



Гарант

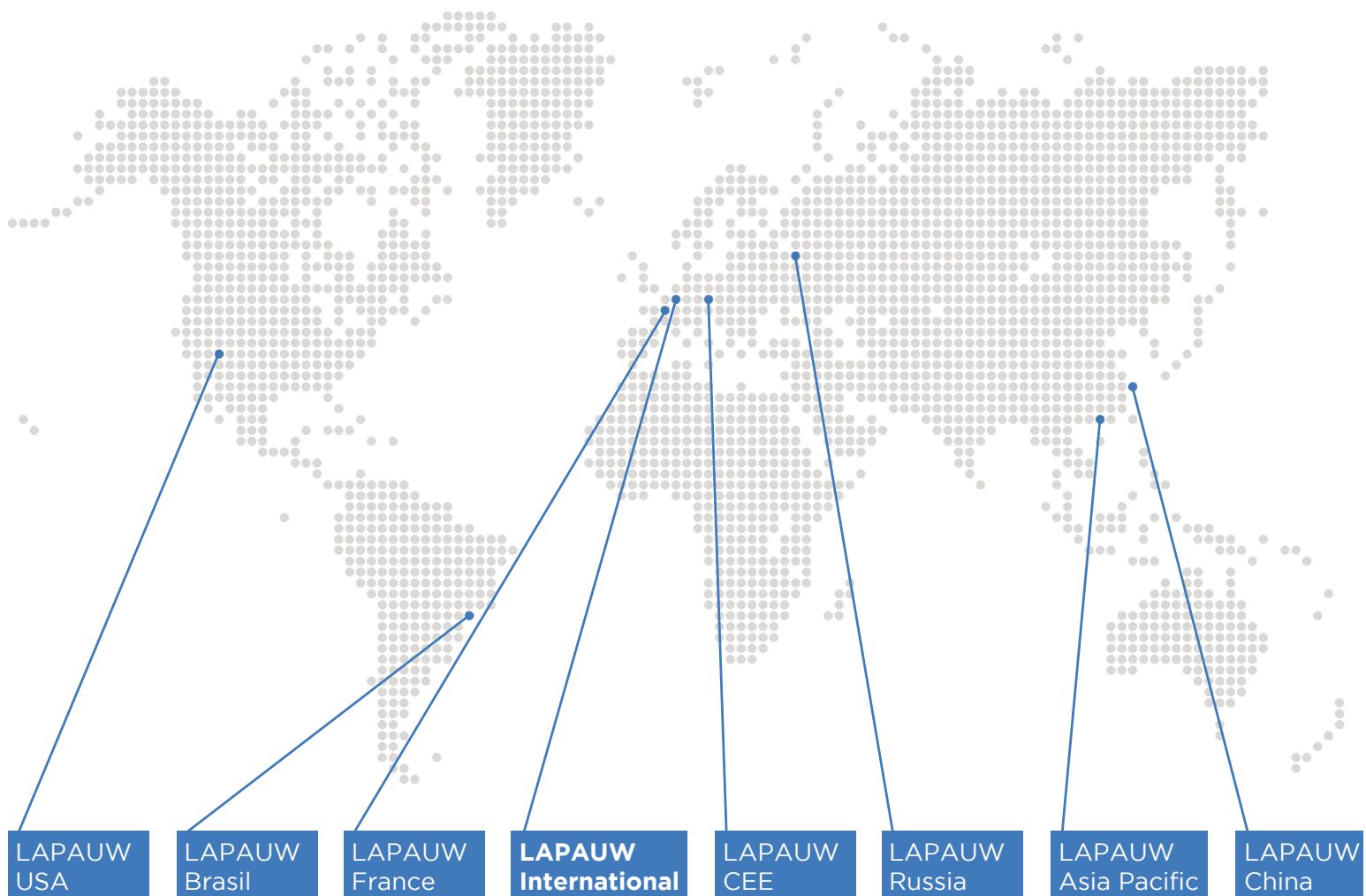
# GARMENT SOLUTIONS

# Lapauw throughout the *world*

## Worldwide dealer network:

Lapauw has a worldwide dealer network to serve its customers with the professionalism that is required. All dealers have a warehouse with the most common parts and all spare parts are always on stock at Lapauw for a 24 hr service.

Your closest local Lapauw partner can be found on our website: [www.lapauw.be](http://www.lapauw.be)



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# BEYOND INNOVATION

\* All images and data in this brochure are for reference only and are not binding!



## Beyond Innovation

# *Lapauw*: Shaping laundry technology

Since the mid 20th century, Lapauw has shaped laundry technology.

Did you know that the flexible chest technology is in fact a Lapauw development? And the “steamless laundry” concept would not even exist if it wasn’t for the gas heated ironers, a technology that saw the light in the Lapauw factory, in 1995. Ever since the very first ironer, in 1950 (with flexible chest), Lapauw has been on the vanguard of laundry technology, as Lapauw always adopted an “out of the box” approach to the specific challenges that come with laundry machinery.

Today, Lapauw manufactures a wide range of laundry equipment :

- Lapauw is one of the few manufacturers of heavy duty washer-extractors.
- Lapauw has the widest range of ironers, all of them equipped with the flexible chest technology.
- Lapauw complements its ironers with a full range of feeders and folders.
- The Hot Stream tunnel finisher is well reputed for the first class finish it delivers.
- The Lapauw Trolley Wash takes care of trolleys or even disinfects hospital beds.

