

AVANTHI INSTITUTE OF ENGINEERING &
TECHNOLOGY

(Approved by AICTE, Permanently Affiliated to JNT University, Kakinada)
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113



DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that project work is entitled "**FABRICATION OF FOOD PROCESSING MACHINE BY USING RACK AND PINION MECHANISM**" is a bonafide record done by **M.Vinay Santosh (15811A0378), P.Jagadeesh (15811A0397), P.Laxmana Rao (15811A03A7), P. Srikanth (15811A0399)**, students of final year **B.Tech** in the Department of **Mechanical Engineering**, Avanti Institute of Engineering and Technology, Visakhapatnam. This work was done for the fulfillment of the requirements of the award of **Bachelor of Technology** during the year 2018-2019.

PROJECT GUIDE

HEAD OF THE DEPARTMENT

EXTERNAL EXAMINER

**FABRICATION OF FOOD PROCESSING MACHINE
BY USING RACK AND PINION MECHANISM**

A Project report submitted In partial fulfillment of the requirements for the award of the
degree of

**BACHELOR OF TECHNOLOGY
IN
MECHANICAL ENGINEERING**

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**DEPARTMENT OF MECHANICAL ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi)

Accredited by NBA, NAAC with B⁺ Grade Affiliated to Jawaharlal Nehru Technological
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Tamaram, Makavarapalem, Narsipatnam, Visakhapatnam.

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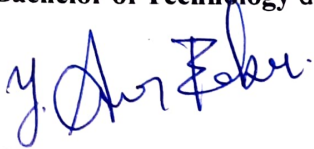
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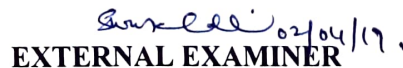
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EXTERNAL EXAMINER

ABSTRACT

In the people situation, people feeling very difficult to eat food outside due to less hygienic conditions. Particularly in street edible stalls. Here we developed a food processing machine. This machine prepares a food(breakfast and snacks) like bajji, punugu...etc. The machine assembly includes sliding operation and rack pinion mechanism. The machine comprises base stand and top stand. Here the base stand includes stove and oil pan. The top stand includes circular base stand, constant plate, batter bowl with gear and pinion gear with handle...etc. Initially, a constant plate is fixed to a circular base stand, whereby the circular base further connected to a top stand and this complete setup is sliding on the base stand. Here the top stand moving from one position to another position with the help of pulling a handle. Further the batter bowl placed on top of an oil pan (looking like cantilever beam) and the handle further attached to the front view of the top stand with a bearing. The mechanism of the machine includes a pinion gear teeth connected to an outer side gear of the batter bowl, both gears are contacted by rack and pinion mechanism. It can use to rotate the batter bowl over the constant plate in the horizontal direction to resulting in extruding dough or batter and to be dipped into the oil pan. We fabricated the machine and got good results. Within a short time get more food in a hygienic manner.