FABRICATION OF GEAR TOOTH GRINDING MACHINE

A Project Report submitted in partial fulfillment of requirements for the Award of the degree of

BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that this project work entitled "FABRICATION OF GEAR TOOTH GRINDING MACHINE" that is being submitted by E. JAGADEESH KUMAR (15815A0313), P. SHANMUKHA (15815A0346), A. SAI KUMAR (15815A0301), K. HARISH (15815A0323) to AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY, Makavarapalem, Visakhapatnam in partial fulfillment of the requirements for the award of degree of BACHELOR OF TECHNOLOGY in MECHANICAL ENGINEERING is a bonafide work carried out by them under my guidance and supervision during the year 2014-2018.

The result embodied in this have not been submitted to any other College or University for the award any other degree.

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ABSTRACT

Tooth grinding is the finishing of the teeth with a grinding operation. Teeth made by grinding are usually those of fine pitch, where the amount of metal removed is very small. Grinding work is typically more accurate than a hobbing operation. In addition harder products cannot be milled and have to be grinded.

A gear tooth grinding machine involves two grinding wheels mounted and directed on two pillars. Each wheel is rotated with high speed to remove the material. These grinding wheels are fed pneumatically over the gear wheel.

It also save costs on expensive cutting tools such as hobs, shapers or cutters, or to get a desired surface finish or accuracy on a difficult-to-manufacture gear.

The gear tooth grinding machine finds its extensive use in the manufacturing of gear where the gear tooth are grinded to close tolerances. The same equipment is used to remove the imperfections of the gear due to continuous work and effects of foreign material contaminations.