



## PCB Boardhandling Catalog

# Vacuum Bare Board Loader



## Application

---

The Bare Board Loader is designed for automatic loading of unpopulated boards at the beginning, or in the middle of a PCB assembly line. 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. The PLC program allows PCB to be sucked and sent out smoothly.

## Features

---

- PLC control system
- FUJI button for easily operation
- By pass mode selectable
- Agility sucker design, position adjustable
- Single vacuum equipment design, for more stable PCB's
- Width width adjustable manually
- SMEMA compatible
- CE certified

## Specifications

---

<b>Model</b>	<b>ACN-460</b>
<b>Power Supply</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 $\pm$ 20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Machine Size</b>	600 x 1100 x 1300mm

# PCB Destacker



## Application

The Destacker is used for loading bare boards onto the PCB assembly line. The destacker can be positioned anywhere in the PCB assembly line. A large stack of boards is placed above the belt conveyor by the operator.

The destacker unique separation cams take one board from the bottom of the stack and lowers it onto the edge belt conveyor.

## Features

- PLC Control System
- FUJI Button or Touch Screen Control for easy operation
- Selectable By-pass mode
- Automatic Width Adjustment
- SMEMA compatible
- CE Certified

## Specifications

Model	DCN-350	DCN-400	DCN-460
Power Supply	AC 110/220V $\pm$ 10V, 50/60HZ		
Air Supply	5Kgf/cm <sup>2</sup>		
PCB Size	50x50 - 500x350mm	50x50 - 600x400mm	50x50 - 600x460mm
Transport Height	900 $\pm$ 20mm		
PCB Direction	left to right or right to left(option)		
Machine Size	630x 840x1250 mm	630x 900x1250 mm	630x 950x1250 mm

# Single Magazine Loader and Unloader



## Application

The PCB Loader is designed for loading of PCBs. The unit loads your production line automatically by pushing PCB's out of a magazine onto the conveyor of the downstream machine.

The PCB Unloader is designed for unloading of PCBs, an arriving PCB is taken up by the attached conveyor and then pushed into the magazine by a specially designed pusher. The magazine indexes to the next position and is ready for the following unloading cycle.

## Features

- PLC Control system
- FUJI button, easily operation.(or touch screen control)
- Four pitches selections( 10,20,30,40mm).
- Direction from left to right or right to left(optional).
- SMEMA compliant.

## Specifications

Model	LMO-250 Loader	LMO-330 Loader	LMO-390 Loader	LMO-460 Loader
Power	AC 110/220V +/-10V, 50/60HZ			
Air Pressure	5kgf/cm <sup>2</sup>			
PCB Size	350 x (50 - 250)mm	460 x (50 - 330)mm	535 x (50 - 390)mm	535 x (50 - 460)mm
Transport Height	900±40mm			
PCB Direction	left to right or right to left(option)			
Magazine Rack Size	350 x 320 x 563mm	460 x 400 x 563mm	535 x 460 x 570mm	535 x 530 x 570mm
Pitches	10,20,30,40mm			
Machine Dimension	1160(660)x1040x1220mm	1370(770)x1210x1220mm	1540(840)x1310x1220mm	1540(840)x1460x1220mm

Model	UMO-250 Unloader	UMO-330 Unloader	UMO-390 Unloader	UMO-460 Unloader
Power	AC 110/220V +/-10V, 50/60HZ			
Air Pressure	5kgf/cm <sup>2</sup>			
PCB Size	350 x (50 - 250)mm	460 x (50 - 330)mm	535 x (50 - 390)mm	535 x (50 - 460)mm
Transport Height	900±40mm			
PCB Direction	left to right or right to left(option)			
Magazine Rack Size	350 x 320 x 563mm	460 x 400 x 563mm	535 x 460 x 570mm	535 x 530 x 570mm
Pitches	10,20,30,40mm			
Machine Dimension	1120x1040x1220mm	1280x1210x1220mm	1450x1310x1220mm	1450x1460x1220mm

# Multi Magazine Loader and Unloader



## Application

The PCB Loader is designed for loading of PCBs. The unit loads your production line automatically by pushing PCB's out of a magazine onto the conveyor of the downstream machine.

The PCB Unloader is designed for unloading of PCBs, an arriving PCB is taken up by the attached conveyor and then pushed into the magazine by a special designed pusher. The magazine indexes to the next position and is ready for the following unloading cycle.

## Features

- PLC Control system.
- FUJI button, easily operation.
- Four pitches selections( 10,20,30,40mm).
- Direction from left to right or right to left(optional).
- SMEMA compliant.
- CE certified.

