

**DESIGNING A LAYOUT FOR AN INDUSTRIAL-ELECTRIC COMPONENT-SERVICES COMPANY TO OPTIMIZE THE SERVICES PROCESS**

by

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BACHELOR'S DEGREE

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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.

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## ABSTRACT

### **Designing a Layout for an Industrial-Electric Component-Services Company to Optimize the Services Processes**

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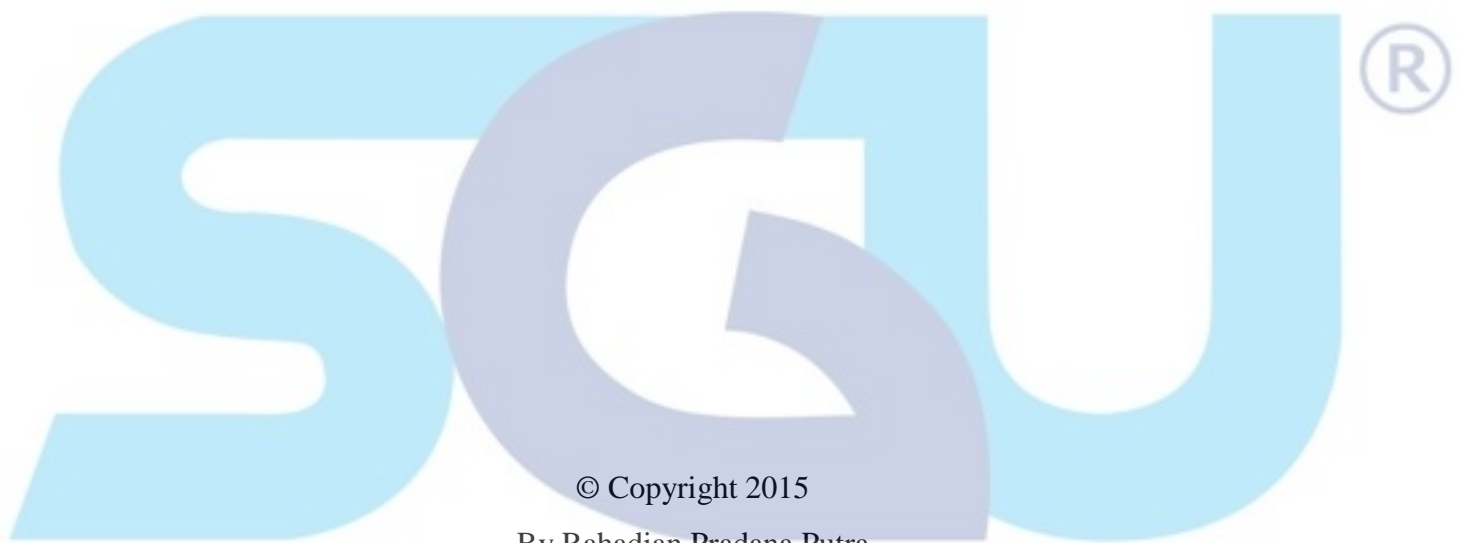
Dr. Ir. Prianggada Indra Tanaya. MME., Thesis Co-Advisor

This thesis project is targeted to generate a recommendation optimum layout for PT. Rotating Electrical Motor Service (PT. REMS) by designing the layout of the factory and taken a reference layout from PT. Xab Industrial Services (PT. XIS).

The main objective is to design a new factory layout from the views of Industrial Engineering with optimum services process on the Systematic Layout Planning (SLP) method. Regarding to test the process, AnyLogic Discrete Event Simulation software will be used to simulate and identify the optimum service process and comparing the layout alternatives to decide the best layout.

The optimum layout according to the simulation and SLP method will be used as the master draft layout that will be proposed to PT. Rotating Electrical Motor Service (PT.REMS) and will be shown in 2D and 3D dimensional layout.

**Keyword: Factory Layout, Systematic Layout Planning (SLP), Discrete Event Simulation, Electric Motor.**



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## **DEDICATION**

I dedicate this thesis to my beloved parents, my brothers that have been very supportive every time.



