



▶ **BASICS – FABRIC
PROCESSING.**

PURPOSE OF PROCESSING

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Processing is a term applied to a very broad range of treatments that are usually performed during the last manufacturing process before garmenting. Some finishing can also be performed after garmenting.

Process Includes →

- wet processing (Bleaching)
- dry processing (Finishing)

BLEACHING

(WET PROCESSING SECTION)

❖ In this section all the impurities like wax, colour impurities, Kitty of yarn / fibers are removed by chemical treatment And degree of whiteness & Luster of the material is enhanced.

BLEACHING SECTION INCLUDES

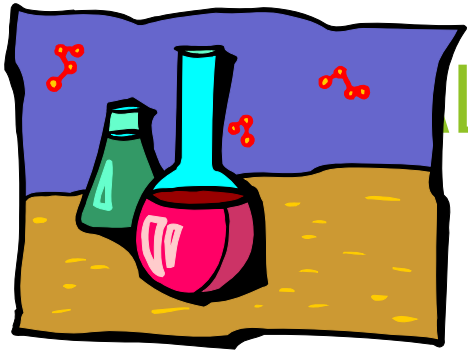
- 1) Singeing
- 2) Desizing
- 3) Mercerization
- 4) Bleaching
- 5) Fabric Dyeing

IN THIS SECTION PARTICULAR QUALITIES ARE ADDED TO THE FABRIC LIKE CREASE RECOVERY, HANDLE, LUSTUR, ETC., TO ENHANCE THE VALUE OF THE PRODUCT AS PER THE CUSTOMER REQUIREMENT AND MARKET EXPECTATIONS.

MECHANICAL FINISHING

- ▶ This type of finishing involves process that change the texture or appearance of the fabric without the use of chemicals e.g.
- ▶ 1) Calendering
- ▶ 2) Brushing
- ▶ 3) Embossing

CHEMICAL FINISH



⌘ Chemical finishing is performed on variety of types of equipment e.g. Padders, Jigger, Jet Dyeing , Kiers, Stenter etc.

⌘ One type of Chemical finishing doesn't involve chemical reaction .The application of softener or a hand builder to modify the feel and texture of the fabric .

⌘ The other type of chemical finish involves a chemical reaction ..resin finishing to produce desire physical property in the fabric.



