Board Handling Equipment

AS Technologies GmbH

01.09.2019

AS Technologies GmbH Bitzestr. 13 72336 Balingen

www.astechnologies.de

Ansprechpartner: Peter Spieß

Telefon: +49 7433 513 Telefax: +49 7433 8107 Mobil: +49 1725808580

Product Contents

| Managina Loador and Unloador | Multi Magazine Loader | 2 |
|----------------------------------|------------------------------------|----|
| Magazine Loader and Unloader | Multi Magazine Unloader | 4 |
| | Single Magazine Loader | 6 |
| | Single Magazine Unloader | 8 |
| Conveyor | PCB Conveyor 500mm | 10 |
| <u></u> | PCB Conveyor 1000mm | 12 |
| NG/OK Unloader | PCB NG/OK Unloader | 14 |
| Bare Board Loader and Unloader | PCB Destacker | 16 |
| | PCB Push-up Stacker | 18 |
| | Vacuum Bare Board Loader | 20 |
| Turn Conveyor | PCB Turn Conveyor L-type | 22 |
| <u>Inverter</u> | PCB Inverter | 24 |
| Buffer | Multifunction PCB Buffer | 26 |
| <u> </u> | Single Magazine Buffer | 28 |
| Traverser | PCB Traverser | 30 |
| Reject Conveyor | PCB Reject Conveyor | 32 |
| <u>Reject Conveyor</u> | AOI Rework Conveyor | 34 |
| Gate Conveyor | Telescopic Gate Conveyor | 36 |
| <u></u> | Lowering Gate Conveyor | 38 |
| | Manual Lift Gate Conveyor | 40 |
| Wave Solder Conveyor | Wave Solder Infeed Conveyor | 42 |
| | Wave Solder Outfeed Conveyor | 44 |
| | Flat Belt Conveyor | 46 |
| Adjustable Loader and Unloader | Adjustable Multi Magazine Loader | 47 |
| rajastanio Boudel dilu Gilloddel | Adjustable Multi Magazine Unloader | 49 |

Multi Magazine Loader



Application

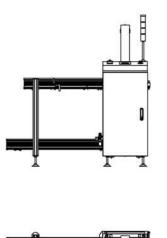
The **Multi Magazine Loader** is used at the starting of the line for loading of PCB's to the production line. The unit loads the production line automatically by pushing PCB's out of a magazine onto the conveyor of the downstream machine.

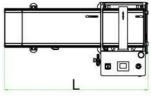
- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.

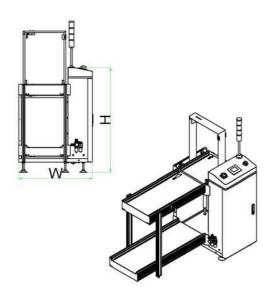
Board Handling Equipment

| Model | ML-250A-CT | ML-330A-CT | ML-390A-CT | ML-460A-CT |
|--------------------|--|------------------|--------------------|------------------|
| Size | M | L | LL | XL |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Air Pressure | | 4 - 6 k | gf/cm ² | |
| Fixed Rail | | Fre | ont | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| Transfer Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1365x765x1200mm | 1650x850x1200mm | 1745x910x1200mm | 1745x980x1200mm |
| Machine Weight | 220kg | 240kg | 260kg | 270kg |

^{*} Other options available on request.







Multi Magazine Unloader



Application

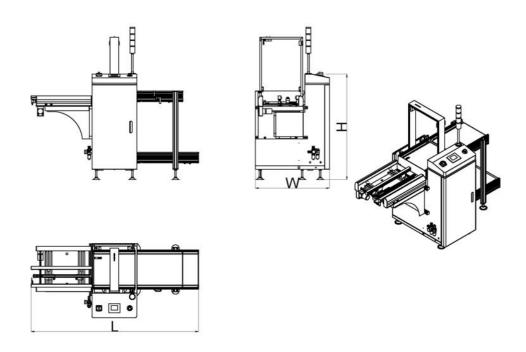
The **Multi Magazine Unloader** is used at the end of the line for unloading of PCB's from the production line. An arriving PCB is taken up by the attached conveyor and then pushed into the magazine by the pusher. The magazine indexes to the next position and is ready for the following unloading cycle.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- □ Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.
- 4 Board Handling Equipment

Board Handling Equipment

| Model | MU-250A-CT | MU-330A-CT | MU-390A-CT | MU-460A-CT |
|--------------------|--|------------------|--------------------|------------------|
| Size | M | L | LL | XL |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Air Pressure | | 4 - 6 k | gf/cm ² | |
| Fixed Rail | Front | | | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| Transfer Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1685x745x1200mm | 1920x820x1200mm | 2165x880x1200mm | 2165x950x1200mm |
| Machine Weight | 240kg | 270kg | 290kg | 310kg |

^{*} Other options available on request.



