



# PRODUCT CATALOGUE

SMART PCB HANDLING SYSTEM

© FlexLink 2015

The contents of this publication are the copyright of the publishers and may not be reproduced (even extracts) unless permission is granted.

Every care has been taken to ensure the accuracy of the information but no liability can be accepted for any errors or omissions. The right is reserved to make design modifications.

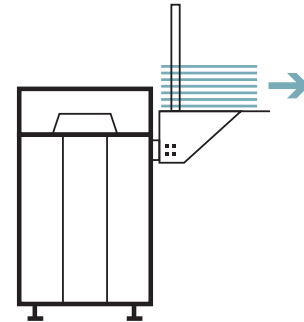
#### *Patents*

Essential parts of the FlexLink product range are protected by patents and design regulations. Drawings are made to European standards.

## Content

|                  |    |
|------------------|----|
| SMART CSR .....  | 4  |
| SMART SSR .....  | 5  |
| SMART DSK .....  | 6  |
| SMART STK .....  | 7  |
| SMART CIV1 ..... | 8  |
| SMART LIFO ..... | 9  |
| SMART AOI .....  | 10 |

# SMART CSR



## Loader single magazine

### STANDARD FEATURES

- Electrical expeller for automatic PCB insertion in line
- Selectable pitch
- Easy width adjustment
- Start, reset push-button and alarm light
- Airless

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–450 mm    |
| PCB width              | 85–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Magazine handling

|                          |                   |
|--------------------------|-------------------|
| Buffer capacity          | 1 magazine        |
| Maximum load             | 30 kg             |
| PCB step height          | 10, 20, 30, 40 mm |
| Max magazine dimensions  | 460×400×563 mm    |
| Max nr. PCB per magazine | 50                |

### PCB handling

|                             |  |
|-----------------------------|--|
| PCB transport system        | -  |
| Width adjustment            | -  |
| Length of conveyor sections | -  |
| Transport height            | SMEMA 950±25 mm                              |
| PCB flow direction          | SMEMA left to right<br>reverse flow optional |
| Cycle time                  | < 9 seconds                                  |
| Air pressure                | -  |

### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                        |                              |
|------------------------|------------------------------|
| Height (with magazine) | 1065 mm (1550 mm)            |
| Length (with magazine) | 990 mm (1090 mm)             |
| Width                  | 660 mm                       |
| Weight                 | 50/98 kg                     |
| Structure              | Self-standing steel bodywork |
| Transparent material   | Polycarbonate                |

# SMART SSR



## Unloader single magazine

### STANDARD FEATURES

- Electrical pusher for automatic PCB insertion into magazine
- Selectable pitch
- Easy width adjustment
- Start, reset push-button and alarm light
- Airless

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–450 mm    |
| PCB width              | 85–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Magazine handling

|                          |                   |
|--------------------------|-------------------|
| Buffer capacity          | 1 magazine        |
| Maximum load             | 30 kg             |
| PCB step height          | 10, 20, 30, 40 mm |
| Max magazine dimensions  | 460×400×563 mm    |
| Max nr. PCB per magazine | 50                |

### PCB handling

|                             |  |
|-----------------------------|--|
| PCB transport system        | Antistatic dissipative flat belt             |
| Width adjustment            | Manual                                       |
| Length of conveyor sections | 600 mm                                       |
| Transport height            | SMEMA 950±25 mm                              |
| PCB flow direction          | SMEMA left to right<br>reverse flow optional |
| Cycle time                  | < 9 seconds                                  |
| Air pressure                | -  |

