

SMT 전문판매회사
 Since 1988
www.namaSMT.com

최다 판매장비

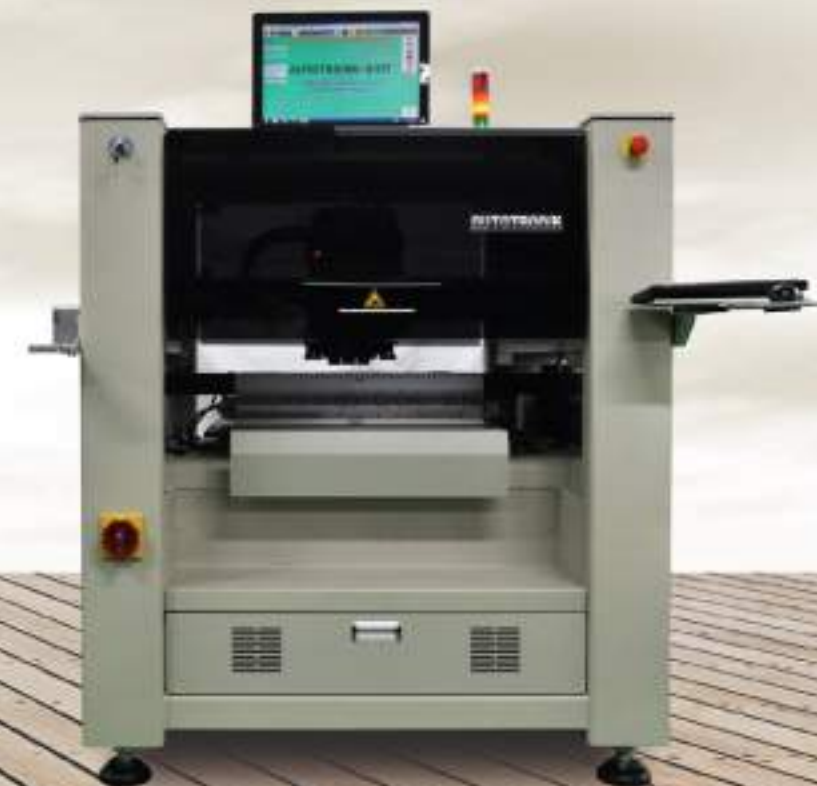
- Lab & Small Oven (Pb, N2 Profiler)
- Reflow (3,4,5,7,9,12 Zone)
- Vapor (증기) Reflow **New!**
- Temperature Profiler (유/무선)
- Chip Mounter (Full Auto 1,2,4 Head)
- Semi Auto Pick & placer (반자동)
- PCB Cleaning Machine (PCB 세척기)
- PCB Coating Machine (PCB 코팅기)
- SMD Parts Counter (부품 계수기)
- 기타 PCB 생산 기자재 취급

World Distributors

中國 상하이 소주 남경 군산 청도
 Asia 베트남 태국 인도 라오스

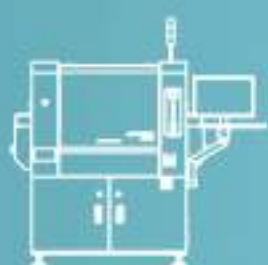
Our philosophy stands for itself:

QUALITY BY CONVICTION



Autotronic series – SMT Equipments

Stencil Printer



AP430



AP1200



BS281

Pick & Place Machine



BA385



BA388



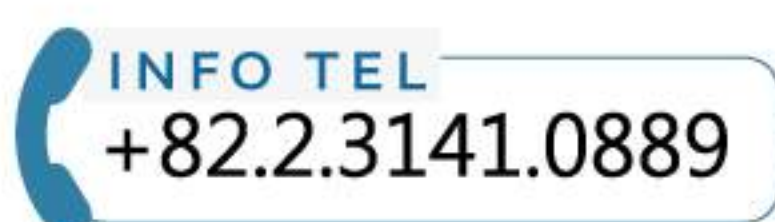
BA389



BA392



LD812



HIGH PRECISION & HIGH SPEED

Small & Multi 생산에 적합한 Autotrinik-SMT GmbH 장비는 아래와 같은 분야에 5,000 systems 이상 사용하고 있습니다

- 산업기기, 방산장비, 우주항공, 의료장비
- 선박통신, 철도차량, 제어(control)Control
- SMD Module 생산
- LED Module, Bar LED, 전장 LED, 광고판
- 학교, 연구소, Proto 시생산, QC 신뢰성



Strong and rigid mechanical design

통 프레임 높은 내구성



Autotrinik series using welded steel which guaranteed a strong and rigid mechanical design. The high durability and monocoque frame support the high-speed drive and assure the high precision.

