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# FOLIANT MERCURY 530 SF 4x4

The FOLIANT Mercury 530 SF 4x4 is double sided 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 – pallet stacker, non-sticky rollers or air shafts. 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 B2+ lamination too. The machine maximum speed is up to 25 m/min. (single and double sided lamination too); while performance is 2100 sheets per hour of B2 portrait (white paper 200 gsm).



#### **FEEDER**

The FOLIANT Mercury 530 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 530 SF laminator maximum sheet size is 53 x 74 cm. The minimum sheet size is 30 x 20 cm (A4). The FOLIANT Mercury 530 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 rolls of a film are mounted on quick-changing shafts with a film tension control breaker. The shaft capacity is up to 3000 m of the 24 - 31 microns film. The film holder units are equipped with a trim slitter and a perforating wheel.

The laminating process is made between two pairs of laminating rollers - a highly polished chrome roller, and a lower hard rubber pressure roller for each laminated side. The laminating rollers are heated with a dry electric system inside the rollers, with sensitive temperature sensors. The warming up time is shorter than 10 minutes. The pressure is pneumatically adjustable, with an extra independent control knob for each roller edge. Machine can be switched between single and double sided lamination very quickly.

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), Nylon films (max. 35 microns) and PET films (max. 35 microns).

#### **OPTIONS**

# JOGGER 530 (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 530 (OPTIONAL)

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

#### NON-STICKY PRESSURE ROLLERS (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. Up to two non-sticky rollers can be fitted, for lamination of upper side and for lower side as well.

#### FOLIANT FOILER (OPTIONAL)

Winding device that allows use of metalized film (gold, silver, red, etc.) and spot varnish film.

# FILM MICRO ADJUSTABLE AIR SHAFTS (OPTIONAL)

Air shaft for precise and easy film placement. Up to two air shafts can be fitted.

#### MODULE FOR SHEETS 53 x 100 CM LAMINATION (OPTIONAL)

It is an extension for lamination of sheets with size up to  $53 \times 100$  cm. Unloading of these sheets is possible with Jogger only.

## 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.



Optional Pallet Stacker



Optional Foliant Foiler

Foliant Mercury 530 SF			
Max Speed single sided	25 m / min	Warming up Time	8 min
Max Speed double sided	25 m / min	Temperature Control	80 - 140°C
Feeding	Automatic	Power Supply	3 ph., 400 V AC, 50-60 Hz
Feeding System	Suction Feeding Head Heidelberg	Power	7500 W
Feeder's Load Capacity	54 cm	Floor space (w x l) incl. a Jogger	120 x 300 cm
Overlaps	Automatic, PLC Control	Weight	570 kg
Overlaps Accuracy	+ / - 2 mm	Foliant Foiler	Optional
Separation	Automatic, Bump Rollers	XL Module (sheets 53 x 100 cm)	Optional
Paper Weight	115 - 600 gsm	Jogger 530	Optional
Main Rollers Pressure	Pneumatic	Pallet Stacker 530	Optional
External Compressor	150 l / min, 6 - 8 bar	Non-sticky pressure rollers	Optional (up to 2x)
Min. Sheets Size (w x I)	20 x 30 cm	Film Loader (Electric)	Optional
Max. Sheets (w x I)	53 x 74 cm	Film Micro Adjustable Air Shaft	Optional (up to 2x)
Max. Performance	2100 B2 / hour		