**RH SOLUTIONS LLC**

Bringing Print to Life

ATMA®

# ATMAPC
(G6 Version)

Four-Post
Screen Printer
with Gripper Take-off

Suitable for precision screen printing on rigid and flexible non-deforming materials such as flat film, sheet or thin board.

Applications include Mylar Overlay, Nameplate, Poster, Sticker, Decal, Sign, Flexible Circuit, and much more.

***Smooth, accurate, fast, and press operator friendly.***

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# ATMAPC Four-Post Screen Printer with Gripper Take-off

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## SPECIFICATIONS

| | ATMAPC 67 Metric Units | ATMAPC 67 US Standard Units | ATMAPC 710 Metric Units | ATMAPC 710 US Standard Units |
|---|---|---|---|---|
| Table size (WxD) | 800mm x 1040mm | 31½" x 40⅞" | 950mm x 1250mm | 37⅜" x 49¼" |
| Pneumatic pins | 6 pcs (square shaped) | 6 pcs (square shaped) | 7 pcs (square shaped) | 7 pcs (square shaped) |
| Vacuum area (WxD mm) | 740mm x 600mm | 29⅛" x 23⅝" | 760mm x 1060mm | 30⅞" x 41½" |
| Max printing area (WxD mm) | 750mm x 600mm | 29½" x 23⅝" | 750mm x 1050mm | 29½" x 41¼" |
| Max frame O/D size (WxD mm) | 1100mm x 1100mm | 43¼" x 43¼" | 1400mm x 1250mm | 55" x 49⅛" |
| Min frame O/D size (WxD mm) | 900mm x 900mm | 35⅜" x 35⅜" | 900mm x 900mm | 35⅜" x 35⅜" |
| Screen frame height | 26mm to 54mm | 1.02" to 2.12" | 26mm to 54mm | 1.02" to 2.12" |
| Screen fine adjustment (mm) | X/Y = ±10 ; Z = ±2 | X/Y = ±⅜" ; Z = ±⅛" | X/Y = ±10 ; Z = ±2 | X/Y = ±⅜" ; Z = ±⅛" |
| Peel-off height (mm) | 25mm | 1" | 25mm | 1" |
| Peel-off type | Preset servo peel-off on touch panel | Preset servo peel-off on touch panel | Preset servo peel-off on touch panel | Preset servo peel-off on touch panel |
| Screen cleaning height (mm) | 350mm | 13¾" | 350mm | 13¾" |
| Substrate thickness (mm) | 0 - 30mm ( 3/4 auto : 0 - 4mm) | 0 - 1⅛" ( 3/4 auto : 0 - ⅛") | 0 - 30mm ( 3/4 auto : 0 - 4mm) | 0 - 1⅛" ( 3/4 auto : 0 - ⅛") |
| Working table height (cm) | 97cm + 3cm | 38¼" + 1⅛" | 97cm + 3cm | 38¼" + 1⅛" |
| Print head speed (mm) | 50mm - 1250mm /sec | 2" - 49 ¼" /sec | 50mm - 1250mm /sec | 2" - 49 ¼" /sec |
| Max. capacity (pcs / hour) | 850 P/H (3/4 auto : 780 P/H) | 850 P/H (3/4 auto : 780 P/H) | 850 P/H (3/4 auto : 780 P/H) | 850 P/H (3/4 auto : 780 P/H) |
| Print head skew angle | ±50° | ±50° | ±50° | ±50° |
| Pneumatic type gripper | 4 pcs | 4 pcs | 4 pcs | 4 pcs |
| Conveyor speed | 360mm/sec | 14"/sec | 360mm/sec | 14"/sec |
| Compressed air source | 5 - 7 kgf/cm2 | 71 - 99 PSI | 5 - 7 kgf/cm2 | 71 - 99 PSI |
| Power source | 220/380V, 50/60 Hz | 220/380V, 50/60 Hz | 220/380V, 50/60 Hz | 220/380V, 50/60 Hz |
| Machine dimensions (cm) | 164cm x 245cm x 145cm | 64 ⅝" x 96 ½" x 57 ⅛" | 194cm x 275cm x 143cm | 76⅜" x 108¼" x 56¼" |
| Control panel | Touch screen control panel | Touch screen control panel | Touch screen control panel | Touch screen control panel |



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# ATMAPC
## Four-Post Screen Printer with Gripper Take-off Generation 6 Version

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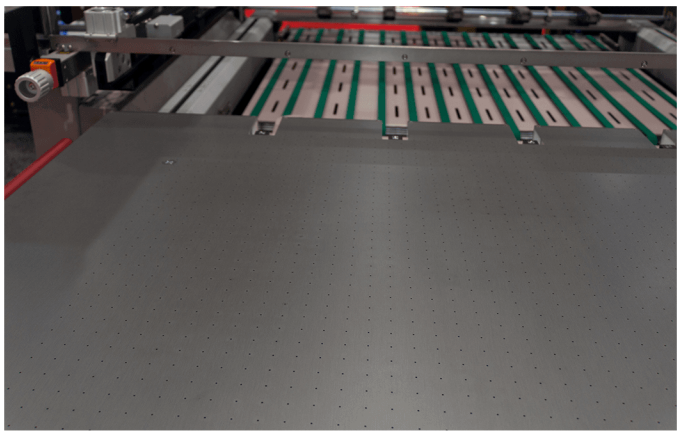
# Features and Benefits

