



TECHNICAL DATA

Total Length	25-50 m Varies as per No. of washbox
Total Width	RW + 2000 mm
Working Width	up to 3400 mm
Roller Width	up to 3600 mm
Mechanical Speed	up tp 100 m/min
Heating Medium	Steam
Merceriser Technology	Hot Merceriser, Cold Merceriser Wet on Wet, Dry on Wet
Fabric	Woven
Dwelling Time	45-60 Sec

**Note:** The details given in the leaflet cannot be considered as binding. Technical Indications are infinitely variable.



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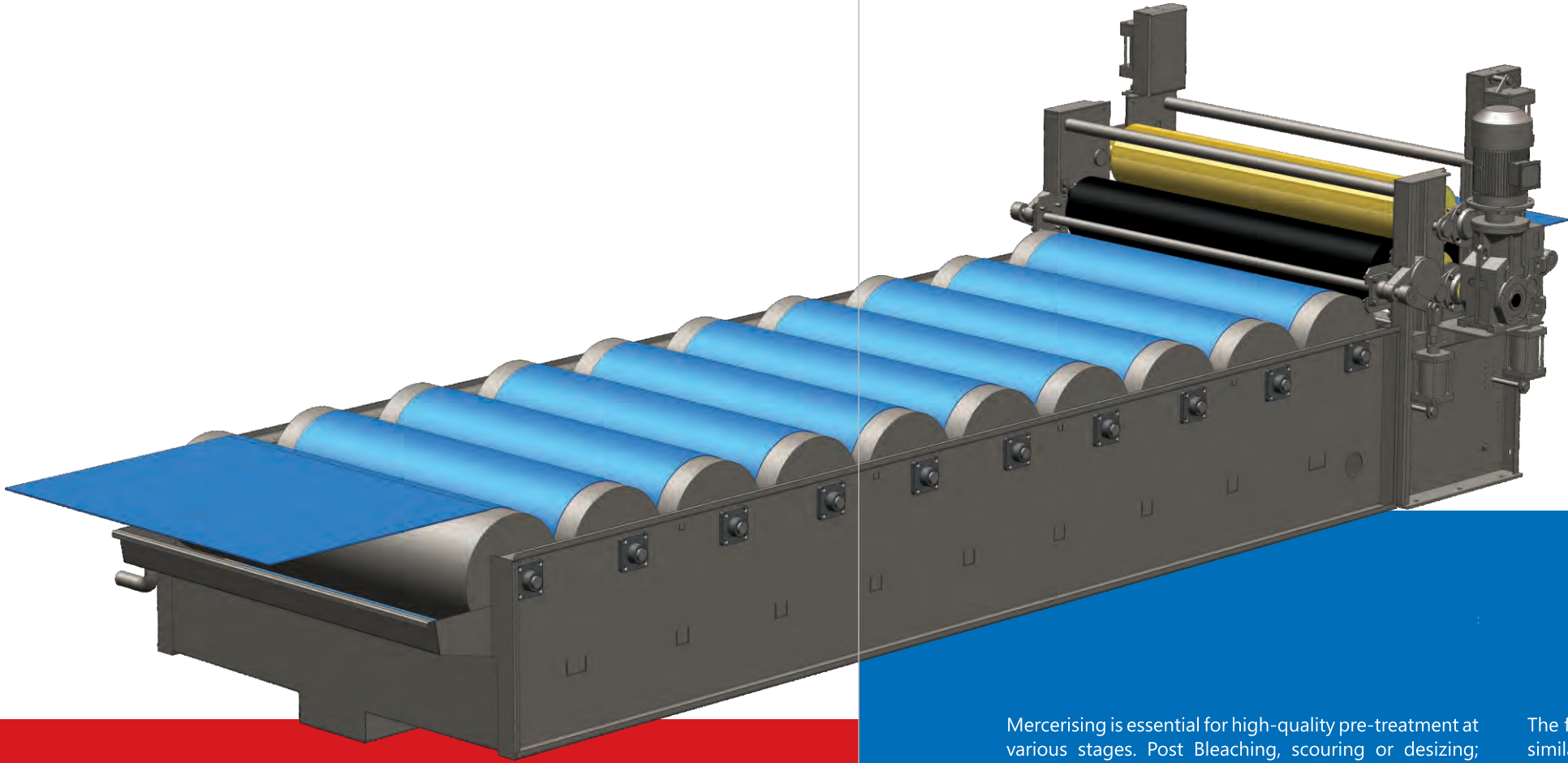
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CONTINUOUS CHAINLESS  
MERCERISER MACHINE



