency," and "Sinusoidal winglet."

8- The authors have presented an in-depth analysis of the data collected. However, the authors should consider providing more interpretation of the data in their results.

9- The authors have done a good job of summarizing the main findings. However, it would be beneficial to further illustrate how these findings will contribute to the existing body of knowledge, and how they can be used to improve or innovate the current technology or practices in the field.

10- To ensure the highest quality of the paper and to improve its readability, it is recommended that the author seek a professional language editing service for polishing.