



RH SOLUTIONS LLC

Bringing Print to Life



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

ph: 800.314.1622
sales@rhsolutionsllc.com
www.RHSolutionsLLC.com
4295 Armstrong Blvd Ste 1
Batavia, Ohio 45103



ATMA
ATMA**CE**
(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.



CALL US TODAY

513.407.5399

ATMACE Four-Post Screen Printer with Gripper Take-off Generation 6 Version SPECIFICATIONS

	ATMACE 67 Metric Units	ATMACE 67 US Standard Units	ATMACE 710 Metric Units	ATMACE 710 US Standard Units
Table size (WxD)	800mm x 900mm	31½" x 35¾"	950mm x 1200mm	37¾" x 47¼"
Pneumatic pins	6 pcs (square shaped)	6 pcs (square shaped)	7 pcs (square shaped)	7 pcs (square shaped)
Vacuum area (WxD)	600mm x 740mm	23¾" x 29½"	760mm x 1040mm	29¾" x 41"
Max printing area (WxD)	600mm x 740mm	23¾" x 29½"	760mm x 1040mm	29¾" x 41"
Max frame O/D size (WxD)	1100mm x 1100mm	43¼" x 43¼"	1200mm x 1400mm	47¼" x 55½"
Min frame O/D size (WxD)	900mm x 900mm	35¾" x 35¾"	1000mm x 1200mm	39¾" x 47¼"
Screen frame height (standard)	25mm to 45mm	1" to 1¾"	25mm to 45mm	1" to 1¾"
Screen frame height (option)	RH SOLUTIONS can arrange, at time of order, for frame holder to be prepared for frame heights 28-52mm (1.1"-2.1")			
Screen fine adjustment	X/Y = ±10 ; Z = ±2	X/Y = ±¾" ; Z = ±½"	X/Y = ±10 ; Z = ±2	X/Y = ±¾" ; Z = ±½"
Servo Driven Peel-off height	0 to 25mm	0 to 1"	0 to 25mm	0 to 1"
Servo Driven Peel-off	Preset servo peel-off on touch panel		Preset servo peel-off on touch panel	
Screen cleaning height	350mm	13¾"	350mm	13¾"
Substrate thickness	0.1mm to 6.0mm	0.0039" to ¼"	0.1mm to 6.0mm	0.0039" to ¼"
Working table height	970mm + 30mm	38¼" + 1½"	970mm + 30mm	38¼" + 1½"
Print head speed	50mm - 1250mm /sec	2" - 49¼" /sec	50mm - 1250mm /sec	2" - 49¼" /sec
Servo Driven squeegee and flood stroke	Preset servo driven squeegee and flood stroke on touch panel		Preset servo driven squeegee and flood stroke on touch panel	
Max. capacity (mechanical cycle speed)	850 cycles/hr (3/4 auto 780 cycles/hr)		850 cycles/hr (3/4 auto 780 cycles/hr)	
Print head skew angle	±5°		±5°	
Conveyor Belt Speed	Variable		Variable	
Compressed air source	6.3-7.7 kg/cm²	90 - 110psi	6.3-7.7 kg/cm²	90 - 110psi
Power source	3 , 220/380V, 50/60 Hz		3 , 220/380V, 50/60 Hz	
Machine dimensions	165cm x 245cm x 145cm	65" x 96½" x 57½"	195cm x 270cm x 145cm	76¾" x 106¼" x 57½"
Control panel	User friendly touch screen + user switch control allows rapid setup		User friendly touch screen + user switch control allows rapid setup	

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.

HMI faces the operator, with additional switch controls for manual settings allowing rapid setup.



Features and Benefits

A. DIGITAL STORAGE OF SETTINGS Up to 100 recipes of digital settings containing all important print parameters can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Includes, but is not limited to, substrate conveyor belt speed, off-contact, off-contact delay, all peel-off functions, all print modes, preset number of prints, squeegee and flood coater stroke length, pressure range, and speed. This time-saving feature offers repeatability and efficiency while significantly reducing job set-ups and change-overs. HMI color touch panel with 7" screen with additional switch controls allows rapid setup/changeovers and provides consistent control over print quality.

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

C. PRINT TABLE Print table top is high strength aluminum alloy with 2 mm thickness, precision milled surface to achieve precise flatness. Interior structure is honeycomb construction positioned on a cast aluminum base. Vacuum hole size 1.5 mm with a pitch of 20 x 20 mm. Optional custom vacuum hole size is 1.0 mm with a pitch of 14 x 14 mm distributed in clusters of four holes surrounding a center hole to ensure maximum surface contact of substrate with print table throughout the printing cycle. Recommended for thin films and other substrates. (For thinner films/substrates, smaller hole size is available to custom specification.)