But most important of all, owners of the more than 8000 machines sold in over 40 countries know the Lapauw machines as highly efficient, long lived machines that assure the lowest operational cost.



# ***“Beyond Innovation”***. These 2 words are more than a slogan, as they return to the 3 cornerstones of our philosophy.

## **Innovation**

Lapauw invests heavily in R&D. The aim is not just to innovate, but to go beyond innovation by creating benefits for the customer. When developing new machines, we care about improving efficiency, ergonomics and ecology.

The R&D team is located in the factory in Kortrijk, where they stay in close contact with sales and manufacturing. This allows them to keep a finger on the pulse of laundry business and maintain a “hands-on” approach to Research and Development.

## **Quality Management**

Having obtained the ISO 9001:2008 certificate in 2013, Lapauw is one of the very few laundry machinery manufacturers that can put the ISO seal on its official documents. A seal that is worldwide recognized as a symbol of “business excellence”.

With ISO 9001:2008, we go beyond just the quality of the machines and take quality management into the whole process: from the moment we pick up the phone to the after sales and shipments of spare parts, assuring that our customers are served with the highest level of professionalism.

## **Reliability and servicability**

As the Total Cost of Ownership of laundry machines becomes more important, Lapauw goes to great efforts to keep the maintenance and operational costs of the machines to a minimum.

Through our network of distributors and Lapauw offices on every continent, we stay very close to our end users in hotels, hospitals and laundries, assuring them close support and short reaction times.

The simple, robust construction of the machines and the “Open Spare Parts” philosophy assure high reliability rates and minimum maintenance costs.

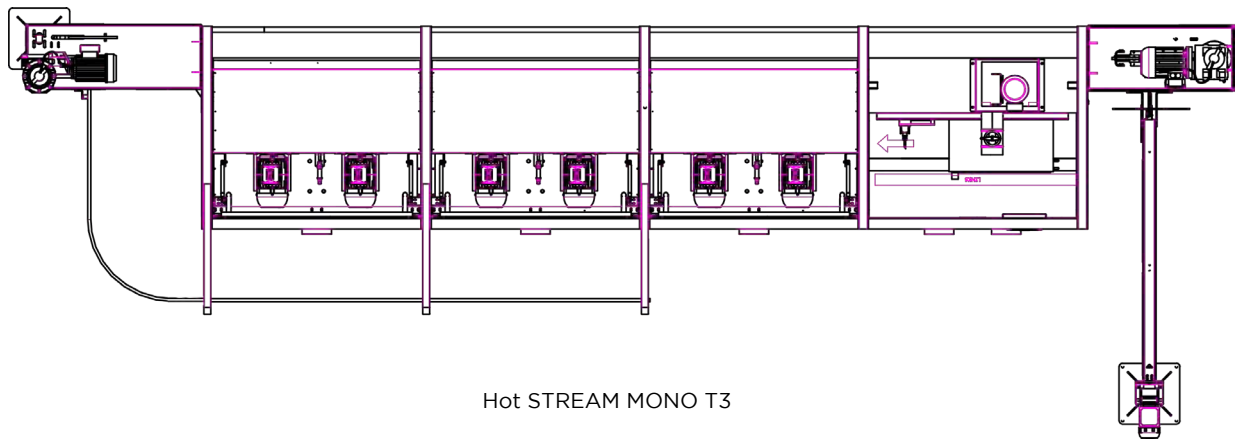


# From 100 to 2000 garments per hour: The range

## MONO *VS* DUO

### Hot STREAM MONO

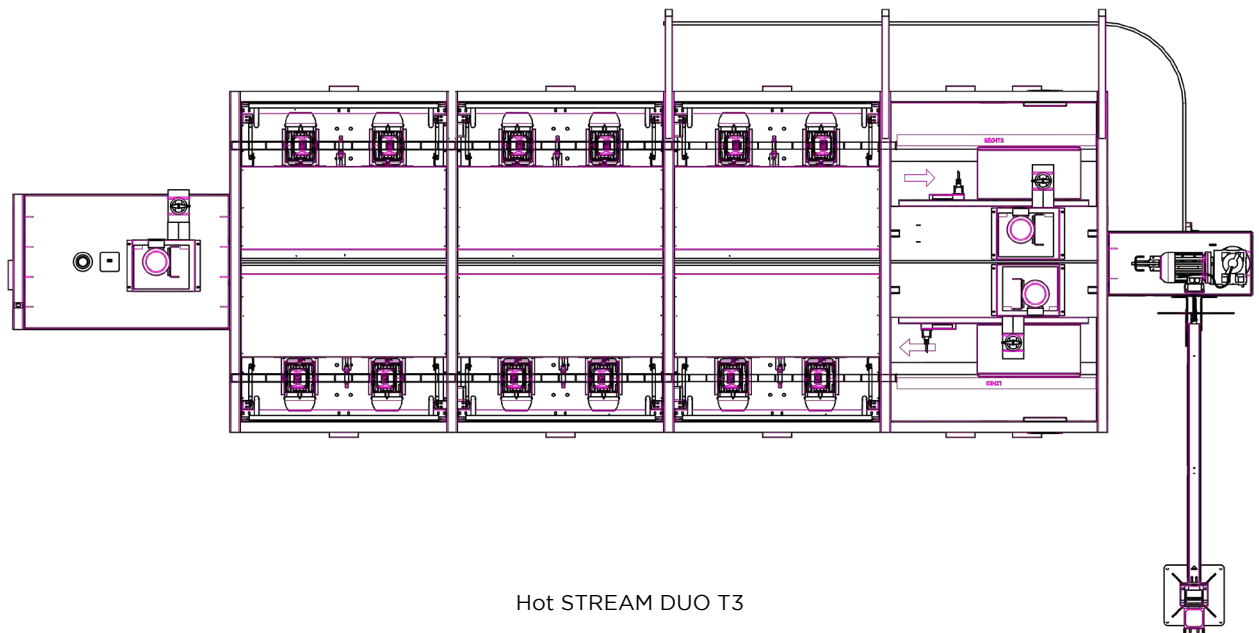
Thanks to the unique compact modular design, the Hot STREAM MONO allows you to use minimum laundry space. For example, the feeding, exit and access to the technical areas of the machine are all on the same side, which provides you with the possibility to mount the machine against the wall.