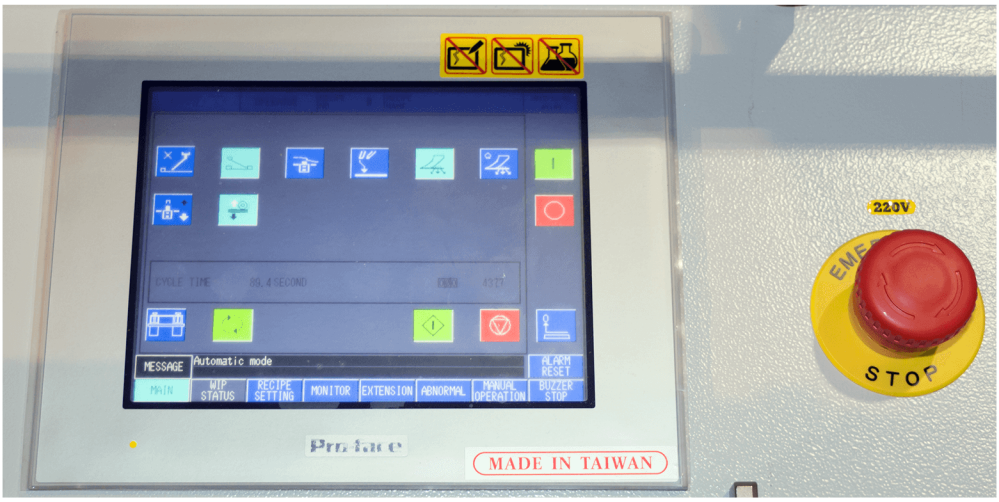


► ***Three-quarter automatic*** **operation with manual substrate loading and registration, sliding table with integrated gripper take-off, adjustable speed automatic conveyor belt, and rear delivery.**

► ***Ergonomic design*** **optimized for ease of use with open access for accurate substrate registration, efficient off-loading, and easy screen cleaning. All setup controls are within close reach of the operator.**

► ***Horizontal head lift*** **keeps screen parallel with printing table for even ink flow.**

► ***Front frame loading*** **for fast setup.**




A. HMI color touch panel with 7" screen streamlines setup and provides consistent control over print quality for repeat jobs by saving and restoring up to 100 sets of stored functions and parameters.



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# Features and Benefits

B. Heavy duty base frame keeps machine vibration free at all speeds.

C. Print table top is high strength aluminum alloy with honeycomb interior structure precision CNC machined for extreme accuracy. Vacuum hole size 1.5 mm with a pitch of 20x20mm. Optional custom vacuum hole size is 1 mm with pitch 14x14mm and a center hole in-between four holes to ensure that substrate has higher surface contact with print table throughout printing cycle. Recommended for thin films / substrates.

D. Heat dissipating turbine vacuum offers powerful suction and blowback. Vacuum and blowback micrometers are independently controlled and numbered for repeatability. Blowback function allows substrate lift when gripper holds the leading edge of substrate to avoid scratching when print table returns to operator.

E. German SEW-Eurodrive motor powers four-post head lift on linear bearings and guide rails. Includes synchronized transmission shaft, double chain, encoders and photo sensors to control screen up / down position.

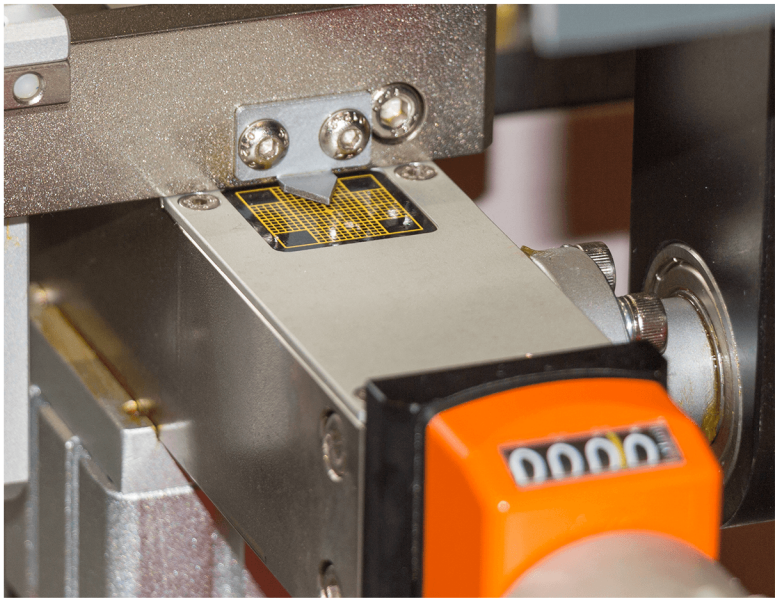
F. Variable gripper release to synchronize with print table return includes dwell timer digitally controlled from touch screen to ensure level drop off onto conveyor belt.