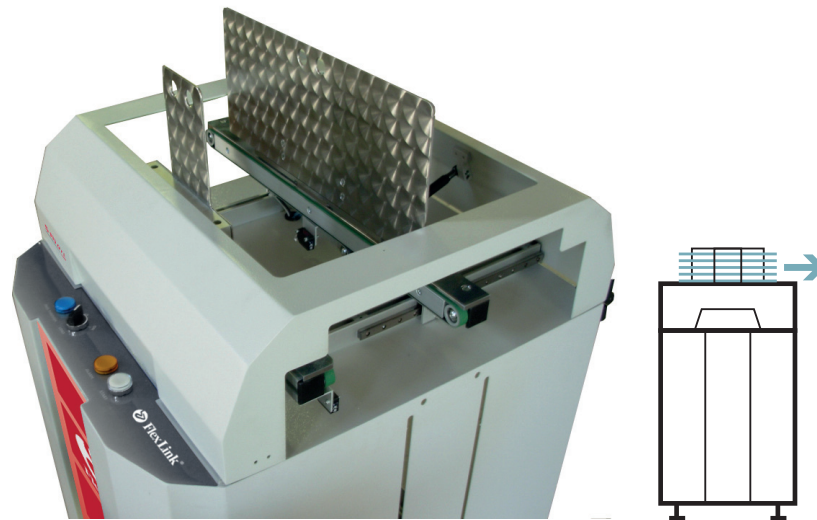
### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                        |                              |
|------------------------|------------------------------|
| Height (with magazine) | 1065 mm (1550 mm)            |
| Length (with magazine) | 990mm (1090 mm)              |
| Width                  | 660 mm                       |
| Weight                 | 50/98 kg                     |
| Structure              | Self-standing steel bodywork |
| Transparent material   | Polycarbonate                |

# SMART DSK



## PCB Destacker

### STANDARD FEATURES

- Destacking blade system
- Sensorized PCB presence
- Manual width adjusting system
- Pass-through

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–450 mm    |
| PCB width              | 85–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Stack handling

|                      |        |
|----------------------|--------|
| Max height PCB stack | 200 mm |
| Max weight PCB stack | 15 kg  |

### PCB handling

|                             |   |
|-----------------------------|---|
| PCB transport system        | Antistatic dissipative flat belt          |
| Width adjustment            | Manual                                    |
| Length of conveyor sections | 600 mm                                    |
| Transport height            | SMEMA 950±25 mm                           |
| PCB flow direction          | SMEMA left to right reverse flow optional |
| Cycle time                  | < 9 seconds                               |
| Air pressure                | 0,6 MPa                                   |

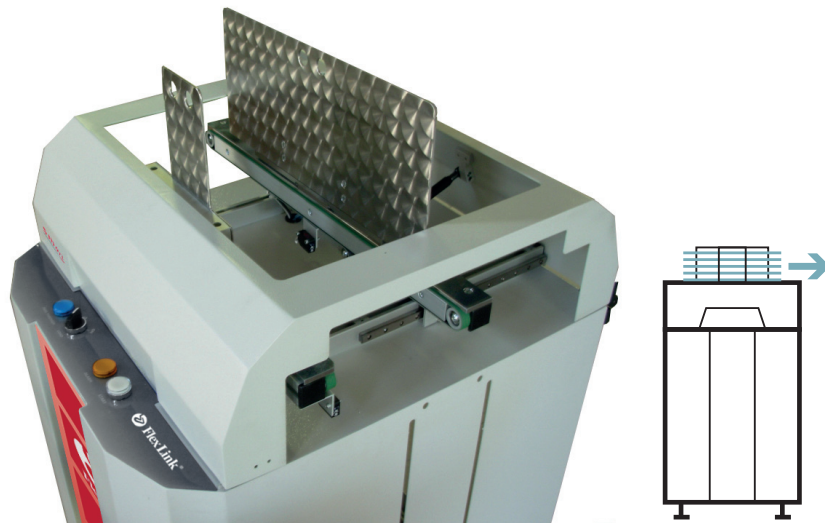
### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                        |                              |
|------------------------|------------------------------|
| Height (with magazine) | 1160 mm                      |
| Length (with magazine) | 600 mm                       |
| Width                  | 660 mm                       |
| Weight                 | 50/98 kg                     |
| Structure              | Self-standing steel bodywork |
| Transparent material   | Polycarbonate                |

# SMART STK



## PCB Stacker

### STANDARD FEATURES

- Adjustable PCB stacking system
- Short PCB cycle time
- Sensorized PCB presence
- Pass-through

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–400 mm    |
| PCB width              | 80–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Stack handling

|                      |        |
|----------------------|--------|
| Max height PCB stack | 200 mm |
| Max weight PCB stack | 15 kg  |

### PCB handling

|                             |   |
|-----------------------------|---|
| PCB transport system        | Antistatic dissipative flat belt          |
| Width adjustment            | Manual                                    |
| Length of conveyor sections | 600 mm                                    |
| Transport height            | SMEMA 950±25 mm                           |
| PCB flow direction          | SMEMA left to right reverse flow optional |
| Cycle time                  | < 9 seconds                               |
| Air pressure                | 0,6 MPa                                   |