### Hot STREAM DUO: Double your production, not the footprint.

The design of Hot STREAM, with narrow preconditioning- and drying zones, allows us to mount the drying compartments back-to-back and go beyond 6 modules and assure production capacities up to 2000 garments per hour.

The Hot STREAM DUO also comes with a standard cool down zone, allowing the garments to cool down in a gentle and controlled manner.





# 1 - 6 compartments

## In function of the production capacity

The Hot STREAM has a modular design, where the drying zone consists out of a number of identical compartments with identical drying elements, in function of the production capacity.

Because the compartments and the elements are identical, the Hot STREAM assures uniform temperature and air flow throughout the entire drying zone. This results in a similar, excellent finishing quality for all garments of the same type.

## The models & capacity (\*)

	MONO T1	MONO T2	MONO T3	MONO T4	MONO T5
Items / hour	100	300	400	600	750
<i>65/35 polyester/cotton</i>					

	DUO T2	DUO T3	DUO T4	DUO T5	DUO T6
Items / hour	700	800	1000	1200	2000
<i>65/35 polyester/cotton</i>					

## Gas VS Steam heated

### Gas or steam? What suits you best?

All Hot STREAM models are available as steam or gas heated version.

Whether it's gas or steam heating, the heat-exchange unit is designed so that it covers the full length of the drying zone, which assures a uniform temperature and high quality finish.

### Heating Element

The heating element (steam or gas) covers the full length of the drying zone, assuring a uniform temperature over the full length of drying zone.



Hot STREAM - Steam Heated

Hot STREAM - Gas Heated

(\*) Capacity for reference only. Actual capacity depends on many factors like residual humidity, linen quality...

# Hot STREAM: Overview

## *Entry* Zone (A)

The Hot STREAM entry zone is made to be a perfect entrance for all types of garments. Whether it's light clothes or heavy weight workwear, all garments fit in the universal entry zone.

## *Electrical* Cabinet (B)

With two doors on front of the Hot STREAM, the electrical cabinet is designed to be very easy accessible. But you can't just open the doors. For safety reasons, you'll have to unlock them first to access the electricity. Then you get a clear overview of the electrical network.

## *Preconditioning* Module (C)

Steam injectors on both sides of the zone relax the fibers, which prepare garments for optimal finishing. The steam injectors are located over the full height (1880 mm), so that the steam fully covers even the largest items. Controllable pressure and time of steam jets assure optimal preconditioning, in function of the fibre.





# Drying Zone (D)

## Excellent finishing quality

Because the compartments and the drying elements (2 per compartment) in the drying zone are identical, and because the airflow and air temperature in the compartments are easily adjustable, the Hot STREAM delivers excellent finishing quality for each type of garments. This results in a similar, excellent finishing quality for all garments of the same type.

## Powerful Airstream

Each element has 2 counter rotating 2,2 kW blower fans that push the hot airstream through the narrow passage. Thanks to the programmable position of the hood, the airspeed can be optimized in function of the type of garments that are processed.



## Rivetless

Thanks to the rivetless surfaces on the inside walls of the Hot STREAM, made of stainless steel, all types of garment will come out of the tunnel finisher in perfect condition and without any risk of rips. The rivetless panels assure optimal care for the garments, even when subjected to high mechanical action.

## Dust Filter

The dust filter assures that lint and dust are kept away from the airstream and do not contaminate the garments or clog up the blower fans. The dust filter is easy to clean.

# Exit Zone (E)



# Hot STREAM: Key Benefits

## *Narrow* Passage

The Lapauw Hot STREAM is well-reputed for delivering a First Class Quality finish. The Narrow passage is the key to that finish.

### **Full exposure**

Because of the narrow passage (only 100 mm), the garments pass shoulder-to-shoulder through the preconditioning unit and the drying zone.

This leaves the front and back of the garment fully exposed to the steam jets and hot air stream, allowing the hot air stream to cover every part of the garments, including the hard to reach parts like pockets.

### **Ironing effect**

As the hot air stream is pushed through the narrow drying zone, it accelerates and shakes the garments. The shaking makes the garments beat against the stainless steel, rivetless side panels of the narrow drying zone.

Both actions result in a strong mechanical action, called ironing effect, which de-wrinkles even the toughest textiles, like cotton overalls.

