UNIVERSITI TEKNOLOGI MARA

DESIGN AND DEVELOPMENT OF ROCKET BASED RUBBER HOLLOW ELASTIC BALL LAUNCHER

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Diploma

March 2022

ACKNOWLEDGEMENT

First and foremost, I would like to indicate my gratitude for giving me the opportunity to engage in this final year project activity. From these, I have learned some lesson in mechanical industry. I would like to express my gratitude to my family and friends for continually supporting me to finish this diploma. In addition, I would like to express my appreciation to my supervisor Mr. Abdul Rahim Bahari for his assistance while in completing this project. I also wish to be a successful engineer in future. Because I believe that engineer can help to develop society lifestyle. In addition, there also have some lesson that also taught me on the time management of separate the time between career as a businessman and education as a student.

ABSTRACT

This Final year project consists of the design and development of rocket-based rubber hollow elastic ball launcher which launched vertical at fixed angle. The main reasons why the project should be done is to figure out a launcher with applied projectile motion. It is to make student easier to understand and applied the concepts through visualize learning. This project involved with launcher design that gives some flight data of experiment. By the end of this project, there are involves various methods such as the concept design, the designing, and fabrication process. After the manufacturing process done, the projectile launcher is tested to gain the flight data and solved by using projectile motion analysis equation. From there the projectile motion experiment and the objective for the experiment is succeed. For expected result, this project will design a projectile launcher by using solid modelling computer-aided design and fabricate it. From there, initial velocity calculated using projectile equation referred to the past project. As conclusion, this project can represent the application of projectile motion by using the projectile equation to find unknown value.

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