

# FOLIANT MERCURY 400 SF

The FOLIANT Mercury 400 SF is a very compact industrial laminating machine, constructed for a heavy duty digital and offset outputs lamination, with an integrated suction feeder Heidelberg and a high speed bump separator. Several options are available for the Mercury machine – a module for the double sided lamination, a module with the embossed laminating roller, pallet stacker, etc. Due to its high pressure system, format and performance the machine is suitable for all jobs – all kinds of digital printed sheets lamination and high volumes of offset printed sheets size B3+ lamination too. **The machine maximum speed is up to 25 m/min.**, while performance is 3000 sheets per hour of B3 portrait (white paper 200 gsm).



## FEEDER

The FOLIANT Mercury 400 SF is equipped with a rising pile back separation stream feeder and with a suction feed head Heidelberg. It is driven by an Omron servo motor and controlled by a machine central PLC. The Becker vacuum pump is used for sheets back airing. The overlaps are electronically controlled, in an „in-run“ automatic mode, from the touch screen. The accuracy is +/- 2 mm under-lap (in a constant speed). The feeder is fitted with a lifting plate and its capacity is a 54 cm pile of paper.

## LAMINATOR

The FOLIANT Mercury 400 SF laminator maximum sheet size is 40 x 70 cm (for example the maximum outputs from Xerox iGen4 are 38 x 66 cm). The minimum sheet size is 30 x 20 cm (A4). The FOLIANT Mercury 400 SF machine is a single sided thermal industrial laminator, laminating the 115 – 600 gsm paper.

The laminating unit is equipped with an adjustable twin decurl unit:

- With a decurl blade for offset printed sheets decurling
- With a decurl roller for digital printed sheets decurling (to prevent the scratches on sheets printed on both sides by digital print with sensitive inks).

The roll of a film is mounted on a quick-changed shaft with a film tension control breaker. The shaft capacity is up to 3000 m of the 24 - 31 microns film. The film holder unit is equipped with a trim slit and a perforating wheel.

The laminating process is made between two laminating rollers - a highly polished chrome roller, and a lower hard rubber pressure roller. The laminating roller is heated with a dry electric system inside the roller, with a sensitive temperature sensor. The warming up time is shorter than 10 minutes. The pressure is pneumatically adjustable, with an extra independent control knob for each roller edge.

The machine is fitted with OMRON Programmable Logic Controllers, which control all machines' functions. The used PLC system includes many automation items for an easy control of the machine and a reliable lamination. The whole machine is controlled by an interactive easy understandable icon touch screen panel – no language version is needed.

## SEPARATOR

The integrated bump separator (sheeter) is equipped with a pair of fast cycling rollers. The process is controlled from the machine PLC unit. The separated sheets are delivered into a vibrating jogger (optional) or a pallet stacker (optional).

## LAMINATING FILMS

The machine laminates the BOPP films (23 – 42 microns) and Nylon films (max. 35 microns). The PET films (max. 35 microns) can be laminated with the optional module only.

## OPTIONS

### JOGGER 400 (OPTIONAL)\*

It is an adjustable vibrating reception unit for the laminated sheets stocking. Its capacity is limited up to a 10 cm pile of sheets.

### PALLET STACKER 400 (OPTIONAL)\*

It is a device equipped with a lifting plate with a pallet, electronically controlled from the machine, which loads the laminated sheets into a high pile. Its capacity is 70 cm of sheets.

### NON-STICKY PRESSURE ROLLER (OPTIONAL)

Standard rubber pressure roller is replaced by roller with non-sticky surface. Melted glue from film cannot stick to it even under heavy pressure. Cleaning of this roller is not necessary at all. Allows laminating sheets with windows.

### FILM MICRO ADJUSTABLE AIR SHAFT (OPTIONAL)

Air shaft for precise and easy film placement.

### MODULE FOR SHEETS 40 x 100 CM LAMINATION (OPTIONAL)

It is an extension for lamination of sheets with size up to 40 x 100 cm.

### DOUBLE SIDED LAMINATING MODULE (OPTIONAL)

It is module for one pass double sided sheets lamination. Speed is limited to 20m/min. when laminating from both sides at once. Single sided speed is not limited.

### PET FILMS LAMINATION MODULE (OPTIONAL)

It is a module integrated inside the separator for the PET films (max. 30 microns) processing.

### FILM LOADER/MANIPULATOR (OPTIONAL)

It is an electric lift with a film core adaptor for loading heavy rolls of film (max. capacity 125 kg). The device is not integrated with the machine. It is only connected with the machine electric circuits.

\*Important – the machine must be operated either with a Pallet Stacker or with a Jogger.



Optional Double Sided Lamination Module



Optional Pallet Stacker

## Foliant Mercury 400 SF

<b>Max Speed</b>	25 m / min	<b>Power Supply</b>	3 ph., 400 V AC, 50-60 Hz
<b>Feeding</b>	Automatic	<b>Power</b>	5000 W
<b>Feeding System</b>	Suction Feeding Head Heidelberg	<b>Floor space (w x l)(w. Jogger / Stacker)</b>	105 x 230 cm / 105 x 265 cm
<b>Feeder's Load Capacity</b>	54 cm	<b>Weight</b>	430 kg
<b>Overlaps</b>	Automatic, PLC Control	<b>Module for PET Films Processing</b>	Optional
<b>Overlaps Accuracy</b>	+ / - 2 mm	<b>Double Sided Laminating Module</b>	Optional
<b>Separation</b>	Automatic, Bump Rollers	<b>Max Speed running double sided</b>	20 m / min
<b>Paper Weight</b>	115 - 600 gsm	<b>Jogger 400</b>	Optional
<b>Main Rollers Pressure</b>	Pneumatic	<b>Integrated Pallet Stacker 400</b>	Optional
<b>External Compressor</b>	150 l / min, 6 - 8 bar	<b>Pallet Stacker Capacity</b>	70 cm
<b>Min. Sheets Size (w x l)</b>	20 x 30 cm	<b>Film Loader (Electric)</b>	Optional
<b>Max. Sheets (w x l)</b>	40 x 70 cm	<b>Module for sheets 40 x 100 cm</b>	Optional
<b>Max. Performance</b>	3000 B3 / hour	<b>Film Micro Adjustable Air Shaft</b>	Optional
<b>Warming up Time</b>	8 min	<b>Non-sticky pressure roller</b>	Optional
<b>Temperature Control</b>	80 - 140°C		