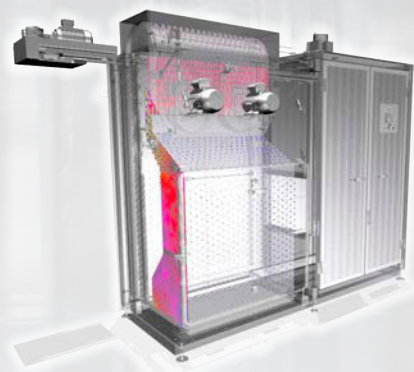
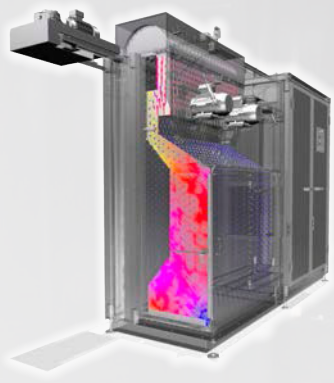
### **Natural heating**

Tests with the Hot STREAM have shown that, when airstream enters the narrow passage, the acceleration alone causes the temperature in the drying zone to increase with 45°C. An increase in temperature for which no gas or steam is consumed.

## **High Density** *Insulation*

The high density insulation is located over the full length of the drying zone. This way, the high density insulation assures that the heat is always kept inside the machine.







# Optimal *Flexible* System

## The perfect stand-alone solution...

With the smooth bar and a wide range of manual loading accessories, the Lapauw Hot STREAM is the ideal stand-alone solution for smaller batches.



## ... but also fully integratable

Thanks to the open system, the Hot STREAM can be integrated with every garment management and transportation system on the market, existing or new.

## Cam Feed System

The specially designed hanger feeding unit allows you to use any type and diameter of hanger and connect the Hot STREAM to any type of garment transportation and sorting system on the market.



# Freely *programmable*

The Hot STREAM is the ultimate versatile tunnel finisher. Advantages of the SIEMENS control system:

## Control speed and temperature

You can adjust the chain speed and the temperature in the Hot STREAM.

## From light to heavy - optimize the airflow

Thanks to the standard 2 airflow speeds, you can control the speed of the airstream in the dry chamber.

The canopy position is pneumatically controlled, enabling you to create different programs with an airspeed optimized to the type of linen to be finished: from the lightest 100% polyester hospital shirts to the heaviest welding overalls.

## Optimized preconditioning: control steam pressure and time

The time and pressure of the steam jets can be adjusted per program. This enables you to optimize the preconditioning for every kind of textile.

## Automatic filter cleaning

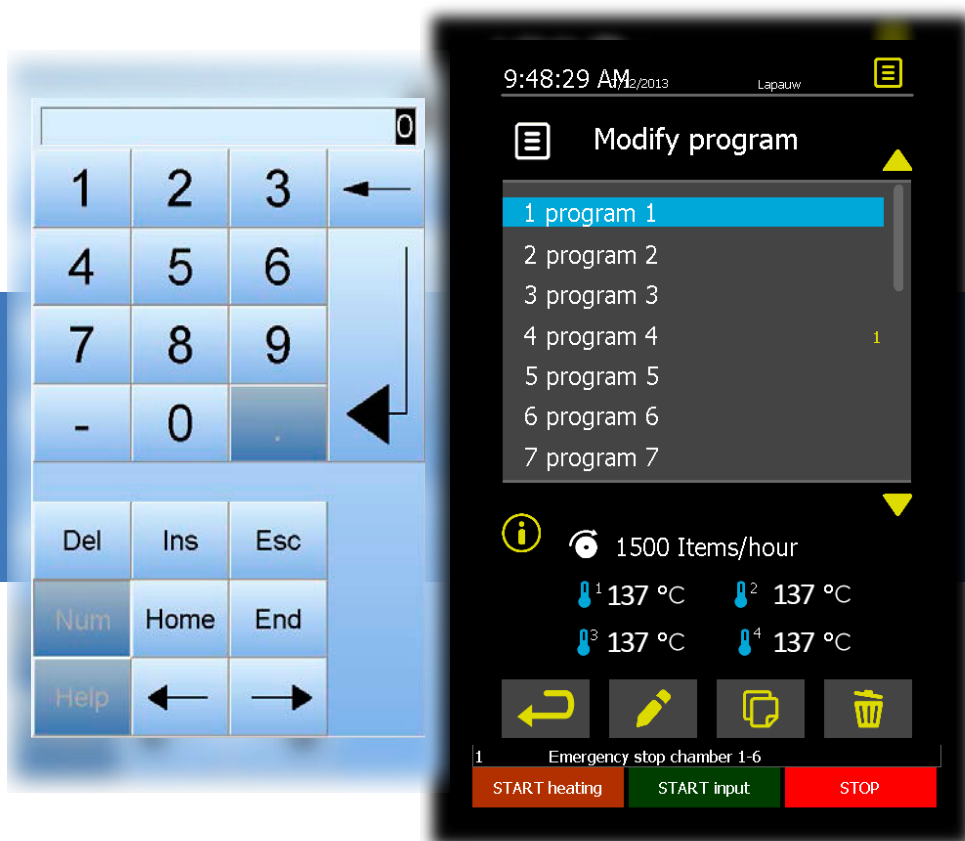
You program how many times per day your filter is cleaned. The Hot STREAM will automatically clean the filter and assure the best finish.

## SIEMENS: programming made easy

The intuitive SIEMENS controller makes programming and operating the Hot STREAM child's play.

Thanks to the extensive use of icons, the controller guides the operator through the process, making it easy even for untrained operators to work with the Hot STREAM.

The large, full color touch screen visualizes all relevant data.



# Maintaining the lowest *total cost of ownership*

In today's very competitive laundry business, maintaining a low Total Cost of Ownership is paramount.

