

Project report on

**FABRICATION AND DEVELOPMENT OF MOTORIZED MULTI-PURPOSE MACHINE**

A project report submitted in the partial fulfillment of the requirement for the award of degree of

**BACHELOR OF TECHNOLOGY  
IN  
MECHANICAL ENGINEERING**

**Submitted by**

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**AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

**DEPARTMENT OF MECHANICAL ENGINEERING**

(Approved by AICTE and permanently Affiliated to JNTUK-KAKINADA,AP) TAMA-

RAM (VIL&PO),MAKAVARAPALEM (MD)

VISAKHAPATNAM (DISTRICT-531113)

**(2015-19)**

# AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Approved by AICTE and permanently Affiliated to JNTUK-KAKINADA,AP)

(An NBA Accredited Institution)

TAMARAM (VIL&PO),MAKAVARAPALEM (MD)

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## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

This is to certify R.VIKAS (15811A03B3),P.LINGARAJU (15811A03A4), R.DURGA PRASAD (15811A03B2), R.GIRISH (15811A03B6) of final year engineering have done their project work on **“FABRICATION AND DEVELOPMENT OF MOTORIZED MULTIPURPOSE MACHINE”** at AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, Narsipatnam in partial fulfillment of the requirements for the award of degree of “Bachelor of technology” in “MECHANICAL ENGINEERING” to JNTUK University , during the academic year 2015- 2019. The result embodied in the project report has not been submitted to any other institute for the award of any degree.

  
Internal guide

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## ABSTRACT

The aim of our project is to increase the productivity by fabricating a motorized multipurpose machine that could perform four machining operations (drilling, grinding, sawing (using hacksaw), cutting) at a time. Industries are basically meant for production useful goods and services at low production cost, machinery cost and low inventory cost. Today in this world every task have been made quicker and fast due to technology advancement but this advancement also demands huge investments and expenditures, every industries to make high productivity rate maintaining the quality and standard of the product at low average cost. The bevel gear mechanism, skotch yock mechanism, belt drives make the multi operations possible with a single input. The need for our project was found out in industries here mass production is carried out. In mass production each operation is carried out step by step manner in a continuous order by transporting the workpiece from one machine to another in a sequence. Thus the transferring of workpiece from one machine to another consumed time, human effort as well as power consumption for each and every machine. Thus our project is the fabrication of machine which came with the breakup for time consumed for the shifting of workpiece as well as the power consumption leading to high productivity, low production cost as well as the decreased capital cost .since the cost of our multipurpose machine is less than the total cost of all the machine purchased separate.

**KEYWORDS:** skotch yock mechanism, Bevel gear mechanism , belt drives.