Single Magazine Loader



Application

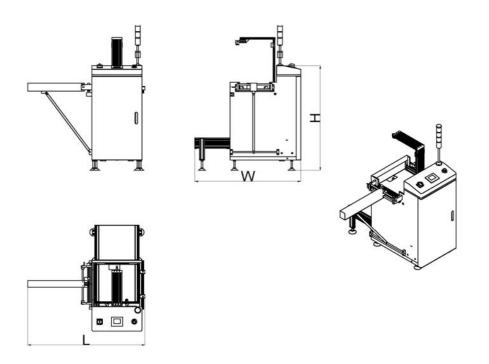
The **Single Magazine Loader** is used at the starting of the line for loading of PCB's to the production line. The unit loads the production line automatically by pushing PCB's out of a magazine onto the conveyor of the down-stream machine.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Tower light display for machine status.
- □ 1 magazine loading capability, discharge magazine from the rear of machine.
- SMEMA interface.
- CE certified.

Board Handling Equipment

| Model | ML-250A-ST | ML-330A-ST | ML-390A-ST | ML-460A-ST |
|--------------------|--|------------------|--------------------|------------------|
| Size | M | L | LL | XL |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Air Pressure | | 4 - 6 k | gf/cm ² | |
| Fixed Rail | | Front | | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| Transfer Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1140x1060x1200mm | 1350x1220x1200mm | 1525x1340x1200mm | 1525x1480x1200mm |
| Machine Weight | 170kg | 190kg | 210kg | 230kg |

^{*} Other options available on request.



Single Magazine Unloader



Application

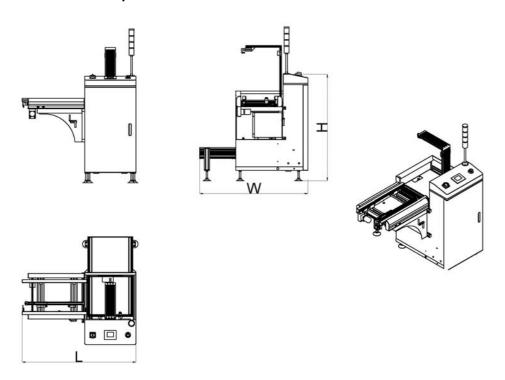
The **Single Magazine Unloader** is used at the end of the line for unloading of PCB's from the production line. An arriving PCB is taken up by the attached conveyor and then pushed into the magazine by the pusher. The magazine indexes to the next position and is ready for the following unloading cycle.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Tower light display for machine status.
- □ 1 magazine loading capability, discharge magazine from the rear of machine.
- SMEMA interface.
- CE certified.

Board Handling Equipment

| Model | MU-250A-ST | MU-330A-ST | MU-390A-ST | MU-460A-ST |
|--------------------|--|------------------|--------------------|------------------|
| Size | M | L | LL | XL |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Air Pressure | | 4 - 6 k | gf/cm ² | |
| Fixed Rail | Front | | | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| PCB Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1120x1060x1200mm | 1280x1220x1200mm | 1460x1340x1200mm | 1460x1480x1200mm |
| Machine Weight | 200kg | 210kg | 230kg | 250kg |

^{*} Other options available on request.



PCB Conveyor 500mm



Application

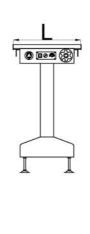
The **PCB Conveyor** is used in the PCB assembly line when frequent visual inspection of PCB's is required, can be used as an Inspection conveyor or a Linking conveyor.

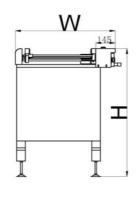
- PLC Control system.
- Metal fabricated frame.
- □ Width adjustment system by hand crank.
- Motorized width adjustment by switch, Automatic width adjustment by touch screen setting, Automatic width adjustment by follow me system available on request.
- □ Variable speed control.
- Inspection and by pass mode selectable.
- Muti-zone concept available on request.
- SMEMA compliant.
- CE certified.

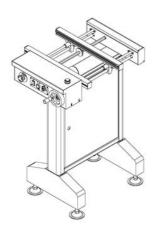
Board Handling Equipment

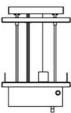
| Model | C-50LD-M | C-50LD-L | C-50LJ-M | C-50J-L |
|--------------------|---|-------------------|--------------------|--------------------|
| Conveyor Length | 500mm | 500mm | 500mm | 500mm |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Fixed Rail | | Fr | ont | |
| PCB Width | 50 - 350mm | 50 - 460mm | 50 - 350mm | 50 - 460mm |
| Transfer Speed | 1 - 12m/min adjustable | | | |
| Transfer Height | 900 ±20mm | | | |
| Transfer Direction | left to right or right to left (option) | | | |
| Working Light | N | N | Υ | Υ |
| Machine Dimension | 500 x 650 x 900mm | 500 x 750 x 900mm | 500 x 650 x 1800mm | 500 x 750 x 1800mm |
| Machine Weight | 50kg | 58kg | 60kg | 68kg |

^{*} Other options available on request.









