

FLATMOUNT



OPTIMOUNT



SAMM POSTPRINT



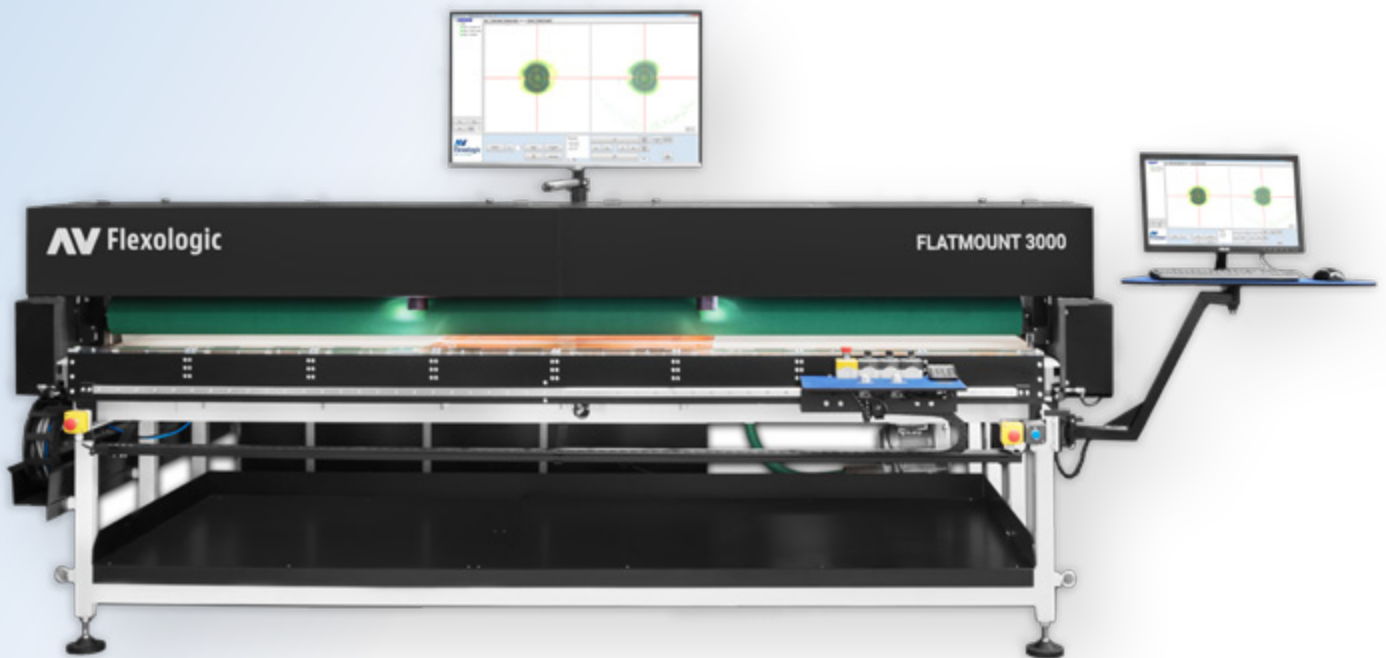
TAPE LAMINATOR



CORRUGATED POSTPRINT PORTFOLIO

FLATMOUNT

MOTORIZED FLAT MOUNTING MACHINE



Product Video



Widths

Width [mm]	≤ 3000, 3500
Width [inch]	≤ 118, 137,8"

Description

The **Flatmount** is a **premier flat flexo plate mounting machine** for mounting on Mylars. Mounting with the Flatmount is **very fast** and, **optimizing efficiency** while simultaneously reducing costs.

Flat mounting is emerging as a prominent trend in the corrugated postprint industry, with the Flatmount offering unique patented solutions for **rapid and precise flat mounting**.

Workflow

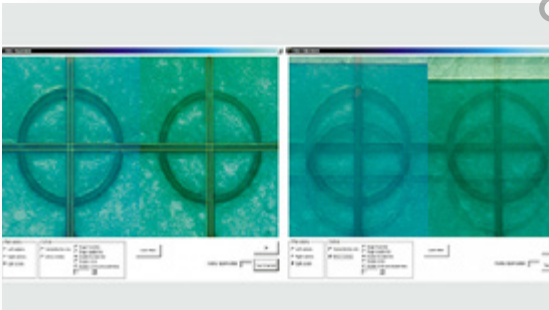
The operator **places the mylar on the large table**, optionally securing it with the vacuum system. After selecting the job, the **cameras align** with the registered **mounting marks**. Controlled easily by encoders and keypad commands, the cameras ensure **precise positioning**.

The operator manually positions the flexo plate or utilizes the **optional Image Recognition system**, which will provide "OK" signs when the plate is within the selected tolerance. Following, the operator removes the double-sided tape, sticking the plate to the mylar.

For optimal results, the operator can use the **optional pressure roller** to eliminate air inclusions. Alternatively, the operator should use a roller to apply pressure and complete the mounting process.

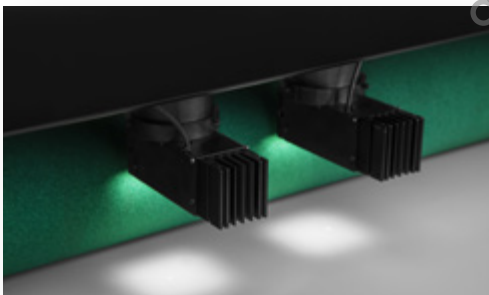
An optional integration with **automation workflows** from **Esko and Hybrid** is also possible.

