Vanstron
PCB assembly & traceability

www.vanstron.com | SHENZHEN . CHINA

IPC-HERMES-9852

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Vanstron
PCB assembly & traceability

With the core business concept of innovation, reliability & loyalty, Vanstron was created at 2016 in Shenzhen by a group engineers who has over 10 years SMT industry experience.We are the young technical company, with the great passion and business loyalty business contract spirit, have been contributed all of our efforts in design, manufacturing & sales for our leading quality products like Vertical heating ovens, inline laser marker machine & Boards handling machines.

Thanks to our talent engineers in the technology supports, Vanstron is very flexible in the market for the customized automation machine, covering from advanced thermal control technology to industrial 4.0 technology, IPC Hermes 9852 communication. We have been continuing to listen to the end users feedback and do the change in time.

Histroy

Manufacturing operation since from 2016.

The company history is rather short but has achieved excellent results through developing new technologies and expending overseas markets.

2016

Vanstron created and setup the business for thermal, traceability, automation .

2017

Manufacturing operation in a 500 square meters factory plant.

2018

Receive the CE certificates for full range equipment

2019

Released the first generation Vanstron lasers & vertical heating oven

2020

Operating the overseas sales branch office in east of Europe and build the first demo center in Hungary

2021

Vanstron entered the important AVL list of international EMS company

2023

By working with SICK Germany for Hermes protocol communication & move to the 3000 square meters modern plant for lasers, ovens, and boards handling machines

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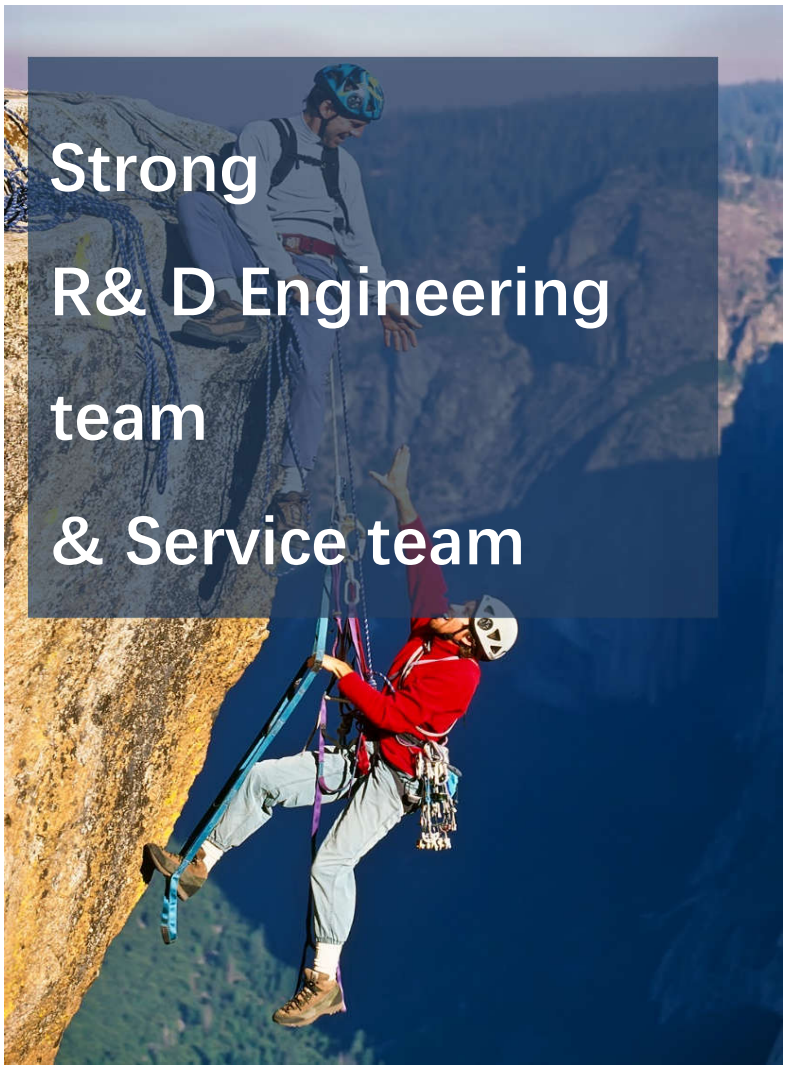

We are a high-tech enterprise with core technology, strong independent research and development, innovation and production capacity. We adhere to the spirit of consistent focus and continuous innovation, and constantly innovate in product strength. We respect knowledge, value talents, encourage competition, and look forward to Cooperation, build a platform for employees to display their talents, and create broad development opportunities and space for employees. Our products are attracting widespread attention with excellent performance and excellent quality, and have been recognized and favored by many well-known companies.

Total employees with 40 working in Vanstron, and the average age is no more than 35 and 30% of them with the Bachelor's degree, and more than 5% of them are with 10 years experience in the SMT industrial.

End users in Global market

With the good quality products and service, Vanstron received the international end users selectable

Normagrup Sense of Technology
Dextra
EAS ELECTRONICS
éolane
Visteon
ROSSI
GPV Accomplish More
UNICOBA
FOXCONN
Celestica
SANMINA
JABIL
METHODE AUTOMOTIVE SOLUTIONS
STE Ltd
makso assemblage
CITROX
Rantelon
VISHAY
flex
enics
Nidec
UNIVERSAL ELECTRONICS
KEMPPI
MULTILASER
NOTE YOUR MANUFACTURING PARTNER
VARIASS
legrand
Salcomp
LACROIX

