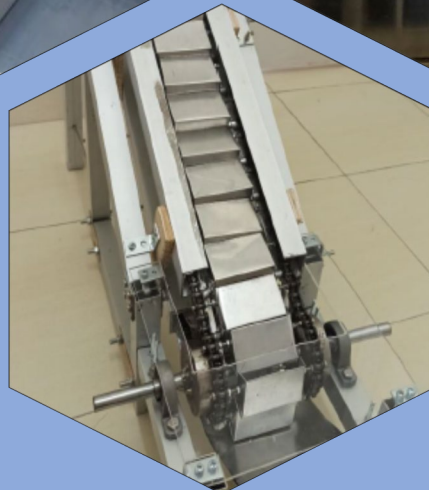
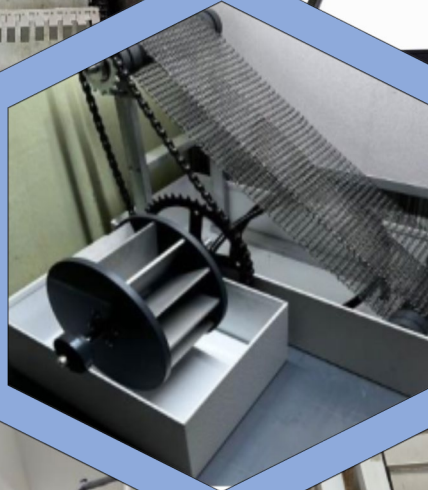


PROTOTYPE DESIGN COLLECTION

SERIES 1



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CHAPTER 71

Foldable Multifunction Hand Trolley

Muhammad Luqman Fahmi Mohd Zaki and Najibah Ab Latif

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PROJECT DESCRIPTION

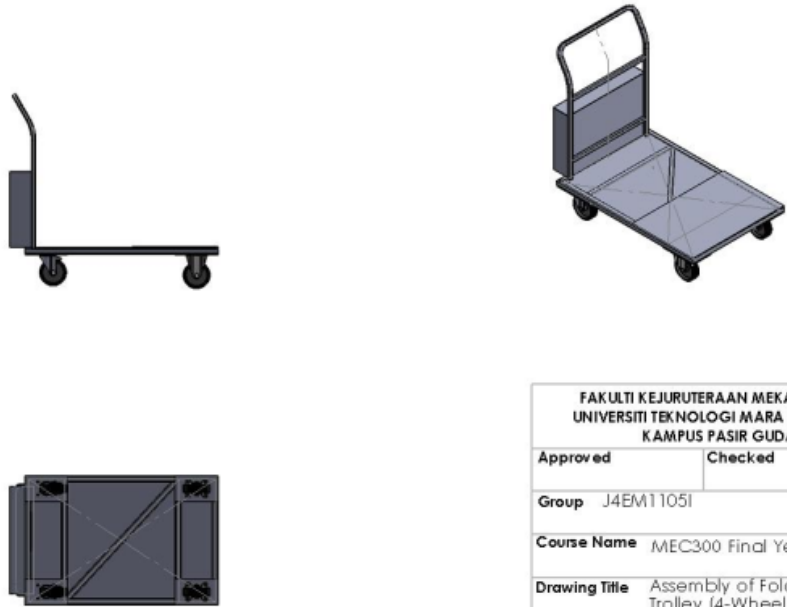
Mechanical Engineering students of semester 4 were given a task to manufacture a product to help or ease people in solving everyday problems. From the data obtained, people are having a problem carrying or transporting loads of bigger shape or dimensions. The objective of this project is to design and fabricate a multifunctional trolley and can be used with 4-wheel mode and 2-wheel mode. This project is also to analyse the multifunction hand trolley affected to the applied load using simulation software. This concept will be generated by referring to existing products in the market based on the characteristic and criteria. Some manufacturing steps will be included in this proposal like research and literature review. There will be several manufacturing processes to fabricate this project like measuring, cutting, welding, and finishing. Upon the completion of this fabrication, an in-depth understanding will be gained and improvement on ability to write an excellent proposal for engineering design fabrication which then can assist fellow students in their future professional environment in the engineering world.

Keywords: *Fabrication, Foldable, Multifunction, Trolley*

PROTOTYPE



DESIGN PARAMETER



FAKULTI KEJURUTERAAN MEKANIKAL (FKM) UNIVERSITI TEKNOLOGI MARA (UTM) JOHOR KAMPUS PASIR GUDANG				
Approved	Checked	Drawn Muhammad Luqman Fahmi		
Group J4EM1105I				
Course Name MEC300 Final Year Project 2				
Drawing Title Assembly of Foldable Multifunction Trolley (4-Wheel Mode)				
Part Name				
Part No.				
REV	Scale	Projection	Weight	Sheet
	1:20		20KG	1/3



BILL OF MATERIALS (BOM)				
NO.	Part Name	Description	QTY	
A	Handle	81.5 x 42 cm	1	
B	Storage Box	12 x 9 x 6 cm	1	
C	4-Wheel Mode Base	12 x 9 x 6 cm	1	
D	2-Wheel Mode Base	35.5 x 42 cm	1	

FAKULTI KEJURUTERAAN MEKANIKAL (FKM) UNIVERSITI TEKNOLOGI MARA (UTM) JOHOR KAMPUS PASIR GUDANG				
Approved	Checked	Drawn Muhammad Luqman Fahmi		
Group J4EM1105I				
Course Name MEC300 Final Year Project 2				
Drawing Title Assembly With Bill of Materials				
Part Name				
Part No.				
REV	Scale	Projection	Weight	Sheet
	1:10		20KG	3/3