

FEATURES AND BENEFITS

ATMA AT-60PD / AT-70PD Digital Electric Flat Screen Printer

- Semi-automatic*, hand load / hand off-load with controlled automatic printing functions.
 - HMI digital touch screen panel provides user-friendly control with multiple printing functions and operating parameters, includes presetting throughput of current yield along with built-in error diagnostics.
 - Horizontal head lift; screen is parallel with printing table for even ink flow. Optimum ease of use with open access for accurate substrate registration, off-load, screen cleaning and all setup controls within close reach.
 - Greater control over the screen printing process with an unobstructed view of important printing parameters such as off-contact, peel-off, squeegee / flood settings, ink well area and view of substrate.
 - Front frame loading / unloading for fast setup.
- A. German S.E.W. Motor powers screen up / down position and drive motor for squeegee / flood travel. Provides high cycle speed with smooth mechanical movements, low noise and accuracy.
- B. Printing table surface is CNC precision milled and manufactured from high quality anodized aluminum to achieve close tolerance planarity. Honeycomb construction for rigidity, while offering powerful, heat-dissipating turbine vacuum. Suction force is adjustable for optimum substrate control and printing requirements. **NOTE:** Model AT-70PD can be equipped with a T-groove slotted table designed for an easy addition of fixtures and toolings.
- C. Travel of squeegee / flood on guided precision sealed linear motion bearings, reinforced tooth belt, timing belt wheel for high rigidity and ultra-smooth high print 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.
- D. Squeegee / flood high-park capability facilitates faster setup and changeover.
- E. Pneumatic frame locking with check valves / airlock and four-sided frame holding assembly ensures rigidity and high stability.
- F. Patented mechanical print head lift guided on precision sealed linear motion bearings allows stable, vibration-free movement in up/down positions.
- G. Squeegee and flood printing parameter settings for speed, pressure, and stroke travel distance is independently controlled by single action from the touch screen.
- H. Includes pneumatic squeegee / flood pressure equalizer 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.

- I. Stable pneumatic cylinders are encased around solid cast to allow consistent pressurization of squeegee and flood. After initial setup pressure regulator can be increased and decreased on the fly. For most applications suitable pressure is 3-4 bars and the squeegee and flood both have pressure gauge to measure incremental setting amount.
- J. Touch screen control of peel-off action to assist release of ink and mesh from substrate synchronized with the print stroke in the auto-mode of operation.
- K. Peel-off height lifting point adjustable by low speed cylinder depending on print stroke with speed adjustment valve and mechanical adjustment to set peel-off height. 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.
- L. Touch screen control of off-contact height between substrate and screen. Numerical value can be set up to accommodate substrate thickness 0 – 120 mm (0 – 4.7”).
- M. Print table X / Y movements via precision scaled micrometer control(s) for fine registration. Play-free registration without backlash.
- N. Choice of six print functions from touch screen: flooding before the print stroke, flooding after the print stroke, higher cycle speed-flood while screen lifts to full up position, double squeegee printing mode with use of two squeegees mounted allowing printing in both directions and screen lift up to print position, twice printing mode (flood while screen lowers and the last flood when screen is in up position) and double squeegee mode with use of two squeegees to perform left print direction while right squeegee is idle and right print direction while left squeegee is idle. Includes no flood setting and print head lift for ease of sq / fl load and unload without removing for fast setup.
- O. Touch screen input of printing standby height: AT-60PD / PPD 150-260mm and AT-70PD 150-270mm. This is the distance that the screen lifts up after the squeegee and flood sequence. Numeric value can be preset to stop the screen in a lower position for increase cycle speed.
- P. 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.
- Q. Touch screen input variable and independent for print and flood stroke speed and length setting to image size. Numerical input of right print stroke start point AT-60PD 0-300mm, AT-70PD 0-340mm and left stop point AT-60PD 400-700mm, AT-70PD 390-780mm.
- R. Touch screen preset for printing position settings. Printing offset distance (5-50 mm) protects squeegee edge and mesh from wear by precisely lowering the squeegee past the leading edge of substrate. Premature wear or damage of squeegee and mesh can occur when squeegee moves across sharp edges of substrate when in direct contact.
- S. Print operating cycles: Manual settings for setup procedure, setting for foot pedal control in single cycle and fully automatic control with dwell timer range of time selectable from 0.2-60 seconds for substrate loading and off-loading.

- T. 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.
- U. Frame loading and unloading from the front of the machine to facilitate fast setup and changeovers. Frame holding rails can be unlocked from touch screen and easily adjusted to the size of the frame.
- V. Control system for compressed air supply is an oil free FRL unit to prevent oil mist pollution, applicable in clean room environment.
- W. Equipped with powerful turbine vacuum control to prevent movement of the substrate.
- X. Emergency press plate positioned in front of print table in case substrate alignment is not in the correct position. Operator can press the plate and printing head slowly lifts up to the full upright home position allowing operator the chance to register correctly final substrate alignment. Reduces spoilage and yields more printed product.
- Y. Front safety bar location on the print head, compliant with OSHA safety regulations.
- Z. Includes 3 squeegee holders and 3 flood coaters, sq. / fl clamps, pedal switch control, toolbox, tools and door key.

Options:

Additional registration pins, anti-static equipment and dripless squeegee. Others 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.rh-solutionsllc.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 screenprinting 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.