Unique Features



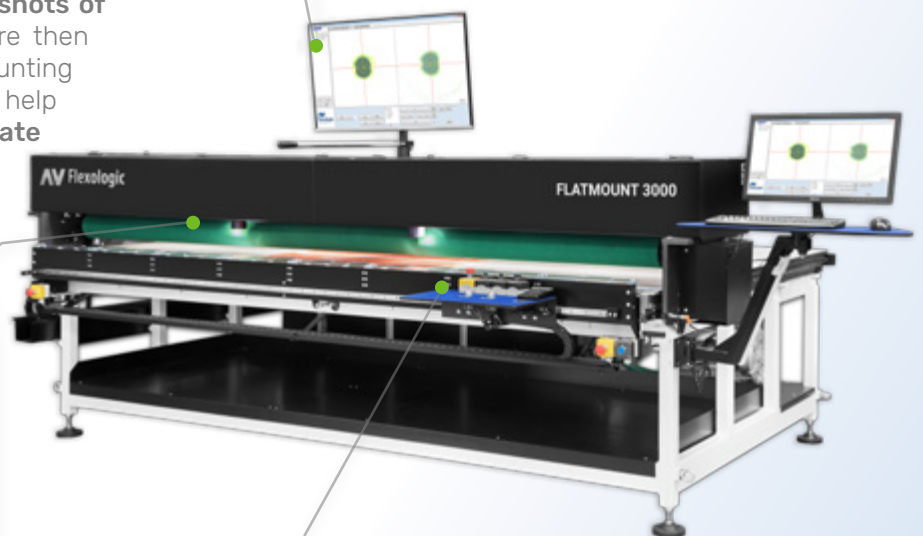
Patented overlay system

Once the first plate is correctly positioned, the overlay module enables the operator to **take snapshots of the mounting marks**. These snapshots are then **displayed semi-transparently** when mounting the next plates. This feature significantly help the operator in achieving **accurate plate positioning** more efficiently and quickly.



HD Ethernet cameras

Using the latest technology in **high-speed Ethernet cameras**, AV Flexologic ensures **crisp and sharp ultra-high-resolution images**, enabling an efficient and accurate mounting process.



Camera encoders and keypad

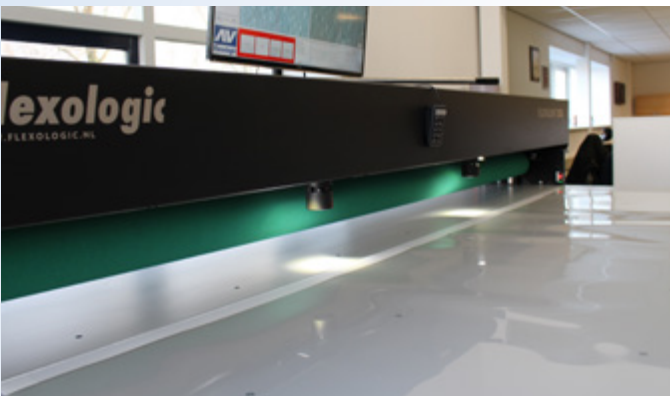
Operating the Flatmount is **very easy** since the **cameras are easily controlled by encoders** and the operator can insert all the settings through the keypad. In addition, once the plate is secured in the desired position, the operator can **use the switches** to operate the (optional) **pressure roller**, moving it back and forth as needed.

Unique options

Image Recognition System

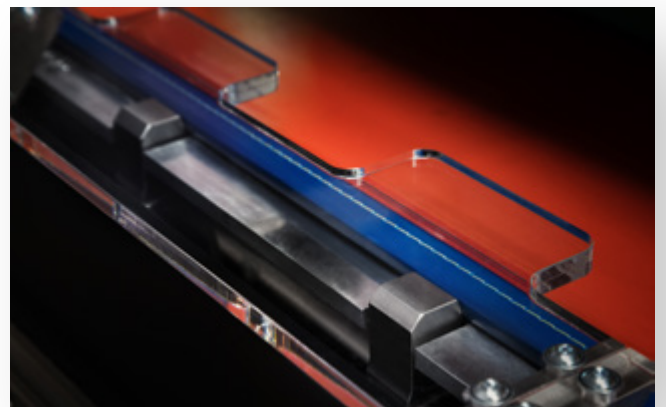
Unique to the Flatmount is the optional **Image Recognition system** (standard feature in the Automatic SAMM Postprint). For the Flatmount, AV Flexologic has developed image recognition based Quality Control and intelligent positioning assistant. The **positioning assistant** maintains the familiar workflow, but with the added benefit of the image recognition system **continuously monitoring the position of mounting marks**.

Additionally, post-mounting, the machine **conducts a quality check** and generates a real-time PDF **Quality Report**. This report includes measurements from the quality check, providing **insights into the accuracy** of plate mounting.



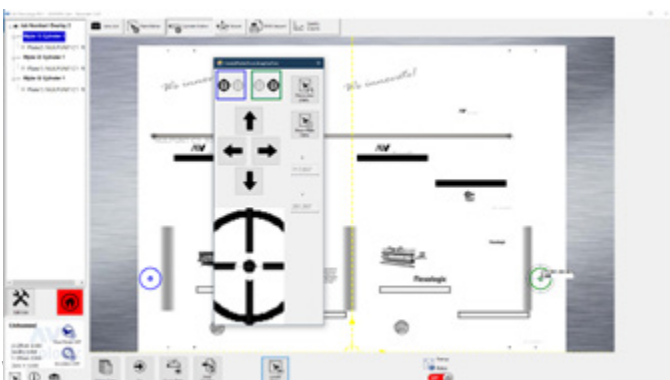
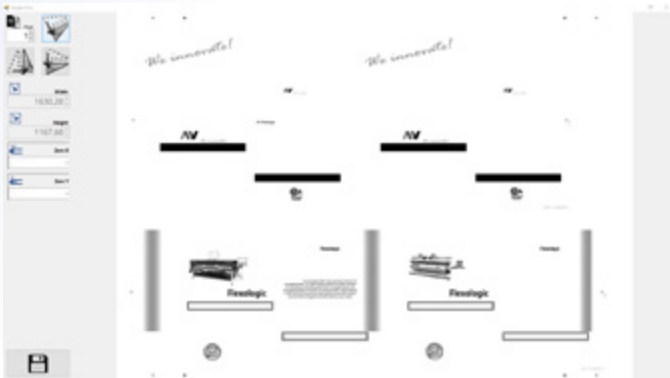
Pressure roller