G. Digitally controlled servo peel-off distance start/end point can be set relative to image size, with variable speed and height control. Peel-off and print stroke is synchronized with all conveniently adjustable preset functions. Parameter settings, including off-contact, can be saved and recalled from touch-screen.

H. Printing and flood coater stroke parameter settings can be saved and recalled from touch-screen. Servo motor drive for stable low speed to high speed control, with linear guide rails and cog toothed belt for smooth precise vibration free printing, ensures absolutely even and uniform ink deposit.

# Features and Benefits

I. Utilizes special ball bearing micrometer design instead of thread bolt type adjustment. This is designed to prevent stripping out and offers play-free registration without backlash during setup.



J. Print table X / Y movements adjusted via precision scaled micrometer controls for fine registration with numbered value for repeatability and standardization.

K. Print table motion cycle driven by top-class servo motor, using swivel arm system guided by linear rail for consistent repeatability.

L. Pneumatic frame locking system with check valves / airlock and four-sided frame holding assembly ensures rigidity and high stability.

M. Digital pressure equalization system allows parameter settings to be saved and recalled from touch-screen. Print and flood coater pressure is digitally settable and automatically equalized for precise balance and consistency of printed ink film layer. Includes numbered fine-tuning depth, skew-angle (snowplow) and swivel-angle of squeegee and flood coater.

N. No-peel flood coater function has digital settings that can be saved, recalled, and adjusted from the touch-screen.

# Features and Benefits

O. Squeegee / flood high-park capability facilitates faster setup and changeover.

P. Choice of flooding before the print stroke, flooding after the print stroke, or higher cycle speed-flood while screen lifts to full up position. Digital settings can be saved, recalled, and adjusted from the touch-screen.

Q. Digital setting for the number of print cycles necessary for printing job and the machine will stop running automatically upon completion of set amount. Can be set, saved, and adjusted from the touch-screen.

R. Screen frame holder is equipped with rear registration pin system for fast and repeatable frame position centering to reduce setup time.

S. Rail-led cylinders guide squeegee and flood coater up and down, allowing smooth movement and unrestricted accurate pressure application to improve print quality.

T. Touch-screen digital settings can be set for light squeegee pressure at the beginning of the print stroke and then once past the edge of substrate regular full pressure can be applied according to the input setting. This feature prevents squeegee rubber from ripping screen against direct contact of sharp edge or corner of rigid substrate. Allows longer life of mesh and squeegee rubber.

U. Screen cleaning safety switch located at the rear of the machine completely disables any start function to protect operator when cleaning the screen. Operator can completely lock out the machine to prevent any chance of machine activation.

V. Print head safety guards on left and right side of print head. If activated, machine stops immediately and print head slowly lifts to full upright position.

W. Squeegee and flood coater depth, inclination, and bias angle are finely adjustable using a sophisticated micrometer, in order to minimize chatter and vibration from irregular print surface heights and traces.

# Features and Benefits

X. Vertical screen leveling is individually controlled laterally on left and right side of frame holder to compensate for mesh tension and to ensure that mesh is parallel with print table surface.

Y. FRL triad assembly is equipped with an automatic pressure detection switch that stops the machine when low air pressure detected. The control system for compressed air supply is an oil free FRL unit to prevent oil mist pollution, particularly applicable in clean room environments.

Z. Two safety bars are located in front of the sliding table, and bilateral safety bars are located along left and right side of four-post printing head. The safety bars stop the machine immediately when activated. An error message will be displayed and restart icon will appear on the touch screen. Once restored or reset properly the table or printing-head will return back to home position. Additional safety features include cycle start/interruption control on the foot switch, emergency stop button, safety reset key, automatic error diagnostic system on touch screen and power surge protection. Meets and exceeds all European and US Safety requirements.

**Options:**

- **Dripless squeegee system (rotary type)**
- **Cleaning roller system**
- **Anti-static bar**
- **Registration pins**
- **Optic sensors for substrate alignment**
- **Custom vacuum hole size**

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RH SOLUTIONS specializes in ATMA screen printing machinery covering seven industry sectors classified as: Industrial, graphic, glass, printed circuits, optoelectronic, biomedical, green energy and auxiliary. ATMA produces the finest machinery specifically for close-tolerance and high precision requirements using only top quality components and materials.

To see our extensive range of high quality screen printing machines and auxiliary equipment, be sure to check out our website: www.rh-solutionsllc.com

ATMA is a world leader for high-end screen printers, winner of Taiwan's prestigious SYMBOL OF EXCELLENCE honor for more than ten consecutive years, and the only screen printing machine manufacturer to be ISO 9001/14001 CERTIFIED. This international certification assures the highest quality design and manufacturing.

ATMA's 35 years of experience with more than 200,000 screen printers installed worldwide makes them top choice for the highest quality machines with low maintenance cost, steadfast reliability, and long production life.

ATMA's policy is one of continuous improvement and accordingly, the manufacturer reserves the right to change specifications without prior notice.


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