TYPES OF FINISHING

MECHANICAL

CHEMICAL

PERMANENT

TEMPORARY

TEMPORARY

PERMANENT

BRUSHING

EMERIZING

EMBOSSING

FELTING

CALENDERING

SOFT FINISH

ANTI BACTERIAL

FRAGNENCE

RESIN FINISH

MOIST CROSS LINKING

WATER PROFF

COATING

EASY CARE

BIO TECH

PROCESS FLOW



SINGEING & DESIZING



BLEACHING



MERCERIZING



STENTER



POLYMERIZING

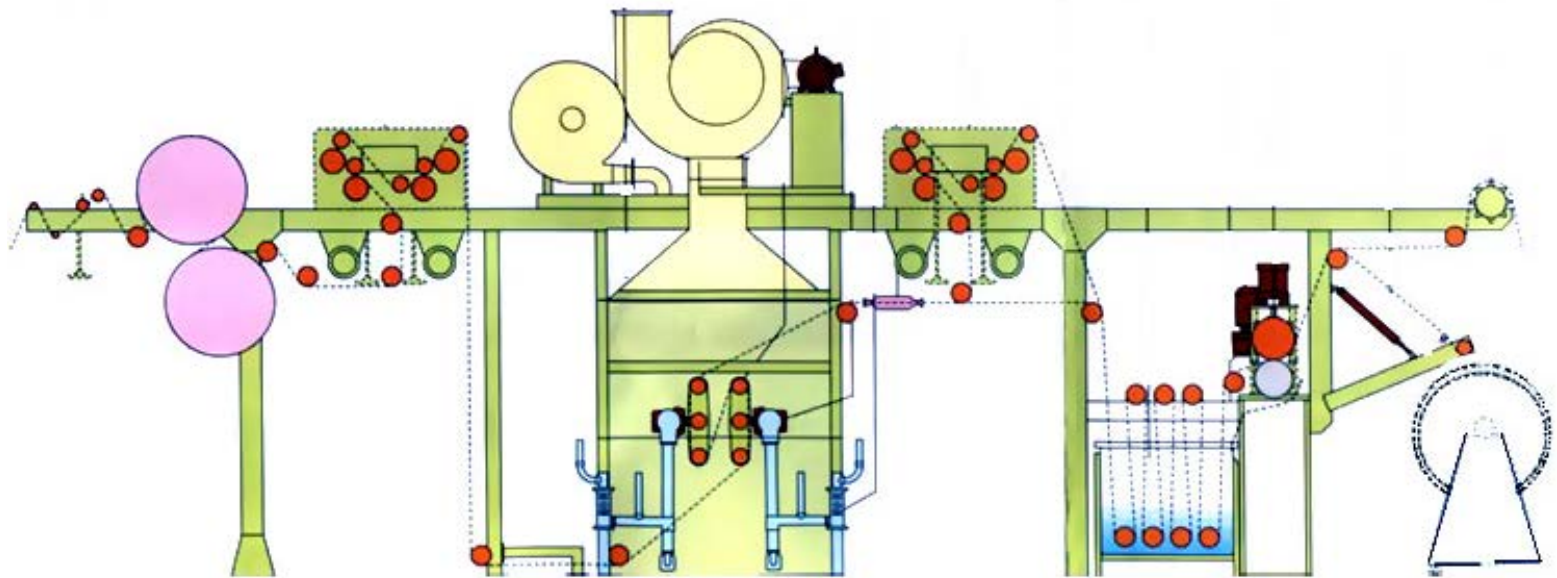


MECHANICAL FINISHING



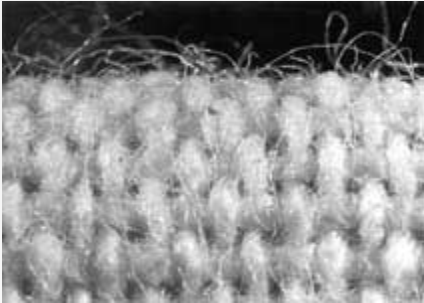
SANFORIZER

SINGEING & DESIZING

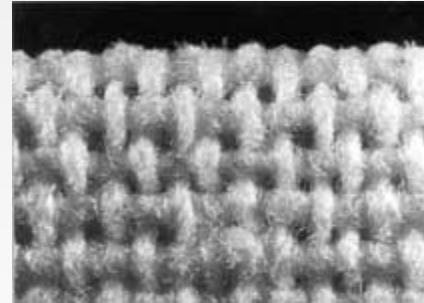


- Singeing is a Process of Removing Protruding fibers from the surface of the fabric. It gives a smoother surface to Fabric and Reduce Pilling and Facilitates Non Fuzzy Printing and improves the appearance of fabric.

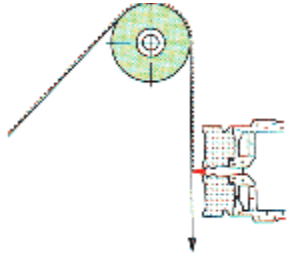
The direct, very intensive flame, the short contact time between flame and fabric, the ignition flame temperature necessary for the vaporization of polyester and the various singeing positions represent the decisive advantages of the Osthoff-Senge singeing system.



Before Singeing

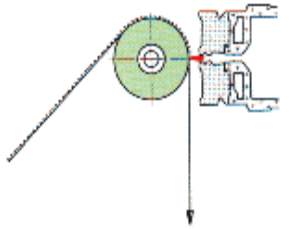


After Singeing



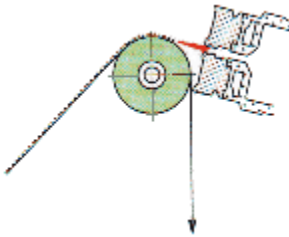
Onto free guided fabric

Flame meets right-angle onto dense woven fabric freely guided between 2 rollers, recommended for natural fibres and blends weighing more than 125g/m^2



Onto water cooled roller

Flame meets right-angle onto the fabric bended over a water cooled roller. Recommended for fabrics of temperature sensitive fibres, those of open-weave, blended ones weighing less than 125g/m^2



Tangential singeing

Flame passes tangentially over the fabric bended over a water cooled roller recommendable for fabrics which cannot tolerate direct exposure to flame and for repair of filamentation