D. TURBINE VACUUM 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. SCREEN UP/DOWN 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 substrate drop off onto conveyor belt.

G. PRINT OFFSET DISTANCE 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 distance. 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. Digital setting of print parameter can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Reduces setup and changeovers.

H. OFF-CONTACT Touch screen digital setting of off-contact is an important print parameter that can be stored, saved, and recalled for repeat jobs and/or common application. Reduces setup and changeover.



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



Features and Benefits

- I. SERVO DRIVEN SQUEEGEE AND FLOOD STROKE** Squeegee and flood coater travel is servo-driven for stable low to high speed control, with linear guide rails and cog toothed belt for smooth, precise, vibration free printing, ensuring absolutely even and uniform ink deposit. Touch screen digital setting of this print parameter can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Reduces setup and changeovers.
- J. SERVO DRIVEN PEEL-OFF** Digitally controlled servo peel-off distance of start/end point can be set relative to image size, with variable speed and height control. Touch screen setting of this print parameter can be stored, saved, and recalled for repeat jobs and/or common applications. Reduces setup and changeovers.
- K. BALL BEARING MICROMETER DESIGN** 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.
- L. FRAME REGISTRATION X / Y** Three (3) micrometer registration adjustments for screen alignment of screen image on the substrate with numbered value for repeatability and standardization. Once alignment is completed the frame holding rails and screen can be pneumatically locked and secured.
- M. PRINT TABLE MOVEMENT CONTROL** Print table motion cycle driven by top-class servo motor, using swivel arm system guided by linear rail for consistent repeatability.
- N. PNEUMATIC FRAME LOCKING** system with check valves / airlock and four-sided frame holding assembly ensures rigidity and high stability.
- O. DIGITAL PRESSURE EQUALIZATION** Print and flood coater pressure is digitally settable with fully automatic pressure equalization system and auto-leveling function controlled by touch screen for precise balance and consistency of printed ink film layer. Digital setting of print parameter can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Improves print quality and reduces setup and changeovers.
- P. NO-PEEL FLOOD COATER FUNCTION** No-peel flood coater function has digital settings that can be saved, recalled, and adjusted from the touch-screen.
- Q. HIGH-PARK OF SQUEEGEE AND FLOOD** Squeegee & flood high-park allows screen loading and unloading without removing squeegee holder and flood coater. This facilitates rapid setups and change-overs.
- R. PRINT SELECTION MODE** Choice of flooding before the print stroke, flooding after the print stroke, or higher cycle speed-flood while screen lifts to full "up" position, and after specified number of print strokes (from 1 - 5 times in one cycle). Digital setting of print parameter can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Reduces setup and changeovers.

ATMACE
Four-Post
Screen Printer
with Gripper Take-off
Generation 6 Version
Features and Benefits

S. SET NUMBER OF PRINT CYCLES Digital setting for the number of print cycles necessary for printing job and the machine will stop running automatically upon completion of set amount. Print parameter can be stored, saved, and recalled from the touch screen for repeat jobs and/or common applications. Reduces setup and changeovers.

T. FRAME HOLDER PIN REGISTER Screen frame holder is equipped with rear registration pin system for fast and repeatable frame position centering to reduce setup time.

U. LINEAR GUIDE RAIL CYLINDER FOR SQUEEGEE AND FLOOD COATER Linear guide rail cylinder for smooth vibration-free squeegee and flood coater up and down movement. Includes precise micro adjustment control with numbered fine-tuning depth, skew-angle (snowplow feature), and numbered swivel angle of squeegee and flood coater. Allows the highest degree of repeatability, reliability, accuracy, and extremely precise even pressure of the squeegee and flood coater. Overall print quality is optimized.

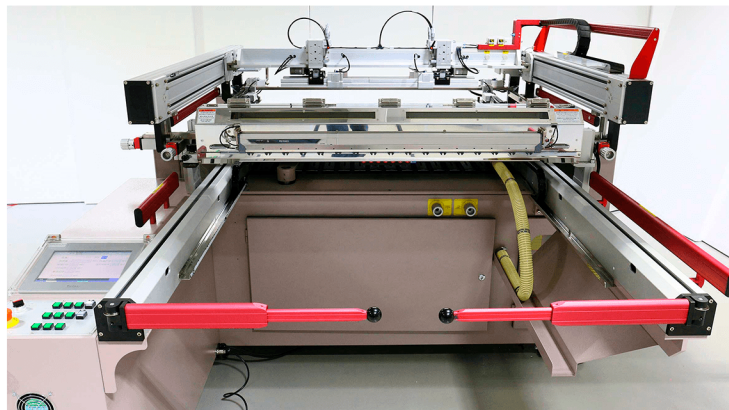
V. NEW PRINT CARRIAGE Pressure regulators are mounted on the carriage for displaying accurate printing pressure settings of both the squeegee and flood coater pressure. Includes accurate numeric readout and independent quick access pressure dial controls.

