

MOUNTING MACHINES FOR THE FLEXIBLE PACKAGING INDUSTRY



Next generation mounting machines for mounting flexographic printing plates onto sleeves or cylinders.



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MOUNT-O-MATIC SLEEVE MOUNTER 1300

The Mount-O-Matic Sleeve Mounter 1300 belongs to the economy range of AV Flexologic mounting machines for mounting flexographic printing plates onto sleeves. It is a simple to operate mounting machine allowing for accurate plate positioning and easy and quick sleeve changes.

WORKFLOW

- 1 The system is based on two mounting marks that have been applied on the printing plate perpendicular to the mounting direction.
- 2 Perpendicular above the shaft, two high magnification high resolution digital color cameras with optical lenses are mounted on precision guides. The camera beam is precisely grinded to ensure the best calibration for high quality results. The cameras can be positioned sideways by hand.
- 3 The images of the camera and the positioning coordinates are displayed on an HD split screen monitor. Positioning coordinates are displayed on the monitor. The operator has a choice of hairlines, e.g. single crosses, double movable lines, sizable circles and combinations.
- 4 Snapshots of the mounting position can be taken and displayed faded on the monitor to mount image on image. The positions are stored in the computer and can be recalled any time. This eliminates setup time with repeating jobs, multicolor jobs and staggered mounting.
- 5 Sleeves can be exchanged with the help of compressed air. The bracket on the right-hand side can be opened by hand. Bearings on both sides ensure accurate mounting.

"The sturdy steel frame and the high precision temperature treated and grinded camera beam in combination with high quality cameras ensures best calibration and therewith excellent results

FEATURES

- Simple design with precise mounting
- Ridged full body frame for stability and consistent results
- High definition color cameras for best images
- Cameras on precision rail for best calibration
- Sectoring system for staggered mounting
- Quick lock system for sleeve changing

ADVANTAGES

- High magnification for clear view on mounting mark and accurate mounting
- Eliminate set-up time thanks to job storage in the computer. Recall jobs at any time.

OPTIONS

- **Mounting table** that is air spring supported and can be positioned in one movement. The table supports the plates during the mounting process.
- **Tap holder** holds the tape parallel to the sleeve, making it easier to mount tape correctly.
- **Direct Drive Motorized rotation** of the air cylinder by means of a foot pedal.



MOUNT-O-MATIC DD PLUS SERIES MOM DD+ PRO

The Mount-O-Matic Direct Drive Plus (MOM DD+) Pro is the most advanced AV Flexologic motorized mounting machines. Simple to operate and extremely precise, delivering high quality.

WORKFLOW

The system is based on two mounting marks that have been applied on the printing plate perpendicular to the mounting direction.

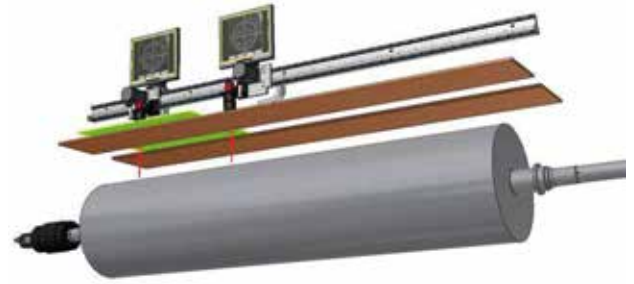
A computer controls the motorized positioning of the cameras and the gearless rotation of the fixed mounting and (optional) proofing cylinder to the exact mounting positions.

The images of the cameras are displayed on a 40" flat screen monitor. A mounting table in a fixed working height is used to position the printing plate. When the correct mounting position is reached, the cylinder moves vertically up to fixate the plate.

Exchanging the sleeve is easy as the mounting cylinder swings out horizontally.

