

# PRIALTEX s.r.l.

## P-ST



## After Printing Steamer

# P-ST series main features

The prialtex steaming production range is divided into two large families according to the transport chain used: 2" or 3". For each family several fabric capacities are available (140m-260m-380m-500m for 2" chain; 110m-190m-280m-360m for 3" chain). Furthermore several other options are available on request. Entry and exit can be completely personalized in accordance with customer needs.

## Dimensions for different capacities

Base machine has one steaming chamber and it is represented here on the side; each additional chamber gives a fabric extra capacity and requires an extra length of 2440mm.

## Chambers

Our machine body is AISI304 stainless steel made to ensure a longer life to the machine and decrease maintenance costs. 80mm thick rock wool panels ensure isolation of the structure. Machine roof is also heated to prevent water drops.

## Fabric transport / Loop formation

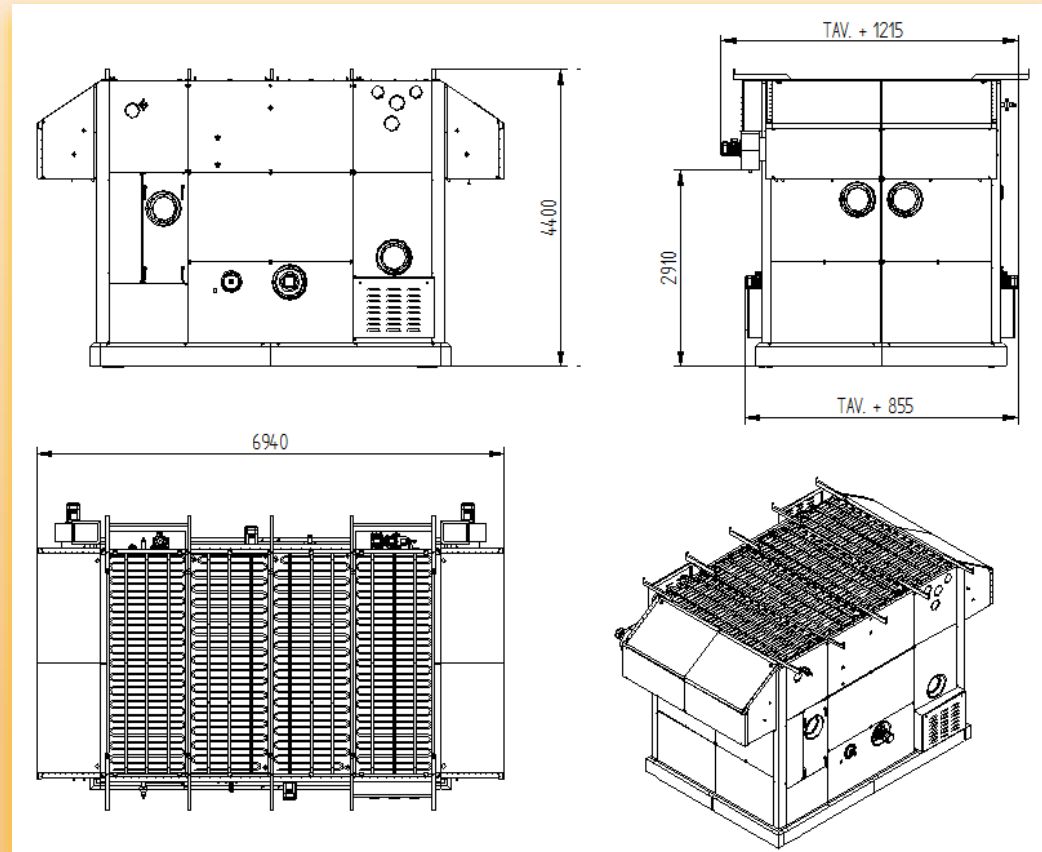
The fabric crosses the inlet hood and falls down over stick starting to make the first loop. A steam spray bar is installed for a better loop formation. Loops length is adjustable between 60-250cm. Loops are hung by sticks made in stainless steel covered with fiberglass sock. A laser sensor control maintains constant fabric content in the steaming chamber. Sticks are moved inside chamber by the secondary chain. Chains are automatically lubricated

Two different loops distance are always available:

The narrowest one has a distance between the printed sides of the fabric of 61mm in case of 2" chain and 99mm for 3" one.

