

# FOLIANT MERCURY 530 SF

The FOLIANT Mercury 530 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 B2+ lamination too. **The machine maximum speed is up to 65'/minute (20m/min)**, while performance is 1650 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 21” (54 cm) pile of paper.

## LAMINATOR

The FOLIANT Mercury 530 SF laminator maximum sheet size is 20.4" x 29.1" (53 x 74 cm). The minimum sheet size is 8-1/2" x 11" letter size (30 x 25 cm, A4). The FOLIANT Mercury 530 SF machine is a single sided thermal industrial laminator, laminating the 115 – 500 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 10,000' (3000 m) of the 1.2 to 1.7 mil film (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 OPP films 1mil to 1.7mil (23 – 42 microns) and 1.5 mil Nylon films (max. 35 microns). The PET films (max. 1.5 mil maximum -35 microns) can be laminated with the optional module only.

## OPTIONS

### JOGGER 530 (OPTIONAL)\*

It is an adjustable vibrating reception unit for the laminated sheets stocking. Its capacity is limited up to a 3.9" (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 54 cm pile of sheets.

### EMBOSSED ROLLER MODULE (OPTIONAL)

It is a module for structured lamination. The embossed rollers are available with more surface structure.

### DOUBLE SIDED LAMINATING MODULE (OPTIONAL)

It is module for one pass double sided sheets lamination.

### 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 275 lbs (125 kg). The device is not integrated with the machine. It is only connected with the machine electric circuits.



Optional Double Sided Lamination Module



Optional Pallet Stacker

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

### Foliant Mercury 530 SF

|                                 |                             |   |                           |
|---------------------------------|-----------------------------|---|---------------------------|
| <b>Max Speed</b>                | 65' / minute (20 m / min)   | <b>Warming up Time</b>                    | 8 min                     |
| <b>Feeding</b>                  | Automatic                   | <b>Temperature Control</b>                | 80 - 140°C                |
| <b>Feeding System</b>           | Suction Feeding Head        | <b>Power Supply</b>                       | 3 ph., 400 V AC, 50-60 Hz |
| <b>Feeder's Load Capacity</b>   | 21" (54 cm)                 | <b>Power</b>                              | 6000 W                    |
| <b>Overlaps</b>                 | Automatic, PLC Control      | <b>Floor space (w x l) incl. a Jogger</b> | 47" x 106" (120 x 270 cm) |
| <b>Overlaps Accuracy</b>        | + / - 2 mm                  | <b>Weight</b>                             | 1100 lbs (500 kg)         |
| <b>Separation</b>               | Automatic, Bump Rollers     | <b>Module for PET Films Processing</b>    | Optional                  |
| <b>Paper Weight</b>             | 115 - 500 gsm               | <b>Double Sided Laminating Module</b>     | Optional                  |
| <b>Main Rollers Pressure</b>    | Pneumatic                   | <b>Embossed Roller Module</b>             | Optional                  |
| <b>External Compressor</b>      | 150 l / min, 6 - 8 bar      | <b>Jogger 530</b>                         | Optional                  |
| <b>Min. Sheets Size (w x l)</b> | 8-12" x 11" (A4-30 x 25 cm) | <b>Pallet Stacker 530</b>                 | Optional                  |
| <b>Max. Sheets (w x l)</b>      | 20.4" x 29.1" (53 x 74 cm)  | <b>Pallet Stacker Capacity</b>            | 21" (54 cm)               |
| <b>Max. Performance</b>         | 1650 B2 / hour              | <b>Film Loader (Electric)</b>             | Optional                  |