

## OPTICAL

### Continuous Optical Whitening Machine

Open Width Pad-Steam Optical Application Unit for Knitted Fabrics





**HIGH  
PRODUCTIVITY**



**ENERGY  
EFFICIENCY**



**HIGH  
QUALITY**

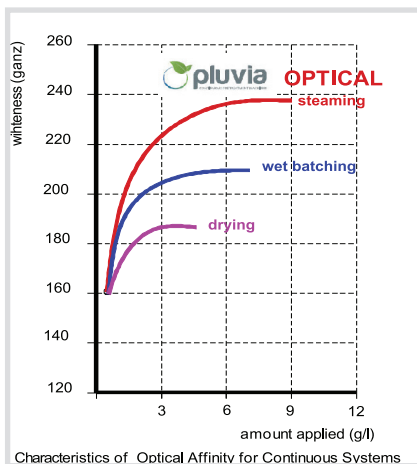
**HIGHER AFFINITY**

OPEN WIDTH PAD STEAM

OPTICAL APPLICATION



# LOGIC OF PLUVIA BLEACHING SYSTEM



## PLUVIA OPTICAL CONSUMPTIONS

**Water Consumption**  
1 - 2 l/kg

**Steam Consumption**  
0,4 - 0,6 kg/kg

**Electricity Consumption**  
0,03 - 0,05 kW/kg

## PLUVIA OPTICAL DIMENSIONS

LENGTH	WIDTH	HIGHT
6.000mm	4.000mm	2.350mm

## IMPREGNATION SYSTEM

System has hydraulic pistons to create required nipping forces. Hydraulic system offers the possibility of reaching constant tightening forces against changing rubber structures. For homogenous diffusion of optical dye stuff, continuous circulation is applied for the effluent.

## STEAMING SYSTEM

The path of the fabric inside the cabin is extended and thus the steam contact time is increased. In steaming chambers, steam is directed to the surface of the fabric with a special angle. In the meantime, saturated humidity is maintained by evaporating the water inside the chambers. The dwell time is around 4-6 minutes for each chamber.

With these design features, local drying and contact spots, right-left and head and tail differences do not occur during steaming process.

## SOFTWARE

User friendly and flexible software. Software codes are shared with customers.

## STEAMING AND TEMPERATURE CONTROL

The temperatures and the amount of consumed steam are PID controlled by the automation software precisely.

## 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

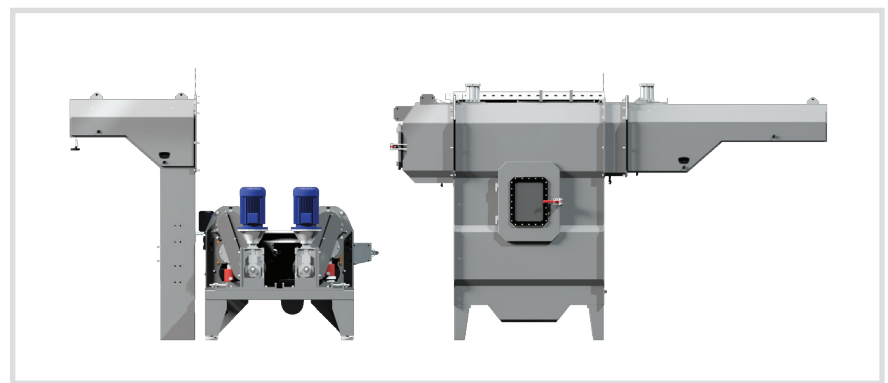
Precise speed synchronization with Load Cell controlled J-Box and frequency controlled drive cylinders provides tension and elongation free fabric flow.

## PRODUCTION AND PRODUCTIVITY RECORDS

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

## 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 OPTICAL WHITENING MACHINE FOR KNITTED FABRICS