The widest one has a distance of 162mm in case of 2" chain and 251mm for 3" one.

The loop interval can be changed directly from touch screen and there is no need to cool down the machine before proceeding. When widest loops are used, half of the sticks are stored in a special warehouse chain.



## Steam distribution / recirculation

Steam coming from the boiler come into the chamber through special stainless steel box, with soft water inside. The steam passage into the water box, assures the best saturated steam conditions; a circulation fan pushes the saturated steam into the chamber. The number of water boxes and steam recirculation fans depends on machine capacity (one on LHS and one for RHS for each steaming chamber).

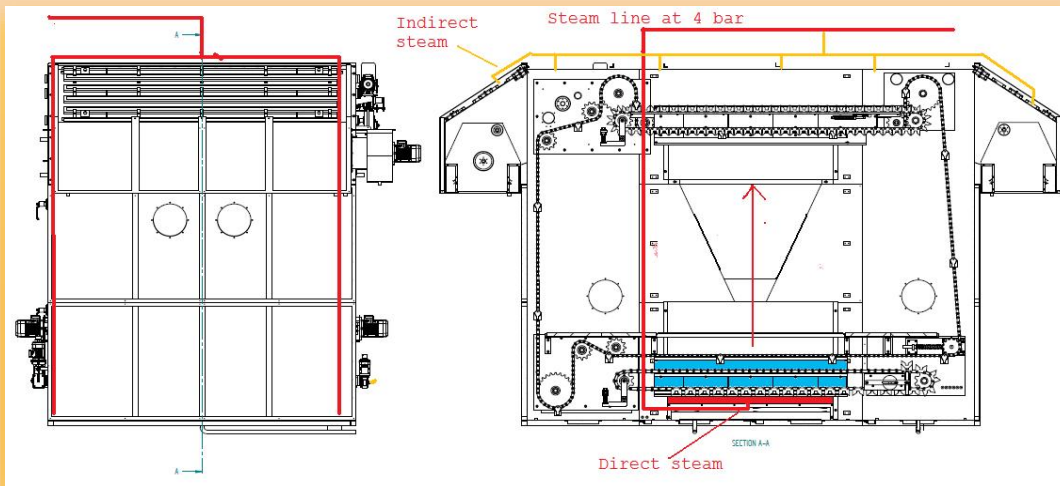
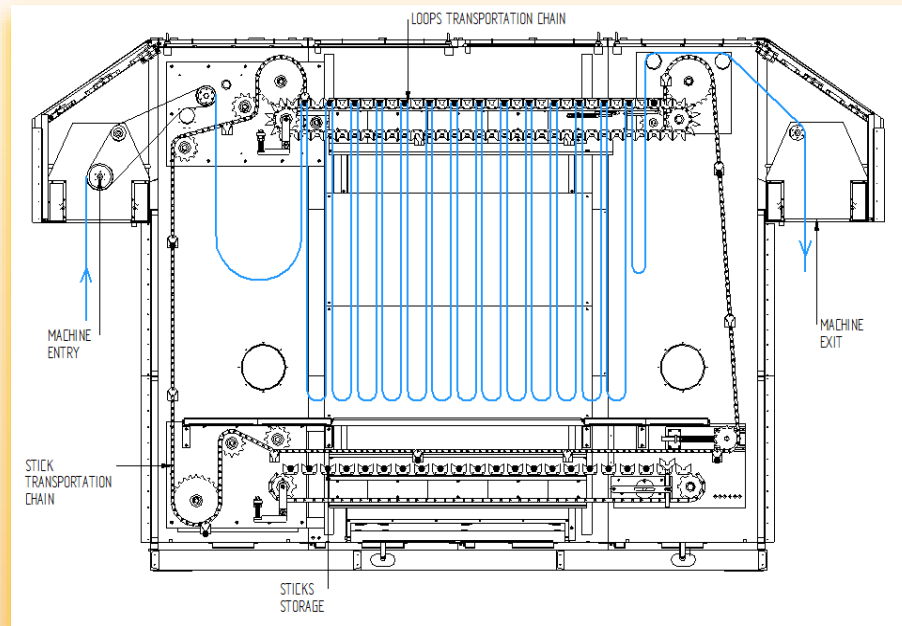
Special nozzles for water and steam injection are installed on each ventilation channel in order to humidify steam and to reduce its temperature. Steam or air can be used alternatively as a mean to atomize the water.