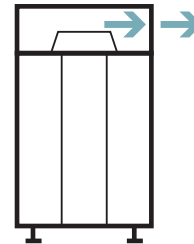
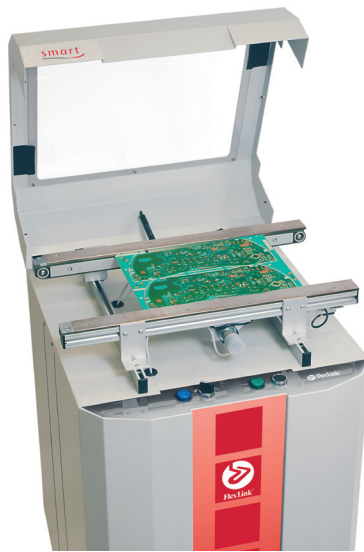
### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                        |                              |
|------------------------|------------------------------|
| Height (with magazine) | 1160 mm                      |
| Length (with magazine) | 600 mm                       |
| Width                  | 660 mm                       |
| Weight                 | 50/98 kg                     |
| Structure              | Self-standing steel bodywork |
| Transparent material   | Polycarbonate                |

# SMART CIV1



## Conveyor

### STANDARD FEATURES

- Selectable inspection/pass-through
- Visual inspection on/off
- Easy width adjustment
- PCB releasing button
- Sensorized PCB presence
- Oven infeed/outfeed (optional)

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–450 mm    |
| PCB width              | 85–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### PCB handling

|                             |   |
|-----------------------------|---|
| PCB transport system        | Antistatic dissipative flat belt          |
| Width adjustment            | Manual                                    |
| Length of conveyor sections | 600 mm                                    |
| Transport height            | SMEMA 950±25 mm                           |
| PCB flow direction          | SMEMA left to right reverse flow optional |
| Cycle time                  | < 9 seconds                               |
| Air pressure                | -   |

### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                      |                              |
|----------------------|------------------------------|
| Height               | 1065 mm                      |
| Length               | 600 mm                       |
| Width                | 660 mm                       |
| Weight               | 50/98 kg                     |
| Structure            | Self-standing steel bodywork |
| Transparent material | Polycarbonate                |



# SMART LIFO



## Buffer LIFO

### STANDARD FEATURES

- Mode selector: Loader/LIFO/unloader
- Electrical pusher for automatic PCB insertion into magazine
- Electrical expeller for automatic PCB insertion in line
- Selectable pitch
- Easy width adjustment
- Start, reset push-button and alarm light

### PCB dimensions

|                        |               |
|------------------------|---------------|
| PCB length             | 100–450 mm    |
| PCB width              | 85–330 mm     |
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Magazine handling

|                          |                   |
|--------------------------|-------------------|
| Buffer capacity          | 1 magazine        |
| Maximum load             | 30 kg             |
| PCB step height          | 10, 20, 30, 40 mm |
| Max magazine dimensions  | 460×400×563 mm    |
| Max no. PCB per magazine | 50                |

### PCB handling

|                             |  |
|-----------------------------|--|
| PCB transport system        | Antistatic flat belt or push                 |
| Width adjustment            | Manual                                       |
| Length of conveyor sections | 600 mm                                       |
| Transport height            | SMEMA 950±25 mm                              |
| PCB flow direction          | SMEMA left to right<br>reverse flow optional |
| Cycle time                  | < 9 seconds                                  |
| Air pressure                | 0,6 MPa                                      |

### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                        |                              |
|------------------------|------------------------------|
| Height (with magazine) | 1065 mm (1550 mm)            |
| Length (with magazine) | 990mm (1090 mm)              |
| Width                  | 660 mm                       |
| Weight                 | 50/98 kg                     |
| Structure              | Self-standing steel bodywork |
| Transparent material   | Polycarbonate                |

# SMART AOI



## Test server

### STANDARD FEATURES

- Electrical pusher for PCB insertion into magazine
- Electrical expeller for automatic PCB insertion in line
- Extended SMEMA interface
- Good/bad sorting

### PCB Dimensions

|                        |               |
|------------------------|---------------|
| Thickness              | 0,8 to 2,6 mm |
| Above board max height | 40 mm         |
| Below board max height | 20 mm         |
| Transport edge width   | SMEMA 3 mm    |

