

**IMPROVING OVERALL EQUIPMENT EFFECTIVENESS OF INJECTION
MOLDING MACHINES BY ENHANCING THE MAINTENANCE
MANAGEMENT SYSTEM: CASE STUDY AT INJECTION MOLDING
COMPANY**

By

Muhammad Yusuf Giovanni

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SWISS GERMAN UNIVERSITY

The Prominence Tower

Jalan Jalur Sutera Barat No. 15, Alam Sutera Tangerang, Banten

15143 - Indonesia

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Muhammad Yusuf Giovanni

Student

Date

Approved by:

SWISS GERMAN UNIVERSITY

Ir. Setijo Awibowo, M.M

Thesis Advisor

Date

Dr. Eng. Aditya Tirta Pratama, S.Si., M.T.

Thesis Co-Advisor

Date

Dr. Maulahikmah Galinium, S.Kom., M.Sc

Dean

Muhammad Yusuf Giovanni

Date

ABSTRACT

IMPROVING OVERALL EQUIPMENT EFFECTIVENESS OF INJECTION MOLDING MACHINES BY ENHANCING THE MAINTENANCE MANAGEMENT SYSTEM: CASE STUDY AT INJECTION MOLDING COMPANY

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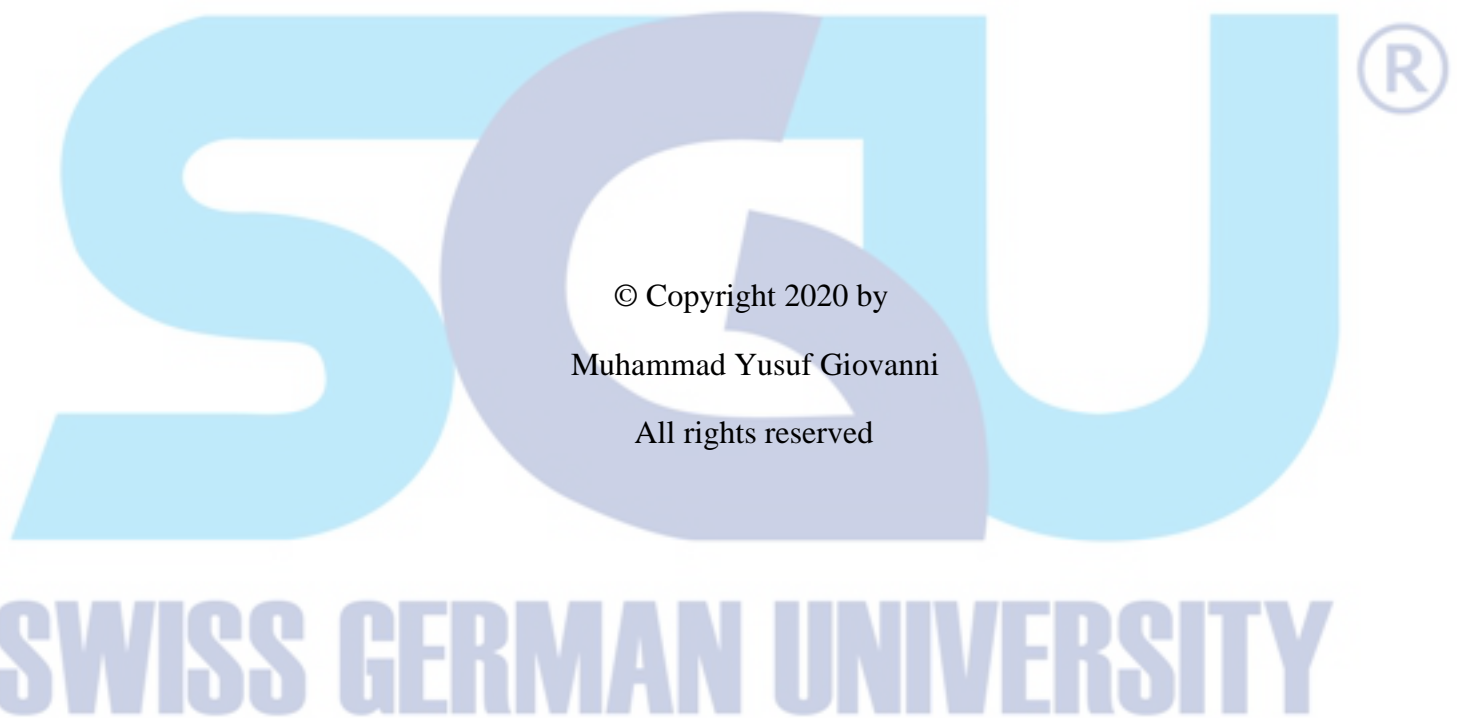
Ir. Setijo Awibowo, M.M. Advisor

