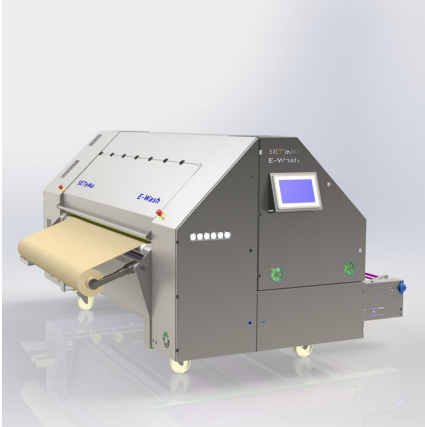


E-Wash series



- counterflow modular roll-to roll washing machine
- three sections within one unit
- high temperature washing up to 90° C
- long dwelltime with minimal water content
- 3 high efficient vacuum slits to remove polluted water
- minimal energy and water consumption
- up to 7 recycled and 3 fresh soft water spraying nozzles positions
- counter-flow heat exchangers for hot waste water/cold incoming water
- air recirculation to regain energy
- quick fill possibility
- two separate driven sections
- thermally isolated walls and covers
- no leaders for feed-in / feed-out
- user friendly PLC-control
- easy to maintain
- available in a 1.85, 2.50 and 3.40 m width

Options:

- chemical dispensing system
- single and double scroll rollers for e.g. knitwear
- bow bars for e.g. silk
- high impact or high flow nozzles
- synchronisation with stenter
- tension control bars
- water softener
- custom power / frequency

The E-Wash is a modular roll-to-roll counterflow washing machine consisting of three washing sections suitable for various cloth- and fibre types.

The separate washing sections use recycled and fresh soft water. Standard spraying nozzles, or optional high impact nozzles, are pressurised by circulation pumps, supplying the mechanical energy to increase the washing effect. The water counterflow can be regulated independently between the sections.

To obtain a high energy efficiency the E-Wash components are tight integrated: Each section is equipped with a counter-flow heat exchanger between cold fresh and hot waste water. Air of the vacuum systems is recirculated. The walls and covers are thermally isolated.

The vacuum system in each of the three washing sections is ideal for the removal of polluted water containing the excess of dyestuff and coatings from the cloth and it largely prevents polluted water being dragged by the cloth into the next washing section. To further enhance the washing effect the cloth is sprayed with clean soft water prior to the vacuum slit.

The build-in vacuum system can achieve moisture contents as low as 30% for synthetics and 60% for natural fibres.

The maintenance-free chains drive all rollers thus a tensionless fabric transport is guaranteed. With two separate driven and controlled sections, fabric lengthening during washing can be compensated. A fabric bar can be attached to the chain which greatly simplifies the feed-in handling of cloth into the E-Wash at the production start.

With a cloth content of 9 m and the ability of a hot wash, the E-Wash is suited for high speeds and a demanding fastness wash up to 90° C.

The integrated PLC enables the control of the washing speed, water temperature and the vacuum per cloth type in each module. Each washing module can be equipped with an automatic dispensing system for chemical dosage. The E-Wash comes with an user friendly touch-screen interface.

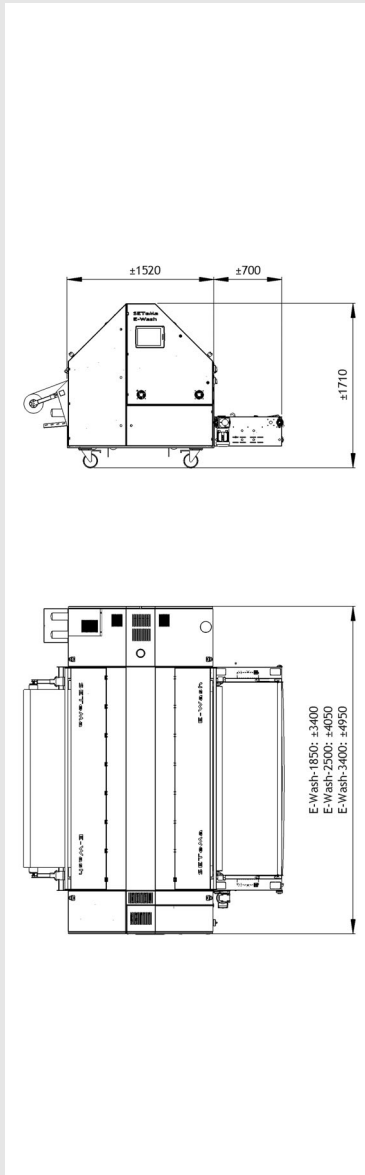
Two or more E-Wash modules can be combined for an even higher performance, but also a combination with Porta-Wash and Porta-Pad modules is possible.

Combined with the Portafix Universal or the Drum-Dryer the E-Wash forms a complete washing-drying line. In combination with the Portafix Universal the line can also be used for dyestuff fixation thereby reducing the investment costs. The E-Wash can also be integrated and synchronised with a third party dryer or stenter.

The E-Wash is available in a 1.85, 2.50 and 3.40 meter width and is made of 304 and 316 stainless steel.

The E-Wash is **CE** marked.

E-Wash series technical specifications

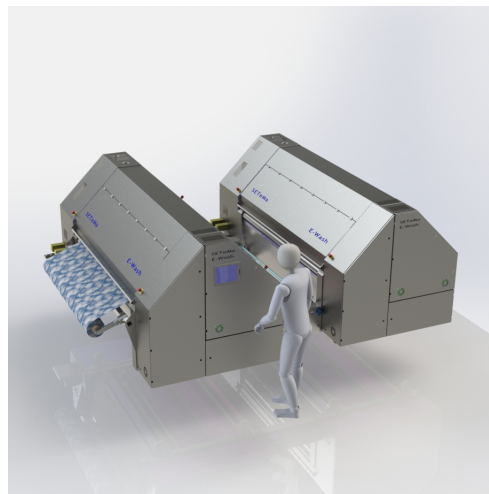


Type, capacity			
Fabric content		9	[m]
Dwell times	at 150 m/h	3.6	[min]
	at 90 m/h	6	[min]
	at 75 m/h	7.2	[min]
	at 45 m/h	12	[min]

Bath temperature / with 60 °C hotfill supply	20 - 70 / 60 - 90	[°C]
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Type, width		1850	2500	3400	
Volume	1st section	65-140	80-180	110-230	[l]
	2nd section	70-245	90-310	115-410	[l]
	3rd section	95-270	120-345	160-450	[l]
Water usage per section (< 1° dH)		75-150	90-180	120-240	[l/h]
Fabric	maximum width	1.85	2.50	3.40	[m]
Fabric roll	maximum weight	60			[kg]
	maximum diameter	0.55			[m]
Heat exchanger		up to 80% efficiency			
Electrical heater	configurable per section	0 / 11 / 22 / 30			[kW]
Exhauster fan	power	5.5			[kW]
	vacuum	10000			[Pa]
Weights		± 1800	± 2000	± 2300	[kg]

Required connections	power voltage	N + 3 x 230/400	[VAC]
	power current (max)	63 + 63	[A]
	water (< 1° dH)	720	[l/h]
	waste water	720	[l/h]
	water pressure	1 - 4.5	[bar]



2 units in-line