## Easy maintenance

The large, pivotal "bus" doors are easy to open and offer unlimited access to the technical areas.

Components that require frequent cleaning or maintenance are easily accessible and cleanable:

- Because the blower motors are mounted on hinges, the fans can be accessed and cleaned easily.
- The anti-dust filter is in plain sight and can be cleaned easily by hand.
- Because the chains are made of stainless steel, the chain has a higher lifespan and it is much cheaper in maintenance.

## Open spare parts policy

Like on all Lapauw machines, Lapauw also adopts its Open Spare Parts Policy to the Hot STREAM.

From the electric components to the blowers to the Riello gas burner: All components are identifiable and can be purchased of-the-shelf.

## Electronic Lapauw System: your machine taken care of via the digital highway\*

With the ELS system you have a Lapauw specialist at your disposal, every minute your Hot STREAM is operational.

But ELS is more than just long distance maintenance. Combined with the SIEMENS control system, ELS helps you plan maintenance.

\*ELS is option





# Hot STREAM: Options

## Automatic *Filter* Cleaning

The automatic filter cleaning takes away the burden of remembering to clean the filters and maintain optimal efficiency and finish quality of your Hot STREAM.

This option automatically cleans the dust filter at preprogrammed intervals. You stay in control, as you can program yourself when and how many times per day the filter is to be cleaned.

## *Loading* Coils

If you want to use your tunnel finisher as a stand-alone unit, Lapauw offers a wide range of loading coils and lengths, including buffer systems and exit system on the machine.



## *Feeding* Station

The Lapauw automatic feeding station adds speed to your process, as it allows the operator to put the garments on a hanger conveniently and in an efficient manner.

The feeding station can feed up to 400 hangers per hour.

## Additional *Suction* Hood

The additional suction hood evacuates the heat and fumes instead of being blown in the laundry.



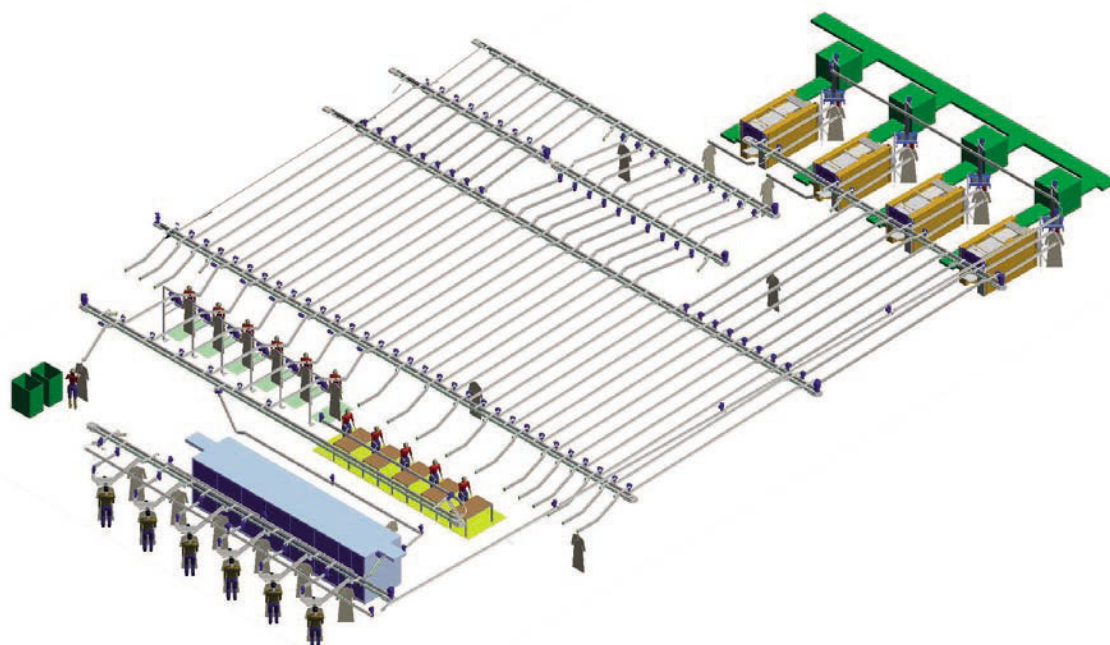
# Lapauw: Total Solutions

***Finishing, sorting & folding: taking  
Garment Finishing one step further!***

## Logistics

**First class finish from 100 up to 2000 garments per hour**

With the Hot STREAM tunnel finisher, Lapauw assures you a first class finish on your garments. With its conveyor system, Lapauw provides you with the most efficient garment management solution for any production requirement. From stand-alone set-ups for 100 or fewer garments per hour, up to the high volume production units.



## Flexible

The Lapauw garment management system is designed with your laundry and budget in mind. Backbone is the Combiflex endless chain that distributes and directs the garments to the various sections and stations. Flexible screws transport the garments between the Combiflex units. The combinations with Combiflex and the screws are limitless, providing you with the optimal lay-out for your requirements and space. The modular design allows the management system to grow with your business.

## Compact

Innovative sorting software minimizes the space needed for transporting and sorting. Sorting is already possible on a floor surface of 12 m<sup>2</sup> (which is the smallest sorting unit on the market).

## Efficient

It's not only about space, as the system provides efficiency in every aspect of the logistics process.