PCB Conveyor 1000mm



Application

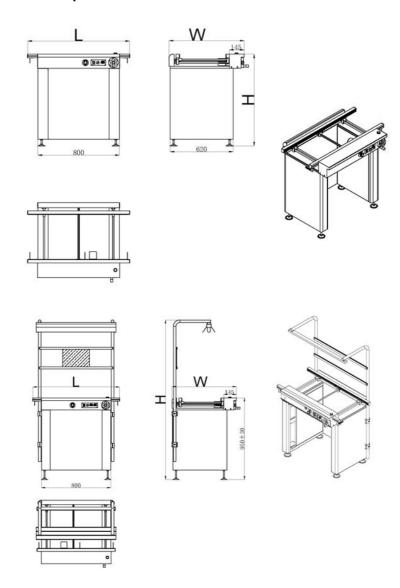
The **PCB Conveyor** is used in the PCB assembly line when frequent visual inspection of PCB's is required, can be used as an Inspection conveyor or a Linking conveyor.

- □ PLC Control system.
- Metal fabricated frame.
- □ Width adjustment system by hand crank.
- Motorized width adjustment by switch, Automatic width adjustment by touch screen setting, Automatic width adjustment by follow me system available on request.
- Variable speed control.
- Inspection and by pass mode selectable.
- Muti-zone concept available on request.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | C-100LD-M | C-100LD-L | C-100LJ-M | C-100J-L |
|--------------------|---|--------------------|---------------------|---------------------|
| Conveyor Length | 1000mm | 1000mm | 1000mm | 1000mm |
| Power | | AC 110/220V : | ±10V, 50/60HZ | |
| Fixed Rail | | Fr | ont | |
| PCB Width | 50 - 350mm | 50 - 460mm | 50 - 350mm | 50 - 460mm |
| Transfer Speed | 1 - 12m/min adjustable | | | |
| Transfer Height | 900 ±20mm | | | |
| Transfer Direction | left to right or right to left (option) | | | |
| Working Light | N | N | Υ | Y |
| Machine Dimension | 1000 x 650 x 900mm | 1000 x 750 x 900mm | 1000 x 650 x 1800mm | 1000 x 750 x 1800mm |
| Machine Weight | 70kg | 78kg | 82kg | 90kg |

^{*} Other options available on request.



PCB NG/OK Unloader



Application

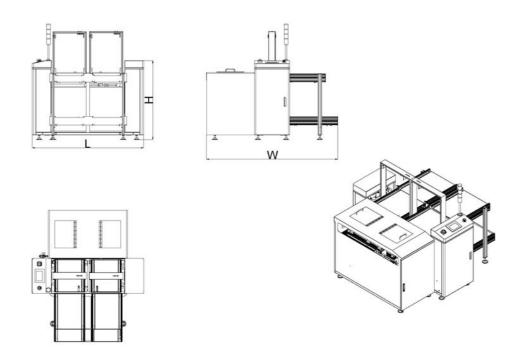
The **PCB NG/OK Unloader** is used for good/bad PCB separation. The PCB's are collected from upstream machine onto a shuttle conveyor and pushed into designated magazine. Shuttle conveyor moves sideways between upstream machine and magazines.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- > Good and bad PCB's can be separated automatically with magazine rack.
- ☐ Multiple pitches selectable, automatic magazine change-over.
- □ Tower light display for machine status.
- 3 magazines for good PCB's, 3 magazines for bad PCB's loading capability.

Board Handling Equipment

| Model | UNG-250A-CT | UNG-330A-CT | UNG-390A-CT | UNG-460A-CT |
|--------------------|--|------------------|--------------------|------------------|
| Size | M | L | LL | XL |
| Power | | AC 110/220V = | ±10V, 50/60HZ | |
| Air Pressure | | 4 - 6 k | gf/cm ² | |
| Fixed Rail | | Fro | ont | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| Transfer Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1680x1460x1200mm | 1890x1630x1200mm | 2160x1760x1200mm | 2160x1900x1200mm |
| Machine Weight | 300kg | 340kg | 390kg | 410kg |

^{*} Other options available on request.



PCB Destacker



Application

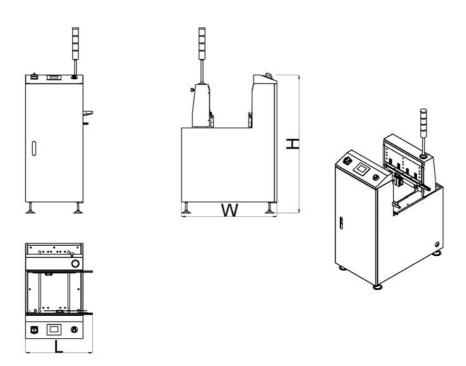
The **PCB Destacker** is used for loading bare board onto the PCB assembly line. A large stack of boards are placed above the ESD belt conveyor, the mechanism separates the bottom PCB from the stacker and lowers it onto the edge belt conveyor.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Large capacity.
- By pass mode selectable without removing PCB stack.
- ☐ Motorized width adjustment by touch screen button.
- ☐ Tower light display for machine status.

Board Handling Equipment

| Model | DU-350A-CT | DU-460A-CT | |
|--------------------|--|---------------------|--|
| Power Supply | AC 110/220V | ±10V, 50/60HZ | |
| Air Supply | 4 - 6 | kgf/cm ² | |
| Fixed Rail | Front | | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm | |
| Transfer Height | 900 ±20mm | | |
| Transfer Direction | left to right or right to left(option) | | |
| Machine Dimension | 600x850x1270mm | 600x950x1270mm | |
| Machine Weight | 190kg | 230kg | |

^{*} Other options available on request.



