

# **Fabrication of Motorized Multipurpose Machine (Cutting, Drilling, Grinding)**

A project report submitted in the partial fulfilment of the requirements for the award  
for the degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**MECHANICAL ENGINEERING**

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**CERTIFICATE**

This project is to certify that report is entitled "**FABRICATION OF MOTORIZED MULTI PURPOSE MACHINE**" was carried out by **K. RAJESH (17815A0325)** , **S. BRAHMAJI (17815A0368)**, **P. NAVEEN (17815A0345)**, **V. HANISH (16811A0391)** in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in "**MECHANICAL ENGINEERING**" To JNTUK university at **AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY, NARSIPATNAM**, during the academic years 2016-2020.

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**INTERNAL GUIDE**

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## ABSTRACT

This Project deals with fabrication of multi-purpose tooling machine. This machine is based on the mechanism of belt drive with pulleys and bevel gears. The various machining process in manufacturing industries are carried out by separate machining machine. It requires more space requirement and time with high expenses. The concept of Multi-Function Operating Machine mainly carried out for production-based industries. Industries are basically meant for Production of useful goods and services at low production cost, machinery cost and low inventory cost. Today in this world every task has been made quicker and fast due to technology advancement but this advancement also demands huge investments and expenditure, every industry desire to make high productivity rate maintaining the quality and standard of the product at low average cost. We have developed a conceptual model of a machine which would be capable of performing different operation simultaneously, and it should be economically efficient. In this machine the power is drive to the main shaft directly attached to the motor of both sides, and the pulley is attaced to the pulley belt mechanism so the other operations are performed working centre simultaneously as it is getting drive from single power source. Objective of this model are conservation of electricity (power supply), reduction in cost associated with power usage, increase in productivity, reduced floor space.

Keywords: AC Motor, Grinding wheel, Drill bit, Cutter, Bevel gear, and V-Belt Drive.