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MERCERISING



Mercerising is essential for high-quality pre-treatment at various stages. Post Bleaching, scouring or desizing; each of those ways has its own merits. The fabric is held under tension by a series of rollers in contact with each other in the primary immersion/Impregnation tank. The fabric enters in a very absorbent state.

There are two rows of strong rollers of which the Top rollers are coated with rubber and bottom rollers are Flexinip buoyant Bearing-less Stainless steel Rollers. These rollers, one above other, allows the fabric to run alternatively ultimately carried by the top row of rollers which run on ball bearings.

Stainless steel buoyant drums allow full immersion of fabric with 100% impregnation of caustic. This favours uniform liquor wedge across the fabric width.

The fabric then runs through a squeezing mangle at a pressure of about 5 to 8 tons assuring impregnation & the excess caustic to recover.

The fabric then passes through a stabiliser containing a similar set of rollers which allows stabilization under controlled tension.

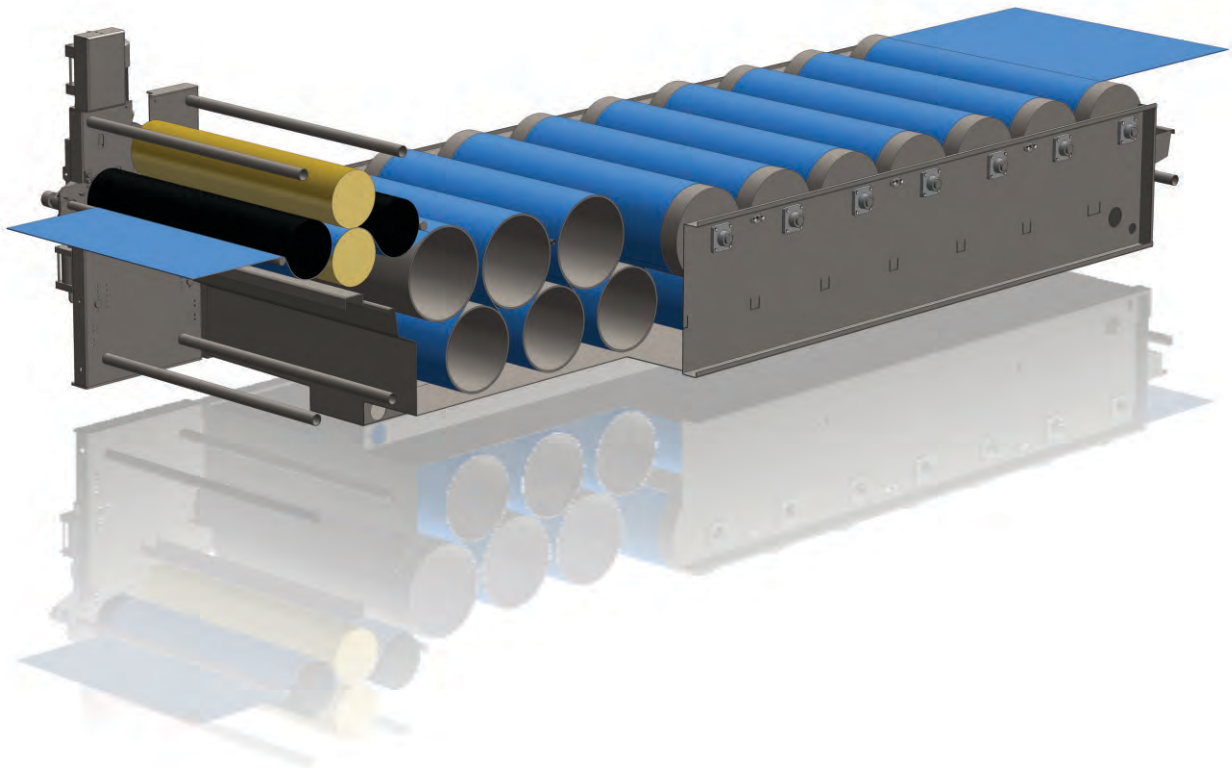
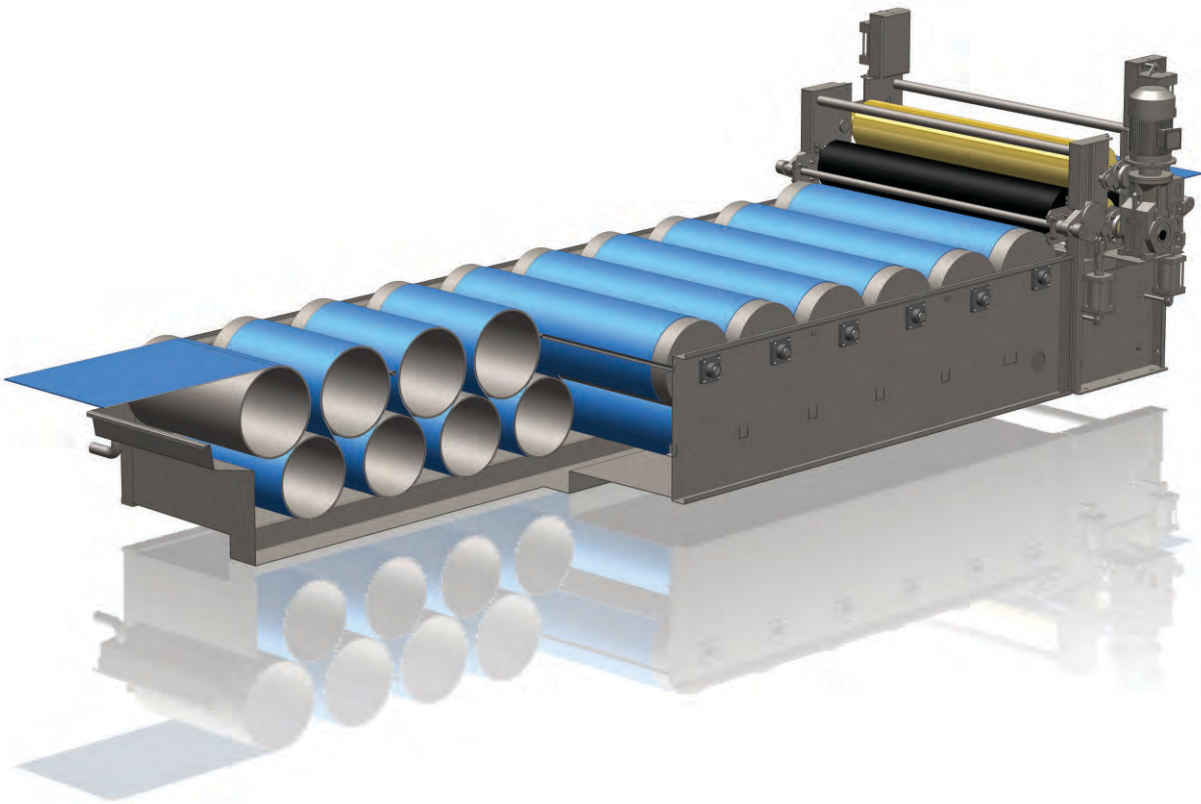
A further Squeezing is done before the fabric passes through four or five washing compartments. Steaming reduces the amount of alkali in the fabric to minute proportions.

In the final compartment, the spray pipes running across the width of the fabric maximizes the cold wash which removes the residual alkali content making the fabric Neutral.

Consumption of dyestuff can be reduced, levelness in dyeing is improved and higher brilliance is achieved. Luster is enhanced with an increase in strength and dimension stability.

