CIRCOT Leaflet No. 2



# GINNING TRAINING COURSE

A Practical Training Programme
on
Ginning Technology
for
Ginning Personnel



Central Institute for Research on Cotton Technology
(Indian Council of Agricultural Research)
Adenwala Road, Matunga, Mumbai 400 019

#### **OBJECTIVE**

Ginning is the first and the foremost step in cotton processing. It decides the quality of raw material that goes into textile production. Most of the ginneries in India have old, outdated machines operated by untrained technicians and workers. Precleaners are very rarely in use for initial removal of foreign matter. The result is trashy and damaged lint, replete with cut seeds and seed coats.

Gin setting and gin maintenance are critical operations that affect the quality of cotton produced even if the machines are new and modern. Efficient machines operated by skilled personnel are necessary for the production of quality lint from ginning. It is in this context that the training offered by the Central Institute for Research on Cotton Technology (CIRCOT) assumes significance.

The CIRCOT was founded in 1924 by the Indian Central Cotton Committee in Mumbai. This Institute was later brought under the administrative control of Indian Council of Agricultural Research (ICAR) in the year 1966. The main objectives of the Institute have been to carry out research investigations on physical, chemical and structural characteristics of cotton fibres, to carry out study on ginning and spinning of cotton and to develop technologies for utilisation of by-products and cotton wastes. Under the Integrated Cotton Development Project (ICDP) with World Bank assistance, CIRCOT had set up a Ginning Training Centre (GTC) at Nagpur in 1985. The centre has all the infrastructural facilities for training including ultra-modern ginning machinery, fibre testing equipments and microspinning unit. It is at the GTC that we conduct regular training programmes for the benefit of technicians employed in ginning units in the country. Details of courses offered are given below.

#### **COURSE CONTENT**

#### \* Introduction

Ginning scenario in India – A brief outline of the main stages in cotton processing – The need for improvements in ginning technology.

## ★ Cotton Production and Marketing

Fibre growth – Development of different varieties – Visual Grading – Marketing of kapas.

# ★ Materials Handling Equipments and Structures

Storage of Kapas – Handling of Kapas – Design, Construction, Working of Belt Conveyors – Screw Conveyors – Chain Conveyors and Bucket Elevators – Pneumatic Suction System – Handling of Lint and Seed.

## \* Pre-Cleaning

Importance of Pre-Cleaning – Trash percentage – Seed Coat Fragments – Types of Pre-Cleaners – Working and Maintenance of Cylinder type Cleaners and Kapas Extractors.

## **★** Ginning

Ginning Percentage – Types of gin machines – Comparison of SR, DR and Saw Gins – Maintenance Schedule of Gin Machines – Settings and Adjustments of Gins for different Cottons – Effect of Faulty Settings on the Quality of Lint – Safe Work Practices.

# **★** Bale Packaging Machinery

Operation of Lint Condenser – Bale Press Classification – Working of Press Machine – Packaging Material – Bale Marking.

## ★ Fibre Quality Evaluation

Measurement of Length, Fineness, Maturity and Strength – Fibre Quality Index.

#### **COURSE DURATION**

\* Short Duration Course : Two weeks \* Long Duration Course : Four weeks

\* Tailor-made package programmes: One or two weeks,

as desired

## All enquires should be addressed to:

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#### OR

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