The pressure roller provides **high-quality mounting without any air inclusions**, ensuring phenomenal print quality. The pressure roller's movements are easily controlled by the **switches** next to the camera encoders. This **ergonomic solution** not only reduces operator effort but also ensures **high-quality results**.



Clamping system and vacuum table

When the mylar is centered to the zero position, it can be fixed on the table using the vacuum system. In addition, the vacuum is used to remove all the air from the mylar to ensure high-quality mounting.



PDF Import

The PDF Import feature enables **direct job creation** from the mylar graphic, simply by importing the PDF and clicking on the targets. This ensures **faster, error-free job setup**.

It is also possible to mount the plates using the **overlay system** to project the image semi-transparently to assist the operator in the mounting process.

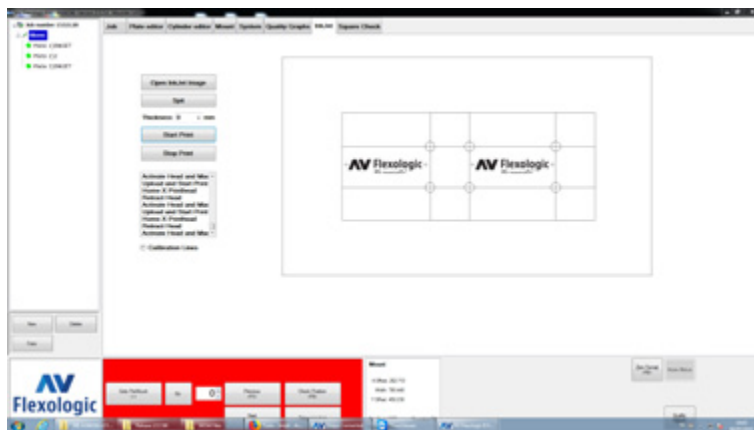
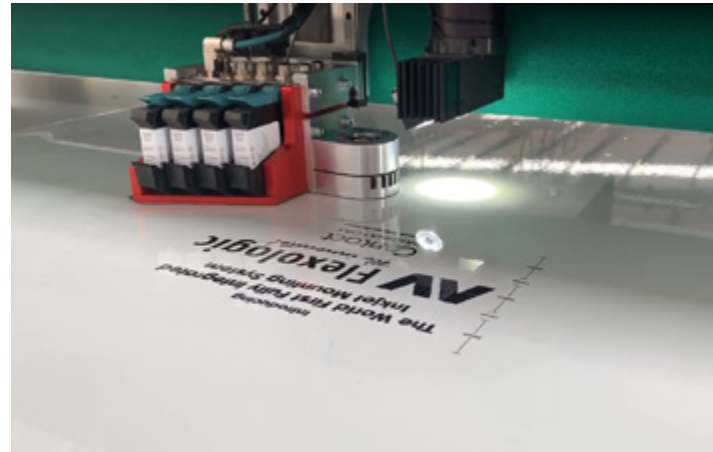
Patented options

Inkjet - Digital Printing Technology

The Inkjet print head is AV Flexologic's latest innovation in the corrugated postprint industry. The revolutionary inkjet technology is used to **apply individual print job information directly on to the mylar** before mounting plates.

This feature allows an **easier, faster and more accurate mounting**. The inkjet uses a PDF file with the design that will be printed on the mylar. Some print option examples are:

- Labels
- Box outline
- Mounting marks
- Plate information



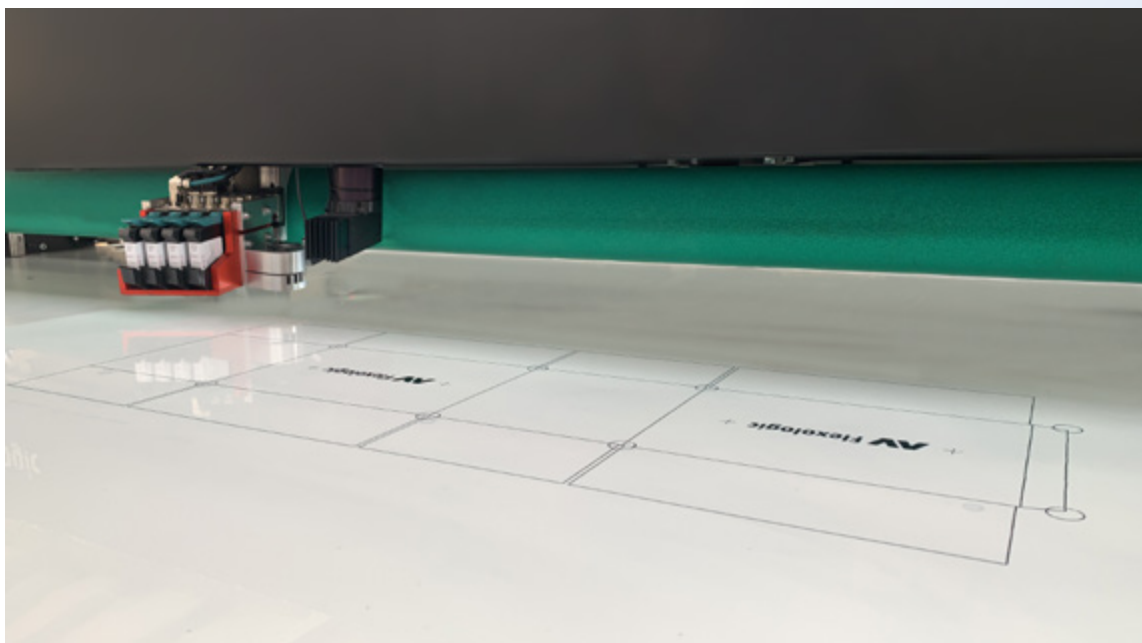
VPP advantages

Provides individual print job information directly onto the mylar before mounting