Superimposing fabrics or running them side by side can increase the rate of Production.





## SALIENT FEATURES

### Bearing-less Buoyant Drums.

Stainless steel buoyant bottom drums allow full immersion of fabric providing 100% Impregnation of caustic which favors uniform liquor wedge across full fabric width.

### Top Rubber Rollers

Top Rubber Rolls are mounted on a bearing. This allows the Flexinip to maintain uniform pressure throughout the cross-section.

### Vertical Thrust of Buoyant Drums.

Vertical Thrust pertains 50% more soaking and squeezing in the impregnation and Stabiliser tank resulting in excellent silky lustre.

### Squeezing Mangle

Post Impregnation and Stabilisation, the heavy duty Anti-deflection squeezing mangle improves the expression and evens the Squeezing throughout the cross-section and avoids centre selvedge due to Mercerise.

### Stabiliser

Enclosed heated stabiliser conserves heat, attains high temperature, and forced spray on fabric layer along with heavy squeezing under controlled tension rapidly reduces caustic lye. This provides the fabric with minimum width shrinkage, excellent stabilisation, and tensile strength.

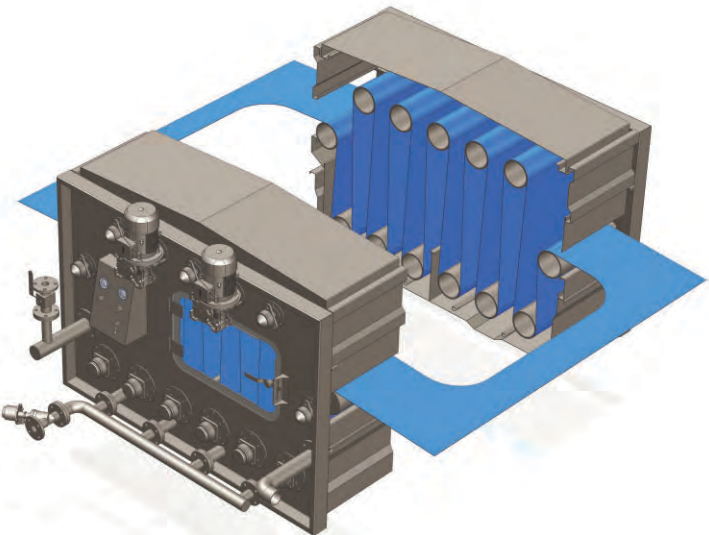
### Minimum Spares

The machine is designed to optimise the inter-changeability of components like bearings, rubber/ebonite rollers, stainless steel Rollers, pneumatics, motors etc.

### Single Loop Washing Compartment.

Single loop washing compartment consists of a trough made from stainless steel consuming low liquor contents.

The fabric loops vertically and comes in contact with in contact with liquor which expedites the removal of dissolved chemicals and impurities. Top and bottom rollers are fixed in bearings along with the mechanical seal/ bush bearings. Compartments can be equipped with direct or Indirect heating arrangements. The top rollers are provided with torque motor / reduction gearbox motor either on individual or alternate rollers depending upon tension sensitivity of the fabric. The Expedition time in a single loop compartment is however lower than that of Double loop washing compartment. However, Cloth accessibility and handling is easier in single loop compartment.



#### Applications:

- Preparation of woven fabrics.
- Scouring and Desizing washing.
- Rinsing, Chemical treatment.
- Neutralisation.

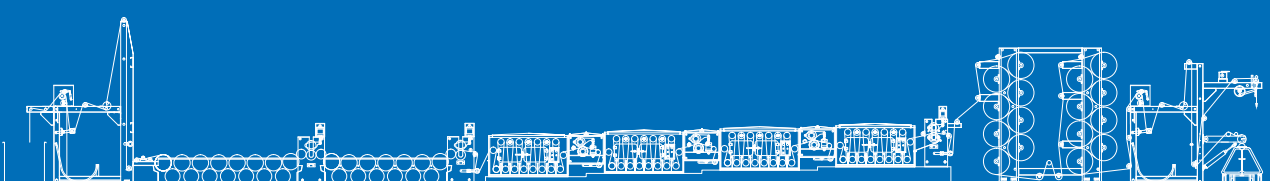
#### Advantages:

