



CIRCUM PRINT

Rope Washing Machine After Printing





**HIGH
PRODUCTIVITY**



**ENERGY
EFFICIENCY**



**HIGH
QUALITY**

ALL TYPES OF FABRICS KNITTED AND WOVEN

ALL TYPES OF FIBRES CELLULOSIC AND SYNHTHETIC

ALL TYPES OF DYES REACTIVE AND DISPERS

ALL TYPES OF FABRICS WEIGHT 40 - 900 GR/SQM

ALL TYPES OF PRINTINGS ROTARY AND DIGITAL

ALL TYPES OF TEXTILE APPAREL, HOME TEXTILE



LOGIC OF WASHING SYSTEM

CAPACITY INCREASE

Pluvia works with maximum production efficiency, with the aid of pre washing chambers with long dwell time. Additionally, excellent washing is completed in rope form with high mechanical washing effects.

WATER SAVING

Pluvia consumes less water due to its high mechanical washing effect and flexible overflow system. Average water consumption is around 20-30 lt/kg for printing washing.

STEAM SAVING

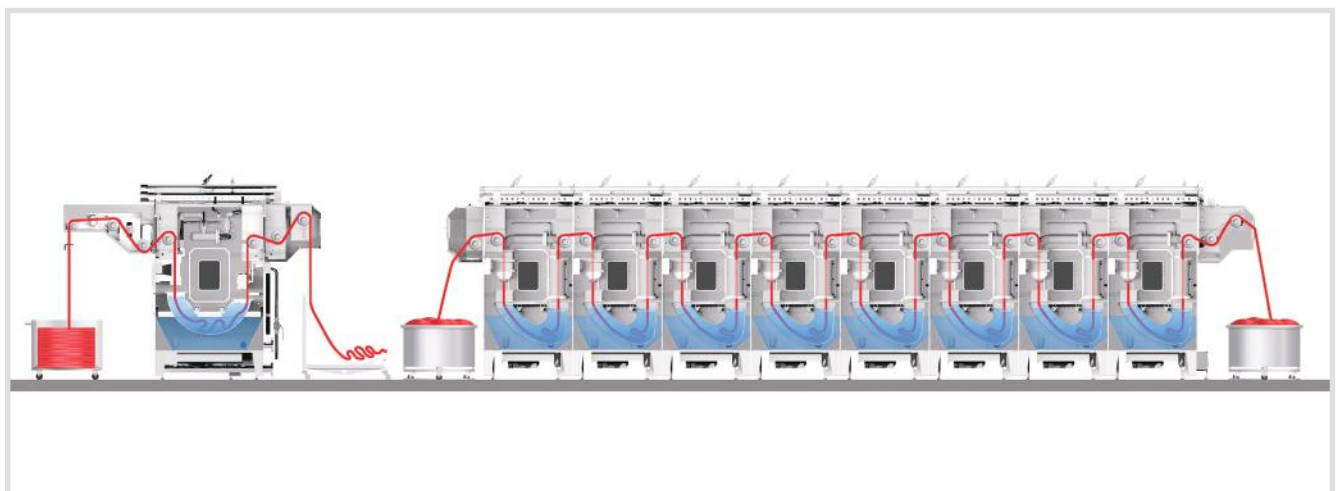
Pluvia consumes less steam due to its low water consumption and low water capacity of the chambers. Average steam consumption is around 1,5-2,5 kg/kg for printing washing.

LESS PEELING

Pluvia washing speed is around 35-50 mpm. Fabric moves without tension and friction from j-box to j-box. There exists no peeling and elongation.

HIGHER FASTNESS

Pluvia, washes the fabric with higher mechanical washing effect during the whole process. Thus washing fastness degree increases. With conventional dyeing machines the fabric passes only once with 300-450 mpm speed through nozzle in every 2-3 minutes in dyeing machine.