W. CONVEYOR BELT SPEED adjustable from HMI (range: 100~348 mm/sec). Allows more control of sheet transfer and synchronizing of press delivery conveyor to dryer conveyor.

X. SAFETY LOCK FOR SCREEN CLEANING Screen cleaning safety switches located at the front and rear of the machine completely disable any start function to protect operator when cleaning the screen. Operator can completely lock out the machine to prevent any chance of activation.

Y. PRINT HEAD SAFETY GUARDS 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.

Z. SQUEEGEE AND FLOOD COATER ADJUSTMENTS Squeegee and flood coater depth, inclination, and bias angle are finely adjustable using a sophisticated micrometer to minimize chatter and vibration from irregular print surface heights and traces.





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



Features and Benefits

AA. SCREEN LEVELING Vertical screen leveling controlled laterally on left and right side of frame holder ensures that mesh is parallel with the print table surface.

BB. LOW PRESSURE DETECTION STOPS MACHINE Filter regulator lubricator (FRL) triad assembly is equipped with an automatic pressure detection switch that stops the machine when low air pressure is detected.

CC. FRL OIL FREE FOR CLEAN ROOM ENVIRONMENT The control system for compressed air supply is an oil free FRL unit to prevent oil mist pollution, particularly applicable in clean room environments.

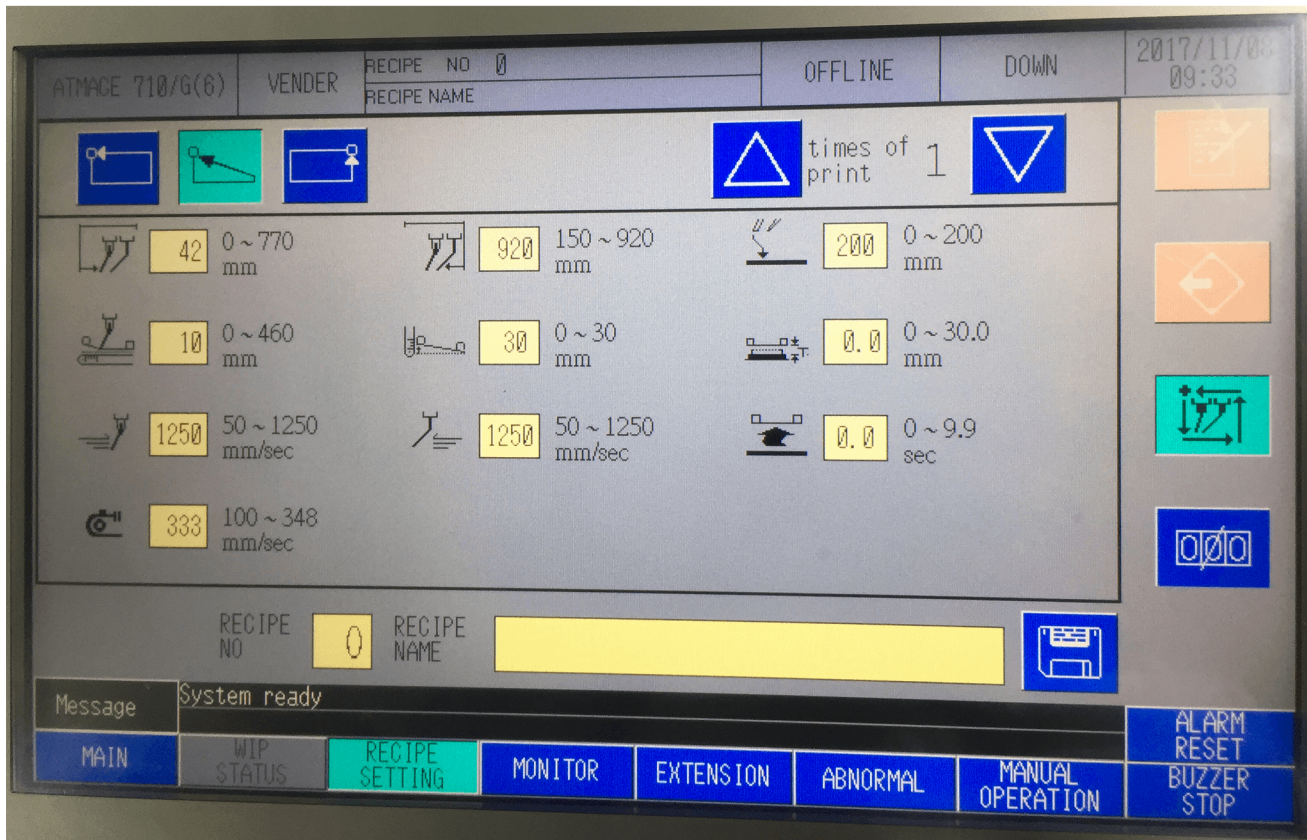
DD. SAFETY FEATURES Two safety bars are located in front of the sliding table, and bilateral safety bars are located along left and right side of four-post printing head. The safety bars stop the machine immediately when activated. An error message will be displayed and restart icon will appear on the 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:

