



RH SOLUTIONS LLC

Bringing Print to Life



ATMECH 57

Clam Shell
Screen Printer



Suitable for precision screen-printing substrates in flat film/sheet/thin board form.

Examples include Printed Circuits, Membrane Switches, Mylar Overlays, IMD Films, EL Films, Posters, Signs, Stickers, Decals, Card Boards, and more.

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

4295 Armstrong Blvd
Batavia, OH 45103
www.RHSolutionsLLC.com
sales@rhsolutionsllc.com
ph. 513-407-5399



CALL US TODAY

513.407.5399

Features and Benefits

- *Semi-automatic*, hand load / hand offload with controlled automatic printing functions.
- HMI digital touch screen provides user-friendly control with multiple functions and operating parameters, includes presetting throughput of current yield along with built-in error diagnostics.
- Printing front to back direction. Front frame load / unloading for fast setup.

Technical Specifications:

	ATMECH 57 Metric	ATMECH 57 US Std Units
Table size (mm)	800 x 1000mm	31½" x 39¾"
Max. printing area (mm)	550 x 750mm	21⅝" x 29½"
Max. frame O/D size (mm)	1100 x 1100mm	43½" x 43½"
Substrate thickness (mm)	0 – 20mm	0 - .79"
Productivity 900 P/H (non-stop full speed full stroke)	900 P/H	
Power source	3Φ, 220V/380V, 50/60Hz	
Power consumption	2.9 kW	
Air pressure (kg/cm ²)	5 - 7 kg/cm ²	72 - 100psi
Air exhaustion	62.19 L/min	2.2 cfm
Dimension (WxDxH)	1550 x 1520 x 1400mm	61" x 60" x 55"
Weight	985 kg	2,172 lbs

Features and Benefits

A) German S.E.W. Motor powers screen up/down position, DC drive squeegee / flood assembly and turbine vacuum table. Provides smooth mechanical movements, low noise and accuracy.

B) High rigidity chassis designed for highest torsional strength keep machine at minimal vibration at all speeds. Maximum weight is 2,172 lbs.

C) Printing table surface is manufactured from high quality anodized aluminum to achieve close tolerance planarity. Honeycomb construction for rigidity, while offering powerful, heat-dissipating vacuum. Suction force is adjustable for optimum substrate control and printing requirements.

D) Travel of squeegee / flood on guided precision sealed linear motion bearings, reinforced tooth belt, timing belt wheel for high rigidity and ultra-smooth high-speed transport cycles without backlash. This ultra-smooth gliding of the squeegee / flood assembly enables step-less speed change for higher production speed, smooth operation, consistent / uniform printing deposit control, less maintenance and fast operation.

E) Includes pneumatic squeegee / flood pressure equalizer control system. Fully automatic regulated by a constant pressure control system equalized with pivot point balance for angled substrate along with snowplow skew feature for irregular print surfaces. After initial setup small incremental increases and decreases of pressure can be made on the fly. For most applications suitable pressure is about 3-4 bars and the squeegee and flood both have pressure gauge to measure incremental setting amount.

F) Squeegee and flood height / depth is independently controlled by single action control from the micrometers.

Features and Benefits

G) Touchless timing disk and sensor instead mechanical cams to control precise mechanical function. Allows less maintenance and longer machine life.

H) Motorized and pneumatically driven transmission head lift action with electromagnetic suction at the lowest screen position designed to balance load and obtain accurate alignment. Further when screen is aligned and locked during printing against high printing pressure accurate registration can still be achieved, controlled, and maintained. Includes row of photoelectric switches for up/down alignment once in designated position the motor brake will activate and position immediately once the switch is activated. Head lift has load bearing air cylinders along with up / down slowdown buffering to control cantilever holder in each final position.

I) Touch screen panel peel-off adjustable to start incrementally during print stroke in proportion to the image position along with settings for height and rate to assist release of mesh from substrate during print sequence. Flood coat sequence is carried out with screen level in a no peel flood function. This benefit offers more uniform control and evenness of ink layer over length and width of image area.

