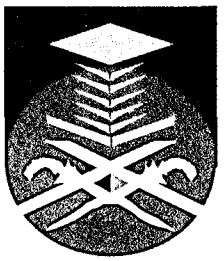

DEVELPOMENT OF A PORTABLE FRICTION WELDING MACHINE

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

Signed : .....

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ABSTRACT

The objective of this project is to develop a portable friction welding machine, so on to reduce the cost and the size of a friction welding machine. In order to test the performance of this design, a prototype system will be developed. This prototype is design, fabricated and tested by welding of carbon steel. Development of a portable friction welding machine is carried out by applying the vertical milling machine or vertical drill machine to drive the portable friction welding system. Technical trials carried out with this prototype have shown that the machine performed like the conventional friction welding for carbon steel. This project will bring huge implications to the local industry whereby it can reduce the cost of operation friction welding and capital investment.

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