IMPROVEMENT OF WORK SITE CONTROL FOR STORAGE AREA

NURFADHILAH BINTI MD RIS

(2011676196)

A thesis submitted in partial fulfillment of requirements for the award of Bachelor Engineering (Hons) Mechanical

Faculty of Mechanical Engineering

Universiti Teknologi MARA (UiTM)

JULY 2015

"I declared 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 .....

Date

Nurfadhilah binti Md Ris

UiTM No : 2011676196

ACKNOWLEDGEMENT

Apart from the effort of me, this project was done successfully because of the encouragement and guidelines from many others. I would like to take this valuable opportunity to express my gratitude to the people who have been a big help to me during completion of this project.

First and foremost, I would like to thank my supervisor, Dr Azianti binti Ismail, who has supported me throughout my project with her patience and knowledge. Guidance by her physically and mentally is very valuable. She inspired me greatly to work in this project. Her willingness to motivate me contributed tremendously to my project. All these are the vital factors which drives me until the end.

Secondly, I would like to offer my sincerest gratitude to Autokeen Sdn Bhd (AKSB) who help me a lot to complete this project. All the information and need required gave a big help to me during the completion of this project. All supports from AKSB made me able to complete this project. Special thanks express to Mr Asyfar Abdul Rahman who supervised me during my often visit to AKSB.

Thirdly, I would like to take this opportunity to thank my family members and friends for supporting and encouraging me for the whole period of project completion. My deepest gratitude from the bottom of my heart for the support, encouragement and inspirations I ob-

ABSTRACT

This project focuses on the improvement that can be implemented to increase the performance of the work site control for storage area at Autokeen Sdn Bhd (AKSB). The aim of this project is to create an effective system of handling the storage management for Work In Progress (WIP) part. In order to complete this project, First-in First-out principle must be applied. The calculation of stocks in the storage area is very important in order to implement this principle. The calculation that needs to be done is the min max control of the stock status.

Besides, rack management also is very important so that the storage will be in good arrangement and easy to trace down the products. The idea to prepare the racking system for the WIP part will help in organizing the parts systematically. This racking system saved a lot pace in storage area. The calculation on number of stock is significant before building up the racking that can fit for three days buffer stock. In storage system, the racking system is used to arrange the polyboxes which are used to store the parts.

There are two designs of rack which used to store the Work-In-Progress (WIP) parts. The design is differ in term of the maximum number of the polyboxes that can fill the column. First design which have 11 columns and 8 racks. The minimum number polyboxes that can be filled in rack are three polyboxes. After the calculation had been made in order for the rack to hold three days buffer stock, there are three racks needed to store all the WIP parts. The second design has two racks with different size. First rack with 17 columns and eight rows to store Proton parts. The second rack with 15 columns and 8 rows to store Perodua and Honda

TABLE OF CONTENT