Saves time and removes the need for labelling

Reduces human interaction and mistakes

Improves standardization and eliminates duplication of information

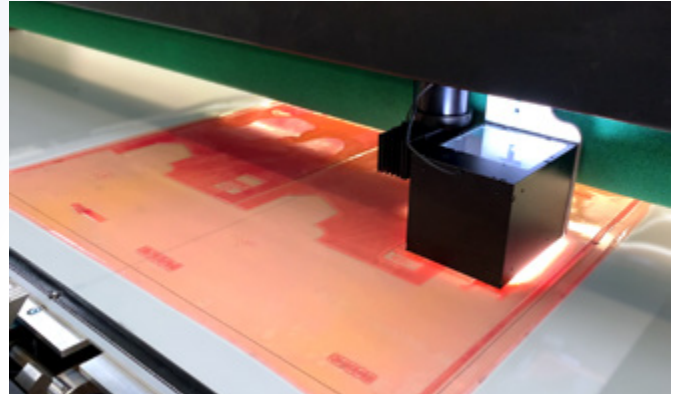


Patented options

VPP - Virtual Proof Print

The VPP provides a **virtual proof of the mounted plates** by scanning each plate after mounting. The extra camera (42,8 megapixels) provides a digital visualization of the image of the mounted plate, which can be **exported as a PDF** to send to the customer.

The plate can be from 20 mm to 2,800 mm wide (X) and up to 1500 mm long (Y).



In the VPP tab, the scan results are displayed on the left, alongside the corresponding PDF image on the right.

Each color can be individually **compared** with the **actual image color**. The operator has the option to view one or more colors stacked on top of each other at any time.

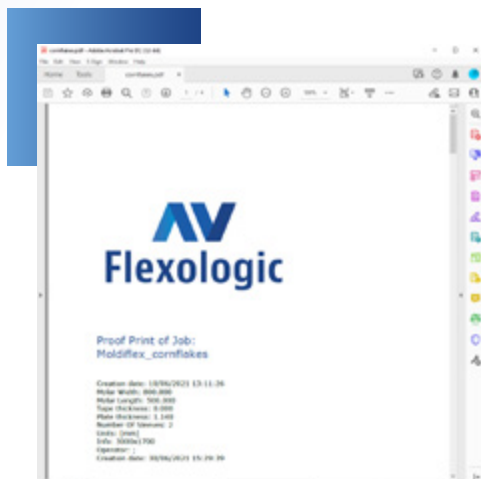
Once all plates are mounted and scanned, an image of the **final result** is available for **comparison with the PDF file**.

The VPP scan can be exported as a PDF file and be used as a **proof of mounting**. The VPP scan PDF is not a substitute of the Quality Report as it doesn't contain the measurements of the mounting accuracy of the marks. However, it **ensures that the plates sent to the press are not mounted upside-down**.



Advantages

- Provides digital proof of the mounting
- No need for manual inking of plates
- Prevents mistakes before sending plates to the press
- Better control over the printing process
- The PDF is stored for later use



Virtual Proof Print advantages

1. Prevents mounting a plate Upside-Down



PDF scan of 2 colors mounted correctly



PDF scan of 2 colors mounted upside-down

2. Find misalignments before sending the mylars to the press

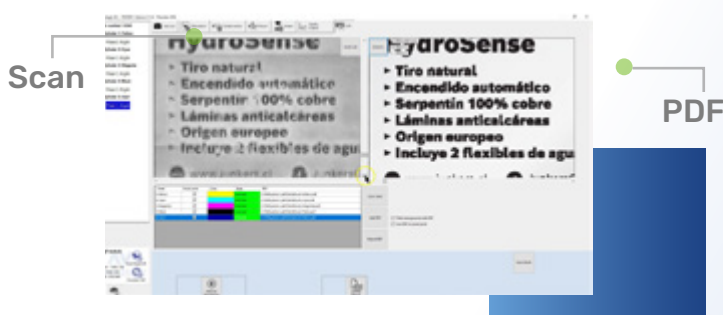


PDF scan of 2 colors mounted correctly



PDF scan of 2 colors mounted not correctly

3. High resolution capability scan results



The VPP software gives also the possibility to mirror the image to make the text readable and comparable.

SAMM POSTPRINT

AUTOMATIC MOUNTING MACHINE



Product Video



Widths

Width [mm]	≤ 3000, 3500
Width [inch]	≤ 118, 137,8"
Max repeat [mm/inch]	1850mm / 66.9"

Description

The **Automatic SAMM Postprint** is the **most advanced corrugated mounting** machine for mounting flexo plates **onto mylars**. This machine stands out in the corrugated postprint industry thanks to its unique capability of **robotic plate positioning**, ensuring **precise and consistent proofing** of flexo plates.

