

# LAPORAN PROJEK TAHUN AKHIR HURSUS DIPLOMA KEJURUTERAAN MEKANIKAL KAJIAN KEJURUTERAAN, UITN SHAH ALAM

TAJUK:

DIE CASTING

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### CHAPTER 1 : INTRODUCTION

### **1.0 INTRODUCTION**

When we decided to start working for the final project, first thing to consider is the title of the project. We're doing some research and investigation about the engineering subject to find the must suitable and interesting things to discuss. After some study, finally we are agreed to choose a one of the attracted topic to watch now a day, the Die-Casting technology.

Demand for lightweight and recyclable aluminum components has increased dramatically over the years, especially in the automotive industry. Given their advantageous features, aluminum component produce from Die-Casting method is fast becoming more popular than they are ferrous equivalents.

Today, many products including oil pump, crankcase, alternator housings, cylinder heads, transmission cases, clutch housings, steering housing, wiper housing and a host of other products are made from such method.

As the above reason, it's clear how why we're choosing Die-Casting as our final project title. More details about Die-Casting are discussed in chapter 2.

### **1.1 OBJECTIVE OF THE PROJECT**

Our final project were supervised by Dr. Abdul Halim, the Course Tutor of Diploma in Mechanical Engineering. This final project is part of our syllabus in completing our Diploma in Mechanical Engineering. The duration for this project is 2 semester (8 months).

The main objective of the project is to develop in engineering student the ability to use every experience and knowledge in this project for future use. In Hicom Diecasting Sdn Bhd, our visiting is scheduled by En. Musrinizam of Human Resource Department. In the company, we were attached to every department, which includes Quality Assurance, Engineering, Maintenance, Toolroom, Production and Machining.

As visitors in these departments, we're required to observe the current situation of job handling and at the same time get some information for our projects. This includes case study, investigation and post mortem. However due to our inadequate of knowledge and experience in casting, we might have to consider taking this opportunity to learn as much as possible for our future use.

Last but not least, this visiting has provided us with all the useful experiences and knowledge where books cannot offer. Besides that, we can develop and enhance our communication skills with people around the factory.