FOLIANT Mercury 400 NG 4×4 double

The FOLIANT Mercury 400 NG 4x4 double is next generation of double sided laminating machine offering very high performance. It is very compact and fast industrial laminating machine, constructed for non-stop work. It is equipped with Foliant suction feeder, high speed bump separator and many options like non-sticky rollers, pallet stacker or Foiler. Due to its 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 27 m/min single sided and double sided as well, while performance is up to 3240 sheets per hour of B3 portrait (white paper 200 gsm).

Feeder

The FOLIANT Mercury 400 NG 4x4 is equipped with a rising pile back separation stream feeder and with Foliant suction feed head. 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 standard feeder is fitted with a lifting plate and its capacity is a 54 cm pile of paper.

Laminator

The FOLIANT Mercury 400 NG 4x4 laminator maximum sheet size is 40 x 70 cm, extendable to 100 cm with optional XL module. The minimum sheet size is 32 x 25 cm (A4).The FOLIANT Mercury 400 NG 4x4 machine is double sided thermal industrial laminator, laminating the 115 – 600 gsm paper, with an unique „U" cross bar for perfect lamination of thin sensitive sheets. 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).

Rolls of a film are mounted on a quick-changed shafts with a film tension control breaker. Each shaft capacity is up to 3000 m of the 24 - 42 microns film. Both film holders 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 on top, and a hard rubber pressure roller on bottom. The position of the rollers for 2nd side is switched. The lamination of each side is thus equal. Both chrome rollers are heated with a dry electric system. The warming up time is shorter than 10 minutes. The pressure is pneumatically adjustable, with an extra independent control knob for each pressure 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), nylon films (24 - 35 microns, signle side only) and PET films (20 - 26 microns single, 20 - 22 microns double).

Safety Measurements

FOLIANT Mercury 400NG 4x4 double is certified by independent testing laboratory DGUV Test and obtained GS mark ("Tested Safety"). The measurements for operators safety are better then required by law in order to minimize injuries.

Specifications

- **Maximal Speed:** single side 27 m/min.

- **Feeding System:** automatic, Suction Feeder Foliant, Feeder's Capacity 54 cm

- **Overlaps:** Automatic, PLC Controlled, Overlaps Accuracy ± 2 mm

- **Separation:** Automatic, bump rollers

- **Paper Weight:** 115–600 g/m²

- **Main Roller Pressure System:** Pneumatic

- **Compressor:** External, 150 l / min, 6-8 bar

- **Minimal Sheets Size (w×l):** 32×25 cm

- **Maximal Sheets Size (w×l):** 40×70 cm

- **Maximal Performance:** 3240 B3 / hod.

- **Temperature Control:** 80–140 °C, Warming Up Time 8 min

- **Power Supply:** 3 f., 400V AC, 50-60 Hz

- **Power:** 7650 W

- **Mechanical Parameters:** Floorspace (w×l) 105×310 cm, Weight: 590 kg

- **Pallet Stacker:** integrated automatic, Capacity ~70 cm

Optional

Air Shaft and Non-sticky pressure roller up to 2× | important - the machine have to be operated either with Jogger or Pallet Stacker

Jogger 400

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

Air Shaft

Standard film holder is replaced with air shaft for quick, tool-less film installation. Only available together with pneumatic separation option.
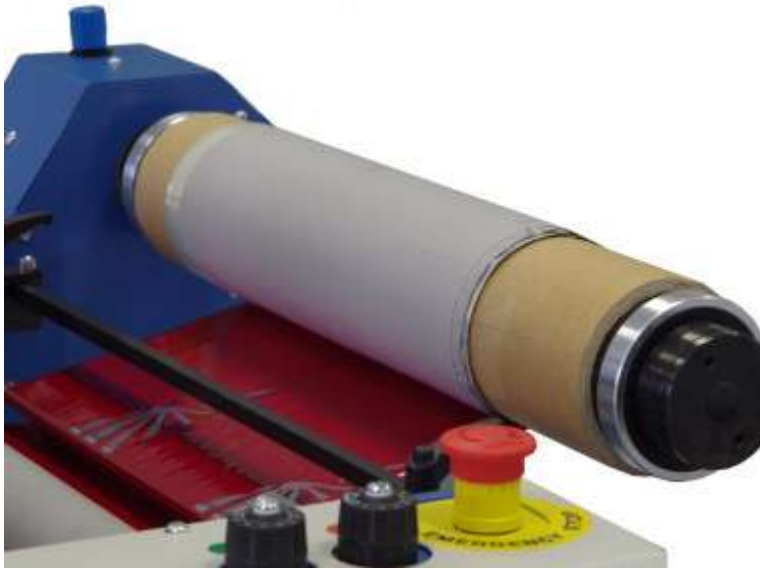
Film Loader

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.

Foliant Folier

Winding device that allows use of metalized film (gold, silver, red, etc.) and spot varnish film allpied over print from digital printing machine.

Heidelberg Feeding Head

Module for lamination (40×100)

It is an extension of feeding table and feeding head mount for lamination of sheets with size up to 40 x 100 cm. Sheets above 70 cm cannot be unloaded to Integrated pallet stacker.

Pallet Stacker

It is a device equipped with a pallet trolley, pneumatically controlled from the machine PLC, which loads the laminated sheets into a high pile. Its capacity is 65 cm pile of sheets.

Non-sticky pressure roller

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

Video Link - https://www.youtube.com/watch?v=ESDgwUBqhxc&feature=emb_logo