PCB Push-up Stacker



Application

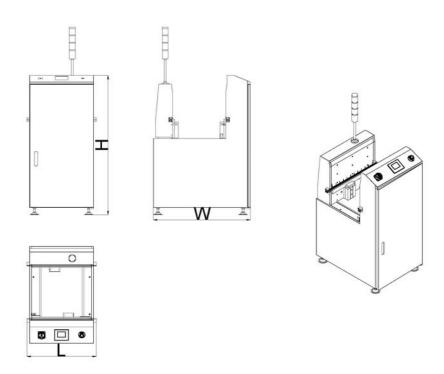
The **Push-up Stacker** is used for restacking un-populated boards at the end of the line. Stacking is done by a pneumatic lifter, which gently raises the PCB's from the belt conveyor and adds the PCB, one by one, to the bottom of the stack..

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Large capacity.
- Motorized width adjustment by touch screen button.
- ☐ Tower light display for machine status.
- SMEMA interface.
- CE certified.

Board Handling Equipment

| Model | SU-350A-CT | SU-460A-CT | |
|--------------------|--|---------------------|--|
| Power Supply | AC 110/220V | ±10V, 50/60HZ | |
| Air Supply | 4 - 6 | kgf/cm ² | |
| Fixed Rail | Front | | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm | |
| Transfer Height | 900 ±20mm | | |
| Transfer Direction | left to right or right to left(option) | | |
| Machine Dimension | 650x810x1270mm | 650x910x1270mm | |
| Machine Weight | 150kg | 180kg | |

^{*} Other options available on request.



Vacuum Bare Board Loader



Application

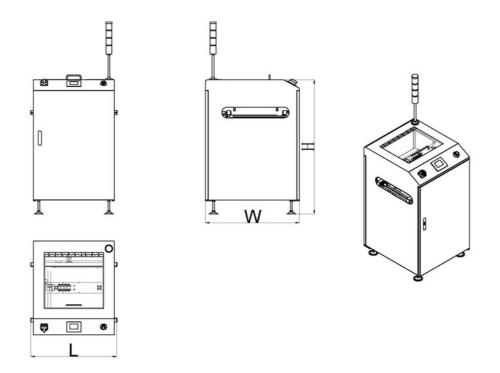
The **Bare Board Loader** is used for automatically loading unpopulated boards at the beginning, or in the middle of a PCB assembly line. A stack of bare boards is placed underneath the belt conveyor. The bare boards are lifted one by one from the stack by vacuum and are gently lowered onto the belt segment ready for the downstream machine.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Large capacity.
- ☐ By pass mode selectable without removing PCB stack.
- ☐ Flexible suction design, suction position adjustable.
- ☐ Width adjustment system by hand crank.
- ☐ Tower light display for machine status.
- SMEMA interface.
- CE certified.

Board Handling Equipment

| Model | SL-350A-CT | SL-460A-CT | |
|--------------------|--|---------------------|--|
| Power Supply | AC 110/220V | ±10V, 50/60HZ | |
| Air Supply | 4 - 6 | kgf/cm ² | |
| Fixed Rail | Front | | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm | |
| Transfer Height | 900 ±20mm | | |
| Transfer Direction | left to right or right to left(option) | | |
| Machine Dimension | 700x735x1250mm | 800x870x1250mm | |
| Machine Weight | 150kg | 190kg | |

^{*} Other options available on request.



PCB Turn Conveyor L-type



Application

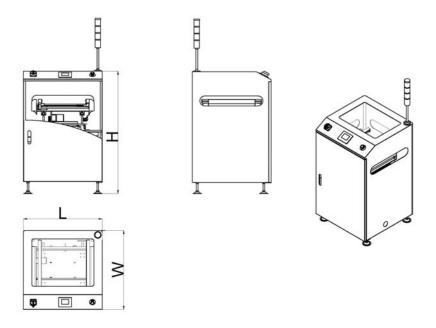
The 90° PCB Turn Conveyor is used for changing the direction of flow of a PCB assembly line. The PCB is transferred onto the built-in belt conveyor which turns either 90° clockwise or counter clockwise.

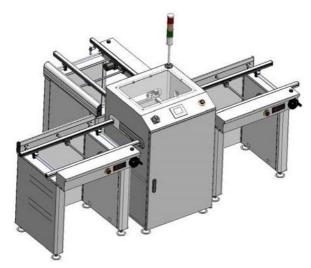
- Controlled by Omron PLC.
- Easy operation by touch screen.
- By pass mode selectable.
- □ Width adjustment system by hand crank.
- Sensor protection more safely.
- It's controlled with motor, rotate smoothly and accurately.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | TC-350A-CT | TC-460A-CT | |
|--------------------|--|---------------------|--|
| Power Supply | AC 110/220V | ±10V, 50/60HZ | |
| Air Supply | 4 - 6 | kgf/cm ² | |
| Fixed Rail | Front | | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm | |
| Transfer Height | 900 ±20mm | | |
| Transfer Direction | left to right or right to left(option) | | |
| Turning Direction | 90° clockwise or counter clockwise(option) | | |
| Machine Dimension | 700x700x1250mm | 800x800x1250mm | |
| Machine Weight | 190kg | 230kg | |

^{*} Other options available on request.