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## TABLE OF CONTENTS

STATEMENT BY THE AUTHOR.....	2
ABSTRACT.....	3
DEDICATION.....	5
ACKNOWLEDGEMENT.....	6
TABLE OF CONTENTS.....	7
LIST OF TABLES.....	10
LIST OF FIGURE.....	12
CHAPTER 1: INTRODUCTION.....	14
1.1 Background.....	14
1.2 Problem Identification.....	15
1.3 Thesis Purpose.....	15
1.4 Thesis Scope.....	15
1.5 Limitation of Object Study.....	16
1.6 Thesis Organization.....	17
CHAPTER 2 - LITERATURE REVIEW.....	18
2.1 Introduction.....	18
2.2 Layout Re-design of facilities at PT. Dwi Komala with Systematic Layout Planning (Naganingrum, 2012).....	18
2.3 Redesigning the layout of the building in the Dr. Soeroto Hospital Ngawi using systematic layout planning (Ernawati,2007).....	18
2.4 Layout Design of Production Facilities with Systematic Layout Planning Method (Case Study Relocation and Re-layout Factory PT. BI - Surabaya). (Rahman, 2008).....	19
2.5 Redesigning the layout of a workshop for the production of the cover bushing and sliding bushing (Case study PT.M-Tech Altinizer). (Iswanto, 2011).....	19
2.6 Systematic Layout Planning (SLP) Implementation in PT.Sanken Argadwija (Yosef Adji Baskoro, 2010).....	20
2.7 Redesigning Layout at PT.Inkoasku to Increase Productivity by using Systematic Layout Planning (SLP) Method and Discrete Event Simulation Model (Kitriastika, 2012) 20	
2.8 Optimization of factory floor layout in a complex manufacturing process. (TADEJ KANDUČ, BLAŽ RODIČ, 2014).....	21
2.9 Electrical Motor Service.....	21
2.9.1 Efficient workshop.....	21
2.9.2 Workshop Layout.....	22
2.10 Concluding Remark.....	23
CHAPTER 3 - METHODOLOGY.....	24
3.1 Introduction.....	24

## Company to Optimize the Services Processes

3.2	Overview of PT. Rotating Electrical Motor Service (PT.REMS).....	24
3.2.1	Company Profile .....	24
3.2.2	Company Service .....	25
3.3	Problem Identification.....	26
3.4	Background Theory.....	26
3.4.1	Factory Layout .....	26
3.4.2	Systematic Layout Planning .....	28
3.4.3	Simulation.....	33
3.4.5	Anylogic Simulation Software.....	37
3.5	Knowledge of Electric Motor.....	39
3.5.1	AC Motor .....	39
3.5.2	DC Motor .....	40
3.6	Project Methodology .....	42
3.6.1	Preliminary Study .....	44
3.6.2	Data Collection .....	45
3.6.3	Data Analysis.....	45
3.6.4	Summary .....	47
3.7	Software Tools .....	47
<b>CHAPTER 4 - RESULT AND DISCUSSION.....</b>		<b>48</b>
4.1	Introduction .....	48
4.2	Data Collection.....	48
4.2.1	Operation Process Chart .....	48
4.3	Data Analysis .....	53
4.3.1	Product Demand and Throughput in 2014.....	53
4.4	Analysis Existing Layout and Designing Layout.....	55
4.4.1	Area Relationship Chart.....	55
4.4.2	Activity Relationship Worksheet.....	58
	.....	60
4.4.3	Dimension Block Diagram .....	62
4.4.4	Activity Relationship Diagram .....	63
4.5	Workshop Area Planning .....	71
4.5.1	Worker Calculation.....	71
4.5.2	Operation Process Service Time.....	74
4.5.3	Lead Time and Effective Working Time Calculation.....	75
4.5.4	Assembly Line Balancing .....	76
4.5.5	Average Calculation Line Balancing .....	76



## Company to Optimize the Services Processes

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4.5.6	Current Factory Layout PT. Xab Industrial Service .....	79
4.5.7	Master Plan for 1st Floor of Workshop .....	82
4.5.8	2nd Floor Workshop Area Planning .....	94
4.6	Drafting the Layout .....	97
4.7	Simulation .....	101
4.7.1	Introduction.....	101
4.7.2	Conceptual Model.....	101
4.7.3	Assumption .....	110
4.7.4	Parameter Measures .....	110
4.7.5	Model Verification.....	110
4.7.6	Model Validation .....	111
4.7.7	Result Analysis .....	112
4.7.8	Concluding Remarks.....	115
CHAPTER 5 CONCLUSIONS & RECOMMENDATION.....		116
5.1	Conclusion.....	116
5.2	Further Development.....	117
GLOSSARY .....		118
REFERENCE.....		119
APPENDIXES .....		120
CONTACT REPORT .....		133



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