BLEACHING

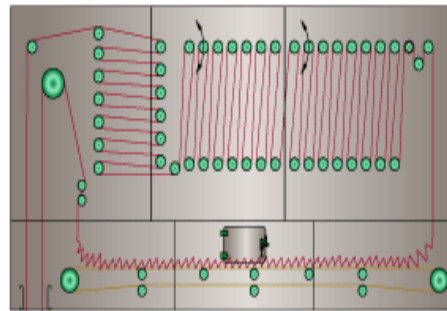
- This is done to enhance the degree of whiteness of the fabric and removal of Wax, Colour impurities, Kitty etc. It can be done by two methods :-

In jigger

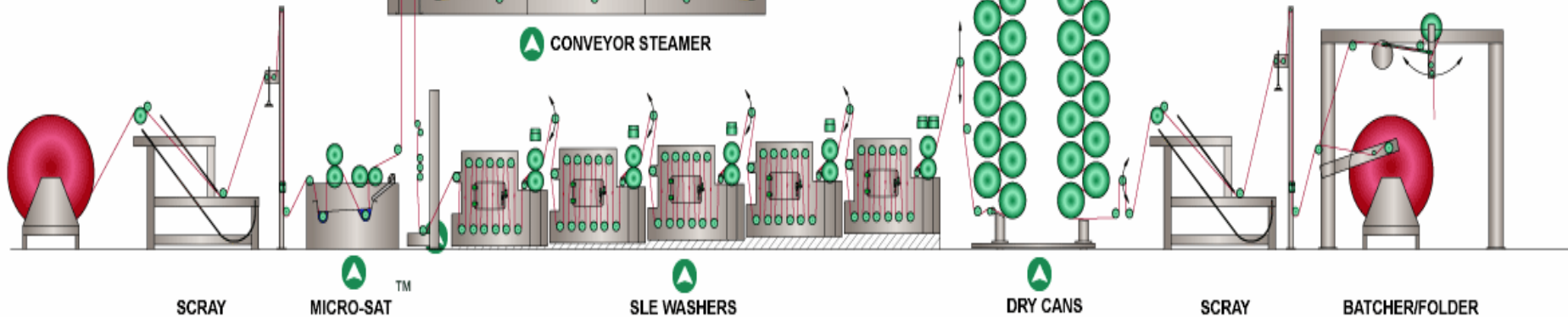
In Continuous bleaching range.