Option: T-type PCB Turn Conveyor

PCB Inverter



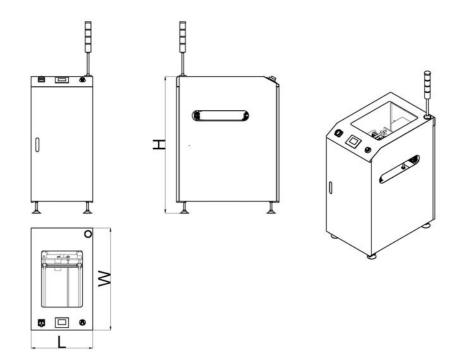
Application

The **PCB Inverter** is used for inverting / flipping the PCB's to process the board at both sides without manual handling.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- □ By pass mode selectable.
- ☐ Width adjustment system by hand crank.
- Sensor protection more safely.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

| Model | IC-350A-CT | IC-460A-CT |
|--------------------|--|------------------|
| Power Supply | AC 110/220V ±10V, 50/60HZ | |
| Air Supply | 4 - 6 kgf/cm ² | |
| Fixed Rail | Front | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm | |
| Transfer Direction | left to right or right to left(option) | |
| Machine Dimension | 500x920x1300mm | 600x1000x1300mm |
| Machine Weight | 150kg | 180kg |

^{*} Other options available on request.



Multifunction PCB Buffer



Application

The **Multifunction PCB Buffer** is used for buffering PCB's in LIFO, FIFO, Pass-through mode between SMT machines to improve working efficiency.

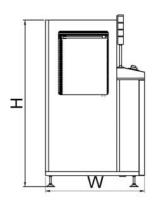
- ☐ Controlled by Omron PLC and servo motor.
- Easy operation by touch screen.
- 3 operative modes: FIFO (first in first out), LIFO (last in first out), pass through. Reject mode is available on request.
- Motorized width adjustment by touch screen button.
- 24 PCB's storage capability.
- Tower light display for machine status.
- ☐ SMEMA compliant.
- CE certified.

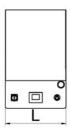
Board Handling Equipment

| Model | BL-350A-CT | BL-460A-CT |
|--------------------|--|------------------|
| Power Supply | AC 110/220V ±10V, 50/60HZ | |
| Air Supply | 4 - 6 kgf/cm ² | |
| Fixed Rail | Front | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm |
| Buffer Capacity | Max. 24 PCB's at pitch 1 | |
| Transfer Height | 900 ±20mm | |
| Transfer Direction | left to right or right to left(option) | |
| Machine Dimension | 500x880x1650mm | 610x995x1650mm |
| Machine Weight | 260kg | 300kg |

^{*} Other options available on request.







Single Magazine Buffer



Application

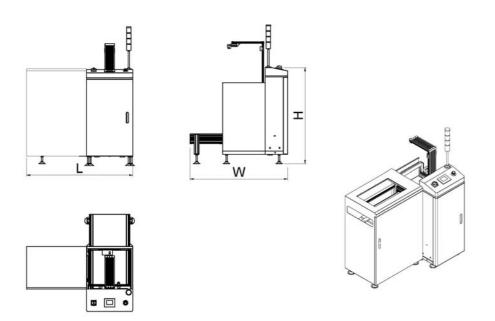
The **Single Magazine buffer** can be used as a mid-line loader or unloader, as a LIFO and FIFO buffer.

- Controlled by Omron PLC and servo motor.
- Easy operation by touch screen.
- 5 operative modes: Loader, Unloader, FIFO (first in first out), LIFO (last in first out), pass through. Reject mode is available on request.
- Multiple pitches selectable.
- □ 1 magazine loading capability, discharge magazine from the rear of machine.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | SBL-250A-ST | SBL-330A-ST | SBL-390A-ST | SBL-460A-ST |
|--------------------|--|------------------|------------------|------------------|
| Size | M | L | LL | XL |
| Power | AC 110/220V ±10V, 50/60HZ | | | |
| Air Pressure | 4 - 6 kgf/cm ² | | | |
| Fixed Rail | Front | | | |
| PCB Size | 350x(50 - 250)mm | 460x(50 - 330)mm | 535x(50 - 390)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ±20mm or Specify | | | |
| Transfer Direction | left to right or right to left(option) | | | |
| Magazine Rack Size | 350x320x563mm | 460x400x563mm | 535x460x570mm | 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch | | | |
| Machine Dimension | 1120x1060x1200mm | 1320x1220x1200mm | 1500x1340x1200mm | 1500x1480x1200mm |
| Machine Weight | 220kg | 240kg | 260kg | 280kg |

^{*} Other options available on request.