Dr. Eng. Aditya Tirta Pratama, S.Si., M.T, Co-Advisor

SWISS GERMAN UNIVERSITY

As an Injection Molding company that supplies parts for several automotive companies in Indonesia, PT. Takagi Sari Multi Utama (“TSC”) is demanded to always produce flawless products with high production rate. However, product delivery lateness still can be found several times due to the company is unable to meet the production target. Six Steps of Kaizen is being used as a guidance to continuously improving productivity. Based on Ishikawa Diagram as a root-cause analysis tool, unscheduled downtime, speed loss, and defect which is the highest factor that affect the production target to not being achieved. Failure mode, effect, and Criticality Analysis is used to determine the most critical part of the machine. The time between failure with their respective distribution of the injection machine is being calculated to obtain the most effective maintenance interval. By doing a preventive maintenance strategy, the Overall Equipment Effectiveness for small machine category is increased from 83.01% to 85.40%, medium machine category increased from 79.20% to 83.29%, and large from 85.31% to 86.51%.

Keywords: Overall Equipment Effectiveness, Six Steps of Kaizen, Time Between Failure, Ishikawa Diagram, Failure Mode, Effect, and Criticality Analysis

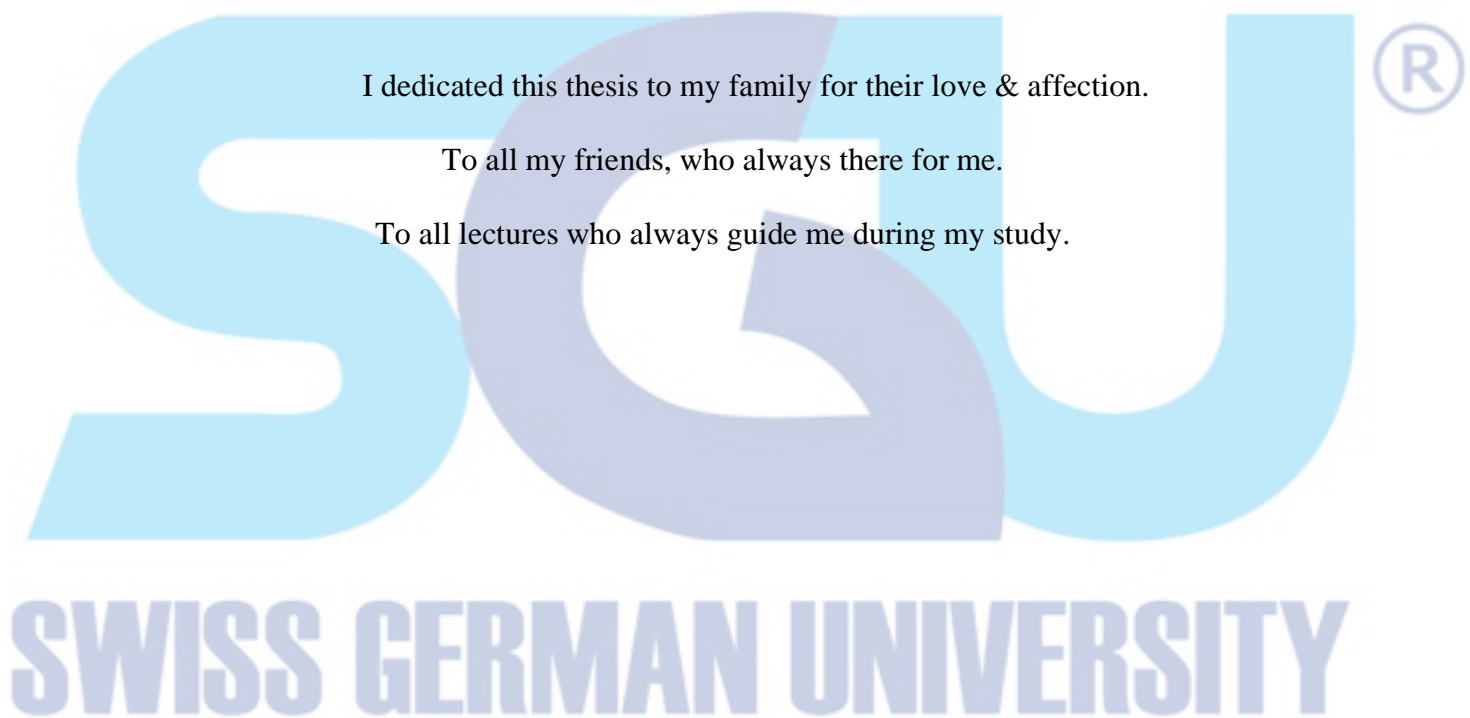


DEDICATION

I dedicated this thesis to my family for their love & affection.

To all my friends, who always there for me.

To all lectures who always guide me during my study.



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