FEATURES

- Rigid full body frame for stability and consistent results
- Flat camera rail (grinded and heat tempered) with double linear guiding for best mounting results
- Automatic moving cameras (patented) for exact positioning enabling a repeat accuracy of 0.01 mm
- Automatic fixation of the printing plate through the upwards movement of the mandrel
- High definition cameras with fixed focus length enabling high precision and repeatability
- High magnification for clear view on mounting mark and accurate mounting
- LED lights next to the cameras for the best light and contrast under each condition
- Direct driven (DD) electronic shaft for a gearless, very accurate register
- A windows 7 based computer with user friendly AV Flexologic software
- Quick lock system for sleeve changing



ADVANTAGES

- Download information of mounting marks from an external database
- Choice of hairlines, e.g. single crosses, double movable lines, sizable circles and combinations
- Snapshots of the mounting position can be taken and displayed faded on the monitor to mount image on image (Overlay system)
- Store positions in the computer to be recalled at any time
- Eliminate setup time with repeating jobs, multicolor jobs and staggered mounting
- Air bubble free mounting

STANDARD INCLUDED

Overlay System (see special overlay chapter)

Pressure Roller: After positioning the printing plate and fixing it correctly, the mounting on the sleeve is performed with the pressure roller. This pressure roller ensures air bubble free, quick and smooth mounting.

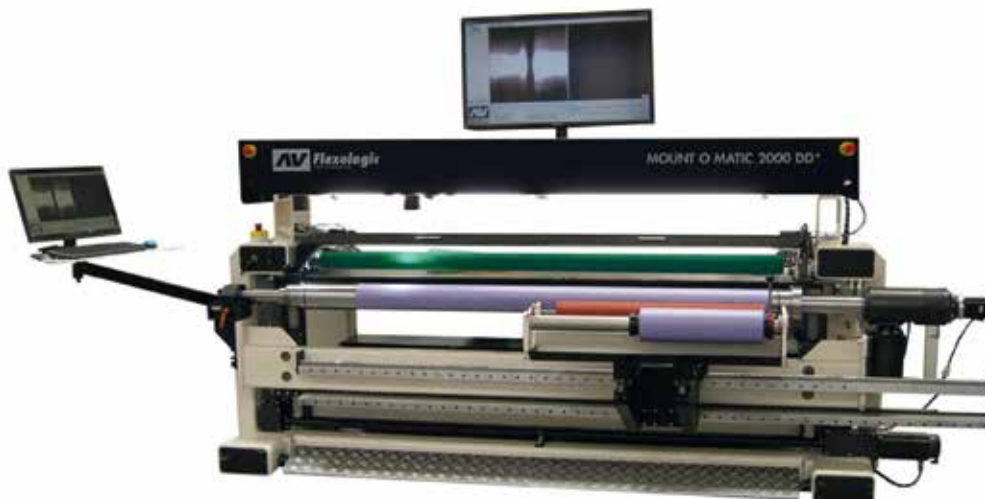
Digital calibration of camera beam: The camera images are used in a calibration procedure to create a lookup table to digitally compensate for any deviations in the camera beam, down to 10 µm over the entire width of the camera beam / sleeve.

OPTIONS

Tape holder: To hold tape parallel to the mounting cylinder, so the operator can mount the tape quickly and precisely.

Cutting Knife: A special thin lip round blade. The sleeve is not damaged during cutting since the lip slides underneath the tape.

Network Capabilities: Mounting jobs coming from the DTP department can be converted by the AV Plug in, so these mounting jobs can be used by the MOM DD+. Remote desktop software AV Flexologic can provide direct support within minutes.



SEMI-AUTOMATIC MOUNTING MACHINE SAMM®

The state-of-the-art machine belongs to the top range of AV Flexologic mounting machines for mounting flexographic printing plates onto sleeves. The Patented SAMM® and FAMM® (semi)-automatic mounting machines are the most accurate mounting machines in the world.

WORKFLOW

All the plates are automatically positioned onto the sleeve using patented image recognition software. Minimum operator interference and training is required. This significantly increases efficiency in the prepress department as well as reducing overall cost. Many plates are mounted highly accurately in a very short period of time. Payback is quick, often in less than 1 year.