## Specifications

Model	LMU-250 Loader	LMU-330 Loader	LMU-390 Loader	LMU-460 Loader
Power	AC 110/220V +/-10V, 50/60HZ			
Air Pressure	5kgf/cm <sup>2</sup>			
PCB Size	350 x (50 - 250)mm	460 x (50 - 330)mm	535 x (50 - 390)mm	535 x (50 - 460)mm
Transport Height	900±20mm			
PCB Direction	left to right or right to left(option)			
Magazine Rack Size	350 x 320 x 563mm	460 x 400 x 563mm	535 x 460 x 570mm	535 x 530 x 570mm
Pitches	10,20,30,40mm			
Machine Dimension	1350 x 760 x 1150mm	1600 x 820 x 1150mm	1700 x 880 x 1150mm	1700 x 960 x 1150mm

Model	UMU-250 Unloader	UMU-330 Unloader	UMU-390 Unloader	UMU-460 Unloader
Power	AC 110/220V +/-10V, 50/60HZ			
Air Pressure	5kgf/cm <sup>2</sup>			
PCB Size	350 x (50 - 250)mm	460 x (50 - 330)mm	535 x (50 - 390)mm	535 x (50 - 460)mm
Transport Height	900±20mm			
PCB Direction	left to right or right to left(option)			
Magazine Rack Size	350 x 320 x 563mm	460 x 400 x 563mm	535 x 460 x 570mm	535 x 530 x 570mm
Pitches	10,20,30,40mm			
Machine Dimension	1700 x 760 x 1150mm	1800 x 820 x 1150mm	2000 x 880 x 1150mm	2100 x 960 x 1150

# Linking and Inspection Conveyors



## 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.

## Features

---

- PLC Controlled
- Manual Width adjustment using hand crank
- Inspection and by pass mode selectable
- SMEMA compliant
- CE certified!

## Specifications

---

Model	C500-1-460	C1000-1-460	CL1000-1-460
Power	AC 110/220V $\pm$ 10V, 50/60HZ		
PCB Width	50 - 460mm		
Height	900 $\pm$ 20mm		
Direction	left to right or right to left(option)		
Machine Dimension	500 x 850 x 900mm	1000 x 850 x 900mm	1000 x 850 x 1800mm

# Wave Solder Outfeed Conveyor



## Application

---

The Wave Solder Outfeed Conveyor is used to unload PCBs from the inclined conveyors of wave solder. It also adjust the soldered boards to a standard conveyor height.

The angle of the shorter inlet section can be adjusted to match the angle of the wave soldering system's conveyor rails, while the longer off-load section can be adjusted to a desired angle to suit adjacent equipment.

## Features

---

- 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.

## Specifications

---

<b>Model</b>	<b>CV-460</b>
<b>Power</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>PCB Width</b>	460mm
<b>Direction</b>	left to right or right to left(option)
<b>Machine Dimension</b>	1200 x 460 x (750 – 1200)mm

# Flat Belt Conveyor



## Application

---

The Flat Belt Conveyor is used for smooth transfer of PCB's when edged conveyors can't be used. It can be custom made to meet your requirements, it is available in any length and width.

## Features

---

- No PLC control, or PLC and sensors controlled(optional).
- Heat-resistant, ESD belt with non-slip surface.
- Customized length and width.

## Specifications

---

Model	Flat Belt Conveyor
Power	AC 110/220V $\pm$ 10V, 50/60HZ
PCB Size	customized
Direction	left to right or right to left(option)
Transport Height	900 $\pm$ 20mm



# Lowering Gate Conveyor



## Application

---

This unit is used when a passage way is required in a production line.(semiautomatic operation)

## Features

---

- PLC control system.
- Lowering and lifting of gate conveyor by cylinder.
- Width adjustment by hand crank
- Sensor protection for more safely
- SMEMA compatible

## Specifications

---

<b>Model</b>	<b>CP-460B</b>
<b>Power Supply</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 $\pm$ 20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Machine Size</b>	1300 x 860 x 1250mm

# Telescopic Gate Conveyor



## Application

---

The 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.

## Features

---

- PLC Control system
- FUJI button, easily operation
- Fully opening gate passage allows operator in/out freely
- Width adjustment by hand crank
- Through beam sensors for additional safety
- Electrically driven for smooth extension and retraction
- SMEMA Compatible

## Specifications

---

<b>Model</b>	<b>CP-460A</b>
<b>Power Supply</b>	AC 110/220V ±10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 ±20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Machine Size</b>	1700 x 850 x 1200mm

# PCB Traverser



## Application

---

The 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.

## Features

---

- PLC Control system.
- FUJI button or touch screen control, easily operation.
- By pass mode selectable.
- Traversing length specified.
- SMEMA compatible.
- CE certified.

## Specifications

---

<b>Model</b>	<b>D-460</b>
<b>Power Supply</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 $\pm$ 20mm
<b>PCB Direction</b>	left to right or right to left(option)

# NG/OK Unloader



## Application

This unit is connected to the back of an inspection system like AOI and has horizontal movement and go-through functions. The tested PCB's are being stored depending on their NG/OK status in racks for better protection or storage.