Single Stage Prep Range



CONVEYOR STEAMER



SCRAY

MICRO-SAT

SLE WASHERS

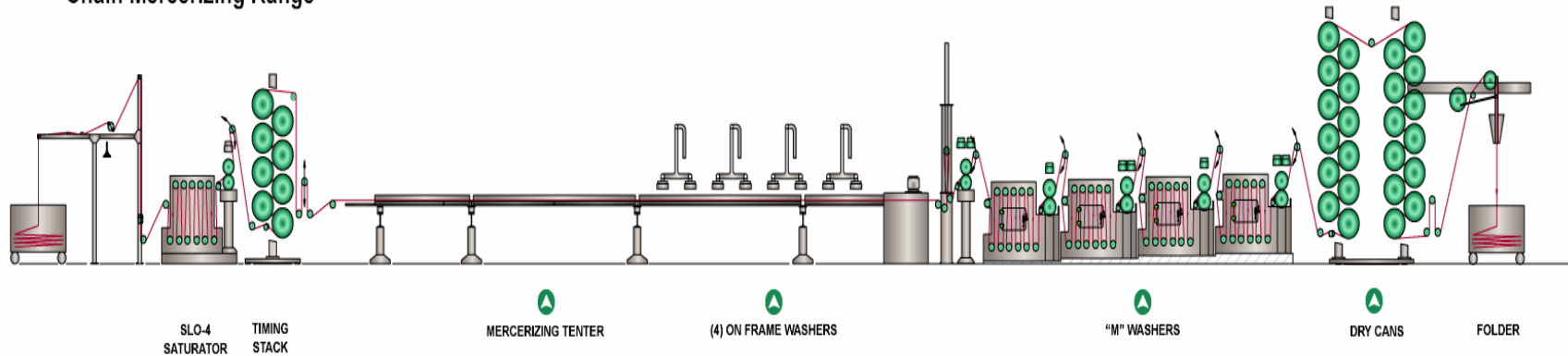
DRY CANS

SCRAY

BATCHER/FOLDER

MERCERIZING

Chain Mercerizing Range



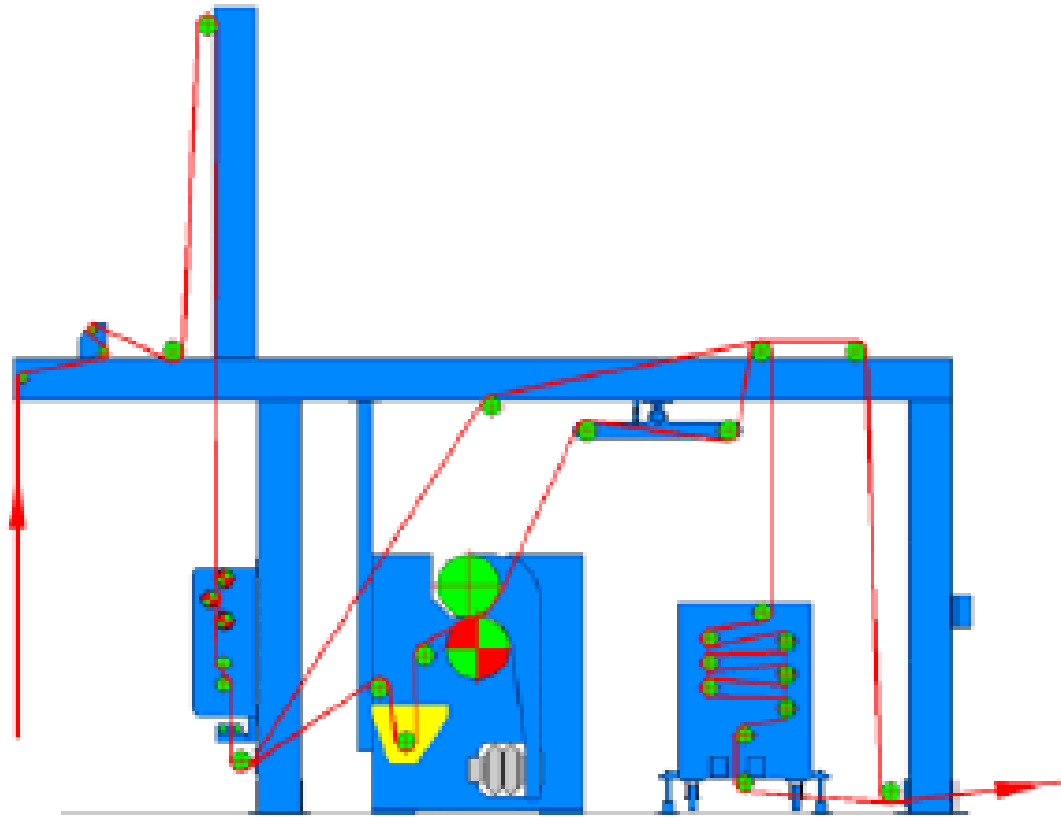
- In Order to improve the properties like Luster, Dye pick up and Dimensional Stability, the fabric is treated with caustic liquor of specific strength this process is known as Mercerizing. Improves absorbancy of textile without degrading it.

