

A review on Design and Development of an Advanced Cotton Wick Machine

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Abstract :-

Cotton is known for its versatility, performance and natural comfort. It's used to make all kinds of clothes and home wares as well as for industrial purposes like tarpaulins, tents, hotel sheets and army uniforms. Cotton is a food and a fiber crop. Cotton seed is fed to cattle and crushed to make oil. We have designed the cotton wick machine. This design consist of designing of frame, roller bush and cotton wicks size die. Designed the frame structure from standard M.S sheet and fabrication material. This machine is used to make the round cotton. The machine is helpful for small scale industries for increasing rate of production and customer satisfaction.

Keywords :- Cotton, Cotton wicks

I. Introduction

Textile mill can be set up in a tehsil where around 9,600 tonne of cotton is produced in a year, the official said. The cotton growing tehsils have been identified in Aurangabad, Jalna, Parbhani, Hingoli, Nanded, Beed, Buldhana, Amravati, Nagpur, Akola, Yavatmal, Wardha, Chandrapur, Nashik, Dhule, Nandurbar, Jalgaon and Ahmednagar districts etc

Cotton is known for its versatility, performance and natural comfort. It's used to make all kinds of clothes and home wares as well as for industrial purposes like tarpaulins, tents, hotel sheets and army uniforms. Cotton is a food and a fiber crop. Cotton seed is fed to cattle and crushed to make oil. This cottonseed oil is used for cooking and in products like soap, margarine, emulsifiers, cosmetics, pharmaceuticals, rubber and plastics. An average textile mill needs around 4,896 tonnes of cotton per annum to sustain itself.

This means a textile mill can be set up in a tehsil where around 9,600 tonne of cotton is produced in a year, the official said. The cotton growing tehsils have been identified in Aurangabad, Jalna, Parbhani, Hingoli, Nanded, Beed, Buldhana, Amravati, Nagpur, Akola, Yavatmal, Wardha, Chandrapur, Nashik, Dhule, Nandurbar, Jalgaon and Ahmednagar districts etc.



Cotton Wicks has been a large production of various consumer products. The circular cotton wicks has become more important in market these processes as it allows rapid production and higher quality material to be produced while reducing labor costs and operator. In order to be able to use cotton wicks for production, a fixture must be designed that will locate, hold, and support the part while it rotating using motor or pulley based. The design of the fixture will have a drastic impact on the quality of part that is produced from the process. This machine is used for all the small scale business and industries also. Cotton wick making machine automates the process of making round cotton wicks in a very efficient manner.

Wicks made from this machine have uniform shapes and sizes. This machine is easy to operate, portable and requires very less maintenance. Operation of machine is quite simple and easy to maintain. Dropping mechanism and employing two hands for production aids the productivity. Machine is compact and maneuverable. Quality of wick is consistent and far better.



II Literature Review

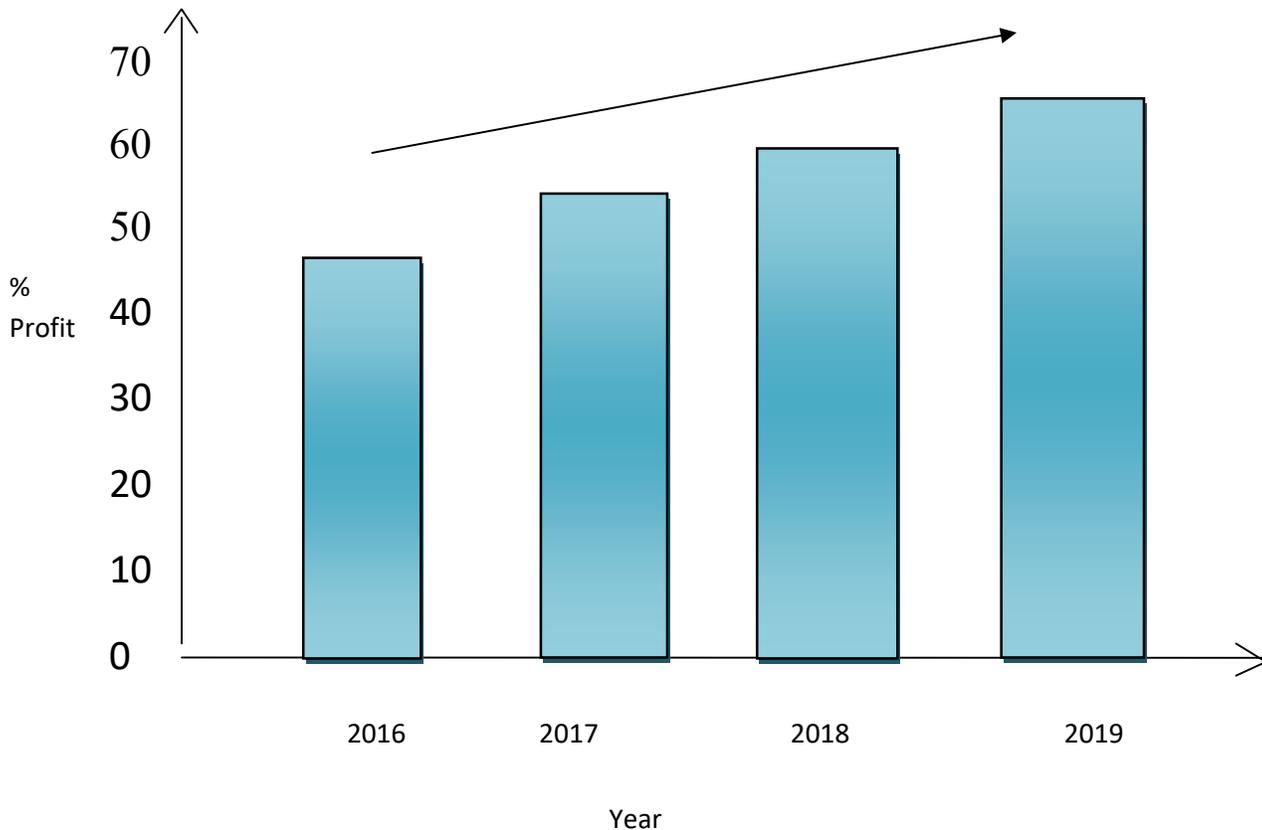
In today's industrial world mans innovative ideas has taken him towards all directions concerning about the production and safety in industrial establishments. Some instruments are of sheer excellence where as others are the result of long research and persistent work, but it is not the amount of time and money spend in the invention of device or the sophistication of it operation is important, but its convenience, utility and operational efficiency that are important in considering the device.

The market survey shows that, the local trader provide raw cotton and buy back cotton wicks from the women. The compensation provided is in the range of Rs. 60 to Rs.300 per kg, depending upon the size, shape and quality of the wicks. The vision of this machine is to create small scale employment and business opportunities in small town and villages, specially for women and handicraft.

III.Expected Outcomes

Now a day workers are not available for all the field for work on time and working capital of small scale business process is increased. Hence, increase in production cost will increase for final price for end customer. Hence we have tried to make an automatic cotton wicks making machine. This machine will help small scale and industrial field to increase its production in low time and low cost. Wick making is a fairly manual process wherein a lump of cotton may be taken and spin with hands to make wicks.

Machines for making long cotton wick are available in the market for industries; however there is no machine available for making round cotton wick for small scale production or for cottage industries. This is a machine that can make round cotton wick for small scale production. This machine is compact, portable and affordable hence less space is required. This machine is too easy to use and maintain and provide income generation and opportunity for rural and urban people.



Increasing profit and customer satisfaction of "Cotton Wicks Machine"

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