

Hydra

**High-performance semi-continuous
process for the preparation and
washing of open-width fabrics**



Hydra

TVE-ESCALE has created a new semi-continuous line for the wet treatment of open-width fabrics totally innovative.

All the technology developed over the more than 30 years of the firm has been put at the service of this latest invention.

A NEW PROCESS FOR A NEW ERA

HYDRA opens a new range of possibilities in the treatment of open-width fabrics.

This new innovative concept brings great versatility to companies with small and medium-sized production. With HYDRA you can carry out the vast majority of wet processes with excellent performance.



RELIABLE INNOVATION

Since its birth TVE ESCALE has based its growth on innovation. Multiple inventions, which have served as a reference for its competitors, endorse it.

After a period of maturity TVE ESCALE has managed to concentrate all its knowledge on one machine.

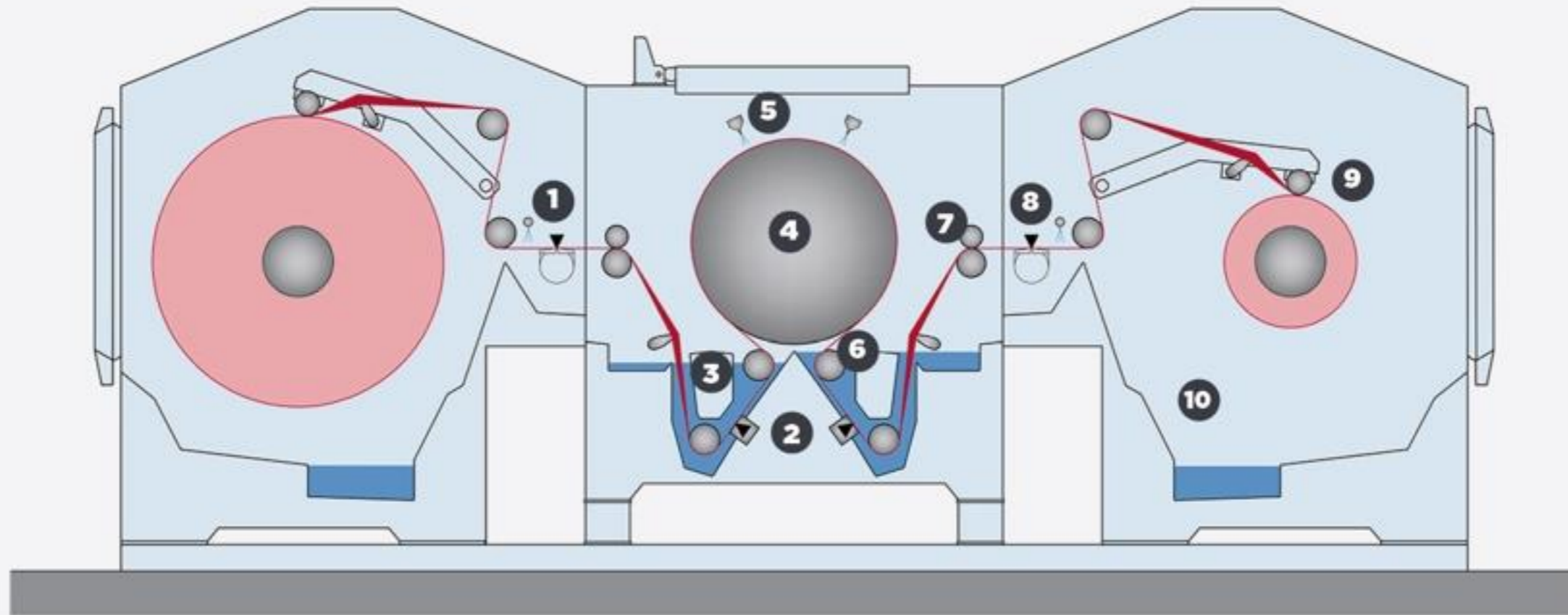
COMMITTED TO THE ENVIRONMENT

Since its creation, TVE ESCALE has been committed to saving water, energy and chemical products. Their knowledge and close collaboration with universities and companies in the chemical sector contribute to the environmental impact.

HYDRA, for its innovation in the process and its enormous mechanical and electrical performance, achieves these savings.

Hydra Process

The first of HYDRA is the use of a wash box in both directions. This box is high performance for all the technology that TVE ESCALE has managed to incorporate into it.