1. Upon mounting, the operator can choose an existing job or create a new job.
2. The operator pre-positions the flexo plate(s) roughly on the mounting table. Upon recognition of the mounting marks, the plate is automatically positioned through the movement of the table. After the plate is in position, the cylinder comes up automatically.
3. The pressure roller presses the plate pneumatically onto the cylinder or sleeve.
4. The operator uses the foot pedal to rotate the cylinder and mount the plate without air inclusions.

The mounting table acts as a **robotic manipulator** that controls the positioning of the plate.

The SAMM® uses AV Flexologic's patented **image recognition** software to measure the position of the mounting marks real-time during the automatic positioning of the plate.

A **vacuum system** holds the bottom of the plate to the table during automatic positioning.

The **high accuracy** of measurements and positioning is 0,005mm (0,0002").

An **automatic quality check** ensures all plates are mounted within specifications before they are forwarded to the press. This significantly reduces press down-time, often incurred with manual mounting.

FEATURES

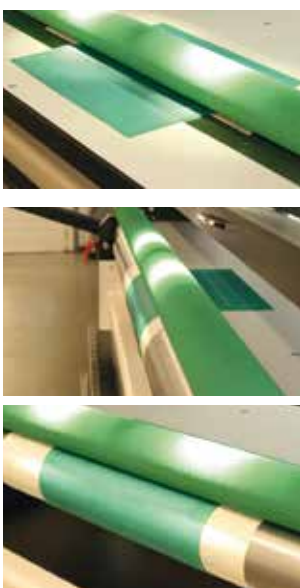
- Robotic positioning
- Pressure roller
- HD Ethernet Cameras
- LED lights
- 40" HD mounting monitor
- Patented digital calibration of camera beam
- Laser pointers
- Vacuum table
- High quality, sturdy frame
- Automatic quality check
- Automatic zero-setting possibility
- Overlay system
- Windows 7 based mounting software
- Digital zoom up to 170x magnification

ADVANTAGES

- Eliminates press downtime due to operator error
- Decreased required operator skill level
- Detailed Quality Control and reporting
- Fast Return On Investment
- Extremely Accurate
- Efficient
- Fast
- Air bubble free mounting

OPTIONS

- Tape Applicator
- Cutting Knife
- TIR Sleeve Measurement System



FULLY AUTOMATIC MOUNTING MACHINE (FAMM)

This robotic state-of-the-art machine is the top of the line of AV Flexologic mounting machines for mounting flexographic photopolymer printing plates onto sleeves. With short job runs and quick changeover times the FAMM® delivers high quality. The FAMM® mounts fast, consistent, and accurate.

WORKFLOW

The operation of the FAMM is very simple. After sending coordinates to the FAMM operating system, all the plates are mounted onto the sleeve automatically without operator interference. While the FAMM takes care of the mounting job, the operator can attend to other tasks. This greatly increases efficiency in the prepress department. More plates will be mounted onto a sleeve in a shorter period of time. Payback for a FAMM is short and often less than 1 year.

FEATURES

- Automatic positioning and mounting for the highest repeat quality/mounting plates in minutes
- Multiple safety features to ensure risk-free operation
- Digital proof report on mounting result
- Automatic check of plate positioning
- Choice of accuracy

ADVANTAGES

- Reduction of press downtime due to human error
- High quality with minimum operator attendance
- Elimination of plate positioning error
- Fast Return on Investment (ROI)
- Air bubble free mounting
- High repeat accuracy
- High efficiency
- Fast

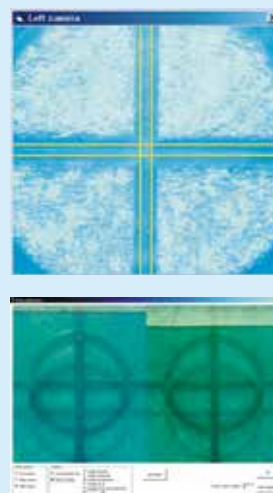


FAMM

OVERLAY MODULE

This highly sophisticated precision tool was invented and patented by AV Flexologic B.V. Once the first plate is in the right position, the overlay module enables the operator to take and store a snapshot of the mounting marks, which is then shown on the monitor. Whilst mounting the next plates, this snapshot is displayed in a faded way on the monitor as a reference point for the operator. The operator simply has to position the mounting marks of the next plate(s) over its (overlay) in exactly the same position.