- Unlike other systems, the Lapauw garment management system handles a wide variety of hanger types, brands and diameters.
- Although compatible with a wide range of hangers, our system is designed to process the hangers without the need of a hanger carrier. This saves the laundry money, in investment and in man-hours.
- Our system is also one of the very few that can read the ID-chips "on the fly", allowing the items to be processed faster and with a minimum of hardware.

## Ergonomics: less noise & adjustable height

Noise is one of the main issues of garment transportation systems, especially those that work with hooks. The Lapauw system works with flexible screws, which makes the Lapauw garment management system one of the most silent of the market and excludes the characteristic noise produced by the tracked hook systems.

The garment feeding system is adjustable in height, making it easy to work with for everybody.

## Manage the total logistics process!

The Lapauw garment management system is much more than a system to transport garments in the laundry. It manages the logistics of your garment finishing line from garment intake, to quality control, to shipment.

The system also provides the software and hardware to track, check and expedite the garments, including barcode scanners and monitors. The software interface between the system and the laundry's administration is designed in such a way that it is open to everybody, enabling the laundry to configure it to their specific requirements.



Flexible screws



Compact Combiflex system



Separator handles any hanger types



Feeding station adjustable in height





# Garment *folding*

## The Universal machine

The Lapauw garment folder is a universal folder, capable to fold any type of garment up to 1,2 x 1,8 meter, whether it's t-shirts, trousers, OP-wear, jackets or cloaks.

The PLC control system offers up to 100 different folding programs, giving you full control over how the garments should be folded.

The folder also effortlessly folds garments in all materials... from polyester, to polyester/cotton, to cotton.



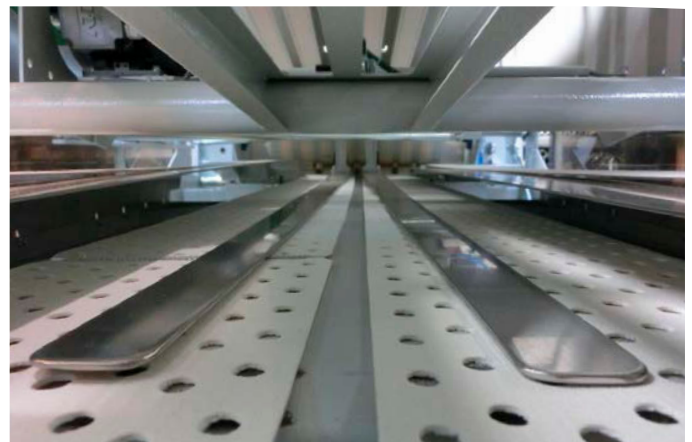
## High precision sleeves handling

A brush system automatically folds the arms inwards. As the brushes move with the optimum speed, wrinkles are minimized. This assures you the best possible position of the sleeves in the folded garment.



## High precision lateral folding

Lateral folding is done by a template, which assures accurate, high quality folding. The template position is gradually adjustable, allowing you to match the needed width in the range from 165-380mm.



## High precision cross folding

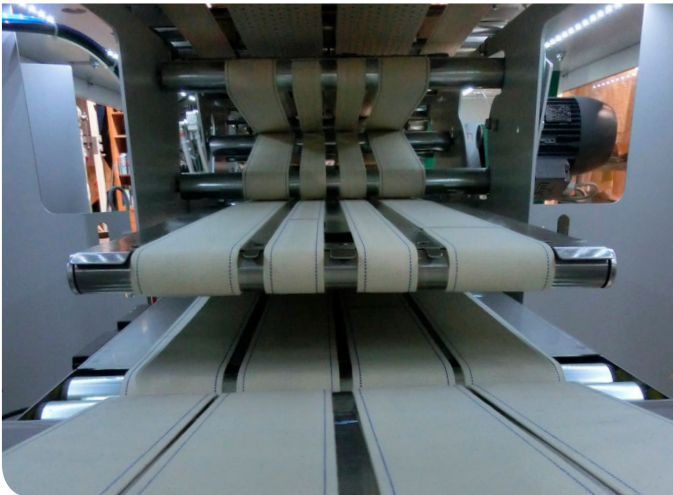
The folder disposes of 2 cross folds. Both use mechanical knife and reversing belts. Additionally, there is an air blast available in the second cross fold for pieces where the knife is not suitable. This gives you maximum flexibility for choosing the way you want to process your garments. the cross fold section can be programmed so that the items are folded 1/2<sup>nd</sup>, 1/3<sup>rd</sup> or 1/4<sup>th</sup>.

## Stacker

After the cross fold section, the garments are deposited onto the stacker at the back of the machine. there is a high-quality roll-off stacker in the machine.

As an option, you can also expand the machine with several stacker positions in order to sort the garments according your needs.

Optional exit conveyors can be mounted onto the stacker, taking your folded packages directly to the packaging stations, without human intervention.



## Manual or fully automated: your choice

The folder can be expanded with a robot, which takes the garments from the hangers directly to the folder. The robot also automatically takes away the hangers and reinserts them into the system. Foldable hangers are automatically collapsed and reopened if needed.



## Standard features

- Jam control
- All optic sensors with monitoring
- PLC control with touch screen - up to 1000 different programs
- Cycle time: 3,2 - 4 sec.
- Very small footprint of the machine
- Sliding doors for easy access
- LED-light inside of the machine
- Antistatic system for special environments (especially when processing microfiber garments).



