

# KALA

## Lamination stations



**OUR** TECHNOLOGY  
DEFINES THE **DIFFERENCE**





# LAMINATION STATION



## The paramount choice for wide format finishing

Since their inception in 2008, KALA laminators continue to be recognised as industry leaders in wide format print finishing departments across the world. More than just a laminator, KALA creates the « Lamination Station » enabling operators to increase productivity, reduce waste thus maximising profit in their finishing operation. Our machines Mistral, Arkane and Atlantic use the same platform and operate the same way, with different features in pressure and temperature.

- Waste free Lamination. Very limited waste when loading media and perfect results from start to finish. No need to reprint because of finishing errors
- Unsupervised roll to roll laminating with perfect results
- Exceptionally intuitive control board makes it easy to operate, for both skilled and new operators.
- **Patented Auto Calibration System** constantly monitors pressure and eliminates skewing.
- Silicon rollers designed to disperse pressure evenly throughout the entire width
- Compact footprint

## Suitable for all your wide format finishing jobs



Mounting up to 50 mm (2") thick

MISTRAL 2100

Single or both sides lamination in one go, sheet fed



MISTRAL 1650



Premask application

ARKANE 1650

Single or both sides lamination in one go, roll to roll



ARKANE 1650 TS

Technology transforms performance

KALA Mistral, Arkane, Atlantic share the same base features.

Our engineers have designed this range based on the innovation described hereby. The result: high performances and easy to use equipment, which turns into an increase of your profitability.

### • EXCLUSIVE: PATENTED AUTO CALIBRATION SYSTEM

The nip of the rollers is constantly monitored and automatically corrected if required even during the laminating process. Pressure level is consistent throughout the width of the media, regardless of the width. A smooth and regular feed of the media for perfect results from start to finish, without changing adjustment during the operation.

### • ROLLERS

No compromise with quality. We select the best steel in the appropriate diameter and thickness. A larger diameter of the roller does not necessarily constitute a better lamination result.

Our steel rollers are coated with our proprietary blend of polymeric materials varying in hardness depending on the laminator selected (thermal conduction, non-sticky surface, higher resistance...).

They are converted following a designated shape carefully studied to ensure that the prints will be processed perfectly, for short and long runs. The combine features of hardness and uniform heat dispersion secure the highest quality level in your finishing operation which other products can't offer, even with larger roller diameter.

### • THE FRAME

The frame consists of welded steel, to form a one piece chassis that guarantees stability and steadiness. As a consequence, lamination works don't skew.

### • HEATING SYSTEM

Temperature is measured in the centre of the heating roller for an accurate information, notwithstanding the width of the lamination job. Heating is supplied by an infra-red heating element, designed for giving a precise and constant temperature throughout the entire width of the roller.



## Performance beyond expectations

### • ROLL TO ROLL

Best performing first choice laminator amongst wrapping studios and high-volume print shops that process full printed rolls.



Easily loaded, a full roll of printed media up to 100 metres (328 ft.) will be laminated perfectly straight and rewound without any skewing. This process can be carried out un-supervised resulting in free time for the operator to perform other tasks. With the recent introduction of a remote-control option, the operator can control certain functions from a distance optimizing the effectiveness of time.

Maximize  
productivity

### • ROLL GAP

The gap between the rollers is adjustable up to 50 mm (2"), suitable for a broad range of applications.

Elevation is operated by 2 electrical motors controlled electronically (auto-calibration) and the pressure is even throughout the working width. Pressure is adjusted on the material itself and not with pre-set positions or compressor assistance.

### • WORKING SPEED

Speed is adjustable up to 6,5 m/minute (21'/minute).

Designed to avoid unanticipated fast starts, the roller gently ramps up to the set speed notably reducing the likelihood of operator handling errors.

In our opinion, higher speed offered by competitive products should not be a major selection criteria, because it would deteriorate the job quality and would not benefit to your organisation.

### • MEDIA REEL DIAMETER

Our laminators will accommodate rolls up to 100 m (328') with a maximum diameter of 9".



# Control and safety

Every standard feature is designed and integrated to enhance the quality, efficiency and profit performance of your finishing operations.

## • CONTROL PANEL

Intuitive and easy to use, all functions are accessible from the ideally positioned control panel. The panel consists of 4 sections, one for each function hereby listed.



Temperature selection and memorization of the working parameters.

Elevation of the upper roller and pressure adjustment.

- Foot switch selection and power button (when switching the machine off, the top roller automatically elevates thus preserving the integrity of the rollers).
- Speed adjustment, forward, stop, reverse, and re-setting safety features.

## • SAFETY

Safety first

**At KALA, we consider operator safety an essential design element and unlike other exotic products, we strictly comply with the latest machinery directives.**

1. Self-checking Laser eye prevents operator injuries
2. Safety switch on swing out infeed tray stops the rollers from turning when in the upward position
3. 2 emergency stop switches easily accessible from the front and back of the machine.
4. When any of the safety features are triggered, the reset button on the control panel will flash red. Simply pressing the reset button will reactivate the system.
5. An audible beep sound will indicate the reverse mode has been engaged.

