

### MEC332 - MECHANICAL ENGINEERING DESIGN

PROJECT TITLE : PINEAPPLE FLESH REMOVER

COURSE GROUP : J4EM1105D

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Alhamdulillah, fir ort of food processing machine which is Pinea none of us thought that we could done this job on time put somenow we did it and praise to ALLAH SWT for giving us opportunity and strength to get it finish in time.

During the whole period of preparing this final report by the submitting this final draft report, we went through a lot of hard times and proteem. But somehow, we believe without a few person that that has been guiding us inroughout this entire process, we probably not going to make it until the finishing line. The first person is our dedicated supervisor, Dr ZurriatiBintiMohd Ali. We would to express our high gratitude for his delicate encourage advises and guide us. The second person is assistant engineer, Mr Bakri who give a lot of idea and help us to solve problem that we had faced. Last but not least, our lecturer Madam SamsiahBinti Ahmad who guide us every step from the start till the finishing of our product. Thank you very much.

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Thank you.

#### **ABSTRACT**

Removing pineapple flesh from its skin has become a major problem for pineapple consumer. The problem that appears is when removing the flesh, there are some flesh attached to its skin. The skin that also has sharp thorn make the process difficult. Thus, when cutting, it is not a clean cut.

In order to solve this, we improvised the pineapple flesh remover by adding motor to make it works automatically. To operate it, cut at the top of the pineapple and place the pineapple flesh remover at the open top of the fruit. When the switch is on, the machine rotate and the blade move vertically inside the pineapple to get its flesh.

The former pineapple flesh remover use a lot human energy to make it work. We choose this product because it already have commercialization value in market.

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## **CHAPTER 1: INTRODUCTION**

For Faculty of Mechanical Engineering, session 1 2016/2017, the group project design theme for course MEC 322 – Mechanical Engineering Design is set to be "FOOD PROCESSING MACHINE". There are 4 given categories which is raw material processing, intermediate processing, final processing and packaging. The main objective of this group project design is

- I. Explain the basic concept s in mechanical engineering design
- II. Demonstrate the use of computer-aided engineering software to solve engineering design process
- III. Analyze the simple mechanical component which would be integrated into a mechanical system using the application of computer-aided engineering software
- IV. Organize effectively within a design team