

FABRICATION OF MULTI-PURPOSE MACHINE TOOLS

**A PROJECT REPORT IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE
AWARD OF THE
DEGREE OF
BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING
BY**

**M.J. PRADEEP CHANDRA (17815A0333)
P. JEEVAN KUMAR (17815A0342)
N. SAI (17815A0341)
V. NAGA RAJU (16811A0386)**

**UNDER THE GUIDENCE OF
A.N.S.SURYA PRAKASH. M.TECH
Assistant Professor**



**DEPARTMENT OF MECHANICAL ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Permanently Affiliated to JNTU-KAKINADA, A.P & NAAC Accredited institution)
TAMARAM, MAKAVARAPALEM, NARSIPATNAM
Visakhapatnam -531113
(2016-2020)**

**AVANTHI INSTITUTE OF ENGINEERING AND
TECHNOLOGY**

(Permanently Affiliated to JNTU-KAKINADA and Approved by AICTE)

(An N.B.A. Accredited institution)

TAMARAM, MAKAVARAPALEM, NARSIPATNAM-531113,
VISAKHAPATNAM Dist.



CERTIFICATE

This project is to certify that work is entitled "FABRICATION OF MULTI-PURPOSE MACHINE TOOLS" is a bonafide record done by M.J.PRADEEPCHANDRA(17815A0333),P.JEEVAN KUMAR(17815A0342) N.SAI(17815A0341), V.NAGA RAJU(16811A0386) students of final year B.Tech in the department of Mechanical Engineering, Avanthi Institute of Engineering and Technology, Visakhapatnam.

2016-2020

PROJECT GUIDE
A N S SURYA PRAKASH M.Tech
Assistant prof. Dept of ME

HEAD OF THE DEPARTMENT
V HARI KIRAN M.Tech, (Ph.D)
Associate prof. Dept of ME

EXTERNAL EXAMINAR

ABSTRACT

Most of the industries are having various types of reciprocating machines for performing machine operation on small size of work. A shaping machine is mainly used shaping the tools, which may be horizontal, vertical, inclined. In this the shaping Operation is performed on both sides of the machine. In this project a dual side shaper machine is designed with the help of Scotch Yoke mechanism, which converts the rotary motion of motor into linear motion of tool which shapes the workpiece mounted on the vice from both the sides. Grinding is a abrasive machining process that uses grinding wheel as a cutting tool. In industries for achieving shaping and grinding operations they are using individual machines. While in this project both operations can be achieved in a single machine.