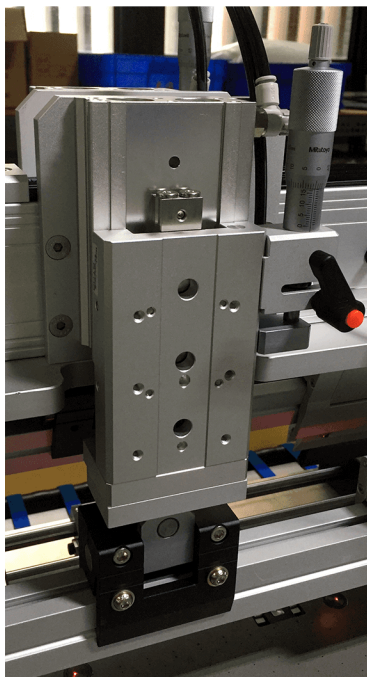
- ▶ **Dripless squeegee system (rotary type)**
- ▶ **Cleaning roller system**
- ▶ **Anti-static bar**
- ▶ **Additional registration pins**
- ▶ **Optical sensors for substrate alignment**
- ▶ **Pneumatic clamps for quick locking/unlocking of squeegee and flood coater**
- ▶ **Custom vacuum hole sizes**

Other options available upon request.

**ATMACE
Four-Post
Screen Printer
with Gripper Take-off
Generation 6 Version**

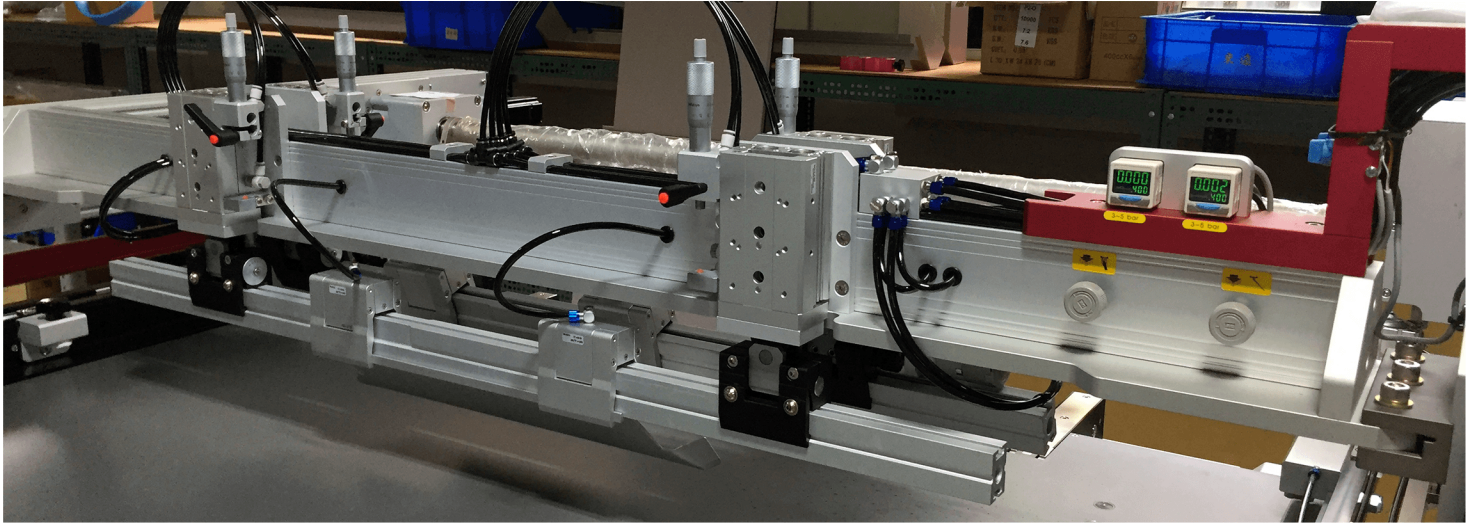


Conveyor belt speed adjustable from HMI (range: 100~348 mm/sec). Allows more control of sheet transfer and synchronizing of press delivery conveyor to dryer conveyor.



