UNIVERSITI TEKNOLOGI MARA

UNIVERSITI TEKNOLOGI MARA
CAWANGAN TERENGGANU
KAMPUS BUKIT BESI

MEC299

STRUCTURE DESIGN OF RIGID TUBE RIB

ADAM ZULHELMI BIN AMRAN

2020468942

SUPERVISOR:

TS. NIK MOHD KHAIRUDDIN BIN NIK ISMAIL

SEMESTER MARCH – AUGUST 2022

ACKNOWLEDGEMENT

Firstly, I wish to thank God for giving me the opportunity to embark on my diploma and for completing this long and challenging journey successfully. My gratitude and thanks go to my supervisor, Ts. Nik Mohd Khairuddin Bin Nik Ismail.

Finally, I would like to thank both my parents for educating me from a young age to be able to successfully complete the various tasks given to me today. Infinite thanks to both of you. Alhamdulillah.

ABSTRACT

The initial goal of the project was to design the structure of rigid tube RIB and at the same time to analyze the strength of the structure. The rigid inflatable boat, or RIB, is a multifunctional boat that provide users many advantages for its ability. To underline, the RIBs' initial inflatable material, Hypalon, was changed to Polyvinyl Chloride (PVC) as part of this project's innovation. However, effectively completing this project presents various problems. This is because to the manner the boat's frame structure is built, the skill required, and the fact that wood is commonly utilized in boat construction. Although challenging, the project's objectives can be achieved. One of its objectives is to increase the strength of the boat through its design structure. In addition, it can build a sturdy boat framework, guaranteeing that the vessel is stable and secure for passengers. To realize, there are phases to building a product that must be followed to achieve the ideal product. First things first, boat builders must research and learn about the boats that must be built to design them precisely. They can design the boat with software such as PolyCad or Rhino, then analyze its strength with Ansys to assure its safety. The builder will then be able to design and construct the boat construction successfully. The boat design structure will be effectively produced. As a result of the predicted outcome, the boat's strength may be increased with appropriate materials and adequate boat structure, resulting in an innovation from the initial RIBs'.

TABLE OF CONTENTS

CHAPTER THREE : METHODOLOGY

3.1 Introduction

3.2 Flowchart

3.3 Gantt Chart

REFERENCES