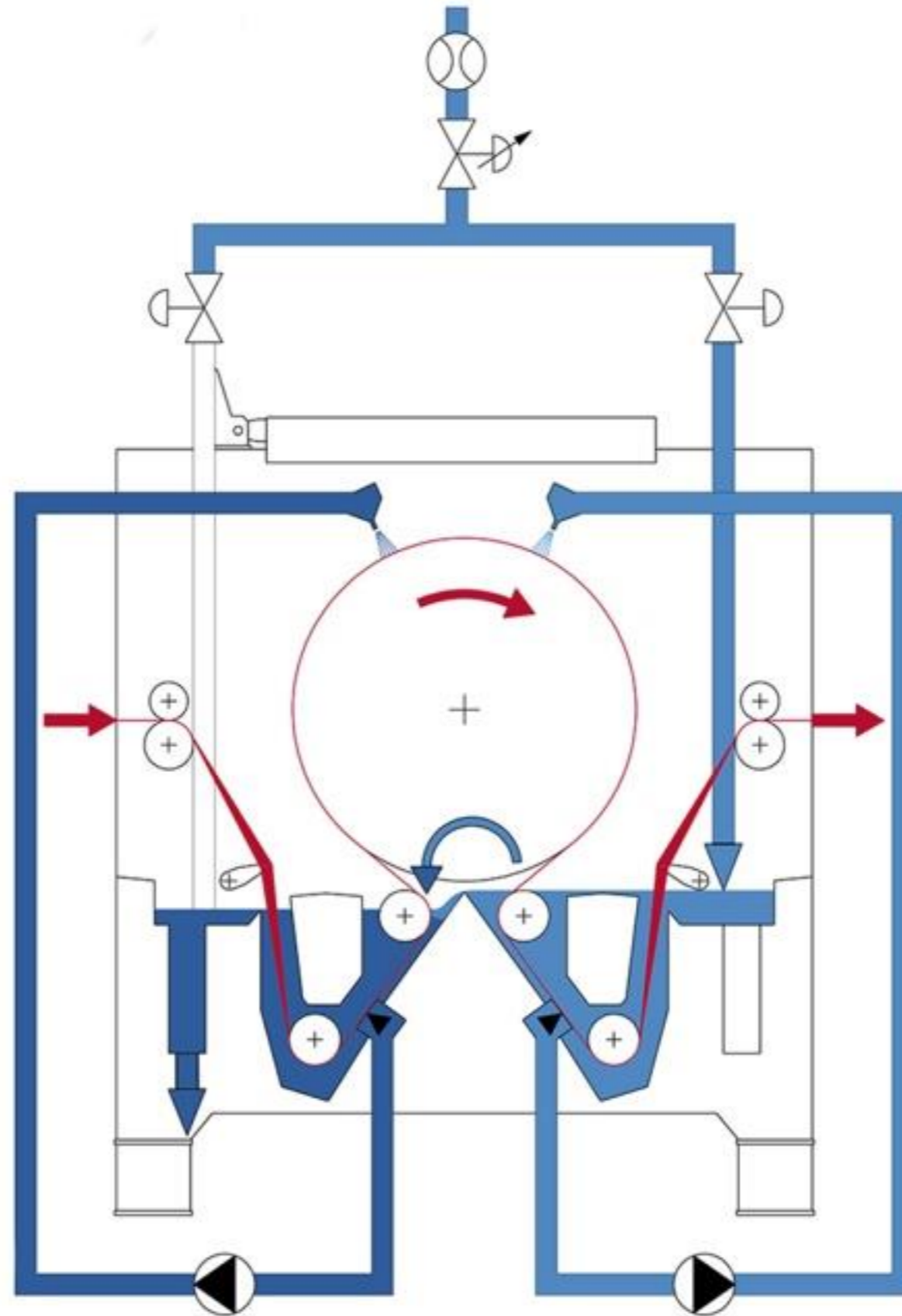


- 1.** Spray Vacuum Washer at the entrance that eliminates the vast majority of contaminants from the previous wash cycle, reducing the level of contaminants that enter the next bath. In addition the fabric is left with a very low residual humidity that allows a greater exchange of bath.
- 2.** Submerged suction tubes inside the bath that force the pass of water through the fabric. The power of this flow ensures a very efficient level of contaminant extraction.
- 3.** Bath reducers that allow the machine to work with the minimum possible bath.
- 4.** Large diameter perforated drum that ensures good guidance and careful advancement of the fabric.

