

PRODUCTPORTFOLIO



(1) DI/LDI and AOI Automation

(2) Targeting

(3) Further Process Automation Solutions

(4) Loading and Unloading

(5) Storage and AGV Solution

(6) Other Automation Systems

(7) Multilayer Edge Treatment

(8) Soldermask Inkjet

(9) Dry Film Lamination

(10) Vacuum Lamination

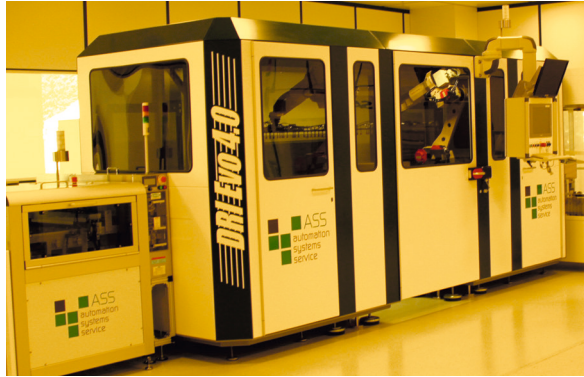
(11) Cover Sheet Removal – Peeler

(12) Soldermask Spray Coater

1. DI/LDI + AOI Automation

Inline Automation DRI

- 2 x 6-axis robot solution
- Capacity >2 panels/min



Stand-alone Automation DRS

- Capacity >2 panels/min
- 4 ports for either L-racks or horizontal boxes



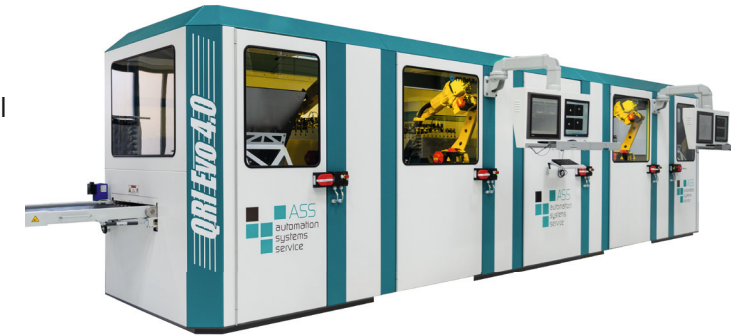
Automation for Soldermask DRS-L

- 2 Ports for either slot cassettes or L-racks
- 2 x 6-axis robot solution



Double DI/LDI + AOI Automation QRI

- Double DI/LDI + AOI Automation QRI
- Inline or standalone solution for two process machines
- Highest capacity >4 panels/min



DI/LDI + AOI Automation - ECOLINE SLR/SUR 608

- Economic solution as standalone operation
- For L-racks and horizontal boxes



2. UV-Marker for Innerlayer Registration TIR24

Targeting Solution TIR24

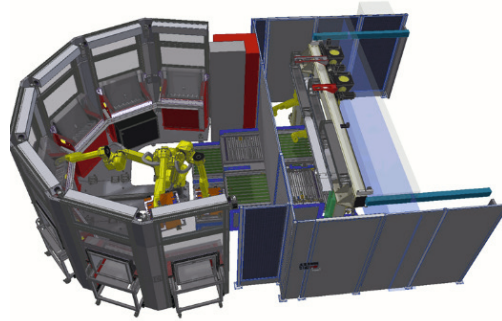
- 3 mm UV marks top and bottom
- Top to bottom UV mark congruency better 5 µm



3. Further Process Automation Solutions

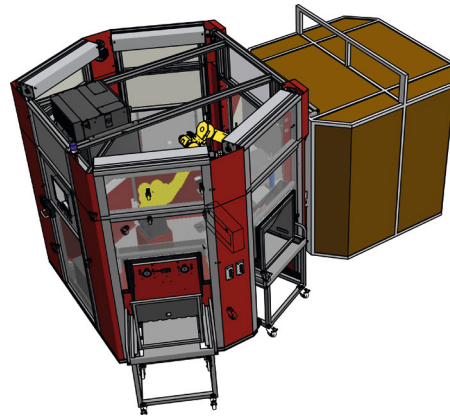
Vertical Plating Line Automation

- Full automatic rack loading
- 7 ports and more possible



Lay-up Automation for pinning before drilling

- Flexible for different lay up strategies
- High precision positioning



Single Cassette Loader / Unloader with 6-Axis Roboter - Roboload

- 6-axis robot solution for flexible applications



Double Cassette Loader / Unloader SLUR 128

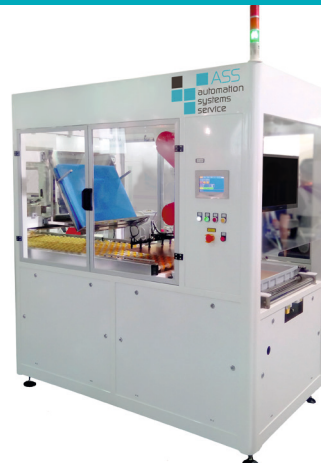
- 6-axis robot solution for continuous operation



