This is Autotronik

Quality by conviction. It is our motto - but you can profit by it world-wide. To be on the winning team you rely on a partner who combines quality, flexibility and innovation.

Autotronik is a global company with approximately 200 employees. We are your specialist for SMD stencil printers, pick and place machines and reflow ovens of low-to medium-Series and complete SMT production lines. Our global commitment allows us to bring together the best components of all continents into an outstanding product.

www.autotronik.de
**STRONG AND RIGID MECHANICAL DESIGN**

*Strong and rigid mechanical design*
AP series with welded steel frame guaranteed a strong and rigid mechanical design. High quality printing is guaranteed by preloaded 4-point ball screws, which drives with an excellent parallel separation of stencil and PCB.

**DUAL, INDEPENDENT PRINT HEADS INCREASE THROUGHPUT**

*Dual, independent print heads increase throughput*
AP series two print heads are independently controlled by high-precision ball-screw drives with a programmable transport speed and closed loop stepped motor. Print pressure is uniformly and accurately controlled.

- 4 point ball screw drives excellent parallel separation of stencil and PCB
- AP series come standardly with a dual squeegee / dual stroke control system for the most economic use of solder paste.
- Self-leveling squeegees automatically adjust to the stencil surface to ensure perfect registration on every print.
**Advanced Easy-Align-Check (EAC)**

AP series advanced imaging system eliminates the need for specialized fiducial marks—any pad, from 0.5 mm to 3 mm, can be used as a fiducial mark. Multiple light source selection allows the vision system to work with a range of PCB substrate colors when learning fiducial reference points.

**FAST, EASY JOB CHANGEOVER**

**Fast, easy job changeover**

Autotronik AP series Stencil printer makes job setup simple: input the stencil size, insert the stencil into the frame mounter until it reaches the stopper and the system software will handle the rest. Be ready for the next production assignment in a matter of seconds.
Unique clamping device for inline integration
The efficient single-stage PCB transport system is SMEAMA-compatible to interface with the other production equipment on your line.

INTEGRATED UNDERSTENCIL WIPING

Integrated understencil wiping
Automatic wet/dry/vacuum understencil cleaning is included with the AP series printer. The system can be programmed to clean the stencil using any combination of dry wipe, wipe with solvent (“wet wiping”), or wipe followed by vacuum to draw material out from the apertures.
**Fully programmable**

Windows-based AP series is easy to program, allowing the printer to be up and running quickly after install. All parameters, including print speed (programmable from 20 to 120 mm/s), stroke length, squeegee pressure, etc., are fully programmable via the graphical user interface. During operation, all details, including process status, of the current job are displayed on screen. Multiple user permission levels prevents important machine parameters from being accidentally changed.

▲ Fiducial learning could be controlled by multiple parameter, such as shape, color, brightness, contract, etc. or completed automatically.

▲ 2D inspection function allow the inspection of short circuit, deviation and coverage rate of the solder paste.

▲ Auto Production panel displays recent production status, camera image and related information.

▲ Conveyor control interface display multiple parameters control, such as in/out direction, PCB width, X/Y/Z position.

▲ Conveyor production control allows speed control, run option, SMEMA signal setting.
MODEL **AP430/AP430L/AP660**

**Key Features**

- Dual-camera vision for fast PCB orientation
- Print repeatability of ±0.008mm
- Dual squeegees with dual-stroke control for efficient solder paste use
- Flexible mounting for single- or double-sided boards
- Fast job setup and changes
- Excellent parallel separation of stencil and PCB with programmable speed control for well-defined prints
- Accepts stencils size from min. 470 x 300 mm (AP430), 520 x 300 mm (AP430L), 736 x 736 mm (AP660) to max. 736 x 736 mm, 900 x 900mm (AP660)
- Accommodates PCBs to 400 x 300 mm (AP430), 450 x 350 mm (AP430L), 600 x 600 mm (AP660)