Vanstron
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Inline

Laser Marker Machine

Special for PCB / FPC / IC Chips / ceramic

Traceability application

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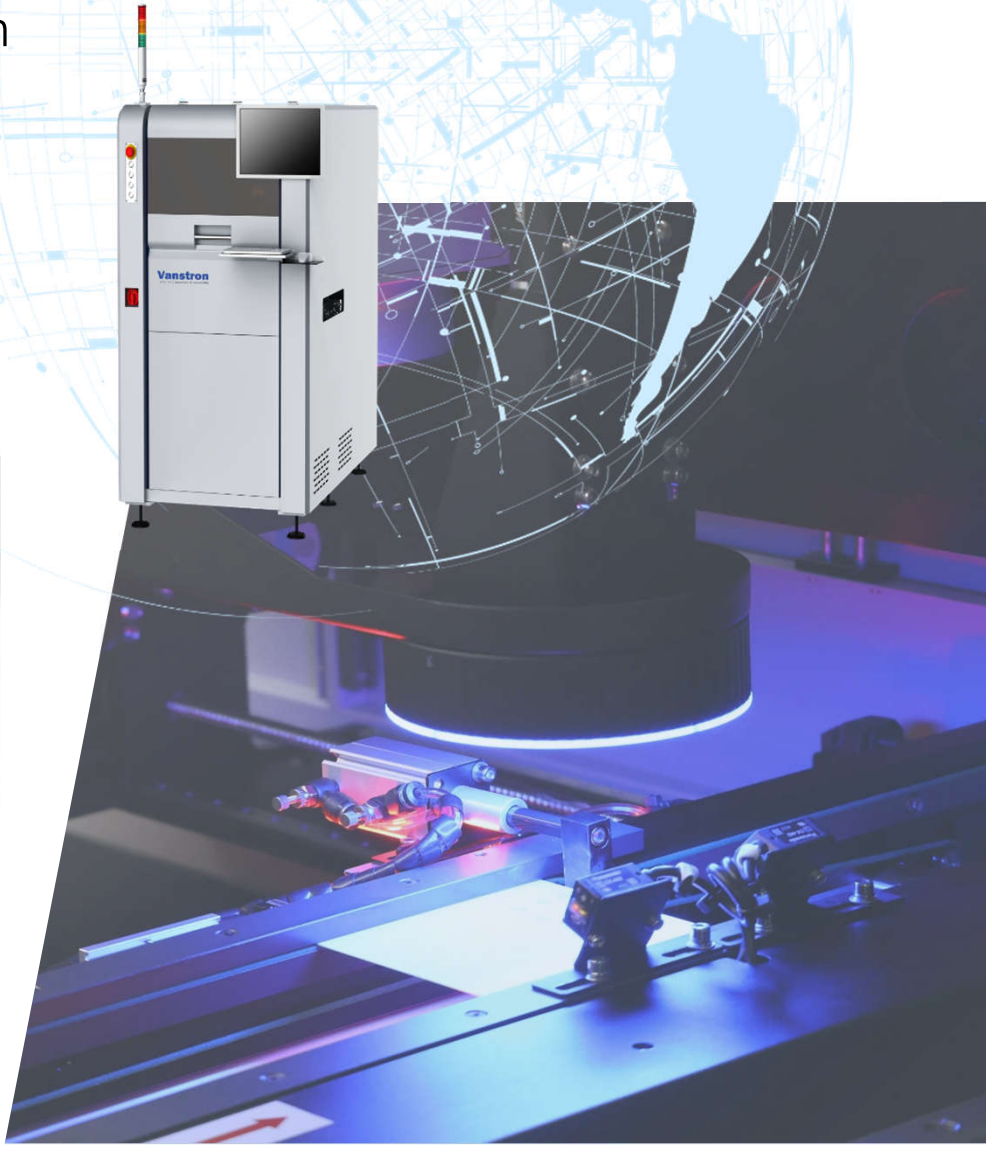


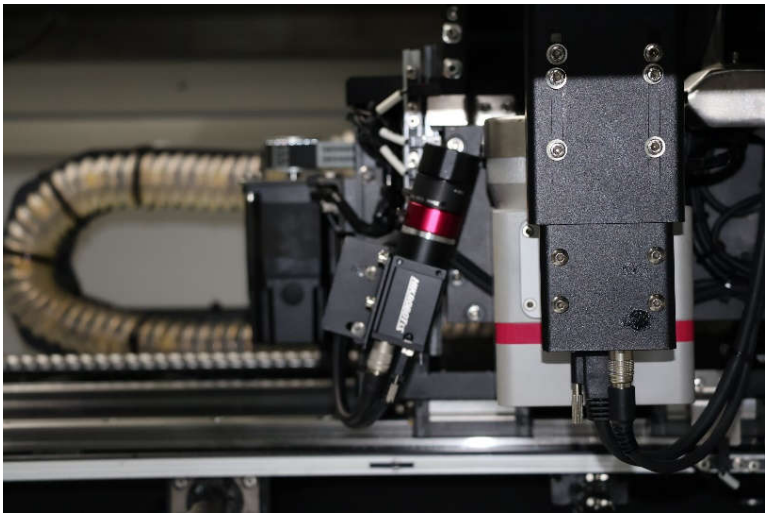
Inline Laser marker machine

Laser Marker machine, is used for direct laser marking of solder resist on PCBs.

The laser assembly is mounted above the transport system on a linear X/Y axis. The PCB to be marked is taken over onto the transport system and transported into the marking position.

The laser now moves to a pre-programmed position and marks the predefined content, such as barcode, data-matrix codes, plain text or logos onto the product.

Marking accuracy:+/-0.01mm



The right laser, whether CO2, UV or fiber laser, can be integrated for every application. A variety of materials such as solder resist, metals, plastics or ceramics can be marked.

For the traceability process, Vanstron offers standardized interfaces to MES systems or implements customer-specific connections.

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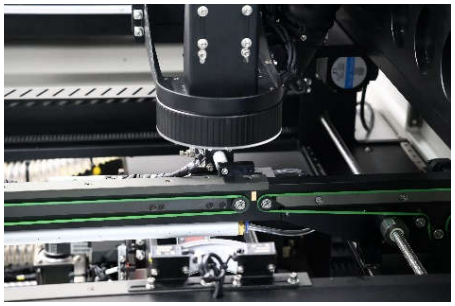
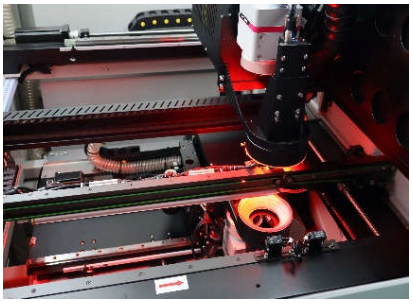
electronic assembly & traceability

Key features:

(Optional : Double laser head)

- Fiducial recognition
- Double side marking (Integrated turning station)
- 2D Barcode quality check.
- Marking positioning CPK>1.67
- Bad mark recognition
- Group marking / Array marking mode
- Anti-second marking
- Code Reading frequency selectable
- Skip marking
- Fume Extraction as the standard
- RGB lighting
- Available to mark on different color PCBs including the green, white, red, black, purple, blue