## Features

- PLC Control system, HMI panel , easily operation.
- Good and defective PCBs can be stored separated automatically with magazine rack.
- Upstream inspection system (AOI, AXI, ICT etc.) allows to distinguish good from NG PCBs by signal.
- SMEMA compatible

## Specifications

Model	NGB-250	NGB-330	NGB-390	NGB-460
Power	AC 110/220V $\pm$ 10V, 50/60HZ			
Air Pressure	5kgf/cm <sup>2</sup>			
PCB Size	350 x (50 - 250)mm	460 x (50 - 330)mm	535 x (50 - 390)mm	535 x (120 - 460)mm
Transport Height	900 $\pm$ 20mm			
PCB Direction	left to right or right to left(option)			
Magazine Rack Size	350 x 320 x 563mm	460 x 400 x 563mm	535 x 460 x 570mm	535 x 530 x 570mm
Pitches	10,20,30,40mm			
Machine Dimension	1850x 1500 x 1200mm	2050 x 1650 x 1200mm	2450 x 1750 x 1200mm	2650 x 2000 x 1200mm

# NG/OK Conveyor



## Application

---

The NG/OK Conveyor is used to separate the good from the failing PCB's after AOI inspection. Failing PCB's are stocked at the top, on an accumulating conveyor

## Features

---

- PLC Control system
- Fuji button
- Width adjustment by hand crank
- Sensor protection
- SMEMA compatible

## Specifications

---

<b>Model</b>	<b>CBM-460</b>
<b>Power Supply</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 $\pm$ 20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Machine Size</b>	1500 x 860 x 1250mm

# Multifunction Buffer



## Application

---

This Buffer Loader can be used as a LIFO and FIFO buffer between SMD assembly systems. “Straight-through” may be selected so that the PCB is conveyed, or “Automatic” may be selected so that the unit is used as a PCB buffer loader.

“Automatic” or “Straight-through” may be selected for this machine. When “Automatic” is selected and if the preceding machine is turning out PCB's too fast while the following machine is feeding PCB's too slow, more PCB's will be stored and sent out as long as the following machine requires. When “Straight-through” is selected, this unit will be used as a conveying table.

## Features

---

- Servo motor, PLC Control system, HMI control panel.
- 24pcs PCBs can be stored temporarily
- width adjustable.
- 3 operative modes: FIFO buffer, LIFO buffer, pass through.
- SMEMA compliant.

## Specifications

---

Model	BE-460
Power	AC 110/220V ±10V, 50/60HZ
PCB Width	50 - 460mm(other specification on request)
PCB Length	Max. 460mm(other specification on request)
Buffer capacity	Max. 24 PCBs at pitch 10mm
Transport Height	900±20mm
PCB Direction	left to right or right to left(option)
Pitches	10,20,30mm
Machine Dimension	600x 1100 x 1600mm

# Turn Conveyor



## Application

---

The 90° Turn Conveyor is designed for changing the conveying direction of flow of a PCB production line. It's controlled with air cylinder, rotate smoothly and accurately.

## Features

---

- PLC Control System
- FUJI button or Touch Screen control for Easy operation
- By-pass mode
- Manual Width Adjustment
- Sensor Protection
- SMEMA Compatible

## Specifications

---

<b>Model</b>	<b>CR-460</b>
<b>Power Supply</b>	AC 110/220V ±10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50 - 460mm
<b>Transport Height</b>	900 ±20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Turning Direction</b>	90° clockw ise or counterclockw ise(option)
<b>Machine Size</b>	700 x 850 x 1250mm

# PCB Inverter



## Application

---

The PCB Inverter is used for inverting the PCBs to process the board at both sides without manual handling.

## Features

---

- PLC Control System
- FUJI button or Touch Screen control for Easy Operation
- Selectable By-pass mode
- Manual Width Adjustment
- Sensor protection
- SMEMA Compatible

## Specifications

---

<b>Model</b>	<b>RT-460</b>
<b>Power Supply</b>	AC 110/220V $\pm$ 10V, 50/60HZ
<b>Air Supply</b>	5Kgf/cm <sup>2</sup>
<b>PCB Size</b>	50x50 - 460mm
<b>Transport Height</b>	900 $\pm$ 20mm
<b>PCB Direction</b>	left to right or right to left(option)
<b>Machine Size</b>	500 x 830 x 1250mm



# About KEERS Technologies

KEERS Technologies started in 2009 with a key focus on refurbished Agilent In-Circuit Test Systems, Optical Inspection Systems and X-Ray Inspection Systems.

In our short period of existence we have grown to a solid player in the Used Equipment market and provide our systems to many small and larger enterprise customers around the world.

Besides the used equipment KEERS Technologies has a strong portfolio of quality systems and solutions for the Electronics Manufacturing market in the Benelux countries.

KEERS Technologies offers service and support either direct or trough our business partners located in close proximity to our customers.