- High-Washing intensity.
- Direct/Indirect heating.
- Forced Circulation of bath liquor.
- Minimum fabric Tension.
- Adjustable Liquor level.
- High Liquor Turbulence

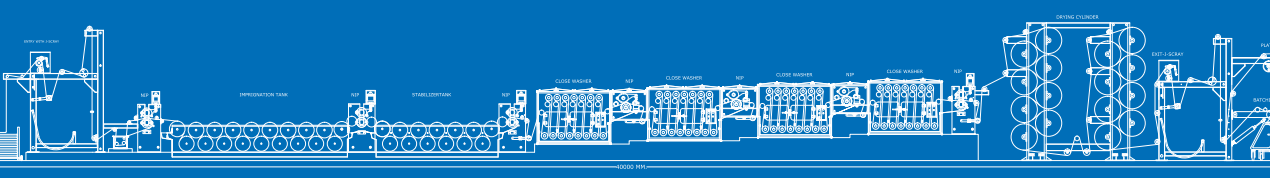
### A-Model



### B-Model



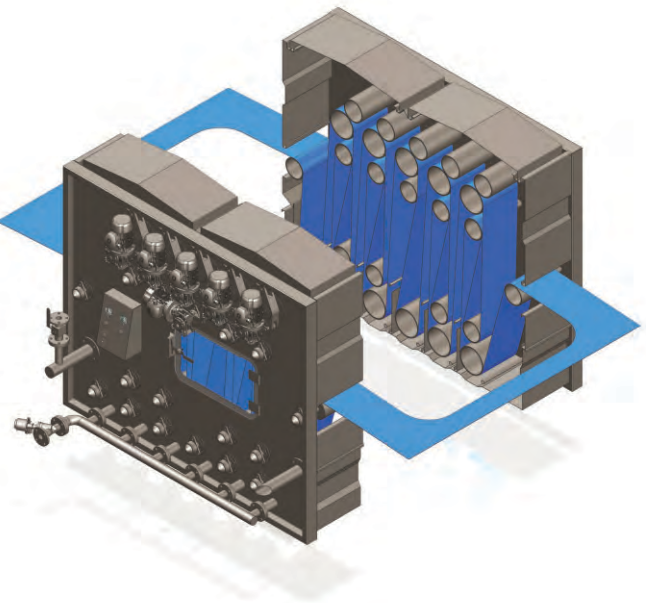
### C-Model



### Double-Loop Washing Compartment.

A double loop threading of fabric provides two adjacent textiles to move in the opposite direction which creates turbulence in the compartment and tension along the width of the fabric. This ensures very high washing efficiency. The washing compartments come with top and bottom rollers mounted on a bearing and mechanical seal. Torque motors / Reduction gear motors are provided alternately or individually depending upon the tendency of the fabric.

The trough can be provided with the partitions to produce a counter flow wherein cleaner or washed fabric comes in contact with fresh water as the fabric advances.



#### Applications:

- Preparation of woven Fabric
- Rinsing and chemical application.

#### Advantages:

- Maximum Cloth content.
- Counter-Flow on the fabric.
- Tension regulation.

### Stripping Roller Washing Compartment.

Stripping roller washing compartment comprises of an additional rows of rollers which provides better fabric guidance retaining tension on the fabric. The fabric loops vertically and expedites removal of impurities and dissolved chemicals. Compartments can be equipped with direct or Indirect heating arrangements. The top rollers are provided with torque motor / reduction gear motors either on individual or alternate rollers depending upon tension sensitivity of the fabric. "Stripping roller compartment improves fabric advancement for the most type of woven fabrics."

#### Applications:

- Preparation of woven Fabric
- Tension sensitive Fabric expedition
- Rinsing and chemical application.

#### Advantages:

- Washing of natural and synthetic Fabrics.
- Rapidity of washing along with optimum efficiency.
- Swift guidance of fabric with lowest tension.