Model		S-330	S-460	S-600
PCB size(L*W)		50x50mm-330x250mm	50x50mm-510x460mm	50x50mm-600x460mm
Line	Clearance	Upper : 25mm and down 25mm		
	PCB thickness	0.6mm-6mm		
	Transport heights	900+/-50mm (or specify)		
	Flow direction	Left to right, right to left (as per customers request)		
Laser Head	Laser type	CO2,10W / UV, 5W / 10W / Fiber Laser 20W		
	Wave	10.6um		
	Laser level	Class 4		
	Marking max. size	CO2: 70*70mm ; Min. 1.2mm*1.2mm UV: 90*90mm; Min.:0.7mm*0.7mm Fiber: 70*70mm ; Min. 1.2mm*1.2mm		
	Character type	1D Barcode (Code39, Code128, ITF, 2of5, NW7, JAN) 2D Code (QR Code, Micro QR Code, ECC200 DataMatrix, GS1 DataMatrix) DataBar (GS1 DataBar Truncated, Stacked and Limited) Logo Image (Customer Logo, CAD Data, BMP/JPEG/PNG/TIF formats)		
	Graphic data	VEC,DXC,BMP,HPGL,JPEG,AI,EPS		

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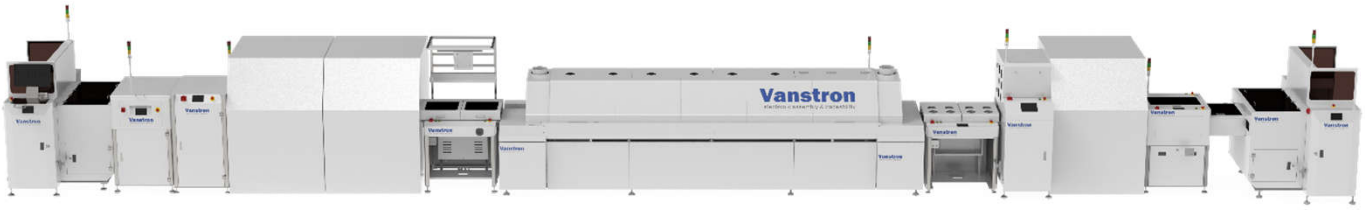
Conveyor system



Multi magazine Loader / Unloader

Single magazine Loader / Unloader

Destacker Loader /Push-up Stacker

Vacuum Loader

Coating line Loader / Unloader

All size magazine loader/ Unloader

Loader / Unloader – combined system

Loader-Destacker– combined system

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Vertical Buffer/ NG OK vertical buffer/ Cooling buffer

Single magazine vertical buffer

Gate telescope conveyor / lowering gate conveyor

Turing conveyor/ NG OK reject conveyor

Flipper conveyor/ shuttle conveyor

Linking conveyor / inspection conveyor

Wave infeed conveyor / outfeed conveyor

UV inspection conveyor

General specifications

Vanstron Automation offers a complete line of PCB handling units which incorporate standard assembly features throughout the product range.

All modules are CE marked.

The PCB product line incorporates modular stand-alone units that are truly independent from other modules in the system. Each module has an on-board control system which allows the unit to function independently. Each module is able to be linked to other modules in the system by utilizing their up line and down line SMEMA communication.

The modules can also be linked to a higher level monitoring or routing system by utilizing a host control system.

All Vanstron products available to use communication like TCP/IP, RS-485/ 232, IPC-Hermes 9852, SMEMA

IPC-HERMES-9852

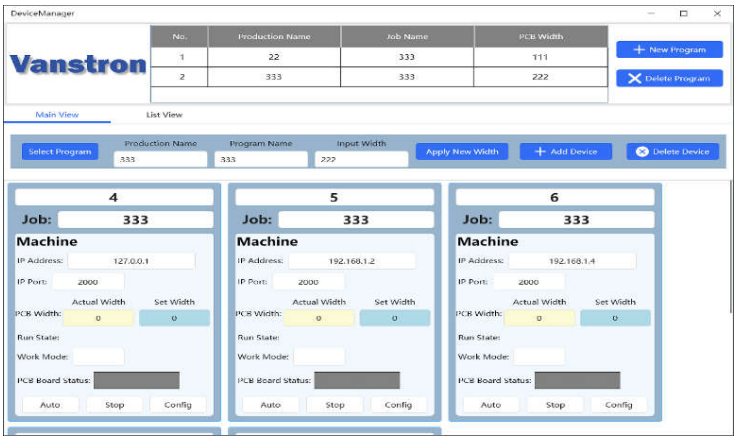
Boards length	50-530mm(or specified)
Boards width	50-460mm(or specified)
Boards thickness	0.6-6mm standard Consult factory for other thickness
Boards weight	Max.3kg (or specified)
Magazine lifting weights	Max.100kg (or specified)
Allowable warpage/sag	Max.1mm
Required edge clearance	3mm on the outer two edges of the boards
Allowable components clearance	30mm below and above conveying surface (or specified)
Belt exposure	Standard width:4mm /Optional :5mm
Boards transfer heights	900mm+/-50mm
Flow direction	Left to right (right to left)
Standard interface	SMEMA 9851 Optional: R232/ R485 / Hermes 9852
Safety	CE, UKCA,RoHS compliant machines
Control	PLC / PCB software
Voltage	220V/ 110V , single phase, 50-60Hz

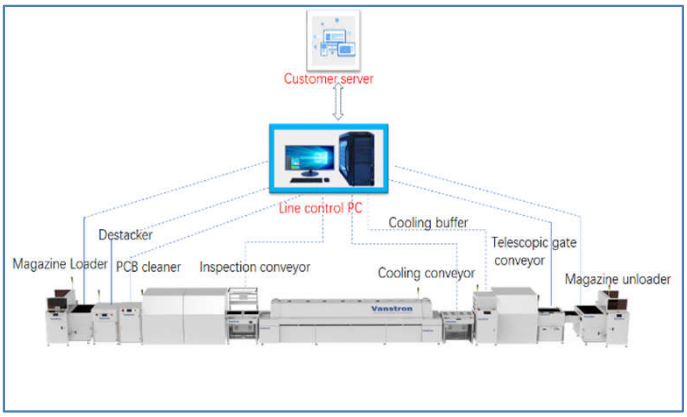
MAGAZINE TYPE	L	W	H	Max. PCB Size		Min. PCB Size	
				L	W	L	W
E-803	355	320	570	330	250	50	50
E-806	460	400	575	440	330	50	65
E-808	535	460	575	530	390	50	60
E-809	535	530	575	530	460	50	100
E-810	620	530	575	610	460	50	100

Smart Conveyor system
With Vanstron CMS software

Vanstron's Smart Conveyor System can build Smart SMT Line. This is a solution that enables an enterprise-wide integrated management and automated production line.