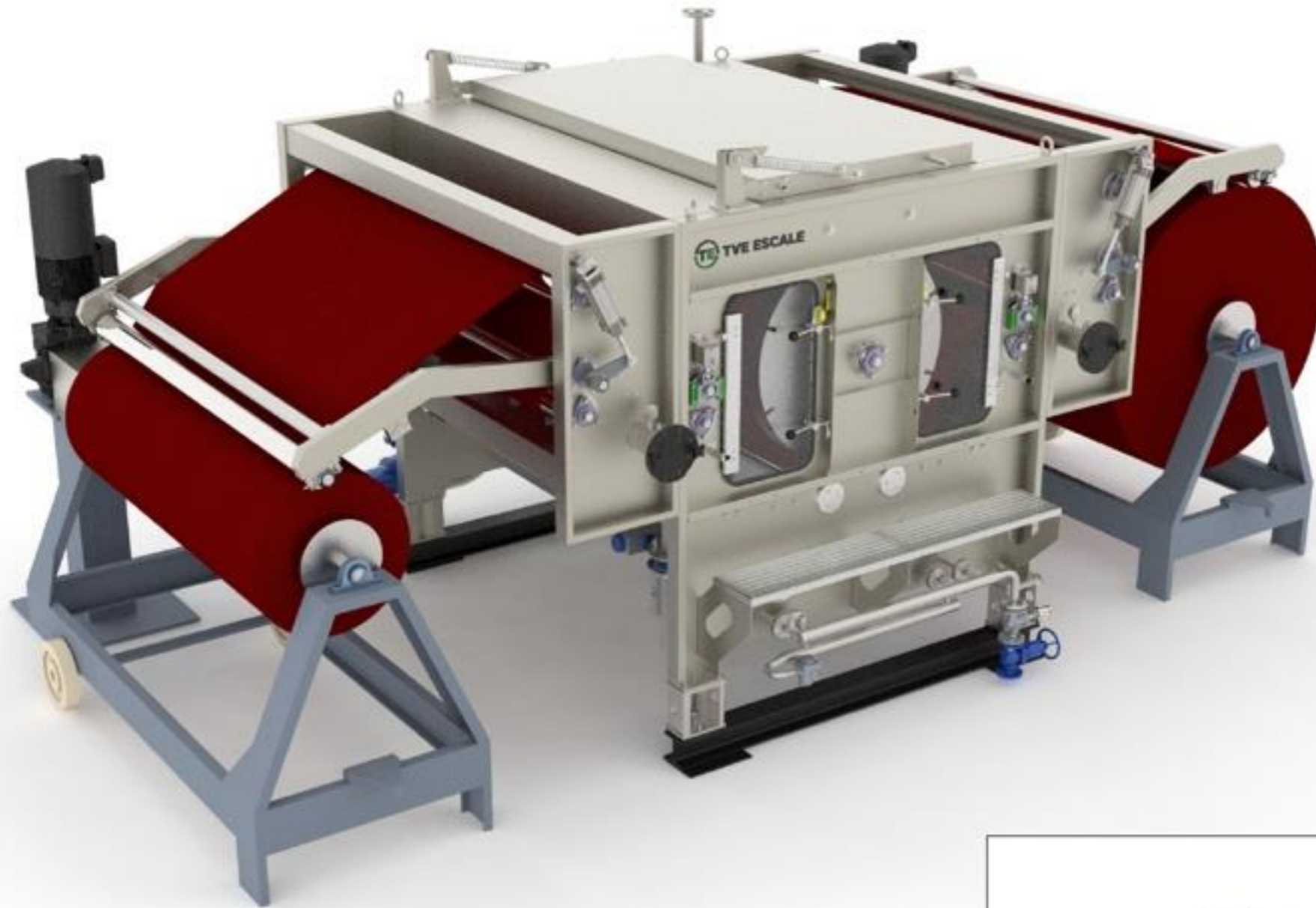
- 5.** Spray bars located around the perforated drum that guarantee a greater washing effect thanks to the water film that forms around the fabric in its advance.
- 6.** Counterflow principle. (Illustration 1.)
- 7.** Pre-squeezed with a small squeezer.
- 8.** Vacuum equipment that is responsible for making a final rinse and reduce the residual moisture of the fabric to the level that interests us.
- 9.** Final winding without wrinkles and controlling the tension during all time.
- 10.** Reaction chamber with saturated steam and adjustable room temperature.