Linear guide rail cylinders for squeegee and flood coater ensures that output pressure is precise with micro adjustment control.

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

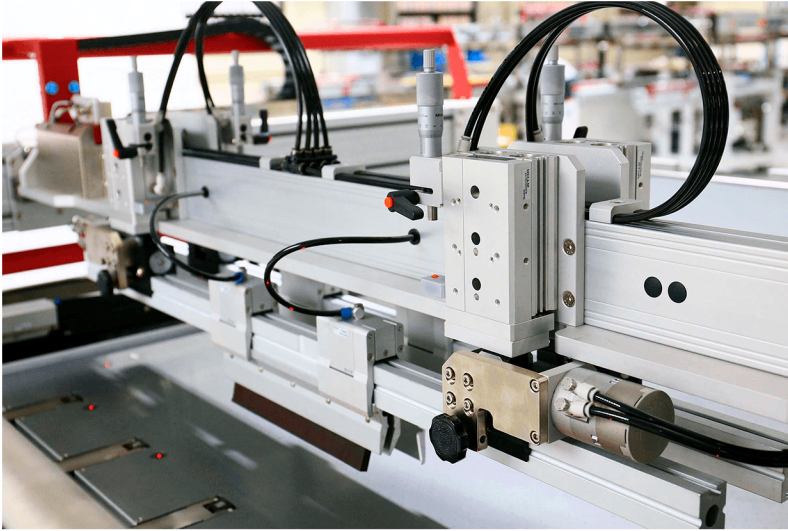


New print carriage. Pressure regulators are mounted on the carriage for displaying accurate printing pressure settings of both the squeegee and flood coater pressure. Includes accurate numeric readout and independent quick access pressure dial controls. Features optional pneumatic clamps for quick locking/unlocking of squeegee and flood coater.

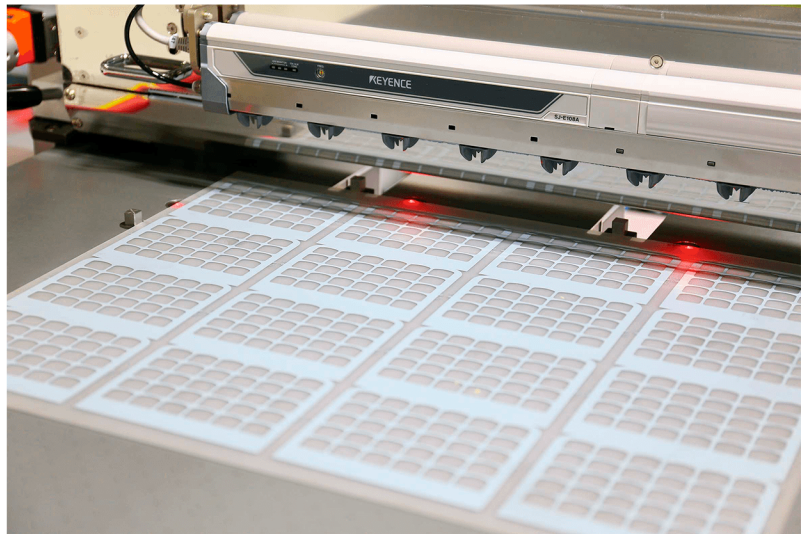


Blowback function lifts substrate slightly as table returns to the operator while gripper holds the leading edge. Independent vacuum and blowback control with numeric settings for job record keeping.

**ATMACE
Four-Post
Screen Printer
with Gripper Take-off
Generation 6 Version**



**Optional driplless squeegee system
(rotary type)**



**Optional optical sensors
for substrate alignment**



**Optional cleaning roller system
and anti-static bar**



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



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.



SLIVER NATIONAL
AWARD OF EXCELLENCE
WINNER



NATIONAL
INNOVATION
RESEARCH AWARD



SYMBOL OF EXCELLENCE
WINNER



NATIONAL AWARD OF SME
(Small and Medium Enterprises)



CE CERTIFIED



ISO 9001 ISO14001
CERTIFIED



NATIONAL
LITTLE GIANT AWARD
WINNER