AUTHENTICITY STATEMENT

In the name Allah, I hereby certify that this research is based on my own work except for the citations and summaries in which of those is explicitly knowledge. If in the future this statement is proved not right and violates the legal regulation of papers and intellectual property rights, I agree Universitas Islam Indonesia to revoke my bachelor certificate.

Yogyakarta, October, 2018

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Wildan Adiwena

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THESIS APPROVAL OF SUPERVISOR

IMPROVEMENT OF MIXED-MODEL TWO-SIDED ASSEMBLY LINE BALANCING USING SIMULATION APPROACH

THESIS

By

Name : Wildan Adiwena
Student Number : 12 522 107

Yogyakarta, October 2018

(Muhammad Ridwan Andi Purnomo, ST., M.Sc., PhD.)

THESIS APPROVAL OF EXAMINATION COMMITTEE

IMPROVEMENT OF MIXED-MODEL TWO-SIDED ASSEMBLY LINE BALANCING USING SIMULATION APPROACH

By

Name

: Wildan Adiwena

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Was defended before Examination Committee in Partial Fulfillment of the Requirements for the bachelor degree of Industrial Engineering Department

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Acknowledged by,

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Department of Industrial Engineering

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(Dr. Taufiq Immawan, ST., MM.)

DEDICATION

I dedicate my final project for my beloved parents, brothers, sisters and my friends.

I would thank my parents for the support, taking care and anything they gave to me.

I also thank my brothesr, sisters and friends for the support and motivation.

MOTTO

"O you who have believed, when you are told, "Space yourself" in assemblies, then make space; Allah will make space for you. And when you are told, "Arise," then arise; Allah will raise those who have believed among you and those who were given knowledge, by degrees. And Allah is acquainted with what you do."

QS: Al - Mujadilah 58: 11

"Indeed, with hardship [will be] ease. So when you have finished [your duties], then stand up [for worship]. And to your Lord direct [your] longing."

QS: Al – Inshirah 94: 6 – 8

"Having no problems is the biggest problem of all"

TaiichiOhno

PREFACE



AssalamualaikumWarrahmatullahi Wabarakatuh.

Alhamdulillahirabbil 'alamin. Praise to Allah SWT the most glorious and the most merciful. Shalawat and Salam toward our adoration Prophet Muhammad SAW along with his family and followers. The guidance of Allah allows the author to finish this thesis. The accomplishment of this thesis is inseparable from the support of all parties. Therefore, the author profusely convey with great and gratitude to:

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Finally, the Author realizes that there are still shortcomings as well as weaknesses

in this report, so the building suggestions and critics are fully expected. The author

hopes this paper would bring advantages for everyone who reads this.

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WildanAdiwena