

Accepted Manuscript

Dynamic Axial Crush Analysis and Design Optimization of a Square Multi-cell Thin-walled Tube with Lateral Variable Thickness

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PII: S0020-7403(17)33448-3
DOI: [10.1016/j.ijmecsci.2018.02.034](https://doi.org/10.1016/j.ijmecsci.2018.02.034)
Reference: MS 4194



To appear in: *International Journal of Mechanical Sciences*

Received date: 3 December 2017
Revised date: 6 February 2018
Accepted date: 18 February 2018

Please cite this article as: Xueshan Ding , Zeqi Tong , Yang Liu , Shutian Liu , Dynamic Axial Crush Analysis and Design Optimization of a Square Multi-cell Thin-walled Tube with Lateral Variable Thickness, *International Journal of Mechanical Sciences* (2018), doi: [10.1016/j.ijmecsci.2018.02.034](https://doi.org/10.1016/j.ijmecsci.2018.02.034)

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Highlights

- The square multi-cell tube with variable thickness in cross-section is proposed.
- The theoretical prediction formulation of the mean crushing force for this kind of multi-cell tube is built.
- The optimization design is carried out to find the optimal thickness distribution form.
- The non-convex multi-corner multi-cell square tube with variable thickness in cross-section is proposed.

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