The Vanstron equipment constituting the smart SMT line is connected to the line control PC(A separate computer for central control of the Vanstron facilities) through LAN communication. The customer transfers the PCB information to each Vanstron facility through the line control PC, so that the operator can change the width easily. In addition, it is attracting attention as a next-generation SMT solution that improves the productivity and competitiveness of customers by enabling real-time monitoring of facility status.





1) Automatic width adjustment	When applying the data of the production model, each transport device of Vanstron carries out automatic width control.
2) Real-time status monitoring	Real-time monitoring possible with PC
3) Maintenance Alarm Function (Optional)	If the maintenance period is set to a certain cycle for each equipment, an alarm will ring.
4) 'LogFile' Creation	Production history management and infinite data processing
5) Set access permisiions	The user can edit accessibility to the system

Single magazine loader

The magazine loader is used when a magazine of PCB boards needs to be loaded into a production line, this units is capable of handling one magazine that can be easily be accessed from the front (or rear) of the machine, it is used in low volume applications or bottom side process with a single magazine.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	900mm+/-50mm
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Singe magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
SL-250MS-E	330*250	50*50	1022-1107-1700	355*320*563
SL-330LS-E	440*330		1232-1267-1700	460*400*563
SL-390LS-E	530*390		1392-1440-1700	535*460*570
SL-460LS-E	535*460		1392-1580-1700	535*530*570

Single magazine loader (Light type)

The magazine loader is used when a magazine of PCB boards needs to be loaded into a production line, this units is capable of handling one magazine that can be easily be accessed from the front (or rear) of the machine, it is used in low volume applications or bottom side process with a single magazine.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Singe magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
LTL-460LS-E	535*460	50*50	1240-990-1600	355*320*563
				460*400*563
				535*460*570
				535*530*570

Single magazine loade& Unloader combination

The magazine loader & Unloader combination system is not only used for the function of loading the boards into the SMT line, but also it can work as the unloader to receive the boards into the magazine, very flexible to setup the functions according to the different needs.

It can work with all size magazines in the machine in one machine.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Singe magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
SL-310LS-E	535*460	50*50	1240-990-1600	355*320*563
				460*400*563
				535*460*570
				535*530*570

Multi magazine loader

The magazine loader is used when a magazine of PCB boards needs to be loaded into a production line, this units is capable of handling total 4 units of magazine that can be easily be accessed from the front of the machine, it is used in **high volume applications.**

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Top 1+down 2+ middle 1
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
SL-250M-E	330*250	50*50	1240-740-1670	355*320*563
SL-330L-E	440*330		1555-820-1670	460*400*563
SL-390L-E	530*390		1768-950-1680	535*460*570
SL-460L-E	535*460		1768--1020-1680	535*530*570

Single magazine unloader

The single automatic 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.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Magazine change over time	30s (optional: 15s)
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Singe magazine
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
SUL-250MS-E	330*250	50*50	1012-1107-1700	355*320*563
SUL-330LS-E	440*330		1117-1267-1700	460*400*563
SUL-390LS-E	530*390		1212-1440-1700	535*460*570
SUL-460LS-E	535*460		1212-1580-1700	535*530*570

Single magazine unloader (Light type)

The single automatic 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.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Magazine change over time	30s (optional: 15s)
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Singe magazine
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
LTU-460LS-E	535*460	50*50	1240-990-1600	355*320*563
				460*400*563
				535*460*570
				535*530*570

Multi magazine unloader

The Automatic 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 system is good for the **high volume production requirements.**

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Magazine change over time	30s (optional: 15s)
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Top 1+down 2+ middle 1
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
SUL-250M-E	330*250	50*50	1822-740-1670	355*320*563
SUL-330L-E	440*330		2137-820-1670	460*400*563
SUL-390L-E	530*390		2350-950-1680	535*460*570
SUL-460L-E	535*460		2350-1020-1680	535*530*570

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Multi magazine Loader(Space save type)

The Automatic magazine loader is designed for Loading PCBs into the SMT line.

This system is designed with the “L” type to help save the line length. To save the space, the magazine conveyor part designed to supply magazine racket can be position on either in front or at rear side depending customer’s request.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Top 1+down 2+ middle 1
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
ASL-250M	330*250	50*50	1077-1475-1700	355*320*563
ASL-330L	440*330		1227-1675-1700	460*400*563
ASL-390L	530*390		1447-1906-1720	535*460*570
ASL-460L	535*460		1502-2126-1720	535*530*570

Multi magazine Unloader (Space save type)

The Automatic magazine Unloader is designed for unloading of PCBs from the SMT line.

This system is designed with the “L” type to help save the line length. To save the space, the magazine conveyor part designed to supply magazine racket can be position on either in front or at rear side depending customer’s request.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Top 1+down 2+ middle 1
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
ASUL-250M	330*250	50*50	1077-1475-1700	355*320*563
ASUL-330L	440*330		1132-1675-1700	460*400*563
ASUL-390L	530*390		1241-1906-1720	535*460*570
ASUL-460L	535*460		1241-2126-1720	535*530*570

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Single magazine loader(Space save type)

The magazine loader is used when a magazine of PCB boards needs to be loaded into a production line, this units is capable of handling one magazine that can be easily be accessed from the front of the machine, it is used in low volume applications or bottom side process with a single magazine.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	One magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
LSL-250M	330*250	50*50	1040-760-1670	355*320*563
LSL-330L	440*330		1215-840-1670	460*400*563
LSL-390L	530*390		1392-950-1670	535*460*570
LSL-460L	535*460		1392-1020-1670	535*530*570

Vanstron
PCB assembly & traceability

Single magazine unloader (Space save type)

The Automatic 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.

Standard features

- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	One magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
LSUL-250M	330*250	50*50	1040-760-1670	355*320*563
LSUL-330L	440*330		1145-840-1670	460*400*563
LSUL-390L	530*390		1212-950-1670	535*460*570
LSUL-460L	535*460		1212-1020-1670	535*530*570

Dual magazine loader

This system is designed to load the PCBs into the SMT line, with the capability to handle the dual lane transportation functions, it can be selected by the customer for the different working mode.

The machine is with a special pusher design, and allowed a very impact dimensions and helped the customer to save the line length.

