

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.

Overall, the paper presents valuable insights into the flow dynamics within a corrugated duct. However, several critical aspects require attention and improvement to enhance the clarity and validity of the findings.

Firstly, the abstract lacks coherence and fails to encapsulate the essence of the paper effectively. Thus, it is imperative to revise the abstract to succinctly summarize the objectives, methodology, results, and implications of the study.

Similarly, the introduction section requires refinement. An effective introduction should provide background information, outline the research problem, and establish the novelty and significance of the study. As noted, the current introduction lacks clarity and coherence, making it challenging for readers to understand the context and motivation behind the research.

Furthermore, there appears to be confusion regarding the terminology used to describe the duct structure. The reviewer suggests verifying whether the term "fins" accurately describes the duct configuration or if "corrugated duct" would be more appropriate. Additionally, it is recommended to consult other relevant literature to ensure the proper characterization of the duct geometry and flow behavior. Particularly, in corrugated ducts, flow asymmetry is common, and this aspect should be thoroughly investigated and discussed in the paper.

Moreover, the paper lacks clarity regarding the novelty of the research. It is essential to clearly articulate how the current study contributes to the existing body of knowledge and what sets it apart from previous research.

Lastly, the resolution of the figures in the paper is insufficient. High-quality figures are essential for conveying information effectively and facilitating a thorough understanding of the results. Therefore, it is recommended to improve the resolution of the figures to ensure clarity and readability.

In conclusion, while the paper offers valuable insights into the flow dynamics within a corrugated duct, several areas require improvement to enhance the clarity, coherence, and validity of the research findings. By addressing the issues outlined above, the authors can significantly enhance the quality and impact of their work.