# Hot STREAM - Technical Specifications\*

		Mono					Duo				
		T1	T2	T3	T4	T5	T2	T3	T4	T5	T6
Exhaust motors	kW	2x 2,2	4x 2,2	6x 2,2	8x 2,2	10x 2,2	8x 2,2	12x 2,2	16x 2,2	20x 2,2	24x 2,2
	HP	2x 3	4x 3	6x 3	8x 3	10x 3	8x 3	12x 3	16x 3	20x 3	24x 3
Conveyor motor	kW	0,55			0,75		1,1				
	HP	0,75			1		1,5				
Air speed m/sec	m <sup>3</sup> /h	4.000	8.000	12.000	16.000	20.000	16.000	24.000	32.000	40.000	48.000
	cfm	2.354	4.708	7.068	9.424	11.780	9.424	14.136	18.848	23.560	28.272
Steam exhaust motor	kW	0,75		1,5			1,5			2x 1,5	
	HP	1		2			2			2x 2	
Production **	p/h	100	300	400	600	750	700	800	1000	1200	2000
Compressed air inlet	mm	10					10				
	inch	3/8					3/8				
Steam inlet	mm	40					40			2x 40	
	inch	6/4					6/4			2x 6/4	
Condensation outlet	mm	32					32			2x 32	
	inch	5/4					5/4			2x 5/4	
Exhaust	mm	120			160		160			2x 160	
	inch	5			6		6,3			2x 6	
Burner	kWh	52		91	104	143	104	182	208	286	364
Gas inlet	mm	40					40				
	inch	6/4					6/4				
Gas Pressure	mbar	30 - 350					30 - 350				
	psi	0,45 - 5					0,45 - 5				
Steam/Water inlet	mm	15					15				
	inch	1/2					1/2				
Condensation outlet	mm	10					10				
	inch	3/8					3/8				
Dimensions											
Length [A]	mm	3.670	4.695	5.820	6.915	8.120	5.250	6.375	7.400	10.000	11.130
	inch	144,5	184,8	229,1	272,2	319,7	206,7	251	291,3	393,7	438,2
Width [B]	mm	1.465					1.860				
	inch	57,7					73,2				
Height [C]	mm	2.480					2.650				
	inch	97,6					104,3				
Weight***	kg	1.000	1.700	2.000	2.600	3.400	3.200	4.800	5.920	6.700	7.900
	lbs	2.205	3.748	4.409	5.732	7.496	7.055	9.700	13.051	14.771	17.416
Consumption											
Steam	kg/h	75	150	225	300	375	300	450	600	750	900
	kWh	5,2	9,6	14,7	19,4	23,8	19,7	28,5	37,3	47,6	56,4
Air	l/h	30					30				
	kg/h	11	26	34	45	60	56	68	83	101	120
Gas ****	m <sup>3</sup> /h	3	6	10	12	16	12	20	23	32	41
	BTU	104.636	204.040	355.762	408.080	559.802	408.080	711.524	816.160	1.119.605	1.433.513
Air	l/h	30					30				
	kWh	5,2	9,6	14,7	19,4	23,8	19,7	28,5	37,3	47,6	56,4

\* All images and data in this brochure are for reference only and are not binding!

\*\* Production depends on environment variables, tested with polyester cotton 65/35.

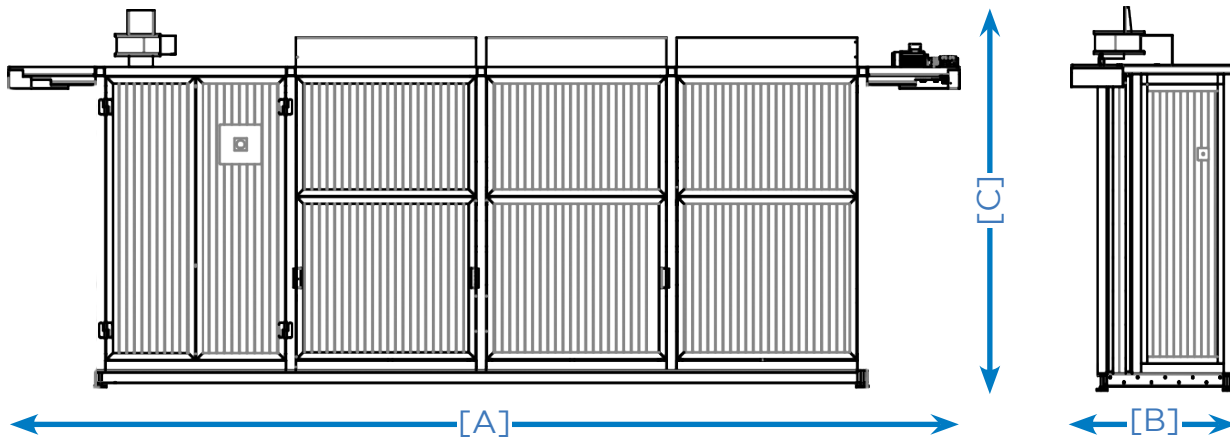
\*\*\* Every Hot Stream Duo comes with an additional lifting beam of 460 kg / 1.014 lbs

\*\*\*\* Based on measuring with Belgian natural gas with 31.65 MJ/m<sup>3</sup> gas.