Standard features

- Efficient management dual lane or single lane.
- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	2 PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
DST-250	330*250	50*50	1090-1592-1680	355*320*563
DST-330	440*330		1300-1752-1680	460*400*563
DST-390	530*390		1450-1872-1680	535*460*570
DST-460	535*460		1450-2012-1680	535*530*570

Dual magazine /NG/OK magazine unloader

This system is available to separate the No good boards and OK boards from upstream tester, and introduce the NG boards & OK boards into the corresponding magazines by special shuttle conveyor. This unit can also work as the dual lane unloader for high volume production

Standard features

- Efficient management of Good & No good boards
- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	2 PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
DSUL-250-E	330*250	50*50	1090-1592-1680	355*320*563
DSUL-330-E	440*330		1300-1752-1680	460*400*563
DSUL-390-E	530*390		1450-1872-1680	535*460*570
DSUL-460-E	535*460		1450-2012-1680	535*530*570

Multi magazine loader system – for Coating line

This magazine loader is design special for the varnish line, all the machine will be with the seal cover and be equipped with the extraction for the vapors of the coating line.

Standard features

- Inline air extraction monitoring system
- External air extraction stop alarm system.
- Full seal cover to enhance the safety friendly working environment
- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 80mm, down 40mm
Magazine capacity	Top 1+down 2+ middle 1
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
SL-250M-EC	330*250	50*50	1077-1500-1700	355*320*563
SL-330L-EC	440*330		1227-1700-1700	460*400*563
SL-390L-EC	530*390		1447-1931-1720	535*460*570
SL-460L-EC	535*460		1502-2126-1720	535*530*570

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PCB assembly & traceability

Multi magazine Unloader system for Coating line

This magazine unloader is design special for the coating line, all the machine will be with the seal cover and be equipped with the extraction for the vapors of the coating line.

Standard features

- Inline air extraction monitoring system
- External air extraction stop alarm system.
- Full seal cover to enhance the safety friendly working environment
- Mitsubishi PLC program control
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- SMEMA compatible

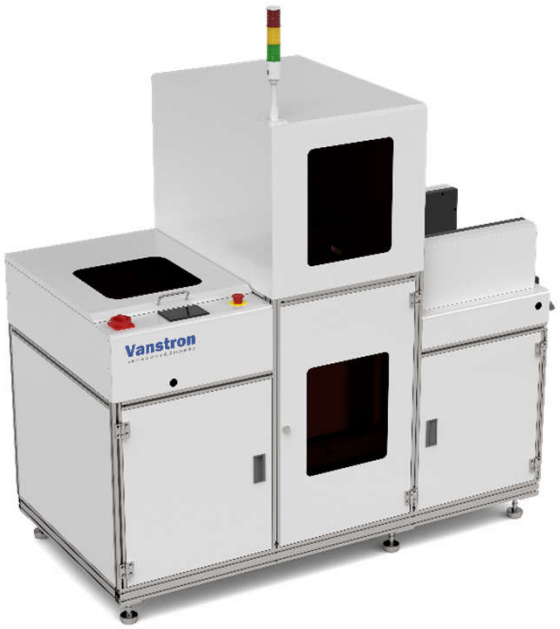
Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 80mm, down 40mm
Magazine capacity	Top 1+down 2+ middle 1
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
SUL-250M-EC	330*250	50*50	1077-1500-1700	355*320*563
SUL-330L-EC	440*330		1132-1700-1700	460*400*563
SUL-390L-EC	530*390		1241-1931-1720	535*460*570
SUL-460L-EC	535*460		1241-2151-1720	535*530*570

Single magazine loader & Destacker combined system

This system is also designed with the capability of handling the bare boards & PCBA into the production line, a independent bare boards destacker is equipped together with the single magazine loader, working in-line.



Standard features

- Mitsubishi PLC program control
- Loader & destacker working mode can be switched exchange.
- Selectable pitch settings
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the front of machine
- Stepper motorized type pusher to enhance working stability
- Pusher position adjustable to Centre for the boards
- Use the friendly touch screen panel
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- Ability to handle the bare boards by destacker.
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Lifting platform Max. weight loading	Above 100kg
Magazine change over time	30s (optional: 15s)
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
Magazine capacity	Single magazine
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(MM)	Machine Dimensions (L*W*H) MM	Magazine size
ALD-250M	330*250	50*50	1640-760-1670	355*320*563
ALD-330L	440*330		1815-840-1670	460*400*563
ALD-390L	530*390		2100-950-1670	535*460*570
ALD-460L	530*460		2100-1020-1670	535*530*570

Bare boards Loader-Destacker

This unit is design for loading the bare boards onto the SMT line. Unique separation cams take one PCB from the bottom of the boards stacked, and softly lowering it on the ESD belts to transfer to downstream machine.

Standard features

- Mitsubishi PLC program control
- By-pass and destacker mode are selectable in the software
- Shortest loading cycle time for PCB
- Thickness 0.6 mm PCB available to be handled
- Uninterrupted PCB charging
- Pre-signal alarm for PCB lower stack heights
- Use the friendly touch screen panel
- Smooth and parallel width adjustment by crank wheel (Optional: motorized).
- Interlock for all door open to improvement highest safety operation
- SMEMA compatible

Technical specification

Transfer heights	900mm+/-50mm
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
PCB working cycle time	3s-7s (adjustable)
Conveyor belts	ESD flat belt
PCB edge support	3.8mm
Allowable components clearance	20mm below and above
PCB thickness available	0.6mm-3.5mm
PCB stack heights	227mm / specify
Air supply	0.4Mpa
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz
Optional	
• Motorized adjustment • Automatic adjustment • Extension for convenient stack loading • Cantilevered input and output conveyor • Ethernet communication with CMS software	

Model	DL-350
Machine dimensions	650-884-1185
Weight	150KG
PCB size	50-560MM (L) 50MM-460MM (W)
PCB thickness	0.6mm-3.5mm

Bare boards UnLoader-Stacker

This unit is design for Unloading the bare boards from the production line.

Standard features

- Mitsubishi PLC program control
- By-pass and Stacker mode are selectable in the software
- Shortest loading cycle time for PCB
- Pre-signal alarm for PCB stack heights
- Use the friendly touch screen panel
- Smooth and parallel width adjustment by crank wheel (Optional: motorized).
- Interlock for all door open to improvement highest safety operation
- SMEMA compatible

Technical specification

Transfer heights	900mm+/-50mm
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
PCB working cycle time	3s-7s (adjustable)
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	20mm below and above
PCB thickness available	0.6mm-3.5mm
PCB stack heights	240mm / specify
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz
Optional	

- Motorized adjustment
- Automatic adjustment
- Extension for convenient stack loading
- Cantilevered input and output conveyor

Model	DLS-350
Machine dimensions	655-850-1295
Weight	150KG
PCB size	50-500MM (L) 50MM-460MM (W)
PCB thickness	0.6mm-3.5mm

Vacuum loader

The vacuum loader is used to load bare boards for SMT production lines. The top PCB is lifted from stack and lowered onto belt segment. The PCB stack is manually loaded into the machine and the individual PCBs are handed over to the downstream system on a transfer conveyor.