4. Loader / Unloader Solutions

Single Cassette Loader / Unloader with 3-Axis Roboter SLUR 246

- Economic 3-axis robot solution
- Transferable for L-racks and horizontal boxes



Linear-Axis Loader / Unloader HS21

- Horizontal automation by linear axis



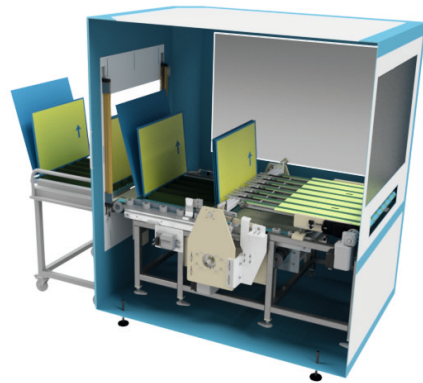
Final Panel Loader / Unloader ML1000

- Horizontal loading and unloading of finished panels
- Panel sizes from 80 x 80 mm (smaller on request)



Slot Cassette Automation SC

- For different slot widths
- Slot cassette buffer solutions (optional)



Flip-buffer for Outerlayer Spacesaver

- Economic loader, unloader and buffer for Outerlayers



5. Storage and AGV Solutions

LIFO (Last-In-First-Out) Buffer SB503

- Upto 20 innerlayer and outerlayer buffer



FIFO (First-In-First-Out) Buffer SLC20+

- 20 – 50 innerlayer and outerlayer buffer
- Individual panel tracking possible



Automatic Guided Vehicles (AGV)

- Smart connection between processes and offline buffer solutions



WIP (Work In Process) Storage Systems

- Smart material storage solution
- Material tracking included



6. Further Automation Solutions

Double Transport Flip for innerlayer SB300

- For innerlayer and outerlayer
- Smooth and save handling



Flip Station for Outerlayer

- For outerlayer flip



Diverter ST103

- Right, left and throughfeed operation
- Smooth automatized angular transfer



Rotating Station (90 or 180°) ST201

- Smooth and safe rotation
by $\pm 90^\circ$ or 180°



Positioning Station

- Right, left and center
positioning possible



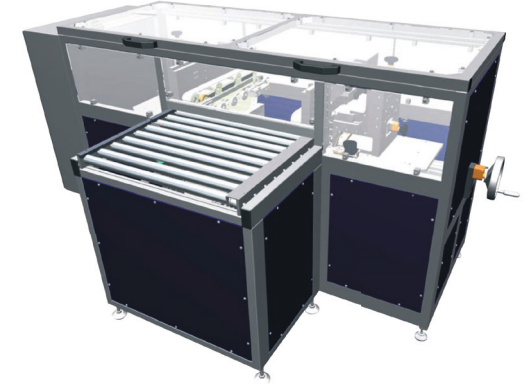
Panel-Turn-Corner Station PCT

- Angular transfer by keeping the leading edge



Edge Milling Machine KF650

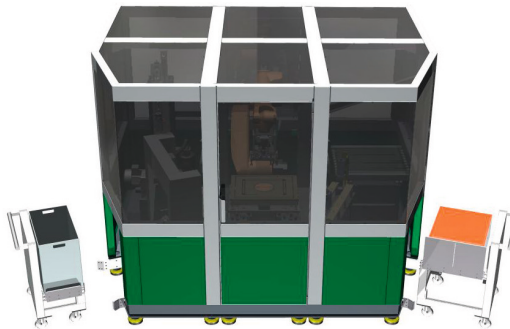
- Economic semiautomatic solution



7. Multilayer Edge Cutting

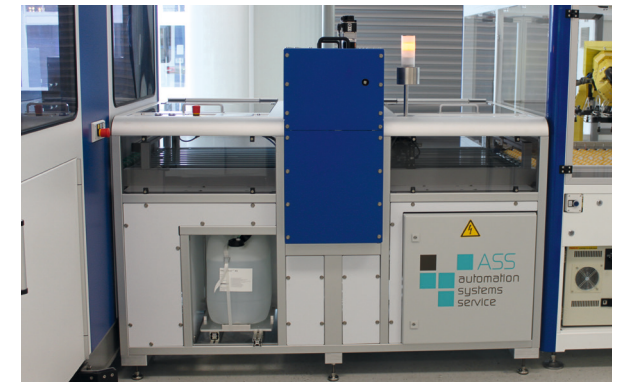
Robocut RC1

- Capacity: 1000 panels/22h



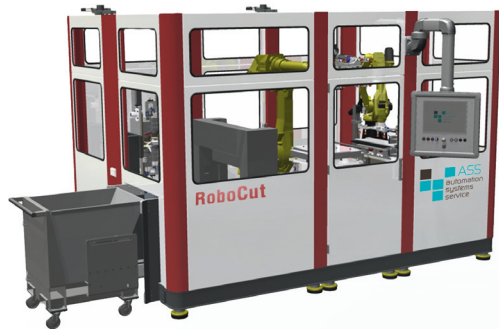
Dry Cleaning behind Edge Cutting

- Efficient panel cleaning behind edge treatment



Robocut RC2

- Capacity: 2000 panels/22h



8. Soldermask inkjet Solutions

n.jet solder mask

- The most advanced solution for digital soldermask printing



9. Dry Film Lamination

Automatic Cutsheet Laminator SmartLam 5200

- The ultimate high productivity solution for a wide range of panel thicknesses



Manual Laminator ML3124 PH1 and more

- The economic solution for all different kinds of application



10. Vacuum Lamination Equipment

Vaccumapplicator VA7224-HP7 and more

- Upto 7 bar pressure



Automatic Vacuumlamination Line RTR MVC24 S2 and more

- Flexible line layout for all types of material



11. Cover Sheet Remover - Peeler

Cover Sheet Remover CSR 2730

- No panel thickness adjustment required
- Adjustable knurling pressure



12. Soldermask Spray Coater

SmartSpray SA24 S2 and more

- Ideal for small and medium sized production requirements with frequent product changeovers



