IMPLEMENTATION OF QUICK CHANGEOVER ON CHANGING NEW MODEL FOR CNC MACHINE

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BACHELOR OF MECHATRONICS ENGINEERING (HONS.) COLLABORATION PROGRAMME WITH HSKA, GERMANY

UNIVERSITI MALAYSIA PAHANG

IMPLEMENTATION OF QUICK CHANGEOVER ON CHANGING NEW MODEL FOR CNC MACHINE

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Thesis submitted in fulfilment of the requirements for the award of the Bachelor of Mechatronics Engineering (HONS.) Collaboration Programme with HsKA, Germany

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SUPERVISOR'S DECLARATION

I hereby declare that I have checked this thesis and, in my opinion, this thesis is adequate in terms of scope and quality for the award Bachelor of Mechatronics Engineering (Hons.) Collaboration Programme with HsKA, Germany).

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I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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My father (Mohamad Radzuan bin Mat Nor) My mother (Ruhani binti Junoh) My beloved families And

My Lecturers

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LIST OF SYMBOLS

m	meter
h	hours
min	minutes
S	seconds

LIST OF ABBREVIATIONS

CNC	Computer Numerical Control
SDN. BHD	Sendirian Berhad
LPS	Lean Production System
QCO	Quick Changeover
SMED	Single Minute Exchange of Die
EMS	Electronics Manufacturing Services
TPS	Toyota Production System
JIT	Just-In-Time
TPM	Total Productive Maintenance
WIP	Work in Process
RM	Malaysian Ringgit
USD	United States Dollar