PCB Traverser



Application

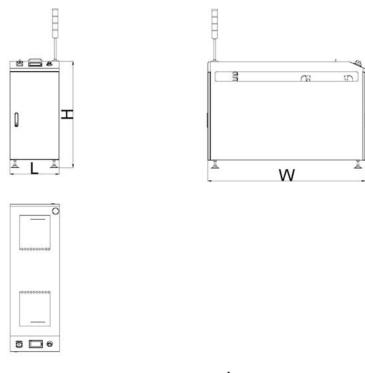
The **PCB Traverser** is used for transporting boards from one line into two lines or vice versa. The orientation of the board is not changed during traversing.

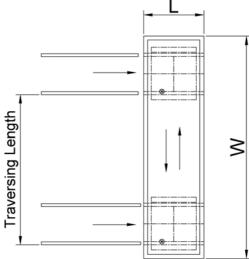
- Controlled by Omron PLC and servo motor.
- Easy operation by touch screen.
- Width adjustment by hand crank.
- By pass mode selectable.
- Traversing length specified.
- Configuration upon request.
- ☐ Front and rear stop positions by touch screen setting.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | SC-350A-CT | SC-460A-CT |
|-------------------|--|------------------------------|
| Power Supply | AC 110/220V ±10V, 50/60HZ | |
| Fixed Rail | Front | |
| PCB Width | 50 - 350mm | 50 - 460mm |
| Traversing Length | specified | |
| Transfer Height | 900 ±20mm | |
| PCB Direction | left to right or right to left(option) | |
| Machine Dimension | 500*W*1100mm | 550*W*1100mm |
| Machine Weight | Depends on traversing distance | Depends on traversing length |

^{*} Other options available on request.





PCB Reject Conveyor



Application

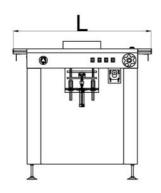
The **PCB** Reject Conveyor is designed for good/bad PCB separation. It can also be used when visual inspection of the PCB is required without interrupting the PCB flow. The PCB is lifted up from the conveyor by metal fingers, enabling the following PCB's to continue downstream.

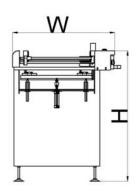
- Controlled by Omron PLC.
- Easy operation by touch screen.
- By pass mode selectable.
- □ Width adjustment system by hand crank.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

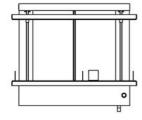
Board Handling Equipment

| Model | C-100RC-M | C-100RC-L |
|--------------------|--|----------------|
| Power Supply | AC 110/220V ±10V, 50/60HZ | |
| Air Supply | 4 - 6 kgf/cm ² | |
| Fixed Rail | Front | |
| PCB Size | 50 - 350mm | 50 - 460mm |
| Transfer Height | 900 ±20mm | |
| Transfer Direction | left to right or right to left(option) | |
| Machine Dimension | 1000x650x900mm | 1000x750x900mm |
| Machine Weight | 85kg | 95kg |

^{*} Other options available on request.







AOI Rework Conveyor



Application

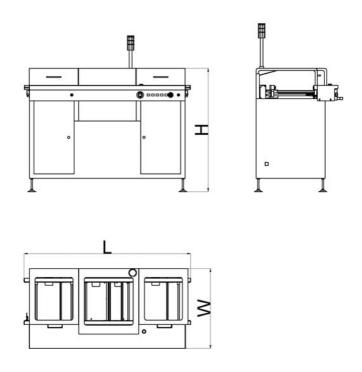
The **AOI Rework Conveyor** is used for good/bad PCB Separation. The center segment pneumatically move up/down allowing separation without interrupting the flow of good PCB's.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- By pass mode selectable.
- > 3 belt segments, providing possibility to buffer one failed PCB and three good PCB's.
- □ Width adjustment system by hand crank.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | C-150LR-3-M | C-150LR-3-L |
|--------------------|--|-----------------|
| Power Supply | AC 110/220V ±10V, 50/60HZ | |
| Air Supply | 4 - 6 kgf/cm ² | |
| Fixed Rail | Front | |
| PCB Size | 50 - 350mm | 50 - 460mm |
| Transfer Height | 900 ±20mm | |
| Transfer Direction | left to right or right to left(option) | |
| Machine Dimension | 1500x730x1100mm | 1500x830x1100mm |
| Machine Weight | 165kg | 180kg |

^{*} Other options available on request.



Telescopic Gate Conveyor



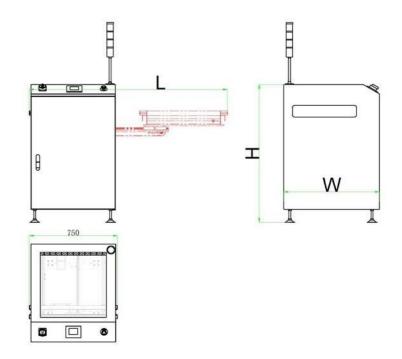
Application

The **Telescopic Gate Conveyor** is used for creating a passage in the PCB assembly line to give the operator access to the rear of the production equipment. The integrated conveyor segment slides across the opening upon request from the downstream machine when a board enters the unit. The conveyor returns to its retracted home position as the board is released, leaving a normally open passage in the line.