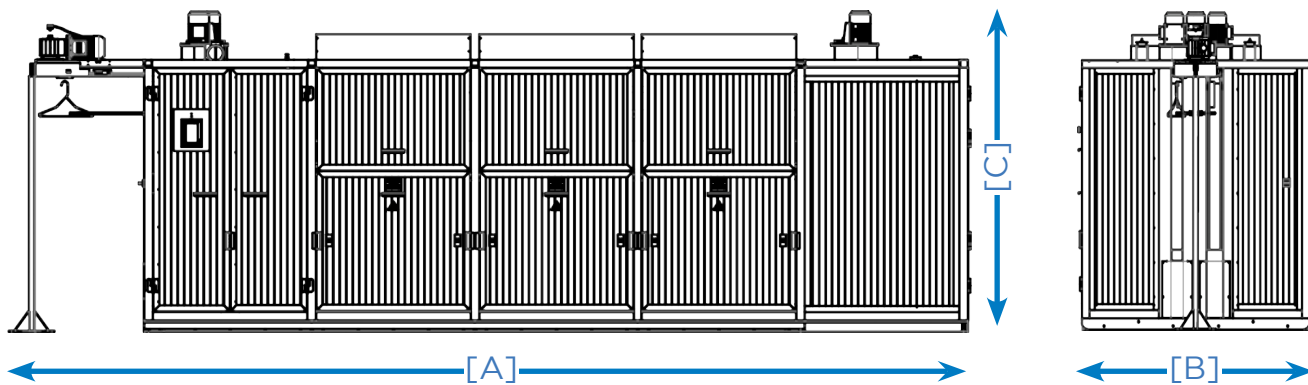


# & Technical Plans

Hot STREAM Mono



Hot STREAM Duo



Lapauw:

# Product Overview

## WASHING SOLUTIONS



### OPEN POCKET WASHER EXTRACTOR

Available: 60, 100, 120, 160, 200, 300 kg with frontal loading.



### 3 POCKET FRONTAL WASHER EXTRACTOR

Available: 60, 100, 160, 200, 300, 400 kg with frontal loading.



### MEDIWAVE WASHER EXTRACTOR

Available: 60, 80, 110 kg with side loading.  
Type: Barrier Washer.



### PULLMAN WASHER EXTRACTOR

Available: 40, 60, 80, 110, 160, 200, 260 kg with side loading.  
Type: Barrier washer.



### TOPLOADER WASHER EXTRACTOR

Available: 120, 160, 200 kg with frontal loading.



### TROLLEY-WASH



Disinfection, washing & drying. Multiple executions possible.

## IRONING SOLUTIONS



### UNIFEED

Independent vacuum feeder for small items.



### STARFEED

Small piece feeding unit for high quality manual feeding.



### UNIVERSE

2-3-4 feeding stations, 1-2 lanes, up to 650 items/hour with manual feeding.



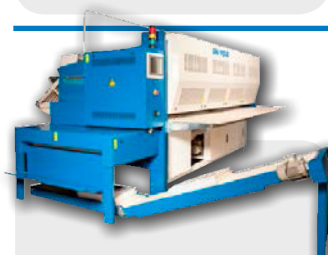
### CLASSIC IRONER

- Ø 500, 600, 800, 900, 1200 or 1600mm.
- 1, 2 or 3 rolls.
- Gas, steam, electric or oil heated



### TURBOFAN

The most efficient, heavy duty, high capacity, gas heated double roll ironer.



### UNIFOLD

Universal folder with 2 to 3 primary folds by air, and 2 to 3 crossfolds by knife in multiple lanes with drop stacker.



### SUPERFOLD

High quality folder with 2 to 3 primary folds by knife, 2 to 3 crossfolds by knife with automatic correction in multiple lanes & roll off stacker.

## SOLUTIONS



### STARFEED+

One feeding station, one lane, up to 250 items/hour.



### EXTRA

Two stations cornerless feeding, up to 750 items/hour.



### UNIX

3-4 feeding stations, 1-2 lanes, up to 1800 items/hour with manual feeding.



### XXL

- Ø 1600 mm.
- Gas or steam heated.
- Chest covers roll over 286°.



### RELAX

Double roll Ø 800 mm steam heated ironer, perfect for basic ironing.



### STARFOLD

Cost effective folder with 2 to 3 primary folds by air in multiple lanes. The Starfold is the ideal single roll folder.



### STACK & FOLD

Small piece folding & stacking, in multiple lanes. 1 cross fold + stacking.

## GARMENT SOLUTIONS



### HOT STREAM TUNNEL FINISHER

Available in Mono & Duo, both gas or steam heated.

- Mono: T1 - T6: 150 - 1000 items/hour.
- Duo: T2 - T6: 750 - 2000 items/hour.

### CONVEYOR SYSTEM

Ultra compact and flexible garment handling system with capacity up to 2000 items/hour. Endless chain system transports garments shoulder-to-shoulder.

### GARMENT FOLDER

Garment folder with capacity of 800 items/hour and one primary fold & 2 cross folds. Modular robotic system which handles any type of hanger available.

## CLEANROOM SOLUTIONS



### MEDIWAVE

Double sided Barrier washer with 2 compartments. Front cover exists out of Glass Reinforced Polymer, which is used in cleanrooms.

### MEDISTREAM

First 100% cleanroom dryer, highly complementary with the Lapauw Mediwave. Keywords: ergonomics, hygiene and user-friendliness.





**LAPAUWINTERNATIONAL**

OUDE IEPERSEWEG 139  
8501 HEULE, BELGIUM

TEL. +32 (0)56 35 42 95  
FAX. +32 (0)56 35 45 59  
INFO@LAPAUW.BE  
WWW.LAPAUW.BE