Workflow

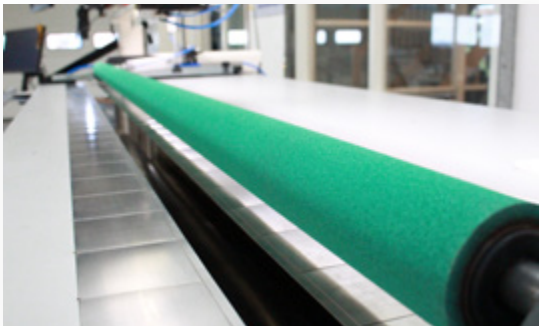
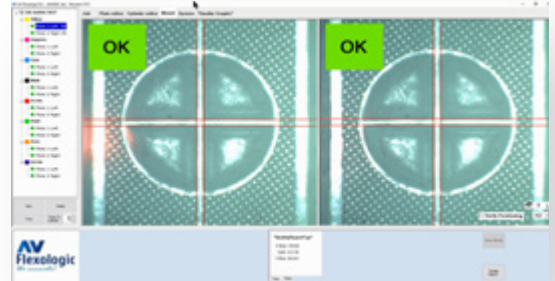
The operator secures the mylar onto the mounting cylinder and selects a job. Then, the operator **positions the plate on the robotic mounting table**, which **aligns it automatically** using patented Image Recognition. After, the operator removes the cover of the double-sided tape and selects the pressure roller to move down to apply pressure on the plate. He only needs to rotate the cylinder using the foot pedal to finish the mounting.

Once mounted, **proofing of the marks** is initiated. After applying ink on mounting marks of the plate, the operator **selects the proofing option** from the touchscreen and the proofing cylinder automatically moves closer to the mounting cylinder. The **proofing cylinder rotates automatically** and the mounting marks are visible on the proofing paper.

Unique Features

Patented image Recognition

The image recognition system **measures the exact positions of the mounting marks** and thus how accurately the printing plate is fixed on the mylar. The tolerance of the report settings determines whether a plate is mounted within tolerance and thus a "OK" sign will appear on the screen. The Image Recognition system provides a positioning **accuracy down to 5 microns**.

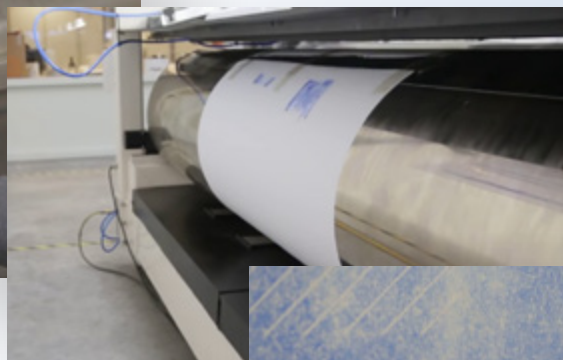


Pressure roller

The pressure roller ensures even mounting, without **any air inclusions** and bubbles. The roller is used to apply the plates evenly over the mylar and without damaging them. The use of the pressure roller eliminates the typical 'hand-rolling'. This feature saves time and **promotes ergonomic** work practices.

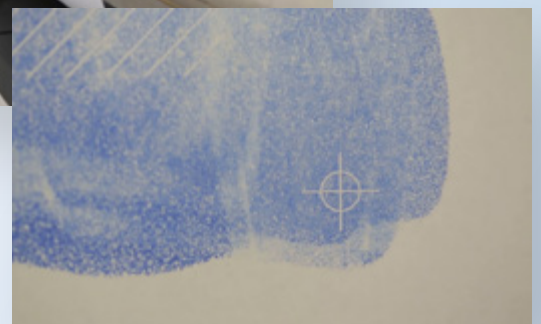
Robotic table

Using the measurements of the Image Recognition system, the machine **automatically positions the flexo plate** with an accuracy of 5 microns, using the robotic vacuum table. In addition, the vacuum table provides an ergonomic and more stable mounting workflow.



Proofing cylinder

The SAMM Postprint includes a proofing cylinder to **validate the mounting marks** on corrugated plates. After mounting, the operator applies ink to the marks and initiates proofing. The **proofing cylinder automatically aligns and rotates**, ensuring the plate is not damaged due to its optimal distance from the mounting cylinder.



SAMM POSTPRINT Unique Options



Esko/Hybrid Compatibility

Both Esko and Hybrid offer a **software for patching corrugated plates**. All the information about the flexo plates and the coordinates of the mounting marks can be transferred directly to the SAMM Postprint, which **recognizes MOM/XML files** that include all the **needed information for the jobs** to be mounted.

Mylar automatic drawing pen

This pen automatically **draws the outline of the corrugated printed package** on the mylar, indicating where the plate will be mounted. After mounting and proofing the first plate, the operator uses the **pen's lines as reference points** to accurately mount subsequent plates using mirror mounting technique.



Proof paper automatic drawing pen

The proof paper pen **draws automatically the outline of the printed package on the proofing paper**. After proofing the mounting marks of the corrugated plates, the operator will be able to **see** whether the plate is **mounted accurately**, and if it will be printed to the correct position on the package.

Mylar centering pin

This is a centering pin which makes the alignment of the carrier sheet/mylar very easy and consistent to the zero position of the machine.



Camera for lining up Proof Paper

This additional camera assists the operator in aligning the proof paper more easily.

Digital mirror camera for proofing paper

The digital mirror camera, located at the back of the machine, **automatically moves to the proofing point**. It then transmits the image to the front screen, eliminating the need for the operator to check proofing at the back of the machine.

Mounting Marks Specifications

The Automatic SAMM Postprint uses the patented Image Recognition to identify the mounting marks and based on them, position the flexo plate accurately.