J) Touch panel control of the off contact for various substrate thicknesses up to 25 mm (1").

K) Includes pneumatic squeegee / flood pressure equalizer / peel-off control system. Fully automatic and regulated by a constant pressure control system equalized with pivot point balance for angled substrate along with snowplow skew feature for irregular print surfaces. After initial setup pressure regulator can be increased and decreased on the fly. For most applications suitable pressure range is 3-4 bars and the squeegee / flood / peel-off have pressure indicators to gauge incremental setting amount.

Features and Benefits

L) Touch screen panel control of peel-off adjustable to start incrementally during print stroke in proportion to the image position along with settings for height and rate to assist release of mesh from substrate during print sequence. Flood coat sequence is carried out with the frame in the horizontal position allowing a no peel flood function. This benefit offers more uniform control and evenness of ink layer over length and width of image area.

M) Frame holding system with X, Y, & theta movements via precision number micrometer control(s) for fine registration. Play-free registration control without backlash and numbered setting can be record for record keeping.

N) Pneumatic frame locking system with check valves / air lock and four sided frame holding assembly for stronger structure. Frame holding rails can be locked/unlocked pneumatically (front and back) from the touch panel to make it easy for the operator to adjust to various frame sizes. Allows fast job setup and changeovers.

O) Separate pneumatic control compartment with front easy access door. Control system for compressed air supply is an oil free FRL unit to prevent oil mist, applicable for clean room environment.

P) Choice of three print functions: flooding before the print stroke and flooding after the print stroke, printing twice (screen lowers, print-flood-print, screen lifts to up position and flood) and no flood setting. Includes no flood setting and print head lift for ease of sq / fl load and unload without removing for fast setup.

Q) Squeegee / flood assembly is synchronized and changeover is pneumatically operated for smoother transition. Adjustable height controls, angle settings 0-30°, leveling and skew feature. Provides uniform ink deposits across the entire print area.

R) Touch screen input variable and independent for print and flood stroke speed and length setting to image size. Numerical input of start point of squeegee blade 0-800mm and end point of squeegee blade 400-680mm.

Features and Benefits

S) Extended screen lift for ease of access underneath screen for inspection and cleaning.

T) Print operating cycles automatically controlled with dwell timer for single cycle loading and off-loading, independent foot pedal control cycling and manual setup mode.

U) Productivity preset in numerical values for throughput can be changed anytime. Enter production quantity according to run length and during the run screen will indicate current yield until preset number of prints are achieved.

V) Frame loading and unloading from the front of the machine to facilitate fast setup and changeovers.

W) Squeegee and flood proximity switch trigger to stop when printing stroke exceeds the set limit position.

X) Control system for compressed air supply is an oil free FRL unit to prevent oil mist pollution, applicable in clean room environment.

Y) Equipped with powerful turbine vacuum control to prevent movement of substrate.

Z) Emergency safety bar positioned around the print table. The safety bars stop the machine immediately when activated. Compliant with OSHA safety regulations. An error message will display and a restart icon will appear on the touch panel. Once restored or reset the machine will return 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. Meets and exceeds US safety requirements.

AA) Includes 4 squeegee holders and 4 flood coaters, sq. / fl clamps, pedal switch control, toolbox, tools and door key.

Options: Available upon request.

To see RH SOLUTIONS extensive range of high quality screenprinting machines and auxiliary equipment, be sure to check out our website: www.rhsolutionsllc.com

RH SOLUTIONS specializes in ATMA / SPS screenprinting machinery covering seven industry sectors classified as: Industrial, graphic, glass, printed circuits, opto-electronic, bio-medical, green energy and auxiliary. ATMA produces the finest machinery specifically for close-tolerance and high precision requirements using only the highest quality components and materials available. .

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.

Please see ATMA brochure for more information. ATMA's policy is one of continuous improvement and accordingly, the manufacturer reserves the right to change specifications without prior notice.

