

## Cover Letter

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Dear Christiane,

We wish to submit an original research article entitled “Detection of Insulation Flaws and Thermal Bridges in Insulated Truck Box Panels” for consideration by Quantitative InfraRed Thermography Journal. We confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere.

In this paper, we report show the detection of defects and thermal bridges in insulated truck box panels, utilizing Infrared thermography. This is significant because this research uses both heating and cooling methods in active thermography configurations.

We believe that this manuscript is appropriate for publication by Quantitative InfraRed Thermography Journal because it applied infrared thermography to non-destructive evaluations.

This research attempted to detect the local flaws inside a truck panel specimen with a straightforward visualization. We established the comparison between heating and cooling approaches for experiments and models. In addition, passive thermography detection in computational models has been presented. Results demonstrate that the compressed air spray is more rapid than the traditional heating method in providing successful detection. Even if the traditional heating approach provides clearer results, in reality it is not easy and practical to heat a whole truck box to conduct inspection: the compressed air spray approach is much more convenient.

We have no conflicts of interest to disclose.

Please address all correspondence concerning this manuscript to me at lei.lei.1@ulaval.ca.

Thank you for your consideration of this manuscript.

Sincerely,

Lei Lei