



# **TRINITY COLLEGE FOR WOMEN NAMAKKAL**

**DEPARTMENT OF COSTUME DESIGN & FASHION**

**FIBER TO YARN  
ODD SEMESTER**

**Presented by**

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# BLOW ROOM PROCESS

# INTRODUCTION

- The section where the supplied compressed bale is turned into a uniform lap of particular length by opening, cleaning, blending or mixing is called blow room section. It is the first steps of **spinning**
- The main tasks of blow room process are opening, cleaning, and blending of cotton fiber tufts without overstressing of fibers.
- One important function of the blow room is to disintegrate the fiber bales into a flow of very small clumps of fiber, which are sufficiently small in size to be digested by the cards. About 40%–70% trash is removed in the blow room section.

Blending Feeder and Fine Opener I



Two rollers cleaner



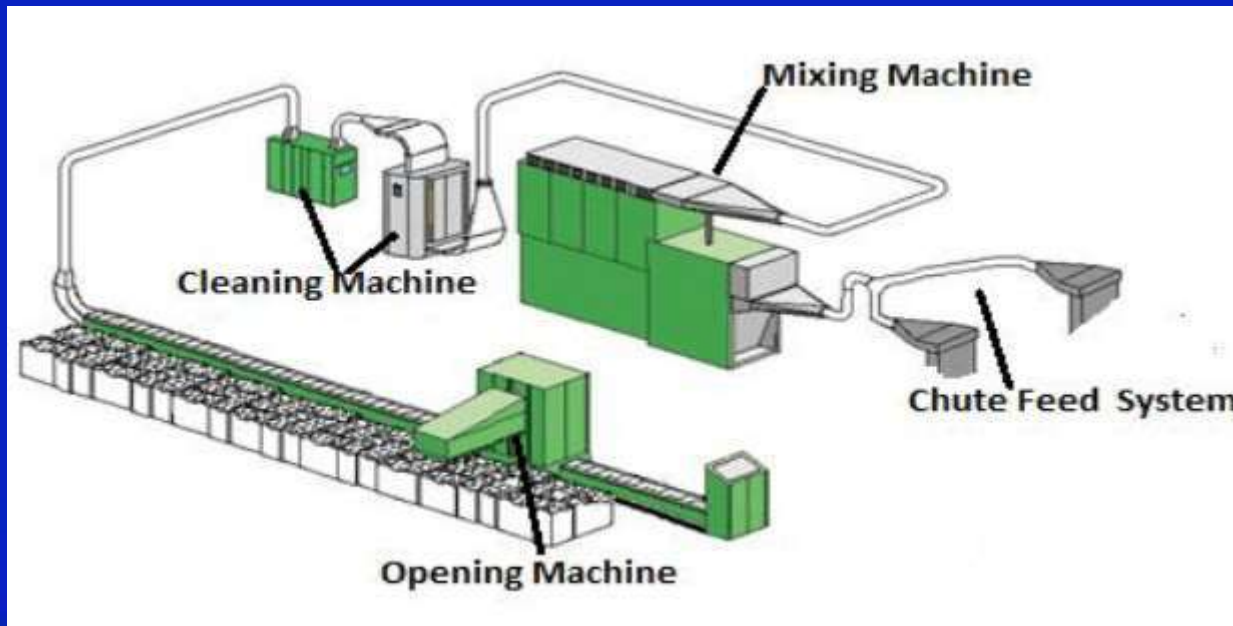
Condenser, Control tower, Super cleaner and Fine Opener II



Condenser, Control tower, Hopper feeder and Scutcher machine

# BLOWROOM LINE

- In the latest blow room lines, the material from fine openers / cleaners is transferred to the card directly by a fan through a chute feed system which is attached at the back of the card.
- Figure shows the latest blow room line in which the scutcher is excluded and fine cleaner delivery pipes are directly connected to the cards.



# FACTORS

The sequence of machinery arrangement in the blow room process for a particular process depends on the following factors:

- Fiber type
- Fiber characteristics
- Trash content
- Material throughput
- Mixing formulation

# OBJECTIVES

Objectives of a blowroom line are as follows:

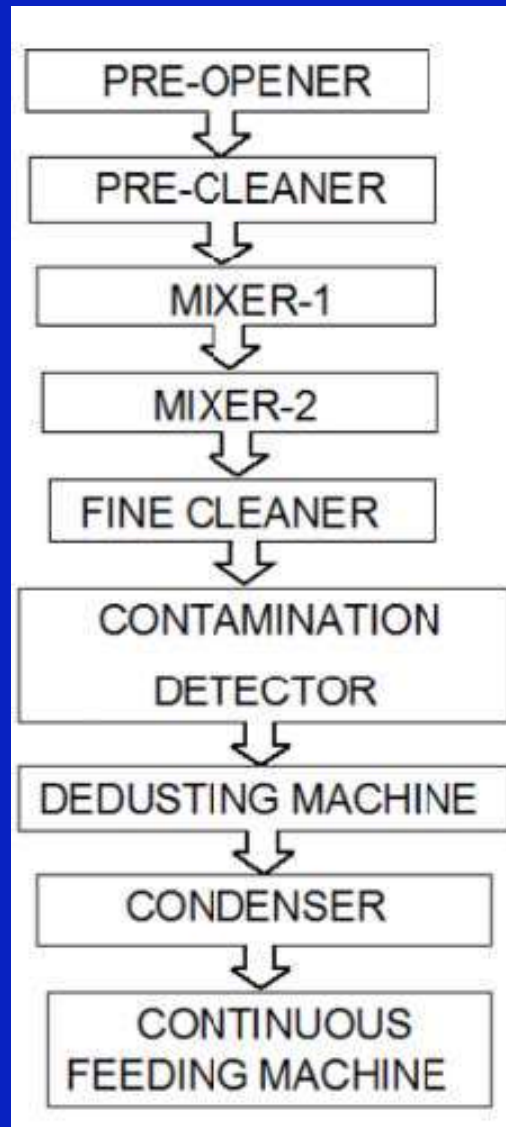
- Opening: To open the compressed fibers up to very small tufts
- Cleaning: To remove the impurities like seed fragments, stem pieces, leaf particles, neps, short fibers, dust and sand
- Mixing and blending: To make homogenous mixture of the material
- De-dusting: To extract the dust if present
- Uniform feed for card: To convert the mass of fibers into thick sheet called lap which should be uniform length and width wise or to provide output in the form of tufts of optimum size

# FUNCTIONS AND OPERATIONS

- Opening
- Cleaning
- Dust Removal
- Mixing and Blending
- Even feed of material to the card



# PROCESS SEQUENCE



# THANK YOU

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