### Magazine handling

|                          |                        |
|--------------------------|------------------------|
| Buffer capacity          | 1-2 magazines          |
| Maximum load             | 30 kg                  |
| PCB step height          | 10, 20, 30, 40 mm      |
| Max magazine dimensions  | 460x400x563 mm (LxWxH) |
| Max nr. PCB per magazine | 50                     |

### PCB handling

|                             |  |
|-----------------------------|--|
| PCB transport system        | Antistatic flat belt                         |
| Width adjustment            | Manual                                       |
| Length of conveyor sections | 600 mm                                       |
| Transport height            | SMEMA 950±25 mm                              |
| PCB flow direction          | SMEMA left to right<br>reverse flow optional |
| Cycle time                  | < 9 seconds                                  |

### Electrical

|                |   |
|----------------|---|
| Control type   | PLC   |
| Interface type | SMEMA (other types optional)                                  |
| HMI            | Control panel with push-buttons, switches and light indicator |
| Voltage        | 230 V single phase, 50 Hz                                     |
| Max power      | 165 W   |

### Dimensions

|                      |                              |
|----------------------|------------------------------|
| Width                | 660 mm                       |
| Weight               | 50/98 kg                     |
| Structure            | Self-standing steel bodywork |
| Transparent material | Polycarbonate                |

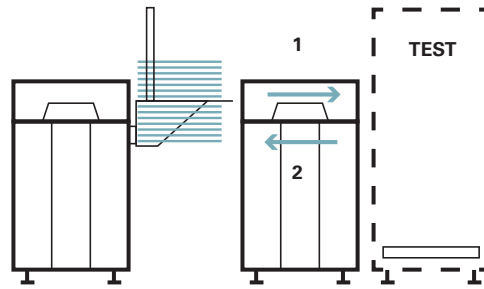
### Detailed features

|                        | AOI            | AOIL           | AOIS           | AOISPT         |
|------------------------|----------------|----------------|----------------|----------------|
| PCB length mm          | 100–450        | 100–450        | 100–450        | 100–450        |
| PCB width mm           | 85–330         | 88–330         | 88–330         | 85–330         |
| Height (with magazine) | 1065 (1550) mm | 1065 (1550) mm | 1065 (1550) mm | 1065 (1550) mm |
| Length (with magazine) | 1690 mm        | 2180 mm        | 2180 mm        | 1690 mm        |
| Air pressure           | -              | 0,6 MPa        | 0,6 MPa        | -              |

# SMART AOI

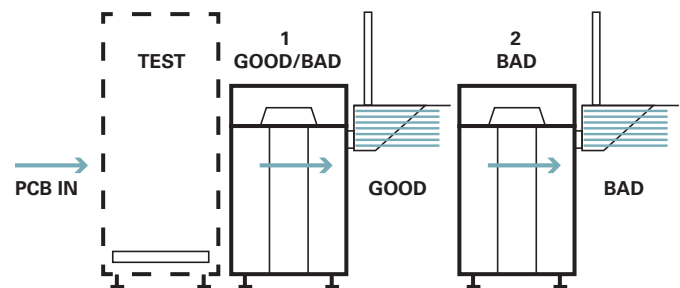
## Test AOI server (stand alone)

Automatic PCB loading into AOI system with post – test and automatic unloading in the original magazine slot.



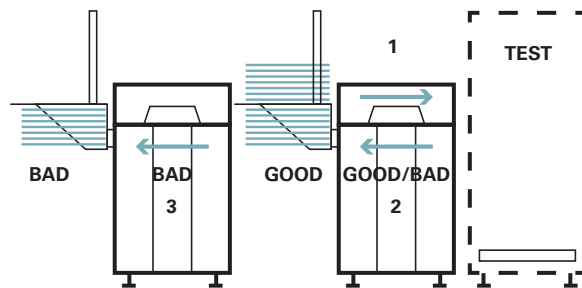
## Test sorter (end of line)

Automatic PCB sorting according to the AOI testing results with selective unloading of PCBs into good or bad magazine.



## Test sorter stand alone (pass-back)

Automatic loading of each PCB on the AOI, automatic sorting of PCBs according to the AOI testing result and unloading of PCBs in different magazines (good/bad).



## Test sorter stand alone (pass-through)

Automatic PCB loading into AOI system with automatic sorting of PCBs according to the AOI testing results and selective unloading or feeding.

