



WAVE EFFECT ON BULK CARRIER STRUCTURE

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“I declared that this thesis is the result of my own work except the ideas and summaries which I clarified their sources. The thesis has not been accepted for any and it is not concurrently submitted in candidature of any degree”

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ABSTRACT

This study was carried out to understand the phenomenon and analyse the wave effect on the vessel structure. The vessel selected was a bulk carrier. There are two types of bulk carrier were being analysed; single and double side skin. The structural behaviours were studied in terms of stress. The largest bending moment at transverse midship section was carried out. Two techniques used to analyse the structure, there are theoretical calculation followed by Finite Element Analysis (FEA) software, ANSYS 5.7 and finally the result for both techniques were compared with previous researcher. The stress obtain gives some errors at keel part when the comparison was made. The outcomes of the study indicate that the double skin (DS) construction has larger bending stress rather than single skin (SS) construction. At the end of this study some recommendation about the better design will be given.

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