- Controlled by Omron PLC.
- Easy operation by touch screen.
- Fully opening gate passage allows operator in/out freely.
- ☐ Through beam sensors for additional safety
- ☐ Motorized width adjustment.
- SMEMA compliant.
- CE certified.

| Model | TG-350A-CT | TG -460A-CT |
|--------------------|-----------------------|-----------------------|
| Power Supply | AC 110/220V | ±10V, 50/60HZ |
| Fixed Rail | F | ront |
| Walkway | Max. 900m | nm adjustable |
| PCB Size | 460x(50 – 350)mm | 535x(50 – 460)mm |
| Transfer Height | 900 : | ±20mm |
| Transfer Direction | left to right or r | ight to left(option) |
| Machine Dimension | (750-1700)x720x1180mm | (750-1700)x820x1180mm |
| Machine Weight | 255kg | 285kg |

^{*} Other options available on request.



Lowering Gate Conveyor



Application

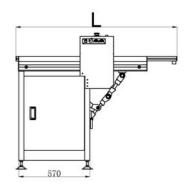
The **Lowering Gate Conveyor** is used when a passage way is required in a production line.

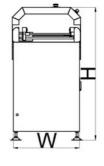
- Controlled by Omron PLC.
- Ergonomic air pressure supported opening and closing.
- Automatically gate lifting down by pushing button.
- Pneumatic locking device installed to enhance safety.
- □ Width adjustment by hand crank.
- SMEMA compliant.
- CE certified.

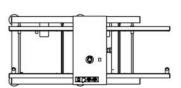
Board Handling Equipment

| Model | GC-350L-CB | GC-460L-CB |
|-------------------|--|---------------------|
| Power Supply | AC 110/220V | ±10V, 50/60HZ |
| Air Supply | 4 - 6 | kgf/cm ² |
| Fixed Rail | Fr | ront |
| Walkway | 500mm | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ± | -20mm |
| PCB Direction | left to right or right to left(option) | |
| Machine Dimension | 1300x530x1200mm | 1300x630x1200mm |
| Machine Weight | 130kg | 150kg |

^{*} Other options available on request.









Manual Lift Gate Conveyor



Application

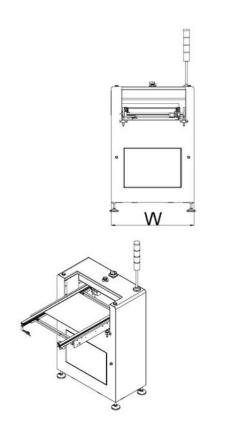
The **Manual Lift Gate Conveyor** is used when a passage way is required in a production line, by manual lifting the conveyor section, access is gained to the rear of the line.

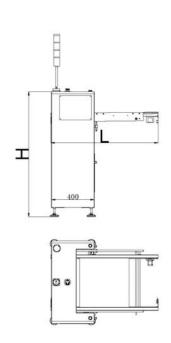
- Controlled by Omron PLC.
- Cylinder assisted lifting motion.
- Pneumatic locking device installed to enhance safety.
- □ Width adjustment by hand crank.
- ☐ Tower light display for machine status.
- SMEMA compliant.
- CE certified.

Board Handling Equipment

| Model | GC-350A-CB | GC-460A-CB |
|-------------------|----------------------|---------------------|
| Power Supply | AC 110/220V | ±10V, 50/60HZ |
| Air Supply | 4 - 6 k | kgf/cm ² |
| Fixed Rail | Fr | ont |
| Walkway | 600mm | |
| PCB Size | 460x(50 - 350)mm | 535x(50 - 460)mm |
| Transfer Height | 900 ± | -20mm |
| PCB Direction | left to right or riç | ght to left(option) |
| Machine Dimension | 1000x670x1200mm | 1000x770x1200mm |
| Machine Weight | 110kg | 130kg |

^{*} Other options available on request.





Wave Solder Infeed Conveyor



Application

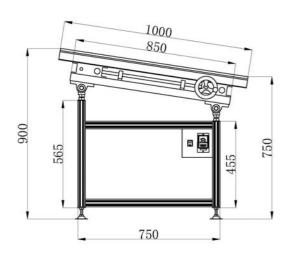
The Wave Solder Infeed Conveyor is used to transfer PCBs/Pallets into the wave soldering machine.

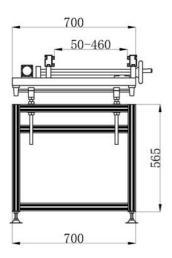
- Robust and stable design.
- □ Variable conveying speed control.
- Smooth and parallel width adjustment.
- Adjustable inclination angle.
- CE certified.

Board Handling Equipment

| Model | C-120LC-L |
|-------------------|--|
| Power Supply | AC 110/220V ±10V, 50/60HZ |
| Fixed Rail | Front |
| PCB Width | 50 - 460mm |
| PCB Direction | left to right or right to left(option) |
| Machine Dimension | 1000x700x900mm |
| Machine Weight | 50kg |

^{*} Other options available on request.





