

An Experimental Study on Strength of Friction Stir Welding

by

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CERTIFICATION OF APPROVAL

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Approved by,

(Dr. Mokhtar Awang)

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TRONOH, PERAK

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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

MOHD SOFFIAN ARIFF B MOHD SAUFI

ABSTRACT

Friction Stir Welding (FSW) is a new technology that has shown great potential and promise as a method of joining process, particularly for lightweight materials as they are not generally weldable. But being a new technology as it is, there are not much information or extensive studies regarding the process. Thus, in order to study the strength of FSW, this paper will briefly describe the problem statement, objectives and scope of the project, information regarding the literature review that the author had done in various scopes. Such as, the theory of the strength of the friction stir welding, the theory on the rotating pin tool which include technique and machines use for fabricating the rotating pin tool and, the machine use for perform the experiments and analyze the end-product, the application of the friction stir welding in the industry, and the advantages and limitations of the process. Also included in the report are the methodology for the experimental study that the author performed on completing the project, results and findings during the experiments, recommendation for the improvement of the project and lastly conclusion.

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