



ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

Permanently Affiliated to JNTUK, Kakinada, Approved by AICTE, New Delhi

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Aditya Nagar, ADB Road, Surampalem, 533437

Department of Mechanical Engineering

Project Title:	“Design and Fabrication of Workshop Trolley”	
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Abstract	PO's Mapping	PSO's Mapping
Trolley is the device used for carrying load or to transport the material from one point to another. For different types of application various types of trollies are available in the market. Depending upon the specific use the one will select the trolley, but it is limited to do a specific work. To overcome this problem, a new trolley was designed which could be used for multi-purpose. There are many types of trolley available in the market for various fields like airport, shopping malls, industries, hospitals etc. to carry the heavy or light loads. This paper contains the development of trolley, which includes design on the basis of creativity skills and fabrication, which can be used for more than one type of task. The trolley designed is the integration of airport trolley and shopping mall trolley. One more advantageous feature added to the design was a motorized wheel which reduces the human effort for carrying of load and also it can be operated manually if required.	PO1, PO2, PO4, PO9, PO10,PO11	PSO2, PSO3

PO1: Engineering Knowledge	PO5: Modern Tool usage	PO9: Individual & Team Work
PO2: Problem Analysis	PO6: Engineer & Society	PO10: Communication Skills
PO3: Design & Development of solutions	PO7: Environment & Sustainability	PO11: Project Management & Finance
PSO1, PSO2, PSO3	PO8: Ethics	PO12: Life Long Learning
PSO1: Mechanical Engineers must be able to analyze, design and evaluate mechanical components and systems using cutting-edge software tools as required by the industries from time to time.	PSO2: The ability to work in manufacturing and other sectors' operations and maintenance plants	PSO3: As part of a team or individually, plan and manage activities in micro, small, medium and large enterprises

Relevance to PO's and PSO's

PO1	Applied the subject knowledge the trolley
PO2	Analysis of base of the workshop trolley
PO4	Calculation wheel radius and dimensions of the base part of the work shop trolley
PO6	This trolley used to carry the goods in various area such as, railway platform, industries and market.
PO9	Fabrication of workshop trolley is done with team work
PO10	Students able to present their work through presentation and documentation which enhance their communication skills
PO11	Managing of costs and achieving better results
PSO2	Students are aware about manufacturing processes that are involved
PSO3	Students able to get plan and manage of activities involved in fabrication of workshop trolley