The system enables snapshots to be taken of these second and next plates as well, which can serve as a digital proof for quality control purposes before printing. Several hairline types are available. The picture on the monitor is adjusted automatically for outside light influences such as brightness, gamma, sharpness, shutter, white balance, and gain.



Advantages of the Overlay Module

- Easy, accurate and efficient
- Time saving
- Easy to retrieve proof
- Digital proof
- Less mistakes
- No mounting mark needed

TAPE APPLICATOR

The Tape Applicator is a machine for efficiently applying tape onto sleeves in the correct positions and without air inclusions.

The sleeves are clamped between the cones by means of compressed air. The universal Tape Applicator can be provided with cones of choice and tape of choice. With a hand wheel the tape dispenser is positioned and precision holes and a fine-tuner ensure that the tape can be perfectly mounted next to each other. A rubber roller applies the tape without air inclusions onto the sleeve. The rotation of the sleeve is motorized and operated with foot pedals. The sturdy frame and strong support rail ensures precise application throughout the years.



DE-MOUNTER

The De-Mounter removes plates and tape from sleeves with minimum force and without damaging the sleeve. The motor driven rubber rollers help to pull plates and tape from the sleeve by spreading the force over the full width of the plate/tape.

The rollers detach the plate material from the sleeve by means of friction. The friction and the driven rollers enable the plate material to be easily removed from the sleeve. Tape is removed in the same way.

Both rollers are coated with silicon which makes it easy to remove tape or plates from the sleeve.



Facts	MOM Sleeve Mounter 1300	MOM DD+ 1100 / SAMM 1100	MOM DD+ 1500 / SAMM 1500	MOM DD+ 2200 / SAMM 2200	FAMM 1700	FAMM 2000	Tape Applicator	De-mounter
Max. sleeve length	1300 mm	1100 mm	1500 mm	2200 mm	1700 mm	2000 mm	1700 mm	1700 mm
	51.18 inch	43.30 inch	59 inch	86.61 inch	66.98 inch	78.75 inch	66.98 inch	66.98 inch
Max. sleeve repeat	1300 mm	850 mm	1350 mm	1350 mm	1250 mm	1250 mm	1300 mm	1300 mm
	51.18 inch	33.46 inch	53.15 inch	53.15 inch	49.25 inch	49.25 inch	51.22 inch	51.22 inch
Min. sleeve repeat	230 mm	230 mm	230 mm	230 mm	230 mm	230 mm	230 mm	230 mm
	9.06 inch	9.06 inch	9.06 inch	9.06 inch	9.06 inch	9.06 inch	9.06 inch	9.06 inch
WxDxH	1900x900x2000	3215x1417x2160 mm	4040x1770x2160 mm	4740x1770x2160 mm	4919x2428x1740 mm	5800x2428x1740 mm	1900x900x1600 mm	2300x700x1460 mm
	75x36x79 inch	127x56x85	159x70x85 inch	187x70x85 inch	194x96x69 inch	228x76x69 inch		90.62x27.58x57.52 inch
Connection compressed air	N/a	6-8 bar	6-8 bar	6-8 bar	6-8 bar	6-8 bar	N/a	N/a
Electrical connection	230V/50-60Hz; 1 Amp	380V/50Hz; 6 Amp, Phase 1	380V/50Hz; 6 Amp, Phase 1	380V/50Hz; 6 Amp, Phase 1	380V/50Hz; 18 Amp, Phase 3	380V/50Hz; 18 Amp, Phase 3	220V; 6 Amp	220V; 6 Amp
Weight	+ - 600 kg	+ - 1500 kg	+ - 2000 kg	+ - 2500 kg	+ - 3400 kg	+ - 4000 kg	+ -450 kg	+ - 450 kg



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