MODEL **AP1200/AP1500**

**Key Features**

- Dual-camera vision for fast PCB orientation
- Print repeatability of ±0.01mm
- Dual squeegees with dual-stroke control for efficient solder paste use
- Flexible mounting for single- or double-sided boards
- Fast job setup and changes
- Excellent parallel separation of stencil and PCB with programmable speed control for well-defined prints
- Custom-designed clamping device holds long PCBs straight and suppresses the bending of flexible boards
- Vacuum table holding fixture keeps PCB flat for best printing result
- Automatic conveyor width adjustment for convenient board loading
- Accepts stencils size from min. 400 x 300 mm to max. 1600 x 300 mm (AP1200), 1900 x 300 mm (AP1500)
- Accommodates PCBs to 1200 x 300 mm (AP1200), 1500 x 300 mm (AP1500)
<table>
<thead>
<tr>
<th>Feature</th>
<th>AP430 / AP430 L / AP660</th>
<th>AP1200</th>
<th>AP1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing Speed</td>
<td>10 to 120mm/s</td>
<td>10 to 120mm/s</td>
<td>10 to 120mm/s</td>
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<tr>
<td>Vision Alignment System</td>
<td>Automatic (any shape)</td>
<td>Automatic (any shape)</td>
<td>Automatic (any shape)</td>
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<tr>
<td>Stencil Frame Size</td>
<td>AP430 ) 470 x 300 mm to 736 x 736 mm</td>
<td>400 x 300 mm to 1600 x 630 mm</td>
<td>400 x 300 mm to 1900 x 630 mm</td>
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<tr>
<td></td>
<td>AP430L ) 520 x 300 mm to 736 x 736 mm</td>
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<td>AP660 ) 736 x 736 mm to 900 x 900 mm</td>
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<td></td>
<td><strong>Board Size</strong></td>
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<td></td>
<td>AP430) 50 x 50mm to 400 x 300mm</td>
<td>100 x 50mm to 1200 x 300mm</td>
<td>100 x 50mm to 1500 x 300mm</td>
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<tr>
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<td>AP430L) 50 x 50mm to 450 x 350mm</td>
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<td>AP660 ) 50 x 50mm to 600 x 600mm</td>
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<tr>
<td></td>
<td><strong>Board Thickness</strong></td>
<td>0.4 to 5 mm</td>
<td>0.4 to 5 mm</td>
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<td></td>
<td><strong>Board Warpage</strong></td>
<td>Max PCB 1% of diagonal line</td>
<td>Max PCB 1% of diagonal line</td>
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<tr>
<td></td>
<td><strong>Blade Type</strong></td>
<td>Metal or plastic, 45° or 60°</td>
<td>Metal or plastic, 45° or 60°</td>
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<tr>
<td></td>
<td><strong>XY Adjustment</strong></td>
<td>±10mm</td>
<td>±10mm</td>
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<td></td>
<td><strong>Radial Adjustment</strong></td>
<td>±2°</td>
<td>±2°</td>
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<tr>
<td></td>
<td><strong>Registration Repeatability</strong></td>
<td>±0.008mm</td>
<td>±0.01mm</td>
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<tr>
<td></td>
<td><strong>Transport cycle time</strong></td>
<td>15s (exclude printing &amp; cleaning)</td>
<td>15s (exclude printing &amp; cleaning)</td>
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<tr>
<td></td>
<td><strong>Transport Height</strong></td>
<td>900±20mm</td>
<td>900±20mm</td>
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<tr>
<td></td>
<td><strong>Transport Direction</strong></td>
<td>Left-Right / Right - Left / Left - Left / Right - Right</td>
<td>Left-Right / Right - Left / Left - Left / Right - Right</td>
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<tr>
<td></td>
<td><strong>PCB Fixation</strong></td>
<td>Screw clamping system and vacuum</td>
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<td></td>
<td><strong>Print mode</strong></td>
<td>Single or double side printing</td>
<td>Single or double side printing</td>
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<td></td>
<td><strong>CCD FOV</strong>                               <strong>Standard fiducial and any pads, 0.5 to 3 mm</strong></td>
<td>5 x 7 mm</td>
<td>5 x 7 mm</td>
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<td></td>
<td><strong>Vision Fiducial</strong></td>
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<td></td>
<td><strong>Air &amp; Power</strong></td>
<td>220VAC 50 - 60 Hz power, 75psi (5 bar) air</td>
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<tr>
<td></td>
<td><strong>Requirements</strong></td>
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<td></td>
<td><strong>Operating system</strong></td>
<td>Windows 7</td>
<td>Windows 7</td>
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<tr>
<td></td>
<td><strong>Dimensions (L x W x H)</strong></td>
<td>1450 x 1120 x 1525 (AP430), 1900 x 1506 x 1550 (AP660)</td>
<td>2300 x 1704 x 1878 mm</td>
</tr>
<tr>
<td></td>
<td><strong>Weight</strong>                               <strong>780 kg (AP430), 1000 kg (AP660)</strong></td>
<td>1200 kg</td>
<td>1500 kg</td>
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</table>
Worldwide at your side
We have service partners all over the world.

Unbeatable Service
In case of problems we are disposal almost around the clock.

Everything from one source
We are your partner for all process steps.

Innovative Features
Our machines are using technical standards, which are normally used in bigger machines for mass production.

Quality and Innovation at a fair price
Through global positions.

A expert in small and medium-scale production.

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