

PM8F Print System

Model PM8F



The Model PM8F Printer/Measurement System is a truly unique printing system. It incorporates a quick setup process by which the very first print is within .1mm of perfect position. This is accomplished by locating the artwork accurately with respect to the screen frame during the screen emulsion exposure process. A special artwork alignment fixture is provided to position the artwork using its registration holes and the locating bushings of the screen frame to position them in accurate relation to each other. Once the image is accurately manufactured into the screen, the screen is located into the printer using the same location bushings. The first printed sample is then measured on the VP8422F via punch/measurement system to determine the precise corrections needed in the print position. XY and Rotation (Θ) correction data are calculated automatically from the VP8422F via punching/measurement system and are then uploaded to the PM8F to correct the print alignment automatically. Once the printer print position is correct, the layer is run to completion. Periodic checks and corrections in alignment can be performed to compensate for things such as screen movement and squeegee wear to keep your process at its highest accuracy.

The VP8422F via punching system has incorporated into it a glass plate alignment STANDARD which provides high accuracy measurement of via punch position as well as print position in XY and Θ . This measurement process in conjunction with the quick setup/automatic print position that is designed into the PM8F provides very fast setup and controlled accuracy throughout the entire lot. Instead of using artwork, which has errors and varies over time, to establish positional accuracy, by using the measurement system portion of the VP8422F, your process tolerances for via punch and circuit print are minimized and "Centered" thereby reducing the collective process tolerances by $\frac{1}{2}$.

This method eliminates the time-consuming "search-and-adjust" method that is customarily used to align the print to the vias. It also reduces your collective process tolerance by $\frac{1}{2}$ because both the via punch and printing processes are aligned to a STANDARD and not one to the other. Setup has never been so easy. Accuracy has never been so consistent.

Specifications and Components

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| <ul style="list-style-type: none"> • Tool Plates to accept 6X6 and 8X8 framed tapes • XY travel: 2 inches with <ul style="list-style-type: none"> - 0.0001" resolution - 0.0001" repeatability - 0.0001" linearity over 12 inches - 0.0001" axis orthogonality • 12" Rotary Top Stage with Frame Alignment • Servo Motor Stage Motion • Bottom Location Screen Frame System to eliminate snap-off • Artwork Exposure Fixture to accurately align the artwork to the screen during light exposure of the emulsion | <ul style="list-style-type: none"> • Fixed Snap-Off • Fixed Print Squeegee Angle • Fixed Print Squeegee Speed • Via Punch Alignment Measurement to verify and quantify your via punch alignment • Dual Location Bushings in each Frame • Vacuum Tape Frame Holding • Vacuum Tape Holding • Ethernet Communication to VP8422F |
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Included	Options (Consult Factory)
•	• Consult Factory