STENTER

- ❖ DRYING
- ❖ FINISHING
- ❖ WEFT STRIGHTNING
- ❖ HEAT SETTING
- ❖ WIDTH SETTING



**STENTER ENTRANCE ZONE :ONE DIP ONE NIP
PADDING MANGLE , WEFT STRIGHTNER**



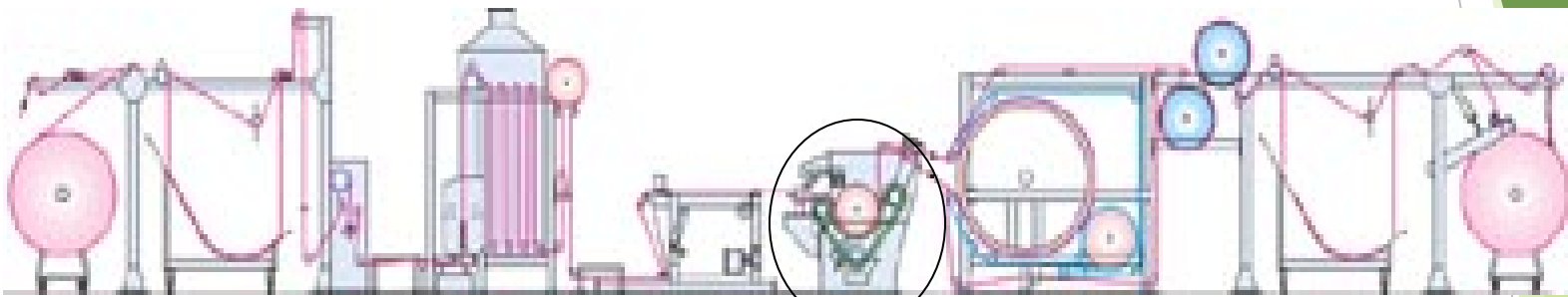
MATERIAL FLOW INSIDE THE STENTER CHAMBER



POLYMERIZER

- **It** is a process of fixing chemicals to the fabric to improve its physical properties.

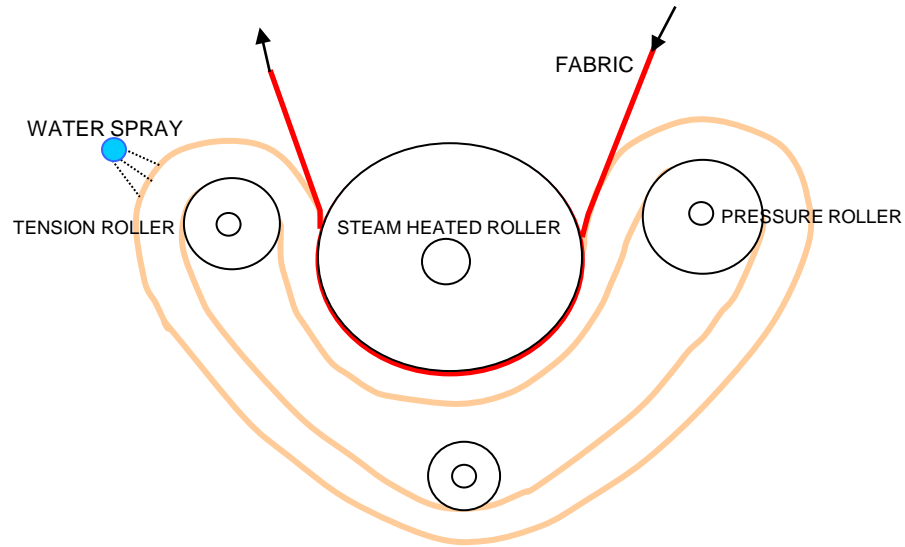
SANFORIZER



[Click here](#)

- To provide a dimensional stability, the fabric is allowed to shrink but only in length not in width. So that fabric remains same in dimensions once it is finished and reaches the customer.

SANFORIZING : TO PROVIDE A DIMENSIONAL STABILITY I.E SHRINKING THE FABRIC SO THAT AFTER WASHING AND DURING ANY OTHER PROCESS THE FABRIC REMAINS SAME IN DIMENSIONS ONCE IT IS FINISHED AND REACHES THE CUSTOMERS.



THE SHRINKAGE PROCESS TAKES PLACE BETWEEN THE RUBBER BELT AND THE HEATED SHRINKAGE CYLINDER. THE PRESSURE ROLL PRESSES THE RUBBER BELT AGAINST THE HEATED SHRINKAGE CYLINDER WHICH IS THEREBY STRETCHED. WHEN THE PRESSURE OF THE ROLL IS RELIEVED, THE BELT RETRACTS AGAIN.

THE FABRIC BETWEEN THE RUBBER BELT AND THE CYLINDER HAS TO FOLLOW THIS RETRACTION OF THE BELT AND IS THEREBY SHRUNK.

EVERY CHANGE IN THE RUBBER BELT PRESSURE CHANGES THE FABRIC SHRINKAGE. THE HIGHER THE PRESSURE, THE GREATER THE SHRINKAGE



Vilas Gharat