Standard features

- Screen touch panel control+ Mitsubishi PLC
- Bare boards loader mode & By-pass mode selectable
- Complete top safety visual window with interlock
- Adjustable vacuum nozzle positions provide a better way to hold the different size PCB
- Automatically positioning the shuttle distance and accurate release the PCB on the conveyor rail.
- Sucking stability improved by using robust vacuum generator system.
- Pre-warning limit alarm for stack empty
- A hand crank is used to adjust rail width
- PCB counter

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
PCB thickness	0.6mm or more min
PCB weights available	1KG
PCB capacity	400PCS (0.6mm thickness board)
PCB Loading time	Around 5s – 10s
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	VK-460
Machine dimension	650-1250-1350mm(L*W*H)
Weight	180KG
PCB size	500mm *460mm

SPI/AOI Vertical Buffer- (25 Slots)

This unit is located after SPI/AOI machine to inspect NG boards in the line. The operator can CALL for NG boards stacked in the rack onto the 2TH layer of the conveyor part to inspect them visually while the good boards are being passed through to the downstream machine without any interruption.

Standard features

- NG / OK boards can be smartly separated in each layer of conveyor.
- FIFO/LIFO, BY-PASS, NG Reject function selectable
- Mitsubishi PLC program control
- Servo motor system to improve the working efficiency
- Selectable pitch settings
- Tower-light display for machines working status.
- Built-in Rack structure
- Enclosed CE construction to improve the safety level
- Conveyor & rack adjustment by motorized
- Separately driven buffer conveyors
- 25 PCBs storage capacity
- Standard infeed conveyor with inspection station
- Use the friendly touch screen panel
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	30mm below and above
Slot distance	22mm
Boards stock capacity	20 PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Optional:

- Outfeed conveyor
- Automatic conveyor width adjustment by software
- Additional PCB boards capacity

	VBN-460XL
Machine dimension	1142mm *1095mm *1650mm (L*W*H)
Weight	650KG
PCB size	500mm *460mm

Vertical Buffer-FIFO/LIFO (20 /25 Slots)

This vertical buffer is designed to have the function as FIFO/ LIFO and by-pass functions. This unit is located between SMT machines to improve the working efficiency by buffering.

Standard features

- Panasonic PLC program control
- Servo motor system to improve the working efficiency
- Selectable pitch settings
- Tower-light display for machines working status.
- Built-in Rack structure
- Enclosed CE construction to improve the safety level
- Conveyor & rack adjustment by motorized
- Separately driven buffer conveyors
- 20 or 25 PCBs storage capacity or specified by the customer
- Use the friendly touch screen panel
- SMEMA compatible
- Threshold signal to protect the PCBs in the upstream oven

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	30mm below and above
Slots distance	30mm (Top 15mm+down 15mm)
Width adjustment method	Motorized type
Boards stock capacity	20 PCS or 25PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Optional:

- infeed conveyor and outfeed conveyor
- Automatic conveyor width adjustment by software
- Cooling fans – cooling options
- NG boards reject functions

	VB-460XL-C
Machine dimension	1183-1095-1670mm (L*W*H)- (dimensions different if customized)
Weight	380KG
PCB size	560mm *460mm

Dual lane Vertical Buffer-FIFO/LIFO (50 Slots)

The **Dual lane** vertical buffer is designed to have the function as FIFO/ LIFO and by-pass functions.

This unit is located between SMT machines to improve the working efficiency by buffering.

Standard features

- Panasonic PLC program control
- Servo motor system to improve the working efficiency
- Selectable pitch settings
- Tower-light display for machines working status.
- Built-in Rack structure
- Enclosed CE construction to improve the safety level
- Conveyor & rack adjustment by motorized
- Separately driven buffer conveyors
- **50 PCBs storage capacity or specified by the customer**
- Use the friendly touch screen panel
- SMEMA compatible
- Threshold signal to protect the PCBs in the upstream oven

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	30mm below and above
Slots distance	30mm (Top 15mm+down 15mm)
Width adjustment method	Motorized type
Boards stock capacity	50PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Optional:

- infeed conveyor and outfeed conveyor
- Automatic conveyor width adjustment by software
- Cooling fans – cooling options
- NG boards reject functions

	VB-460D
Machine dimension	1328-1345-1670mm (L*W*H)- (dimensions different if customized)
Weight	380KG
PCB size	560mm *460mm

Vertical Buffer-FIFO/LIFO (20Slots)-
For high components heights

The vertical buffer is designed to have the function as FIFO/ LIFO and by-pass functions and with the ability to handle the PCB components heights with top 70mm but with the maximum stock capacity 20 PCS as buffering.

This unit is located between SMT machines to improve the working efficiency by buffering.

Standard features

- Panasonic PLC program control
- Servo motor system to improve the working efficiency
- Selectable pitch settings
- Tower-light display for machines working status.
- Built-in Rack structure
- Enclosed CE construction to improve the safety level
- Conveyor & rack adjustment by motorized
- Separately driven buffer conveyors
- **20 PCBs storage capacity or specified by the customer**
- Use the friendly touch screen panel
- SMEMA compatible
- Threshold signal to protect the PCBs in the upstream oven

Optional:
- infeed conveyor and outfeed conveyor
- Automatic conveyor width adjustment by software
- Cooling fans – cooling options
- NG boards reject functions

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	70mm
Slots distance	70mm
Width adjustment method	Motorized type
Boards stock capacity	20PCS
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	VB-700S
Machine dimension	1150-1300-2050mm (L*W*H)- (dimensions different if customized)
Weight	380KG
PCB size	560mm *460mm

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PCB assembly & traceability

Mini Vertical buffer

The Mini buffer consists of a vertical buffer and a 500mm conveyor, and is placed in the line to balance board flow in LIFO buffer mode, act as a line splitter in Loader or Unloader mode, or good/bad board separator in Triggered mode.

Standard features

- Five modes of operation:
  LIFO, Loader, Unloader, Pass through, NG reject
- Modes easily changed through hand control unit
- Tube mounted lights as status indicator
- PLC controlled
- Motorized width adjustment
- SMEMA interface
- Buffer zone capacity: 10PCS of boards
- PLC control + touch screen panel operation
- Conveyor width adjustment: automatic +software input

- Optional:
  1). Heavy boards handling capability.
  2). RS-485 communication protocol

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB buffer quantity	10 PCS
PCB edge support	4mm
Allowable components clearance	Top 20mm + down 15mm
Max. per boards	3kg
Max. combined board weight in buffer	30kg
Belts speed	0-12m/min (adjustable)
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Min. board thickness
VB-460Min	500*460	50*50	550-820-1395mm	0.6mm-6mm

Single magazine buffer NG stocks- 50PCS

The single magazine buffer is designed for loading, unloading , buffering (FIFO,LIFO)of PCBs and By-pass function,and NG boards stock functions total 5 working mode.