PLUVIA CIRCUM PRINT FOR KNITTED AND WOVEN FABRIC

AREA OF USE & DESIGN PARAMETERS

- Compact and modular design for knitted and woven fabric.
- Capable of washing almost all types of printed fabrics and fibers like cotton, regenerated fibers, polyester and blends.
- Wide washing range from 40-900 GSM fabrics from silk to towel.
- 8 to 10 minutes of dwell time of pre washing in open width chambers.
- High washing efficiency with 60 m³/h continuous water flow rate in each chamber.
- 100 kg fabric storage capacity for open width chambers.
- 25 kg fabric storage capacity for each rope chambers.
- Closed-loop type heat exchanger for each chamber.
- Static or automatic filter for each chamber.
- Double chemical dosing inlet points in each chamber.
- Automatic washing nozzles in each chamber for cleaning the chambers.



PLUVIA CIRCUM CONSUMPTIONS

	WASHING AFTER DYEING	WASHING AFTER PRINTING	WASHING YARN DYED FABRICS
Water Consumption	7 - 10 l/kg	20 - 30 l/kg	5 - 7 l/kg
Steam Consumption	0,25 - 0,35 kg/kg	1,5 - 2,5 kg/kg	0,1 - 0,25 kg/kg
Electricity Consumption	0,03 - 0,07 kW/kg	0,06 - 0,10 kW/kg	0,02 - 0,05 kW/kg

SYSTEM OF MACHINE

1. MULTI STAGE NOZZLE

Each chamber is equipped with a two-stage nozzle which provides the required pressure and flow rate for the washing proses. Nozzles are designed to be seamless in order to prevent turbulence which causes fabric spinning and rotation.

2. WATER TUBE

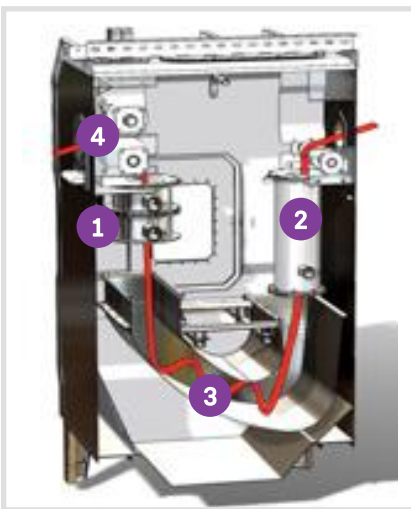
It is designed to rinse out of the fabric just before leaving the chamber. The design geometry ensures maximum fabric-water contact time for best washing effect.

3. NIPPING AND TRANSFER CYLINDERS

Nipping forces can be adjusted by the operator with 0.01 bar precision. Cylinder rubbers are specially produced for proper nipping forces. The nipping cylinders can be disabled if required.

4. ELECTROPOLISHED J-BOX

All the fabric-contacting surfaces are electropolished for smoother movement of the fabric. Rubbing effects are eliminated by high quality J-Box surfaces.