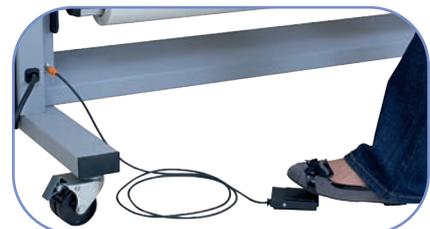


## • FOOTSWITCH

When selected, the multi-function footswitch activates stop and go lamination, leaving hands free when feeding wider prints.

When not selected, the multi-function footswitch, will switch off the driving motor without using the control panel.

Useful for mounting application, the footswitch operation when selected, deactivates the safety laser eye.



## Quick and easy loading of the media

### SELF-BLOCKING AND UNWINDING SHAFTS

Our lightweight and graduated self-blocking roll-shafts save you time when loading media. Contrary to systems using locking rings or pivoting shafts, no tools are required and a much smaller work area is occupied when loading media.

Our roll-shafts can be used in any dispensing or rewinding positions and inserted in either directions. Loading media is easily achieved by one person only.



Built in storage space for up to 4 rolls of media is located in the bottom section of the laminator. Extra roll-shafts are available as an option. Materials are safely stored on a roll-shaft horizontally and easily reachable for quick media changeover.

In addition to the 5 self-blocking shafts, our laminators come standard with a scrolling bar ideal for short batch of prints. This shaft can be placed in any one of the 4 storage slots or any free position on the machine. It will protect your prints from dust before lamination.



Graduated self-blocking shaft



Unwinding shaft

**Quick and efficient**

### EASY LOADING OF MEDIA

KALA laminators are designed to enable quick media changes with minimal waste of material. A powder coated metal feeding plate that minimizes wastage is included with the machine and stored in its designated place on the laminator.



The in-feed tray pivots upwards allowing full and secure access for easy unobstructed loading of the media. When placed in the upward position, the driving motor will not operate, securing the operator from any injury during the loading operation.

### IN-FEED TRAY

Feeding prints made easy thanks to the removable media guide.

Squaring guide for processing rigid panels in series.

Thick feeding tray with bullnose edge to prevent prints from being damaged while feeding.



## ● OUTPUT TRAY

An aluminium output tray maintains and guides the media. The output tray is not required when performing roll-to-roll and it is easily removed and stored in its designated location at the base of the machine.



A safety cutter is included to avoid damage to the rollers. The magnet on the safety cutter makes it easily accessible allowing it to be placed on any part of the steel frame.

## ● LIMITED FLOOR SPACE AND EASY ACCESS TO ALL ADJUSTMENT

The machine occupies a limited space, leaving free access and allowing effortless media changes. All adjustments are easily reachable and all film tension adjustments remain unchanged from one roll to another.



**MISTRAL 1650  
DUAL FEEDING**

## ● IN LINE SLITTING (OPTIONAL)

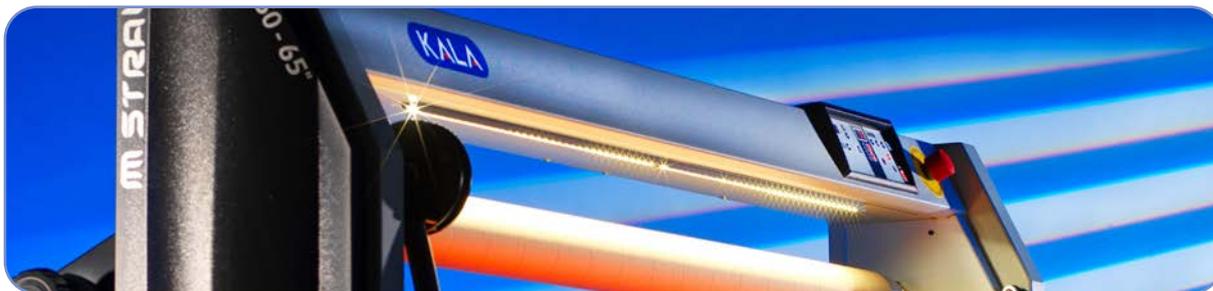


### **In line slitting system**

Delivered with two cutting heads. The heads can be locked in various positions:

- cuts laminated prints as they exit the main rollers
- cuts lamination film before entering the main rollers. Ideal for applications where the laminating film is wider than the print.

This optional slitting device is available for Mistral, Arkane in 1650 mm (65") and 2100 mm (83") and for Atlantic 1650 mm (65")



## LED light kit

Ideal for lighting up the in-feed tray just prior to inserting the print and for one final inspection before feeding it through the rollers.