Type of target	Compatible mode	Plate type	Target top size**		Free space around target		Top of target
			Minimal	Advised	Shape	Size	
Positive dot	Blob	Processed	0.4mm	0.5-0.6mm	Circle	1mm	Flat no image
		Thermal	0.45mm	0.5-0.6mm			
	Correlation	Processed	0.4mm	0.5-0.6mm	Square		
		Thermal	0.45mm	0.5-0.6mm			
Negative dot	Blob	Processed	0.6mm	0.6-1mm	Circle		
	Correlation	Processed	0.6mm	0.6-1mm	Square		
Positive non-dot shapes	Correlation	Processed	2mm	2-4mm	Square		
		Thermal	2mm	2-4mm	Square		
Damaged targets*	Semi Auto	See specs of the original target					

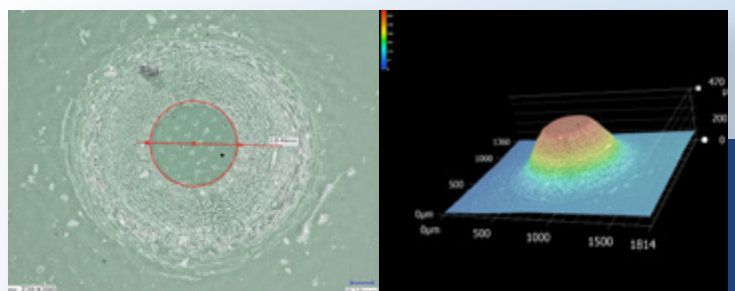
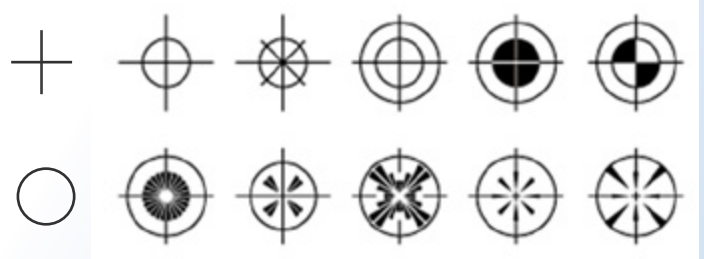
* It is possible to mount damaged targets using the Semi-Automatic mode. It is possible to mount damaged targets using the Semi-Automatic mode. The operator will have to locate the target once, after that the SAMM will mount these plates automatically. Also the quality check after mounting is available.

** Microdots with a smaller diameter than 0.4 mm can become unstable and can deteriorate following printing

*** It's best to avoid using screening like pixel+ on mounting marks for better recognition. If using a laser for screening, object-based selective screening in prepress software can help avoid screening on the marks.

Mounting marks types

The Automatic SAMM Postprint detects all common mounting marks and microdots within the above specifications. The minimum target size is 0.4 mm.



OPTIMOUNT

MOTORIZED MOUNTING MACHINE



Product Video



Widths

Width [mm]	≤ 3000, 3500
Width [inch]	≤ 118, 137,8"
Max repeat [mm/inch]	1850mm / 66.9"

Description

The **Optimount** is a **high-end motorized mounting machine** for mounting flexo plates onto mylars. This mounting machine for the corrugated industry is **highly efficient**, and it is suitable not only for mounting but **also for proofing** the flexo plates. It is ideal for **mounting small patches** of corrugated plates in various positions.

Workflow

The operator secures the mylar onto the mounting cylinder and selects a job. **Motorized cameras automatically align** with the first plate's position. Using the large touchscreen above the cameras, the operator **manually positions the plate** by referencing the mounting marks, then removes the double-sided tape cover to adhere the plate to the mylar.

Mounting is done using a **hand roller** or optional pressure roller. For larger plates, the operator can **rotate the cylinder** using the foot pedal. By selecting the second plate on the touchscreen, the **cameras move to the indicated position** for mounting the next plate.

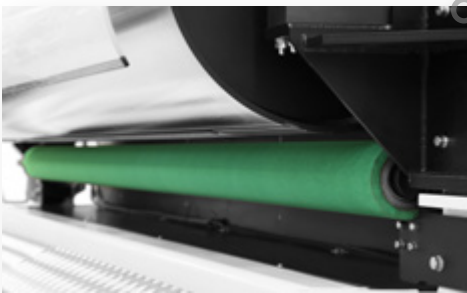
Once mounting is complete, the **cameras automatically align** with each plate's mounting marks **for inspection**. Following this, the operator can apply ink to the mounting marks and proceed with plate proofing.

Unique Features



Automatic moving HD cameras

The Optimount is equipped with HD Ethernet cameras that move automatically into the mounting position. The operator only needs to create or import a job from ESKO/HYBRID plate patcher software and then select the job to start mounting.



Pressure Roller (optional)

The pressure roller **ensures even mounting**, without any air inclusions and bubbles. Located at the base of the mounting cylinder, this roller rotates and applies sufficient pressure to **secure the plate** onto the mylar **without causing damage**.



Proofing cylinder

The Optimount comes standard with a proofing cylinder for **proofing the mounting marks** of the corrugated plates, just like the SAMM Postprint. After mounting, the operator applies ink on the mounting marks and selects proofing. Then, the **proofing cylinder** is automatically brought to the correct position and **rotates automatically**. The proofing cylinder has the correct distance from the mounting cylinder, **avoiding any plate damage**.

Tape Laminator

Product Video



Description

The **Tape Laminator** is designed to **apply double-sided adhesive tape** onto flexographic printing plates **evenly and without air bubbles**. The Tape Laminator offers the highest level of **laminating automation**, ensuring optimal safety for the operator.

The Tape Laminator **measures the position of the plate** and the amount of **pressure required** for each work. The operator can always check the quality of the lamination thanks to settings for thickness of the plate. Less experienced operators can also easily use the Tape Laminator.