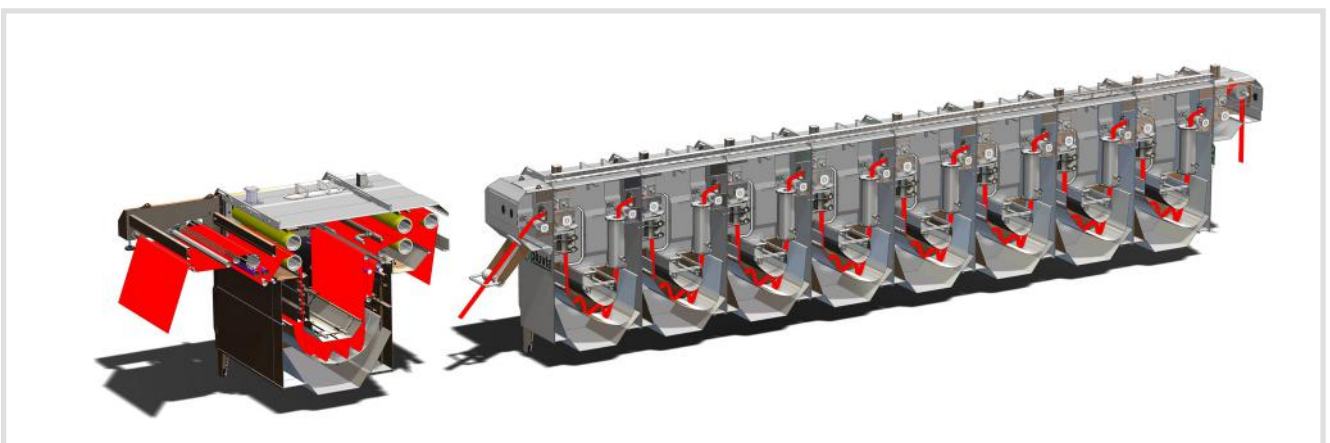


COUNTER-FLOW SYSTEM

Adjustable counter-flow system, allowing various grouping of the chambers according to the process needs

WASTE WATER HEAT RECOVERY SYSTEM

Built-in waste water heat recovery system reducing the energy consumptions at least by %30



AUTOMATION SYSTEM & SOFTWARE



SOFTWARE

Pluvia has a software easy to use.
Software codes are shared with customers.

WATER FEEDING SYSTEM

Water consumption is precisely controlled, based on the fabric weight and machine speed.

CHEMICAL DOSAGE CONTROL

Chemical dosage rate is precisely controlled, based on the fabric weight or water flow rate.

SPEED SYNCHRONIZATION

Precise speed synchronization with Load Cell controlled J-Box and frequency controlled drive cylinders provides tension and elongation free fabric flow.

PRODUCTION AND PRODUCTIVITY RECORDS

Batch-wise automatic recording of process parameters such as speed and consumptions, temperatures etc.



MATERIAL

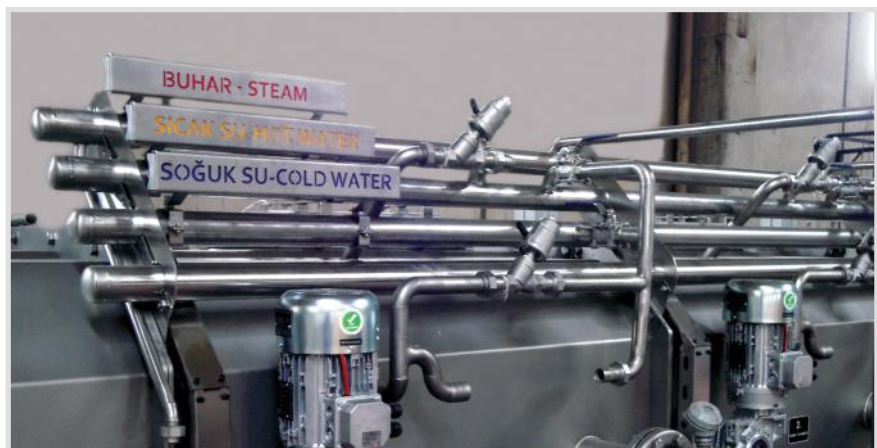
Completely stainless steel.
Pluvia uses state-of-the-art equipments and brands.

SETUP

Easy setup with built-in foundation structure and built-in pipelines.

MAINTENANCE

Quick and easy service and maintenance by universally available standard parts and equipments.
Easy maintenance through large windows located on both front and back side of the chamber.





PLUVIA CIRCUM DIMENSIONS				
CHAMBER		LENGTH (mm)	WIDTH (mm)	HIGHT (mm)
OPEN WIDTH	ROPE			
1	6	14.100	4.000	2.400
1	8	16.600		



SIMPLE | SMART | EFFICIENT

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