

DESIGN AND FABRICATION OF GYROSCOPIC CIRCULAR PROFILE MARKER

A Project report submitted in partial fulfillment of the requirements for award of

Degree of

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

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CERTIFICATE

This is certify that the project work entitled **“DESIGN AND FABRICATION OF GYROSCOPIC CIRCULAR PROFILE MARKER”** is a bonafied record of work done by **CH.JAYA SRIVATSA(14811A0321), A.SRINIVASARAO (14811A0308), CH.BRAHMRAJ (14811A0322), A. RUFEEEN DOMNIC (14811A0305)** in partial fulfilment of the requirement for the award of Bachelor of technology in **MECHANICAL ENGINEERING** by Jawaharlal Nehru technological university, Kakinada . During the year 2014-2018.

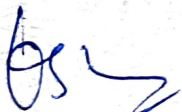

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EXTERNAL EXAMINER

ABSTRACT

Gyroscopic effect has advanced applications in several engineering fields such as aeronautical, automobiles, Ships and other advanced emerging technologies. And the industries use different CNC machines and other laser techniques in order to cut circular plates with large radii which are have been using in several manufacturing aspects. We present an idea of marking the circular plates, plywoods and sheets by using a gyroscopic effect. The change in precession of gyrowheel or disc produces a reactive gyroscopic couple. The reactive gyroscopic effect is utilised in order to mark or to trace the circle on the sheet using laser or tool. It is all done by the change of precession in angular velocity vector and plane of precession. And the marking speed is maintained by controlling the angular velocity of circular disc or gyro wheel driven.

Key words: Gyroscopic effect, precession, Angular velocity, Angular acceleration, Gyroscopic torque,