Ref. MP 601820 Pour laize 1650 mm – 65"  
Ref. MP 621820 Pour laize 2100 mm – 83"



## Antistatic string with magnets

Perfect to unload static generated by lamination and print media, in particular those with a polyester liner backing.

Ref. MP 601840  
Pour laize 1650 mm – 65"  
Ref. MP 621840  
Pour laize 2100 mm – 83"

## Self-blocking shaft

Graduated media shafts. Usable from the storage position and compatible with our complete range of flat-bed AppliKators and KalaXY trimmers.

Ref. AX165076 Pour laize 1650 mm – 65"  
Ref. AX210076 Pour laize 2100 mm – 83"



## Remote control

The remote control allows the operator to set drive function from a distance.

Retrofitable on site, we recommend contacting an authorized KALA dealer prior to purchasing to verify if any electronic modifications are required.

Ref. REMOTE

## Gas lift

For a soft closure of the in-feed tray when in upper position. This feature offers additional safety for high traffic work areas.

Ref. GASLIFT1650 Pour laize 1650 mm – 65"  
Ref. GASLIFT2100 Pour laize 2100 mm – 83"



# Compatibility of options

Options	Mistral 1650 Mistral Dual feeding	Mistral 2100	Arkane 1650, Dual feeding, Double heat, TS	Atlantic 1650
	1650 – 65"	2100 – 83"	1650 – 65"	1650 – 65"
In line slitting with tray, for machines delivered before July 2019 	ILCT 1650	ILCT 2100	ILCT 1650	N/A
In line slitting without tray, for machines delivered after July 2019 	ILC 1650	ILC 2100	ILC 1650	ILCA 1650
Blade holder for ILC, blade included	ILCM			ILCMA
Replacement blades for ILC - pack of 5	CA50-032/5			
Remote control 	REMOTE			
Gas lift To slow down the descent of the feeding tray when in upper position. <i>Included with all machines sold in the USA and Canada</i> 	GASLIFT 1650	GASLIFT 2100	GASLIFT 1650	GASLIFT 1650
Self-blocking shaft 	AX165076	AX210076	AX165076	AX165076
Antistatic string with magnets 	MP601840	MP621840	MP601840	MP601840
LED lighting kit <i>Included with all machines sold in the USA and Canada</i> 	MP601820	MP621820	MP601820	MP601820

## STANDARDS



All products in this range are made in France and CE certified in compliance with the latest machine directives for:

- Electromagnetic compatibility
- Electrical safety
- User safety



**RoHS**

Testing to obtain this certification have been performed by recognized laboratories (Apave, Emitech) with a strict obedience to the official directives. This differs from certification of exotic products, which may simply consist in an auto-certification by its manufacturer. Tests results of KALA machines are available upon demand.

## SERVICE

KALA laminators are designed and built to last. You will acquire this machine with a vision to cope with your development and growth plans for a number of years. A KALA machine is an investment and not a consumable.

Most of our machines delivered 10 years ago are still working today.

We keep tracking of all parts for each serial number produced on our premises. We engage in keeping the wearing parts in our inventory **for 10 years** after the production termination date.

# Technical data

	Mistral 1650		Mistral 2100	Arkane 1650			Atlantic 1650
		Dual feeding			Dual feeding	Double heat	
Maximum film width	1650 – 65"	1650 – 65"	2080 – 82"	1650 – 65"	1650 – 65"	1650 – 65"	1650 – 65"
Maximum working width	1710 – 67"	1710 – 67"	2160 – 85"	1710 – 67"	1710 – 67"	1710 – 67"	1710 – 67"
Heating modes							
Temperature adjustment (°C – °F)	30 – 60 °C 86 – 140 °F	30 – 60 °C 86 – 140 °F	30 – 100 °C 86 – 212 °F	30 – 140 °C 86 – 284 °F			
Autocalibration system	✓	✓	✓	✓	✓	✓	✓
Roller nip opening 50 mm - 2"	✓	✓	✓	✓	✓	✓	✓
Shafts delivered with the machine	5	7	5	5	7	5	5
Scrolling bar	✓	✓	✓	✓	✓	✓	✓
<b>Printing compatibility by print categories</b>							
Solvent, aqueous, Latex, screen printing, Offset...	✓	✓	✓	✓	✓	✓	✓
UV printing			✓	✓	✓	✓	✓
<b>Use with PSA adhesive films: single side lamination, encapsulation, pre-mask</b>							
	✓	✓	✓	✓	✓	✓	✓
<b>Use with thermal films</b>							
Up to 250 µ				✓	✓	✓	✓
Up to 320 µ							✓
Encapsulation							✓
Mix of thermal and PSA films				✓	✓	✓	✓
Warranty 2 years	✓	✓	✓	✓	✓	✓	✓
<b>Made in France</b>							

Find more information about our product range at **www.kala.systems** or check with your local authorized distributor.



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