International Journal of Innovative Research in Engineering
Volume 3, Issue 3 (May-June 2022), PP: 584-586.
www.theijire.com
ISSN No: 2582-8746

Fabrication of Kharra Making Machine

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How to cite this paper:
Anurag A. Mishra[1], Ashish K. Chinchmalatpure[2], Anup D. Katre[3], Aniket D. Mate[4], Ashirwad B. Kamble[5], Sharad S. Pawar[6], "Fabrication of Kharra Making Machine", IJIRE-V3I03-584-586

Abstract: *The objective of this work in to automate the conventional kharra making machine in order to achieve high productivity of work pieces than the kharra making machine using a double slider plate snoring. The operator need not mixed of the work pieces that is to be snoring. The machine feed the work piece with the help of shaft, which is driven by a DC motor. A DC motor is used to be bring about the reciprocating motion is required for snoring of work piece. With the help of this multi way kharra snoring making machine, the four work piece can be snoring simultaneously to get the high speed snoring and to achieve mass production for maximum profit in related small shop. This project is very much useful and easy to install by the user and also the motor used will not only operate with the help of electrical but also through conventional source of energy like solar energy*

Key Word: *Scotch yoke mechanism, fabrication , sliding mechanism, double snoring plate , designing*

I. INTRODUCTION

In present condition many electrically operated kharra snoring machines of different shop and different specifications are available for the use in the shop floor. These machines are so precise that they can snoring material with minimum time made up of different material but they have one and major disadvantages that those are able to snoring a single piece of the material at the time For shop to achieve the mass production, it is necessary to snoring the high rate. So it is impossible to depend upon conventional man power snoring and need the improvement in technology and design of such machine. With the help of this multi way kharra snoring machine, the four material can be snoring simultaneously to get high speed cutting rate and achieve mass production for maximum profit in related companies As this machine is basically used for snoring or mixing material. With the help of this machine easily operation can be done productivity can be improved as well as product Quality. Which is first priority of customer it also reduce the human effort and reduce manufacturing cycle time. It generally used in Pan shop. It can also be operated automatic as well as manually. This project is very much useful and easy to install by the user, and its simple working and operating conditions along with its compatibility, efficiency and affordable price.

II. PROCESS

Manufacturing process are the steps through with row material are transformed into a final product. The manufacturing process begins with the creation of the materials from which the design is made. These materials are then modified through manufacturing processes to become the required part. Manufacturing processes can include treating (such as heat treating or coating),machining or reshaping the material. The manufacturing process also includes the tests and checks for quality assurance during or after the manufacturing and planning the production process prior to manufacturing.

2.1 OPERATION

Project model :-

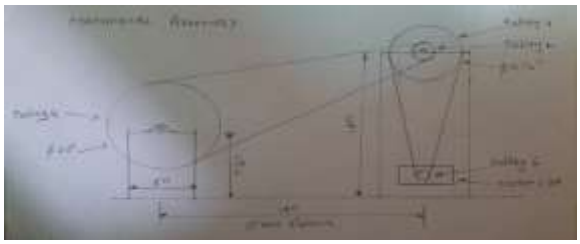
2.2 COMPONENTS:-

The major components involved in the construction of our projects are_

- Electric motor
- Belt
- bearing
- driven pulley
- Nut and Bolt
- Welding of the parts
- Pulley
- frame
- Crank shaft
- Rubber pad

III. WORKING PRINCIPLE

In this Electric motor operating Paper cup making machine there is a 1hp electric motor having control by their speed by speed controlling device with 40RPM. This motor is mounting a small pulley which is a staring the revolution and transfer it rotating motion into reciprocating motion with the help of arrangement of v belt on crank shaft, the crankshaft is mounting on top of the frame in a arrangement of four bearing housing, consists a punch, die, nut and bolt, crack shaft, Bearing, pulley. When the electric motor is starting the revolution it transfers the motion from small pulley to big pulley with the help of v belt, small pulley is mounted on the motor shaft and big pulley having mounting on crankshaft, and the punch is mounting on the connecting rod which is connecting to crankshaft. When crankshaft staring revolution the punch get start reciprocating up and down motion Due to this it exert a pressure on rubber pad, then its moving forwards and back word direction then material snoring 5min and properly mixing material.



DISCRIPTION	SIZE AND MOMENT
MACHINE SIZE L*B*H	32 ½ INCH
1ST MOTOR PULLEY DIAMETER	3 ½ INCH
2ND MOTOR PULLEY DIAMETER	10 ½ INCH
3RD MOTOR PULLEY DIAMETER	3 INCH
4TH MOTOR PULLEY DIAMETER	20 INCH
STABLE PAD	29 INCH*16 INCH
RORATING PAD	15 INCH *10 INCH
ROTATING TRACK	32 ½ INCH *19 INCH
ACTUAL ROTATING RECIPROCATING MOMENTS	22 /4 INCH

3.1 Merits:-

Compact size and portable Easy to move from one place to another place Operating principle is simple. Non-skilled person also operate this machine Time conception is very less when compare to the manual machine The force required to operate this system is low.

- Cost of machine is less as compared with other machine.
- Simple maintenance
- No need of skill labour

3.2 Demerits:-

- It required electric power.
- large amount of energy is supplied to the process starter motor.
- it gives 75% work done and 25% of waste.

3.3 Application:-

- It is suitable for small scale and medium scale industries.
- Electric motor operating machines are used in less maintenance place then hydraulic as well as pneumatic machines.
- To increasing the production rate of product during small interval of time.

IV. CONCLUSION

- The design of the integrated kharra snoring machine is based
- On the technical idea of the combination of all the processes
- Power and satisfies the need for household industries.
- The machine is simple to operate.
- This machine allows in its HDL-C improved by +3.46%,+8.17%and 8.17%,respectively.

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