

ANALYSIS OF LIGHTWEIGHT BOX STRUCTURE

MOHD ALIMIN BIN CHE ALI (99300104)

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Faculty Mechanical Engineering
Universiti Teknologi MARA (UiTM)

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"MAY ALLAH S.W.T BLESS YOU ALL"

ABSTRACT

The objective of this project is to examine the behavior of lightweight box structure loaded by given external force. The analysis involves stress, strain and the displacement. There are two methods that have been used to analyze this structure, theoretical analysis and followed by experiment. The experimental result and the theoretical result will be compared. The experimental method used the strain gauge and data logger to obtain the stress occurs. The strain gauges are distributed at several points. The deflection is measured using the dial indicator. The comparison is made based on the result of these two methods. We identify that the theoretical method and experiment show close result.

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