# FINAL YEAR PROJECT REPORT DIPLOMA IN MECHANICAL ENGINEERING FACULTY OF ENGINEERING MARA UNIVERSITY OF TECHNOLOGY SHAH ALAM

### A STUDY OF NOISE CONTROL IN INDUSTRY

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### **ABSTRACT**

Noise is a part of problem in industry. It can affect to the human body for the certain level. If there is no control, it may affect the human whom exposed to the noise. Its major effect is hearing loss. However, the employers always forget to think about this at their industry. They only think about their production and the profit.

Because of that, we try to study about noise control in industry. Noise can affect human body especially at industry. Its effect is depends on the certain level such as hearing loss, disturbance of communication, reduction of physical and social wellbeing, and so on.

There is several source of noise in industry. Normally it is come from pump, punch press machine, riveter, compressor, and so on. To reduce this noise for safety condition, we suppose to control the noise.

In general, there are three types of methods to control the noise. First is, administrative control, second is engineering control, and the last is a personal safety. However, the engineering control and personal safety are more important to do. In this report we can tell more and details about noise control. We also give a case study that we get by visit the factories to get the real view in noise control. We hope it is useful for us to make it easy to understand.

### **PREFACE**

Firstly, we would like to say our grateful to ALLAH s.w.t because give us a strength to finish our final project report about the "Noise Control in Industry". This project is a study of the pollution of noise that disturbs the workers in the industry. Therefore, from that, we realize that it is the best topic for us to take an initiative to study more about it.

Beside that, we also make more study in the automotive industry that is one of the industries with high noise level in many production departments.

From this project, we also can test our skill to see and interview all of the expert person about the noise control especially the Department of Occupational Safety and Health (DOSH). DOSH are responsible to enforce the Factories and Machinery (Noise Exposure) Regulation to control all of the noise in industry.

So we hope, when we finish this project, it can give us more information and guideline about the noise control in industry especially about how and why should we control the noise.

We would like to appreciate and thank to the person that had help us to finish our project. Without their help, it is impossible to us make this project successfully.

Therefore, we would like to thanks to our adviser, Dr. Ahmad Suhaimi Bin Abdul Rahim because of giving us advice and guideline to do the project successfully.

Besides that, we would like to thanks especially to En. Ramesh Zakir from the Department of Occupational Safety and Health (Kuala Lumpur and Selangor Branch), En Sulaiman also from the Department of Occupational Safety and Health (Headquarters), and En. Mahmud, the safety officer in Associated Motor Industry (AMI) and to all of the person who give us more information about noise.

#### 1.0 INTRODUCTION

Our project about the noise control in industry has been made by two of the final semester student, Diploma in Mechanical Engineering that is under one adviser, Dr. Ahmad Suhaimi.

This project is taking about two semesters to finish it successfully for the KJM 365. It must done by the final year student.

So, from that, we had discussed and we choose to take this topic for our project. This project was done by referring books and study from the book, interview the responsible person and make a visit to the industry and the Department of Occupational Safety and Health.

The objective of our project is to study about the effect of noise, sources of noise and controls the noise in industry.

This study is about the noise effect to the human body in the future. It is also the study how to control it from affect to the human body.

We also try to know what is the source of noise in industry and which departments are having a high noise level in industry. From this we will discuss what is the regulation that defends the workers and feel safe with their work environment.

From this project, we also learn how to control the noise and give more information to the workers about the dangerous of high noise level and the effect to the human body.