

STEAMING

The use of direct steam mixed with the air that pushes the fabric with appropriate operating temperatures allows for swelling and / or shrinkage effects (*viscose crepe*), which are critical in both finishing and preparation for dyeing.

The steam, together with the mechanical action reduces tensions and solicits the thermo-retractable action of the high-twist yarns in a delicate and progressive way without causing defects.

The steam can be managed both in continuous or discontinuous mode (*on I off depending on the inversions*) while the quantity supplied can be controlled from the control panel by means of a modulating valve.



CONTROLS AND INTERCONNECTION

Siemens touch screen panel in direct profibus connection with the main drives of the electrical panel, allows a total control of the whole unit management, even remotely (*Industry 4.0*), monitoring consumption, efficiencies and recipes in real time. The storage and recall of processing recipes ensures uniform results over the time both for a stand-alone unit and also for all accessories and other units provided in line, such as J-Box and pad mangles on entry. J-Box or loop control sensor to synchronize the equipment with a mini-stenter on exit.



SENSO: BACK-AND-FORTH AUTOTUNING

For particularly delicate and sensitive fabrics, we can optionally supply EnAIRgy with an automatic fabric storage management without the risk of tension and friction on the fabric (international patent), during the back-and-forth motion. The software logic automatically performs an autotuning whenever changing fabric weights or air flows by increasing or decreasing the sensitivity of the load cells of the J-scrays, during the alternated motion of the fabric.

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ENAIRGY

EnAIRgy is a specialty finishing machine for value added goods: it's the ideal tool for those who mean to improve the product market positioning conferring softness, bulkiness and volume, drapery, bounce and changes of look.

The range of finishing effects provided by EnAlRgy is comparable the effects produced by rotary drum tumblers, though in a continuous and open width process.

The secret of EnAIRgy is the combination of an alternated discontinuous motion within a continuous process: while in fact inside the machine the stored goods keep smashing at high speed in a back-and-forth motion, externally the fabric enters and exits continuously without any pause.

This is possible thanks to a low speed entering and exiting the equipment (adjustable from 3 to 50 mt/min) and to a very high speed and frequency in the internal back and forth motion (every 3-5 seconds).

EnAIRgy is energy of air and its action gets its maximum creative content in the final drying and finishing step, just before inspection and packing. ENAIRGY can work on dry goods – thanks to its powerful mechanical action – or on fabrics previously padded with chemicals or simply steamed with free steam in order to increase the range of effects.







RELIABILITY WITHIN INNOVATION

With almost 20 years activity, EnAlRgy is the most reliable open width tumbler on the market while distinguishing itself for the wide range of effects and for the adjustable smashing power.

The management of the machine in minimum negative pressure ensures accurate filtering performances of the fluffs generated by the mechanical action. Over the years, choosing EnAlRgy has become a guarantee of reliability and versatility of use.

AIR + MECHANICAL ACTION

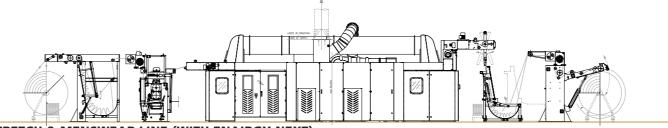
The use of pure air as a means of transport without any mechanical traction whatsoever ensures a defect-free final product, thanks also to the sensitive management of the inverter motorization and to 4 specific international patents, which make our proposal unique on the international market.

Availble in 3 models (*Sprint, Next and XStream*) according to the fabric nature and the evaporation needs.

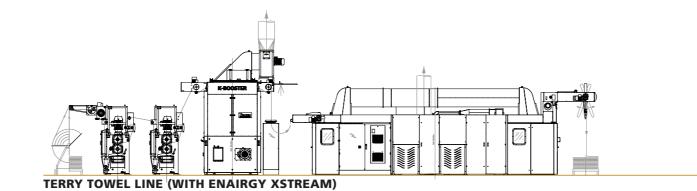
CUSTOM MADE SOLUTIONS

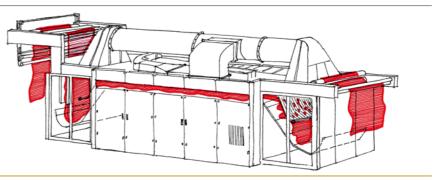
EnAlRgy is available in 3 models (*Sprint, Next and Xstream*) with many solutions and variables studied over the years to cope with the specific fabrics and evaporation required. The user can choose, among many solutions such as the tunnel adjustable width (*international patent*), the various type of smashing grids, exit with flat folding device and/or batchers, J-box and pad mangles in-line, heated air recovery.





DENIM, STRETCH & MENSWEAR LINE (WITH ENAIRGY NEXT)





WORKING PRINCIPLE

DATA SHEE	т	ENAIRGY SPRINT	ENAIRGY	ENAIRGY XSTREAM
Working Wid	ths (<i>mm</i>) from:	2000 x 1800	2000 x 1800	2000 x 1800
	to:	2600 x 2400	3600 x 3400	3600 x 3400
Mechanical speeds:		3-35 mt/min	3-50 mt/min	3-50 mt/min
Heating modes:		Gas, Thermal Oil	, Steam or Hybrid	
Compressed air line:		½"- 6 bar	½"- 6 bar	½"- 6 bar
Max Evaporation:		up to 300 kg/h	up to 500 kg/h	up to 650 kg/h
Installed thermal power:		450 kW	700 kW	700 kW
Maximum temperature:		170° C (gas)	170° C (gas)	170° C (gas)
Avg. gas consumption:		14-20 m ³ /h	20-32 m³/h	26-40 m³/h
Avg power consumption:		40 kW	65 kW	88 kW
Dimensions:	Lenght mm	10.284	11.843	11.843
	Width mm	4.192-4.622	3.950-5.371	3.950-5.371
	Height mm	3.545	3.545	3.545
Weight:		up to 14.000 kg	up to 16.000 kg	up to 18.000 kg

APPLICATIONS:

Womanswear & prints

Effective for all types of printing, both digital and rotary: reactive, disperse and acid prints. Ideal for knitted pigments and rotary prints in general with extremely high production speeds. Ideal for added value goods such as lyocell, cupro, viscose and crêpe to confer a natural shrinkage without crease marks. Often used for cleaning process for preparation for printing.

Menswear & denim stretch

Ideal for linen, shirting, cotton bottom weights, sueded or stretch, corduroy and also to achieve maximum weft stretchability on denim and non-denim goods.

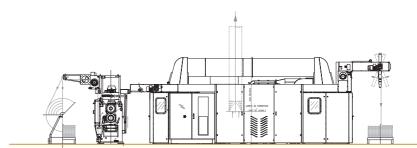
Common application for wool and blends, both worsted and carded.

Terry towels, upholstery, curtains & automotive

Main application for spongy effect on terry towels, even on very heavy ones, up to light curtains in synthetic blends.

Very good to achieve pop up in chenille fabrics, or enhancing yatn swelling on jacquards, with or without back-coating.

Thermal-shock application for automotive polyester goods in order to confer stability.



WOMANSWEAR LINE (WITH ENAIRGY SPRINT)