Hydra Process

Illustration 1
Counterflow principle



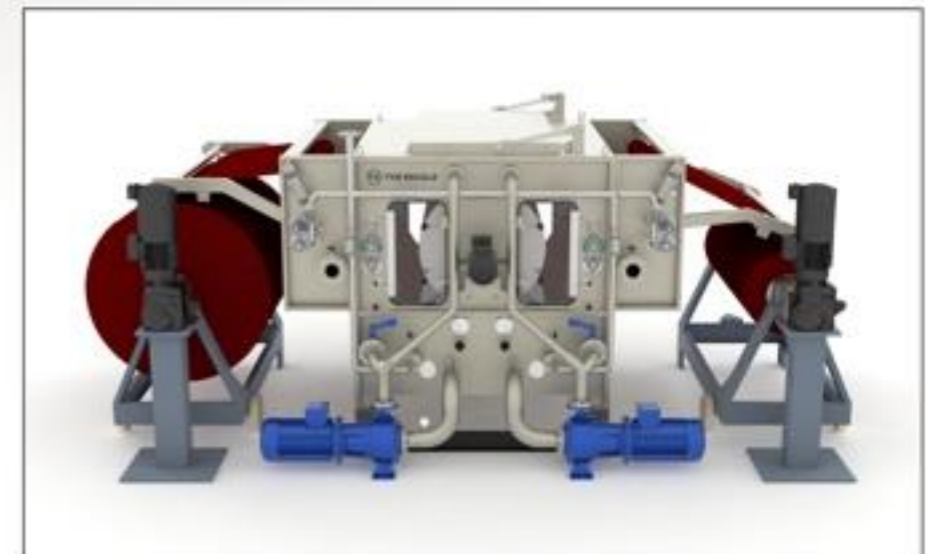
Hydra S



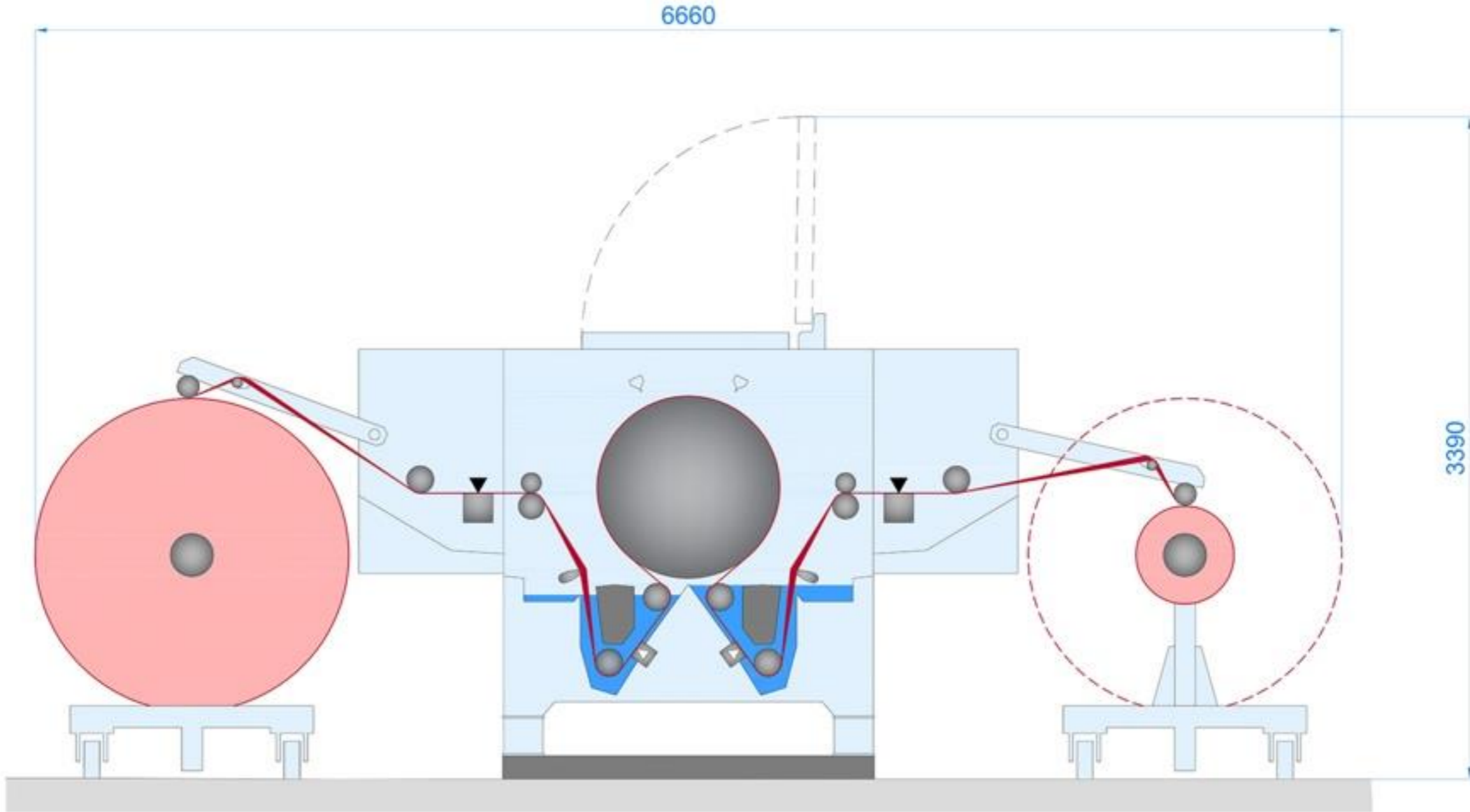
Ideal for processes as

Desizing
Enzymatic washing

Small washes
Impregnations



Hydra S



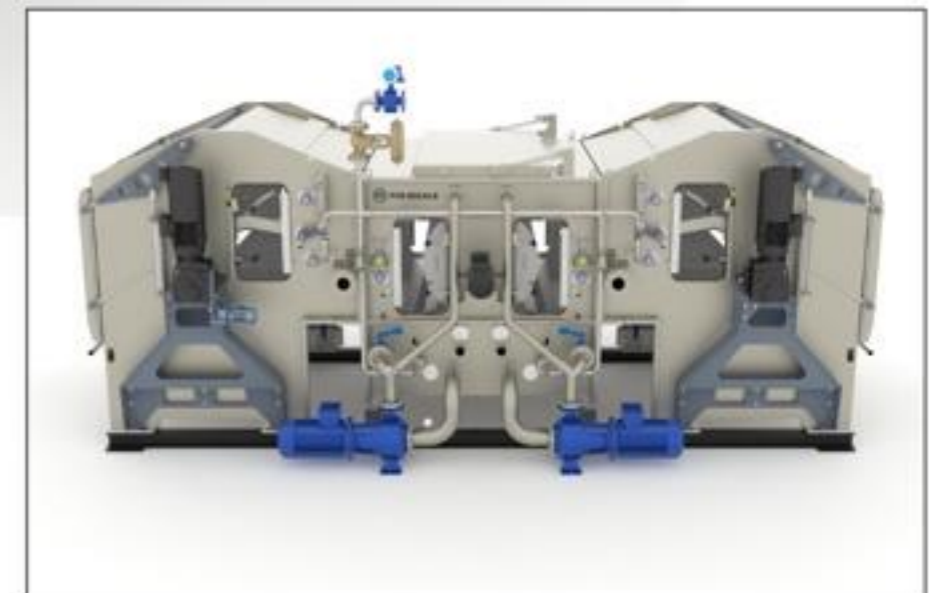
Hydra L



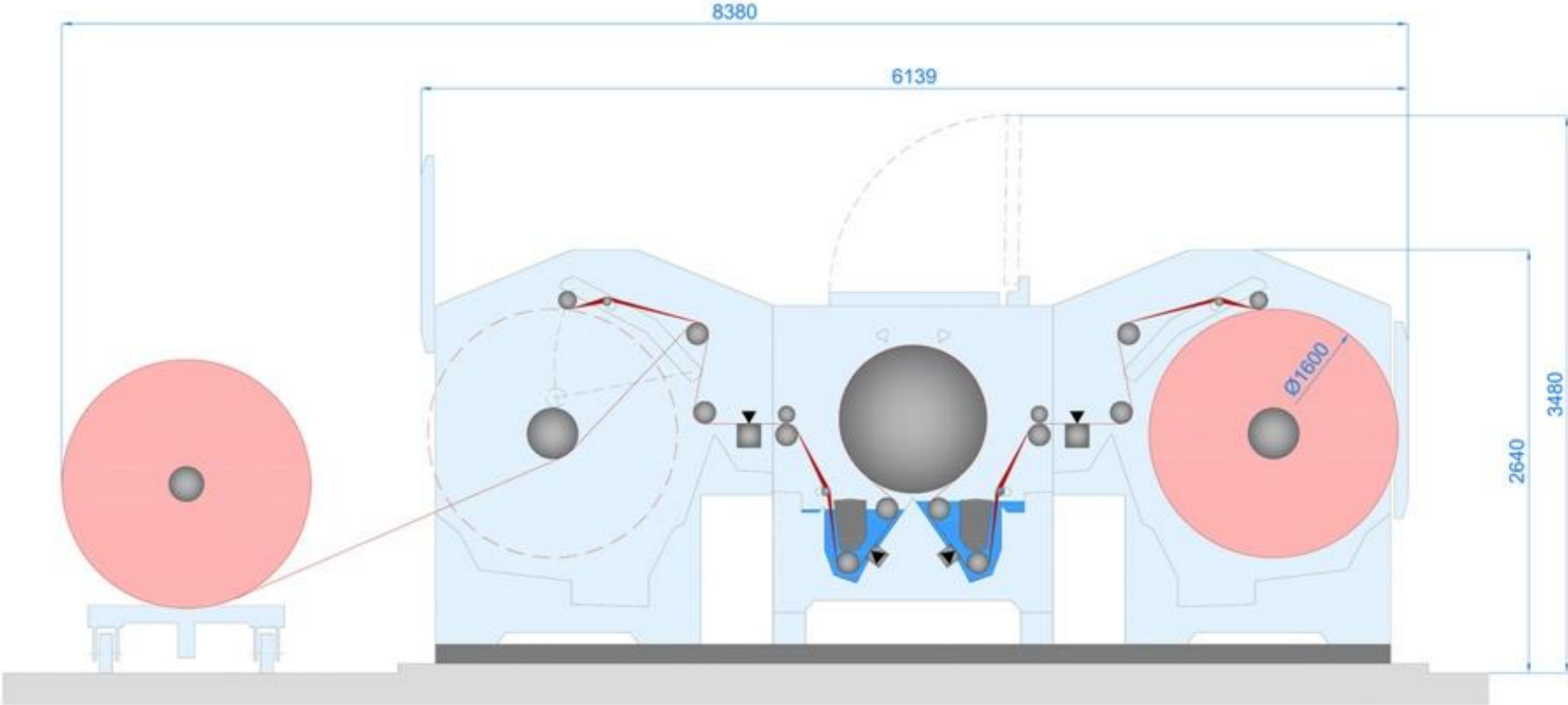
Ideal for processes as

Desizing
Bleaching
Preparation of digital printing
Digital printing washing-off

Dyeing washing
Print washing
Pad-roll



Hydra L











Hydra L - Processes

DESIZING + BLEACHING - Cotton 100%

1st step Loading & Desizing - 120 m/min

2nd step Desizing - 180 m/min

3rd step Washing & Bleaching - 180 m/min

4th step Bleaching - 180 m/min

5th step Washing - 180 m/min

6th step Neutralizing & Unloading - 120 m/min



PRODUCTIVITY - 20 m/min
WATER CONSUMPTION - 4-6 l/kg

Hydra L - Processes

REACTIVE WASHING - Light & medium colours

1st step Loading & Washing - 120 m/min

2nd step Soaping - 180 m/min

3rd step Washing -180 m/min

4th step Neutralizing & Unloading - 120 m/min

PRODUCTIVITY - 30 m/min

WATER CONSUMPTION - 4-6 l/kg



Hydra L - Processes

REACTIVE WASHING - Dark colours

1st step Loading & Washing - 120 m/min

2nd step Washing - 180 m/min

3rd step Soaping - 180 m/min

4rd step Soaping - 180 m/min

5th step Washing -180 m/min

6th step Neutralizing & Unloading - 120 m/min

PRODUCTIVITY - 20 m/min

WATER CONSUMPTION - 5-8 l/kg





**YOUR
RELIABLE
PARTNER**