Features

Rubber roller for safe plate taping without air inclusions

Friendly user interface

Automated cutting knife

Two tape spools

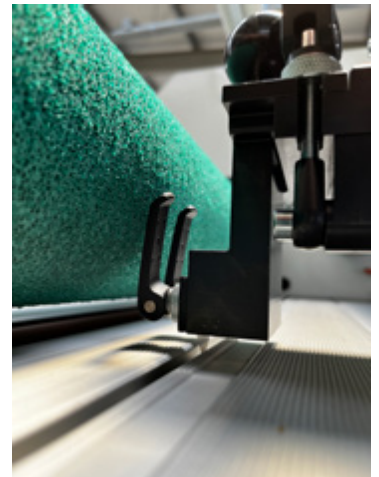
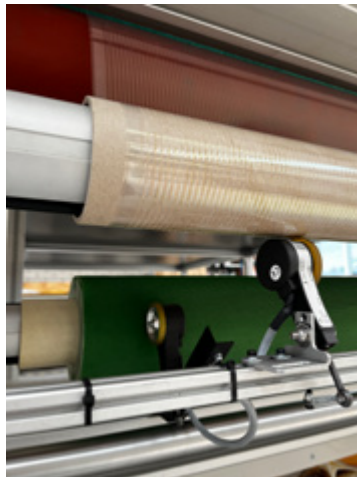
Options

Advanced software

Front and back table

Cutting knife

Tape length measurement



Advantages

Even tape lamination without air bubbles

Insert the job setting and press one pedal, the rest is automated

Different preselect settings to save time

Easy to use for minimal force required and highest safety

Quality assurance and track of every lamination with the advanced software



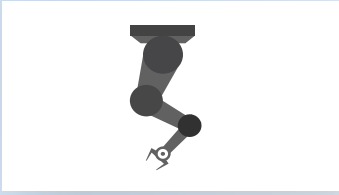
Corrugated Postprint Product Summary

Specifications	FLATMOUNT	OPTIMOUNT	SAMM POSTPRINT
Max Width (mm)	3000, 3500	3000, 3500	3000, 3500
Max Width (inch)	118, 137,8"	118, 137,8"	118, 137,8"
Max Repeat (mm/inch)	1700mm / 66.9"	1700mm / 66.9"	n/a
Proofing cylinder	NO	YES	YES

Features & Options	FLATMOUNT	OPTIMOUNT	SAMM POSTPRINT
HD Ethernet Cameras	✓	✓	✓
Windows 10 mounting software	✓	✓	✓
Overlay	✓	✓	✓
Digital Zoom capability	✓	✓	✓
Camera encoders	✓	o	✓
Laser pointers	✓	✓	✓
Quality Report	✓	✓	✓
Motorized cameras	✓	✓	✓
Digital Calibration System	✓	✓	✓
Keypad for commands	✓		
Touchscreen		✓	✓
Motorized rotation of cylinder	n/a	✓	✓
Pressure roller	o	o	✓
Image Recognition Software	o		✓
Quality check w/ image recognition	o		✓
Vacuum table	o		✓
DOAL Lights	o		✓
Overlay 2.0	o	o	o
Tape holder	o	o	o
14ESKO Platepatcher Compatibility	o	o	o
Hybrid Patchplanner Compatibility	o	o	o
Mylar centralizing pin	o	o	o
Mylar automatic drawing pen	o	o	o
Proof Paper Automatic Drawing Pen		o	o
Digital mirror camera for proofing paper			o
Camera for lining up proof paper			o
Inkjet - Digital Printing Technology	o		
VPP - Virtual Printing Proof	o		

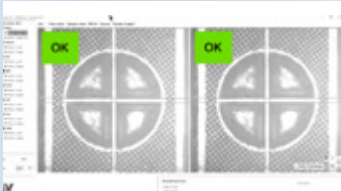
✓ = Included o = Optional

Features Overview



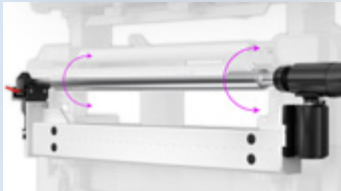
Robotic positioning

Powered by AV Flexologic software, the robotic table consistently positions the mounting plate with an exceptional accuracy of 5 μ m. After positioning the vertically moving cylinder automatically comes up.



Quality check with image recognition

The image recognition system measures the positions of the mounting marks to determine the accuracy of the printing plate placement on the sleeve. The tolerance of the report settings determines whether a plate is judged as mounted 'OK' or 'NOT OK'.



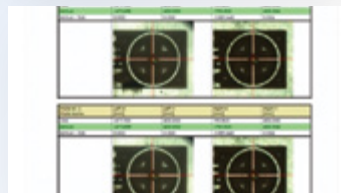
Motorized rotation cylinder

The chromed cylinder is driven by a high quality electric motor which is joined to a high-precision, zero backlash gear reducer called a 'harmonic drive'. This ensures maximum possible precision in the rotational (Y) direction of the mounting process. Starting or recalling a job and moving to the right mounting position for each plate is done within seconds.



HD Ethernet cameras

Using the latest technology in high-speed Ethernet cameras on all of the mounting equipment, AV Flexologic ensures crisp and sharp ultra-high-resolution images, enabling an efficient and accurate mounting process.



Quality report

After each plate is mounted, the machines have the ability to automatically check the tolerance of mounted plates using image recognition. A pdf quality report is generated on-the-fly with ability to check top and bottom.



Laser pointers

Laser pointers are mounted next to the cameras to indicate where the field of view of the cameras is. The mounting marks can be easily positioned in a fraction of time, instead of having to search for the mounting marks in the camera image each time.



