



UNIVERSITY TECHNOLOGY IRAQ  
FACULTY OF MECHANICAL ENGINEERING  
(MANUFACTURING) (EM 112)

TOP 300 FINAL YEAR PROJECT

PROJECT REPORT  
"PAPER MACHINE"

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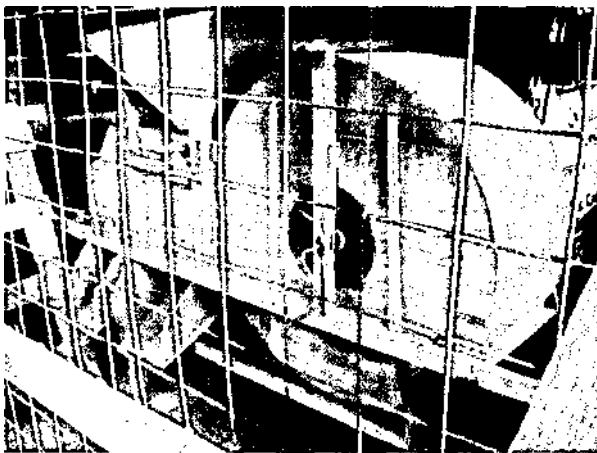
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## *Introduction*

The final year project KJM 365 is a compulsory subject for all diploma students in the field of Mechanical engineering course. The course actually required each group (5 people) to design and make something that is useful on their own engineering skills.

The entire project begins with analyzing problems from the environment. After that, the group will collect data. From the data, they can make hypothesis and then experiment. If the experiment success, a new product will be produced to solve the existing problem. To ran the project smoothly, they will be guided with one supervisor and raw material will be provide.

My group has made a multi-purpose Rice thrasher machine named "*HUNG KOU*". Actually, the kadazans called Hung kou for a traditional rice thrasher machine made from wood by an experience carpenter. The design is never change until now. "*HUNG KOU* " is made to solve problem for the existing machines. The main function is to separate between rice and skins. Beside that, a lot of new advantages on this machine too.



Traditional Paddy machine

### *Objective*

"Hung kou" is new generation machines. It also have a lot of advantages compare to the existing machine. The objective of these machines is;

1. Separate between rice and skins
2. Can be operate either automatic or manual
3. Easy to produce.
4. Ease of maintenance.
5. No pollution
6. Cheap
7. High efficient
8. Long life of operation
9. It can be used in the factory for mass production
10. Can be use for farmers for small production
11. Easy to operate
12. High production
13. Easy to replace

### *Research*

During this week, our group has made research on paddy machine. This is made to analyze the problems on paddy machine and how to solve it. Research is done by surfing internet, interviewing and referring book at the library. Research include on material, productivity, cost, and equipment. Then, we have clues to achieve the objective.

#### *Problems from the existing Paddy machine:*

##### Commercial Paddy machine

1. Expensive
2. Using high voltage electricity or fuel (diesel)
3. High pollution
4. High maintenance.
5. Heavy
6. Need special tools or skills to setup machine.
7. High cost to produce

##### Traditional Paddy machine

1. Made from wood
2. Need experienced carpenter
3. Short operation
4. Using human strength
5. Low production
6. High maintenance