

MARA UNIVERSITY OF TECHNOLOGY
FACULTY OF MECHANICAL ENGINEERING
DIPLOMA IN MECHANICAL ENGINEERING

FINAL YEAR DIPLOMA PROJECT
KJM 365

TITLE: DOUBLE FOLDED PAPER MACHINE (A4 PAPER)

SUPERVISOR:
MR. ABU BAKAR BIN BAHARI

FARHAN ISMAIL	2002423097
MAZWAN BIN MAHAMAD NOR	2002423847
AHMAD FADZLIE BIN MOHAMMAD	2002423225
MOKHTAR BIN MAT YAJID	2002424008

TABLE OF CONTENT	PAGES
1. Acknowledgement	2
2. Introduction	4-5
3. Objective	6
4. Theory	7
5. Concept Involve And Applied	8-10
6. Function of Product	11-12
7. Product Overview	13
8. Process Design	14
9. Procedure	15-19
10. Material Forming Process	20-22
11. Visual	23-24
12. Problem Involve During Process	25-27
13. Comment	28
14. Discussion	28
15. Conclusion	29
16. Reference	29
17. List of Product	30
18. Cost of raw material / equipment	31
19. Schedule	32-33

ACKNOWLEDGMENT

ASSALAMUALAIKUM W. B. T

We would like to express our up most to gratitude to God and the people who have devoted themselves in the completion of this task. We are also grateful to 'UITM' to allow us to make this subject as practical and final project for last semester student. We also want to thank to our class members that give full support and cooperation also encouragement to do and involved in this activities and successful in this progress.

First and foremost we would like to give thank to God for granting us the patience, endurance, and creativity. Allhamdulillah. Secondly, we would like to thank our parents; we would not be where we are right now if not for our parents. Thank God for their guidance and patience.

To **En. Abu Bakar Bahari** we would be forever grateful, for your guidance, advice and most of all thank you for you encouragement. He is the most important person during the completion of this task. It is not too much for us to say that he is the actual backbone of this project.

This final project was start from the open of the semester and finish at 4th of April 2005 and it is being successful. In this final project, my group members that involve four of us give full cooperation and concentration to do this work until it has being done successful. This gives us a chance and confident in adding our knowledge also open our mind in this industry.

All in all we are thankful that the project is successfully done through hardship and perseverance. We could never forget all the wonderful and painful experience we share among friends and educator during these few months. For that we would be eternally blessed.

Finally, I would like to thank all the people and other contributors included the staff in this workshop that give us a guided also give us an effort and support. It is always a pleasure to work with such a professional group of people many other who worked "behind the scenes".

INTRODUCTION

FINAL YEAR DIPLOMA PROJECT (KJM 365) is one subject that is very interesting, practical and benefit. It is the one last syllabus in DIPLOMA MECHANICAL ENGINEERING which all students must to take as 'a core subject'. As it is more to tend to produce and create some product, all students considered this subject very challenge our mind and every group will perform their own idea and skill to produce a better product quality.

Our products that we have produced were achieved of success. All the members with our supervisor, **Encik Abu Bakar Bahari** were hard and give our group a spirit to produce our product, named 'DOUBLE FOLDED PAPER MACHINE'. At present, we have focus to A4 paper size and will continue it function to variety of task in future.

The original idea of our product come through past year project. This idea is relationship with our thought of earlier. In addition, to Encik Abu Bakar Bahari has recommended that we come up with an idea of a 'Paper folder'. According to him, last project is good, and it has something that can be improved. After carefully consideration and planning, we have decided to go along with the idea. We do a research of this product and we find that there are several disadvantages and we do some upgrade to this product to produce a better product quality.

Paper is soft, thin and unique. Sometimes, some one would like to change the paper and other form. You will take 3-5 second for a piece of paper. But, if you want to do for many like hundred or thousand paper, it is impossible to do with ourselves. It is become true by our product design which it can 'fold' the paper in a lot amount with fasten, and easier. So, nothing impossible by used of our knowledge and technology. Our focus right now is for *engage or marriage card, bills and form letter*.

We together with our supervisor, Encik Abu Bakar Bahari were made some research and analysis through the paper in solving the problem. The important is at their strength and weakness also its properties. We have design and produced a new model of a product which will work fully automated using a main system which is 'pneumatic system'. Our product is come out with complex, compact and easy to use.

All in all, these subjects KJM 365 were giving us new environment and experience. By used its application in the future, make easier to do work in workshop and engineering sector. Therefore develop our skill in work ethic such as welding and fitting.