Wave Solder Outfeed Conveyor



Application

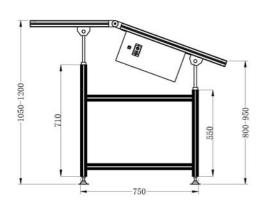
The **Wave Solder Outfeed Conveyor** is used to unload PCBs from the inclined conveyors of wave solder and to then lower the soldered boards to a standard conveyor height.

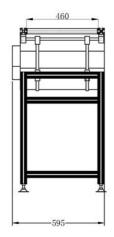
- Angle adjustment at input and output ends.
- ☐ Heat-resistant, ESD belt with non-slip surface.
- ☐ Heavy-duty aluminum construction.
- Optional fan attachment for extra cooling capacity.
- CE certified.

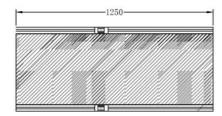
Board Handling Equipment

| Model | C-120LW-L |
|-------------------|--|
| Power Supply | AC 110/220V ±10V, 50/60HZ |
| Fixed Rail | Front |
| PCB Width | 50 - 460mm |
| PCB Direction | left to right or right to left(option) |
| Machine Dimension | 1200x500x(750 – 1200)mm |
| Machine Weight | 60kg |

^{*} Other options available on request.







Flat Belt Conveyor



Application

The **Flat Belt Conveyor** is used for smooth transfer of PCBs when edged conveyors can not be used. It can be made to meet customer's requirements, it is available in any length and width.

Features

- Sensors controlled (optional).
- ☐ Heat-resistant, ESD belt with non-slip surface.
- Customized length and width.

| Power Supply | AC 110/220V ±10V, 50/60HZ |
|-------------------|--|
| PCB Width | customized |
| PCB Direction | left to right or right to left(option) |
| Transfer Height | 900 ±20mm |
| Machine Dimension | customized |

^{*} Other options available on request.

Adjustable Multi Magazine Loader



Application

The Adjustable Multi Magazine Loader is used at the starting of the line for loading of PCB's to the production line.

The unit loads the production line automatically by pushing PCB's out of a magazine onto the conveyor of the downstream machine.

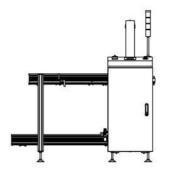
- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.

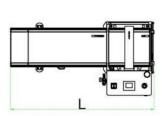
Board Handling Equipment

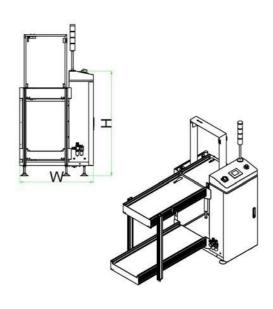
Specifications

| Model | ML-460AC4-CT |
|--------------------|--|
| Power | AC 110/220V ±10V, 50/60HZ |
| Air Pressure | 4 - 6 kgf/cm ² |
| Fixed Rail | Front |
| PCB Size | Min.: 50x50mm, Max.: 535x460mm |
| Transfer Height | 900 ±20mm or Specify |
| PCB Direction | left to right or right to left(option) |
| Magazine Rack Size | 355x320x563mm, 460x400x563mm, 535x460x570mm, 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch |
| Machine Dimension | 1750x1100x1200mm |
| Machine Weight | 290kg |

^{*} Other options available on request.







- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.

Adjustable Multi Magazine Unloader



Application

The **Adjustable Multi Magazine Unloader** is used at the end of the line for unloading of PCB's from the production line. An arriving PCB is taken up by the attached conveyor and then pushed into the magazine by the pusher. The magazine indexes to the next position and is ready for the following unloading cycle.

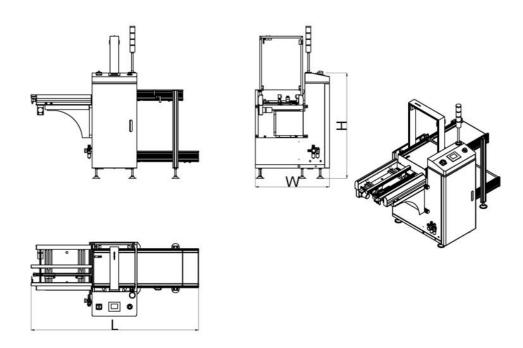
- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.

Board Handling Equipment

Specifications

| Model | MU-460AC4-CT |
|--------------------|--|
| Power | AC 110/220V ±10V, 50/60HZ |
| Air Pressure | 4 - 6 kgf/cm ² |
| Fixed Rail | Front |
| PCB Size | Min.: 50x50mm, Max.: 535x460mm |
| Transfer Height | 900 ±20mm or Specify |
| PCB Direction | left to right or right to left(option) |
| Magazine Rack Size | 355x320x563mm, 460x400x563mm, 535x460x570mm, 535x530x570mm |
| Pitches | 1 - 50, 10mm pitch |
| Machine Dimension | 2500x1100x1150mm |
| Machine Weight | 330kg |

^{*} Other options available on request.



- Controlled by Omron PLC.
- Easy operation by touch screen.
- Multiple pitches selectable.
- Automatic magazine change-over.
- Tower light display for machine status.
- 3 magazines loading capability.
- SMEMA interface.
- CE certified.