Heating systems of HT (High Temperature) & HA (Hot Air) can be natural gas system, thermal oil heating, steam exchangers or electrical heater (ATTENTION: one heater on LHS and one for RHS for each steaming chamber).

## Process control

A pneumatic valve controlled by a steam flowmeter provides for keeping constant steam flow.

PT100 probes control working temperature



## Options

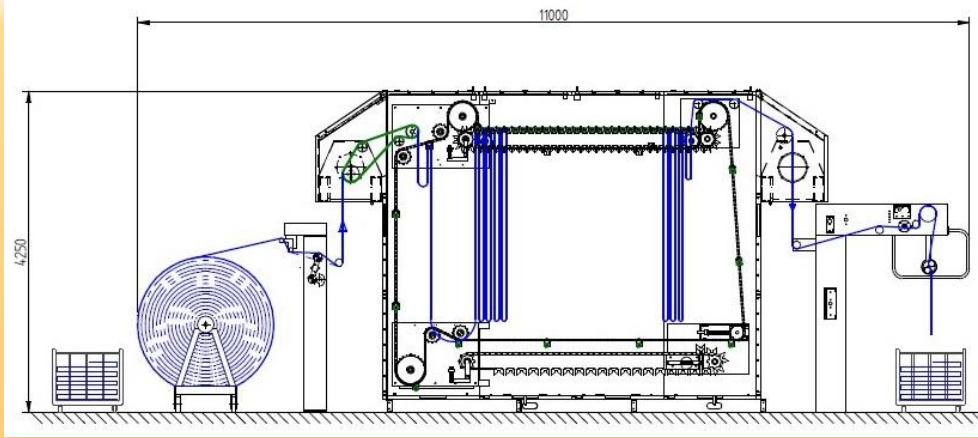
### • Straight passage (patented system).

To avoid defects, some digital printed fabric can't form loops not even using the widest distance between printed faces: for these articles the straight passage can be used.

To reach the required dwell time, the fabric in the straight passage naturally has a very slow speed but it can be treated simultaneously with a second fabric worked in a traditional way (in loops). In this way each of the two processes takes place at its own speed without therefore penalizing the production capacity of the machinery.

The only constraint is that the two fabrics (straight passage and loop) have the same ink fixing temperature.

- Stick rotation speed adjusting system
- Drying cylinder at machine exit.
- Cooling device at the machine exit



## TECHNICAL SPECIFICATIONS

Max fabric capacity (2" chain)	140 – 260 – 380 – 500 m
Max fabric capacity (3" chain)	110 – 190 – 280 – 360 m
Roller Width	2200 – 2800 – 3600 mm
Working Width	1800 – 2400 – 3200 mm
Min-Max. fabric weight	70 – 700 g / m <sup>2</sup>
Length of the adjustable loop	60:250 cm
Mechanical Speed	4-80 m/min
Dwelling time into the machine	4-65 min.
Heating System	Thermal Oil / Natural gas / Steam / Electrical
Saturated steam working temp.	102 – 104 °C
Super heated steam working temp.	160 – 180 °C
Hot air working temp.	150 – 190 °C
Driven system	Motors controlled by inverter