DOAL lights

The image recognition system includes special DOAL lights with a half-transparent mirror which provide the best recognition conditions for automatic mounting. The light comes from the side and is reflected down in the same direction the camera is looking. When the light hits the plate surface it reflects straight back up into the lens.



Pressure roller

The pressure roller has become a standard feature in AV Flexologic flexo plate mounting machines over recent years. The roller is used to apply the plates evenly over the carrier such as a sleeve, cylinder or Mylar. The use of the pressure roller eliminates the typical 'hand-rolling'. The feature saves time and avoids un-ergonomic working procedures.



Windows 10 mounting software

Striving for the latest up to date technology, SAMM is equipped with Windows 10, which is fully compatible with our software.

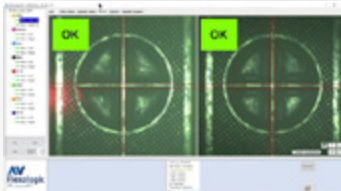
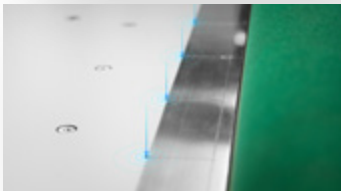


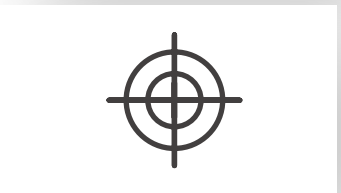
Image Recognition (patented)

The image recognition system measures the exact positions of the mounting marks and thus how accurately the printing plate is fixed on the sleeve. The tolerance of the report settings determines whether a plate is mounted within tolerance and thus a "OK" sign will appear on the screen.



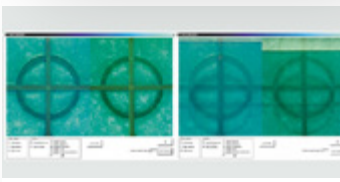
Vacuum table

To ensure highly accurate positioning, the vacuum system fixates the plate to the robotic table before positioning.



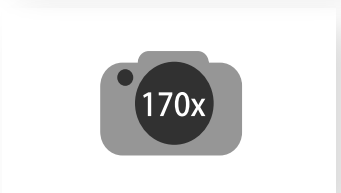
Digital calibration system

Camera images undergo calibration to generate a lookup table, digitally correcting any deviations in the camera beam down to 10 µm across its width. Each camera position recalls y-deviation, digitally adjusting images for 100x more accurate mounting. Y-deviation data is also stored in a lookup table.



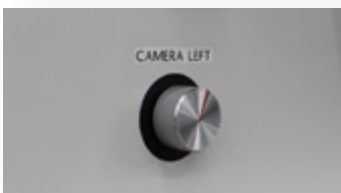
Overlay System (patented)

Once the first plate is in the right position, the overlay module enables the operator to take snapshots of the mounting marks, which are then shown semi-transparently while mounting the other plates.



Digital zoom capability

Combining HD cameras with HD flatscreen monitors enables mounting equipment to zoom digitally up to 170x.



Camera encoders

The encoders facilitate easy adjustment of the motorized cameras' positions. Rotating the encoders allows the cameras to move either right or left with precision.



Proofing cylinder

After mounting, the proofing cylinder is automatically brought to the correct position for pulling a proof. The operator applies ink on the mounting marks and rotates the mounting cylinder through the foot pedal.



Do you need urgent support? Call us at any time!

Our team consists of more than 20 experienced engineers who can help you with any problem you might face. We provide support in: English, German, Spanish, French, Italian, Dutch, Romanian, Arabic, and Thai.

AV Flexologic Care

Explore AV Flexologic Care Packages that provides you support even after the warranty expires.

	Level 1	Level 2	Level 3
Access to knowledge base	●	●	●
Training videos	●	●	●
Free remote support	●	●	●
Spare parts 15 % discount	●	●	●
24/5 assistance		●	
24/7 assistance			●
Software upgrades		●	●
Yearly maintenance visit		●	●
Extended warranty parts & labour			●
Dashboard*			●
24/7 support			●

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Call us at **+31 (0) 172 503 621** or **+1-800-467-1746** for USA.



We create an account for you in our support portal 'Freshdesk'. You can always create a ticket when you log into your account.



Send an email to **support@flexologic.nl**.

By sending your email, a ticket is automatically created in our system, and we will provide support as soon as possible.

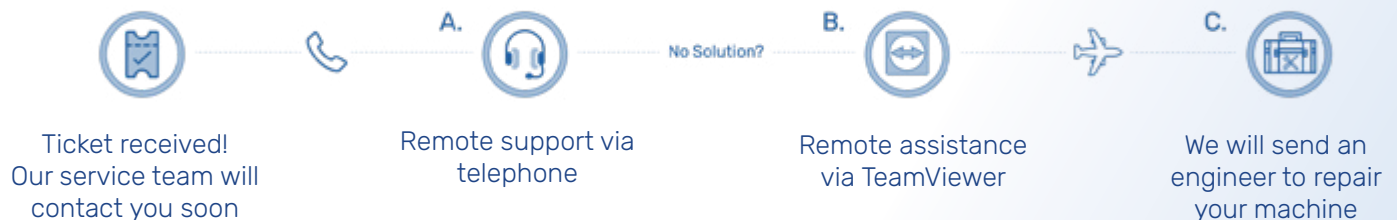


Visit our website at **www.flexologic.nl/support** and fill in the contact form.

By sending the form, a ticket is automatically created in our system and we will support you in a short time.

What happens next?

Once we receive your ticket or email, we will support you in the following ways:



Support & Service, visit our website: www.flexologic.nl/support



Do you want to easily find information about your machine?

Our support portal is designed to provide you help in an instant. By logging in to Freshdesk, you will be able to find information about your machine and answers to frequently asked questions

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