

SETeMa (Scientifically Engineered Textile Machines) based in The Netherlands was founded in 2002. Its main objective is design and development of textile machinery based on the scientific knowledge of the underlying processes. SETeMa is thus able to design machines that perform better.

Modularity: Due to the modular design of our machines we are able to combine units into various configurations and supply a wide variety of solutions for Coating, Fixation, Washing and Finishing. Production lines can even be upgraded afterwards. This enables custom solutions with minimal investments and adaptation to future needs.

Steamers

With temperatures between 100 and 180°C and dwell times up to 30 minutes, SETeMa steamers are suitable for fixation of all textile dyes. The steamers allow ageing at saturated steam conditions, with temperatures in the range of 100 - 105°C for Acid and Reactive dyes. High temperature fixation of Disperse dyes at 165 - 180°C and hot air fixation of Pigments at 150°C.

Regeneration of steam during the forced circulation ensures a low fresh steam consumption leading to low energy and operating costs.

B-SteAM: The B-SteAM is our most compact roll-to-roll steamer and the entry into SETeMa's professional steamer line that combines high quality with the lowest price in its class. With SETeMa's High SteAM re-flow system and the on-board steam generator it shares the proved technique of the other steamers resulting in exceptional colours and a uniform and reproducible fixation.

Portafix Universal: The Portafix Universal is a modular steam/air fixation unit with integrated steam generator for the fixation of textile dyes. The Portafix Universal can also be used for drying in combination with the Washing and Padding solutions.

E-SteAM: The E-SteAM, with a content of 36 m, is the Portafix Universal's bigger brother with more than 3 times its capacity. It is also a modular steam/air fixation unit with integrated steam generator for the fixation of textile dyes. With the modular extension units the E-SteAM can be enlarged into a production line of 108 m content, by combining up to 3 units.

L-SteAM: The L-SteAM is a loop-type steamer to increase capacity up to several hundred meters content. By adding sections the capacity can be increased whenever demand rises. Due to the unique design in flow and steam distribution the steaming results are unparalleled.



Washers

The SETeMa Washers are modular roll-to-roll washing units. They can be used for a variety of washing applications on different cloth- and fibre types. A vacuum system is used to remove polluted water and increase washing efficiency. Spray bars with recycled water are supplying the mechanical action. Fresh water is sprayed before each vacuum slot to reduce carry-over of polluted water. Temperatures can go up to 90°C. The Washing units can be combined with Drum-Dryer or II-Fix into a complete fixation-washing-drying line.

Porta-Wash: The Porta-Wash series consists of four selectable washing modules to be combined into a washing line.

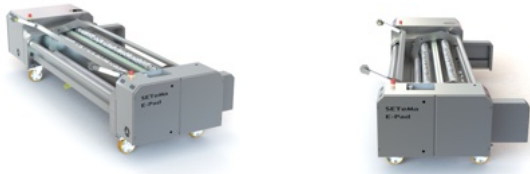
E-Wash: The E-Wash, consisting of three washing sections combined into one unit, is the Porta-Wash's bigger brother. With a cloth content of 9 m and the ability of a hot wash, the E-Wash is suited for high speeds. Being a modular system several E-Wash modules can be combined for increased speed.

Padders

E-Pad: The E-Pad is a modular roll-to-roll padding unit especially developed for applying pre- and after treatment chemicals e.g. an ink-jet pre-treatment or a fabric protector.

Textile is dipped in the E-Pad containing the impregnating liquid. By means of a vacuum slit the excess padding liquid is removed leaving an even and constant wet-pickup on the fabric.

The E-Pad can be combined with the Drum-Dryer-5 or II-Fix into a complete fixation-padding-drying line.



Fabric handling

For fabric handling we offer several modular in-feed and discharge units. These units can be selected from roll-to-roll, lorry-to-lorry, ascending batch winder or a combination of these.

Ascending Batch Winder for higher roll capacities is optionally offered with an automatic transverse substrate correction and cloth-side detection for perfect straight rolls.

A **Plaiter** is ideally suited for a continuous high volume workflow with lorries.



Contact Dryers Contact Fixation

The I-Fix, Drum-Dryer and II-Fix are modular roll-to-roll contact heating units which all share the same technology. Drying or Fixation is done with electrically heated, coated aluminium drums, guaranteeing an even temperature in the full width of the drum and a quick heat transfer to the textile.

Temperatures are adjustable beyond 200°C enabling drying applications as well as fixation of disperse dyes and baking of pigments.

The fabric touches the drums one-sided only, so undesirable ironing effects are avoided.

An integrated exhaust removes vapour and hazardous solvents.

I-Fix: The I-Fix is a complete autonomous heating unit that can be coupled in-line to each digital printer without the need of a mechanical or electrical interface. It's mainly used for fixation of disperse dyes but can also be used as an entry level dryer.

Drum-Dryer: A Drum-Dryer can contain up to 4 drums with optional spiral rollers in between. It can be used for drying of various woven and knitted cloth types. It can be an alternative to a Calendar for fixation of disperse dyes thereby eliminating the need for protection paper.

II-Fix: The II-Fix is the big brother of the I-Fix with 2 drums of almost double diameter bringing fixation speed up with a factor of 4. It can be an alternative to the Drum-Dryer in most applications.



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