Standard features

- Available working mode loader,unloader,buffering (FIFO,LIFO),By-pass
- NG boards stock capability: 50PCS at the NG reject mode
- Mitsubishi PLC program control+ touch screen panel
- Dual function pusher (Driving by the stepper motor)
- Selectable pitch settings from 10mm to 80mm;
- Automatic clamping the magazine by the high quality air cylinder
- Tower-light display for machines working status.
- Flexible platform to suit standard magazines
- Exchangeable magazine from the rear of magazine (single magazine)
- Pusher position adjustable to Centre for the boards
- Magazine infeed and outfeed are automatically driving by motor on the platform.
- Threshold signal to protect the boards in upstream reflow oven.
- SMEMA compatible.

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB buffer quantity	50 PCS
PCB edge support	4mm
Allowable components clearance	30mm below and above
Magazine changeover time	Standard :15s (fastest)
Magazine platform driving	Servo motor
Magazine capacity	Singe magazine
Belts speed	0-12m/min (adjustable)
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase,

Model	Max. PCB(L *W) MM	Min.PCB(L*W)MM	Machine Dimensions (L*W*H) MM	Magazine size
VB-250MS-E	330*250	50*50	1040-760-1670	355*320*563
VB-330LS-E	440*330		1215-840-1670	460*400*563
VB-390LS-E	530*390		1500-950-1670	535*460*570
VB-460LS-E	535*460		1500-1020-1670	535*530*570

Inverter conveyor

This unit is used to inverter flip /PCB's (180 °) for double side process.

Standard features

- Mitsubishi PLC program control
- By-pass mode, inverter mode selectable
- Pneumatic stopper to keep the PCB in position during inverting
- Motorized conveyor width adjustment (optional).
- LED signal tower
- Buzzer
- Suitable for boards with many components on the bottom side
- Closed –loop stepper motor providing the rotating driving power
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
Allowable components clearance	Top 50 mm+ below 30mm
PCB inverter cycle time	Around 5s – 8s
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	TRA-460
Machine dimension	603-1080-1350mm (L*W*H)
Weight	150KG
PCB size	500mm *460mm

Telescope gate conveyor

This unit is used when a passage way is required in a production line. The unit provides a 'normal open' passage in a PCB assembly line. An integrated conveyor segment slides across the opening to deliver PCB to downstream machine.

Standard features

- Mitsubishi PLC program control
- Maximum.600mm passage distance
- Buzzer
- SMEMA compatible
- Fully enclosed design.
- Normal Opened
- Electrically driven for smooth extension and retraction.
- Smooth and parallel width adjustment.(lead screw)

Optional:

- Motorized conveyor width adjustment
- Automatically conveyor width adjustment
- R485 communication

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	Top 50 mm+ below 30mm
Passage distance	600mm
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	TG-460
Machine dimension	800-830-1180mm (L*W*H)
Weight	250KG
PCB size	500mm *460mm

90 degree turning conveyor

This unit is used to transfer PCBs around corners for continued process flow. Available in clock wise or counter clock wise rotation, and by-pass mode. The PCB is accepted and transferred to the end of the rails. The carriage shuttles forward and than turns 90 degrees. The carriage shuttles forward to align with the next process to deliver the PCB. Once transferred, the carriage returns home to request another PCB.

Standard features

- Mitsubishi PLC program control
- By-Pass mode + 90 degree turning conveyor (Available in clock wise or counter clock wise rotation, and by-pass mode
- Motorized conveyor width adjustment
- LED signal tower & Buzzer
- Suitable for boards with many components on the bottom side
- Closed –loop stepper motor providing the rotating driving power
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	Top 50 mm+ below 30mm
PCB inverter cycle time	Around 5s – 8s
Air supply	4-6 bar
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	TRC-460
Machine dimension	840mm *840mm *1250mm (L*W*H)
Weight	150KG
PCB size	500mm *460mm

NG reject conveyor

This unit is used to automatically separate good boards and NG boards while allowing visual inspection for NG PCBs without any interruption on Good Board flow.

Standard features

- Mitsubishi PLC program control
- Touch screen operation panel
- By-pass mode, inspection,NG reject mode selectable
- Conveyor width adjustment by using hand crank.
- Center PCB stop position
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- Total 5 NG PCBs stock capability
- Double plate structure
- SMEMA compatible

Optional:

- Motorized conveyor width adjustment
- Automatically conveyor width adjustment
- R485 communication

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	IPC SMEMA 9851
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	Top 50 mm+ below 30mm
NG PCB position length	300mm
NG PCB stock capacity	5 PCS
Max. PCB weights available	5KG
Safety	CE certificates
Control	PLC
Voltage	350W,220V/ 110V , single phase, 50-60Hz

	RE-460
Machine dimension	1000-890-1460mm (L*W*H)
Weight	150KG
PCB size	500mm *460mm (L*W)

UV inspection conveyor

This unit is placed at the conformal coating process line as a inspection station to check the conformal coating quality by visual inspection. This UV inspection conveyor is with the air exhaust interface and air pressure sensor to monitor the air flow.

Standard features

- Mitsubishi PLC program control
- Touch screen operation panel
- By-pass mode, inspection mode selectable
- Conveyor width adjustment by using hand crank.
- Center PCB stop position
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- Covers which protect the boards against dust
- 2-segment independent conveyor speed control
- UV lights to analyze the coating result over the boards
- Exhaust sensor which forces to use air extraction
- SMEMA compatible
- Inspection interval can be setting by software.

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	Top 80 mm+ down 40mm
UV lights	2 Groups
Inspection interval	Setting by software
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	PTB-460 UV
Machine dimension	1000-1050-1310mm (L*W*H)
Weight	200KG
PCB size	500mm *460mm (L*W)

Inspection & Linking conveyor

Using SMEMA interface, this unit successfully links any SMT machine, this system can work on inspection & linking mode.

