CIRCOT Leaflet No. 56

A Low Cost Sliver Making Machine For Value-Addition to Cotton at Village Level





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Introduction

In the cotton growing area, villagers normally use hand made slivers for producing yarns. In this method, the wastage of cotton is more and the quality of sliver is not maintained, resulting in fibre damage and production of poorer quality yarn.

Cottage industries producing towels, lungi, chaddar, etc. are rural-based vocations for the farmer apart from agriculture with the womenfolk making a significant contribution in this endeavour. There is a great demand for cotton yarn by these industries within the village itself.



Traditional Carding Machine

Often these cottage industries face shortage in supply of yarns.

Commercial spinning machines are highly sophisticated, voluminous in size, and consume more power. They are often beyond the reach of village industries due to high cost.

Thus, there is a need for a low cost, less sophisticated miniature sliver preparation machine. This problem has been addressed by CIRCOT by designing and developing CIRCOT MINI CARD that will help in value addition to cotton at rural level.



Traditional Yarn Spinning



Uneven Sliver Quality

CIRCOT MINI CARD

The CIRCOT MINI CARD consists of two detachable units namely, a pre-opener and a carding system including sliver making unit. The card can be used in conjunction with traditional roving and yarn making machines for quality yarn production.



Pre-opener



Carding System

Features

- Simple design, ease in operation and maintenance
- Low power consumption
- Good cleaning of impurities and foreign matter
- Well covered machine
- Jalis on both sides of the machine as a safety measure against accident
- Heavy-duty castor wheels for ease of transportation of the machine
- Pre-opener feeding unit is an optional attachment, and can be dispensed off for processing opened cottons
- Production of even sliver

Machine Dimensions

Length x Breadth x Height = 2.90 m x 1.20 m x 1.70 m Motor Rating:

THE SEA STATES		
Carding Element	Motor HP	Motor RPM
Opening Unit	0.5	1440
Main Cylinder	0.5	950

Productivity = 2 kg/hour (for medium staple cotton)





CIRCOT MINI CARD

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