THE COMPONENT MATRIX
Versatility without limits
COMPONENT MATRIX

Due to major investments into the research and development of strategically needed peripherals, it was possible to build the Infotech Component Matrix. Based on these modules, reliable products can be realized as flexible as building special application machines, but with an extremely high quality level comparable with standard machines. Process specific, modular and nevertheless standardized:

PRODUCTION CELLS - PLATFORMS - ASSEMBLING - DISPENSING - FEEDING

**Component Matrix PRODUCTION CELLS**

<table>
<thead>
<tr>
<th>IC-900</th>
<th>IC-1200</th>
<th>IC-1800</th>
<th>IC-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="IC-900" /></td>
<td><img src="image2" alt="IC-1200" /></td>
<td><img src="image3" alt="IC-1800" /></td>
<td><img src="image4" alt="IC-2000" /></td>
</tr>
</tbody>
</table>

**Component Matrix PLATFORMS**

<table>
<thead>
<tr>
<th>IP - 100</th>
<th>IP - 500 Desktop</th>
<th>IP - 500 Cell</th>
<th>IP - 520 Cell</th>
<th>IP - 620 Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="IP-100" /></td>
<td><img src="image6" alt="IP-500 Desktop" /></td>
<td><img src="image7" alt="IP-500 Cell" /></td>
<td><img src="image8" alt="IP-520 Cell" /></td>
<td><img src="image9" alt="IP-620 Cell" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Travel range X</th>
<th>93 mm</th>
<th>148 mm</th>
<th>400 mm</th>
<th>210 mm</th>
<th>210 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel range Y</td>
<td>440 mm</td>
<td>550 mm</td>
<td>680 mm</td>
<td>400 mm</td>
<td>540 mm</td>
</tr>
</tbody>
</table>
Component Matrix ASSEMBLING
- Universal Z-axes with various widths
- Z-axis extensions with Z-slide
- Precision assembly head
- Assembly heads with various widths
- Up to 6 assembly heads
- Heated bond head
- Ultra sonic bond head
- Automatic changeable nozzle interface
- Nozzle change stations
- Standard SMD- and die bonding nozzles
- Special nozzles spring loaded and fix
- Special gripper assembly heads
- Supported force measurement
- Automatic and eccentric nozzle offset calibration
- Nozzle ID reading (traceability)

Component Matrix DISPENSING
- Dots, lines, geometric patterns 2D / 3D
- X-, Y-, Z- and valve synchronized with continuous motion path control
- Time/pressure dispensing units
- Archimedes screw dispensing units
- Precision micro screw dispensing units
- Jet dispensing units
- Slider dispensing units
- Piston dispensing units 1C- and 2C- adhesive
- Syringe and needle heaters, syringe coolers
- Automatic amount adjustments (viscosity changes)
- Automatic Z-needle length calibrations
- Automatic X- and Y-offset calibrations
- Purge, scale, and calibration stations
- Dispensing calibration and cleaning tape units
- Dispensing needle cleaning stations

Component Matrix FEEDING
- SMD Tape feeder 8...72 mm
- 2 ... 20 slot feeder bank
- Preform feeder PF2-14, PF12-26 und PF22-36
- Preform stack feeder PS32-66
- Stack tray feeder unit for 2x2", 4x4" and Jedec
- Stack tray feeder for nonstandard dimensions
- Asycube 50, 80, 240, 530
- Vibration and bowl feeder units
- Die and FlipChip eject unit for 4"-12" wafer
- Wafer change unit for 6"-12" wafer frames
- Transport systems for substrates, boards, work piece carriers, boats (auer), lead frames, etc.
- Heatable transport sections
- Loading- and unloading modules
- Transfer shuttle system
Component Matrix APPLICATION EXAMPLES

„Desktop Factory“
- Relative assembly
- Multi-level assembly
- Component flipper 90°/180°
- Automatic tool changer
- Dispensing with time/pressure
- Dispensing with micro screw
- UV-curing
- Height measurement
- Dispenser needle cleaning
- Dispenser needle calibration
- Traceability

„Factory in Cell“
- Automatic loading of blisters
- Assembly of dial
- Inspection and position check
- Flip assembled dial
- Plasma treatment
- Jet dispensing of UV adhesive
- Optical inspection of dispensed dots
- UV-curing
- Final inspection
- Packaging

3D Jet-Dispensing process
- Valve inspection
- Valve cleaning
- Syringe presence control
- Automatic dispensing valve calibration
- 13 Axes synchronized with dispensing valve
- G-code motion
- Cycle time of 1.0s
- One piece flow
- Component handler
- Traceability software

Production line
- Component mount
- WPC Transport system
- ID inspection
- Host communication
- Component test process
- Component test
- Component calibration
- Laser marking
- Plain writing inspection
- Product unload
- Traceability software
- Tool less change over

AUTOMATION PROCESSES - SORTING - ASSEMBLING - BONDING - DISPENSING - LASER PROCESSES

Precision over all
- Precision in automation
- In combination with high dynamic processes
- Automatic compensation of thermal expansions
- Within smallest areas extremely repeatable

Reliability as the highest target
- Professional local supplier network
- 100% Swiss engineering
- Production 95% in Switzerland
- Technical support with motivated engineers

Flexibility to the last detail
- Over 30 years investment into core competencies
- Using the proven Infotech Component Matrix
- In return for high qualified engineering team
- Based on application software VisualMachines™

WWW.INFOTECH.SWISS
- Supports from lab systems to 24/7 production line
- Solutions exceeding the bounds of possibility
- Combines standards of various market segments
- Additional information you will find on our homepage

Exceeding your expectations