Standard features

- Mitsubishi PLC program control
- By-pass mode, inspection mode selectable
- Conveyor width adjustment by using hand crank.
- Center PCB stop position
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- PCB flow direction flows can be customized
- Conveyor width adjustment: crank wheel
- LED light overhead frame (inspection conveyor)
- SMEMA compatible

Optional:

- Inspection interval can be setting by software.
- Motorized conveyor width adjustment
- Cooling fan
- R485 / RS-232 communication follow me system.
- Touch screen panel
- Barcode scanning

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	4mm
PCB thickness	0.5mm-2.5mm
PCB weights per boards	Max. 3kg
Allowable components clearance	top 80mm and below 30mm
Conveyor rail width	Min. 50mm to max.460mm
Inspection interval	Setting by software (optional)
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	PTB-460SE-1000 / 1000IN
Machine dimension	Length (mm) *820mm *930mm (L*W*H) Length is available for 500mm,600mm,800mm,1000mm,1500mm,2000mm
Weight	80KG (depends on different length of conveyor)
PCB size	560mm *460mm (L*W)

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PCB assembly & traceability

Manual assembly conveyor

Using SMEMA interface, this unit successfully links with any SMT / THT machine, this system can work on inspection & linking mode.

Standard features

- Mitsubishi PLC program control
- By-pass mode, inspection mode selectable
- Conveyor width adjustment by using hand crank.
- Center PCB stop position
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- PCB flow direction flows can be customized
- Conveyor width adjustment: crank wheel
- LED light overhead frame (inspection conveyor)
- SMEMA compatible

Optional:

- Inspection interval can be setting by software.
- Motorized conveyor width adjustment
- Cooling fan
- R485 / RS-232 communication follow me system.
- Touch screen panel
- Barcode scanning

Technical specification

Transfer heights	**800+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	Roller Chain
PCB edge support	4mm
PCB thickness	0.5mm-2.5mm
PCB weights per boards	Max. 3kg
Allowable components clearance	top 80mm and below 50mm
Conveyor rail width	Min. 50mm to max.460mm
Inspection interval	Setting by software (optional)
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	ATB-460SE-1000 / 1000IN
Machine dimension	Length (mm) *950mm *950mm (L*W*H) Length is available for 500mm,600mm,800mm,1000mm,1500mm,2000mm
Weight	80KG (depends on different length of conveyor)
PCB size	560mm *460mm (L*W)

Shuttle conveyor

Shuttle Conveyor /Traverser is used to redirect flow of PCBs into different channels in a production line.
It is designed to shuttle PCB's to next process. The conveyor can collect PCB's from two lines to one line/ distribute PCB's from one line to two lines.

Standard features

- Mitsubishi PLC program control
- By-pass mode, shuttle moving mode selectable
- Conveyor width adjustment by using hand crank.
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- PCB flow direction flows can be customized
- Shuttle speed setting by software
- Operation side: Front side
- Fixed rail: Front rail
- Conveyer concept: ESD flat belt
- Cycle time: Depends on traversing distance
- SMEMA compatible

Optional:

- Motorized width adjustment
- R485 communication protocol

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	3mm
Allowable components clearance	30mm below and above
Transfer car number	Standard single car
PCB transfer Mode	2 in 2 out; 1 in 2 out 2 in 1 out
NG Reject function	**Optional**
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	TRS-460
Machine dimension	Length 1500(mm) *950mm *950mm (L*W*H) Shuttle distance Length is available for any customer requirements.
Weight	280KG (depends on the shuttle length)
PCB size	500mm *460mm (L*W)

Infeed conveyor for wave soldering machine

Using SMEMA interface, this unit successfully links any machine, this system is special for connection with the wave soldering machine as the infeed conveyor, the conveyor transfer angle is available to adjusted from 4°to 7°by the hand crank wheel.

Standard features

- Mitsubishi PLC program control
- Continuous queue feeding PCBs into the wave soldering machine.
- Conveyor width adjustment by using hand crank.
- PCB transfer angle is adjustable
- Heavy bottom design to prevent shifting
- Conveyor motor is using with stepper motor
- Conveyor transfer by chain
- PCB flow direction flows can be customized
- SMEMA compatible

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	Chain belt
PCB edge support	5mm
Allowable components clearance	30mm below and above
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	IN-460
Machine dimension	Length (mm) *730mm *930mm (L*W*H) Length is available for 500mm,600mm,800mm,1000mm
Weight	100KG
PCB size	500mm *460mm (L*W)

Unloading conveyor for wave soldering machine

This unit is special for the unloading of PCB from the wave soldering machine.

The transfer heights are adjustable to meet any kind of wave solder in the market.

Standard features

- Mitsubishi PLC program control
- Continuous queue unloading PCBs from the wave soldering machine.
- Conveyor width adjustment by using hand crank.
- PCB transfer angle is adjustable
- Heavy bottom design to prevent shifting
- Conveyor transfer by ESD flat belts
- PCB flow direction flows can be customized
- SMEMA compatible

Optional:

- Cooling fan
- Conveyor length with 2.5m
- Chain conveyor rail

Technical specification

Transfer heights	**900mm+/-50mm**
Transfer direction	Left to right
Operation side	Front of machine
Fixed rail	Front of machine
Interface	SMEMA
Conveyor belts	ESD flat belt
PCB edge support	30mm (or customized)
Allowable components clearance	30mm below and above
Safety	CE certificates
Control	PLC
Voltage	220V/ 110V , single phase, 50-60Hz

	OU-460
Machine dimension	Length (mm) *950mm *1350mm (L*W*H) Length is available for different requirements
Weight	250KG
PCB size	500mm *460mm (L*W)

PowerCleaner X460

The NEW SMT Clean Machine from Vanstron has been specifically designed to remove contamination from bare boards before solder paste, adhesive application and after laser marking.

The design of the machine will ensure full integration into all SMT lines, providing your process with the best contact cleaning system in the world.

SPECIFICATION

Available in different cleaning widths 300 mm- 460 mm– 600mm

Note: The standard SMT machine will process boards from a minimum of 50mm wide and 500mm long.

Customized non-contact air-knife PCB cleaner

Operating modes	Single Side / Double side - Bypass
Processing Speed	1 - 40 m/min
Pass line height	900 +- 50mm
Power Supply	AC 220V,Single phase,50-60Hz
Pneumatic Pressure required	5 - 7 Bar " Oil free air "
PCB size available	Max.wdith 460mm,Max. length 500mm Thickness: 0.6mm – 3.0mm maximum.
Cleaning method	Adhesive roller + ESD brush + vacuum absorbing (individual selectable according to usage)
Ion Fan	Micro wind on top of conveyor (optional)
Electrostatic eliminator	Standard
Adhesive roller viscosity	80μ

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Make a small change, make a big difference!

Vanstron Automation Co.,Ltd

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