High precision preloaded ball screws

고정밀도 제어능력



BA series are installed with preloaded Ball Screws. The preloaded Ball Screws, together with AC Servo motor systems, provides high repeatability and stability.

High performance servo control system

고정밀도 Servo 제어



AC servo control system make both high speed and high precision possible, highly rigid ball screw, direct disk coupling with no backlash, powerful servo motor, high resolution encoder, high response control circuit are combined.

Non-contact Linear Encoder system

Linear Scan Encoder

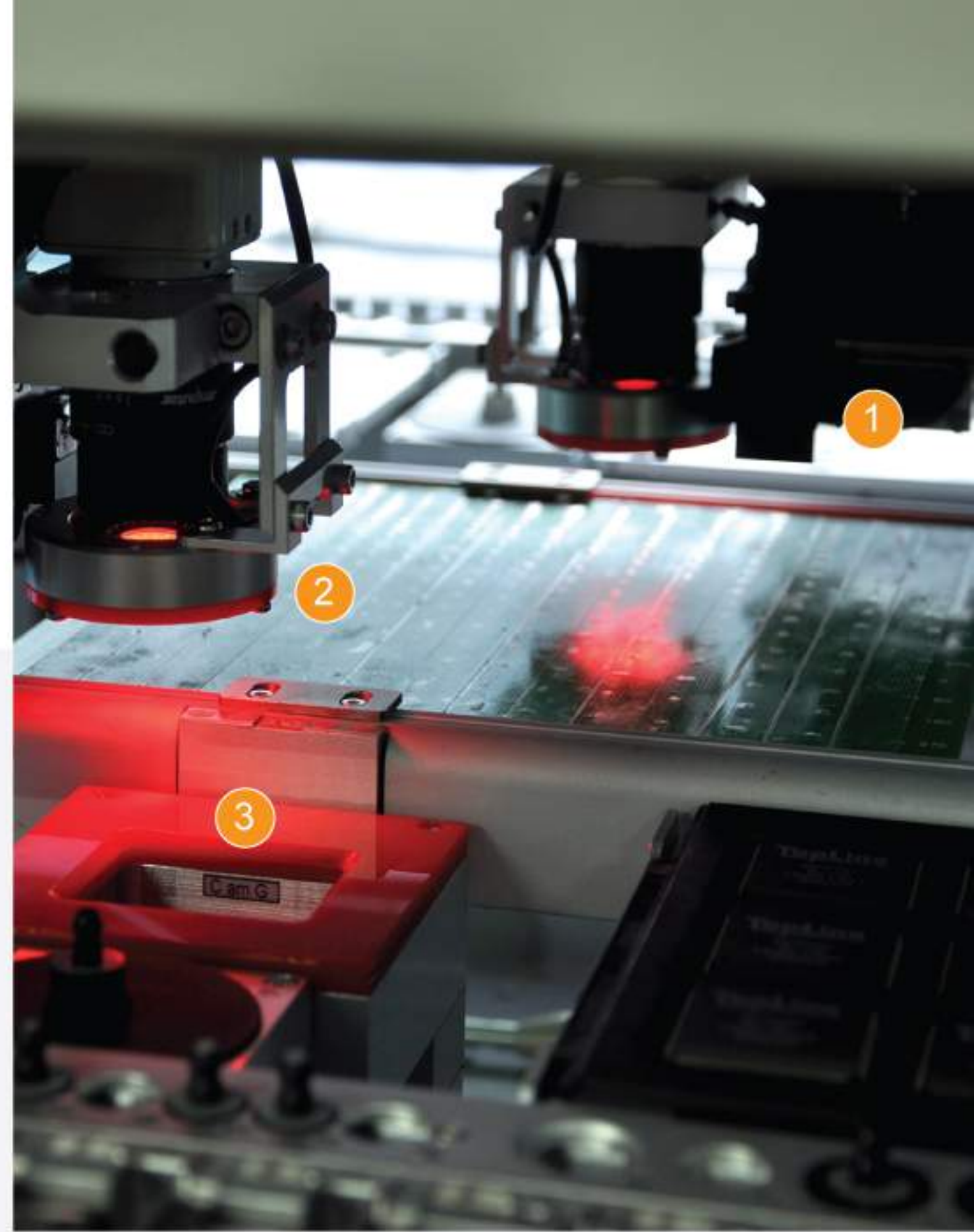


Linear-encoded X-Y drive mechanism, allow Autotrinik Pick & Place machine to deliver a remarkable $\pm 0.03\text{mm}$ placement accuracy.

"Fly Vision" 기본 구성으로 보다 빠른 실장
Under Vision으로 48 x 48 mm 인식

COGNEX[®] Alignment System "Vision on the Fly"

The Autotronic series feature COGNEX[®] vision processing and head-mounted for non-contact "Vision on the Fly" alignment.



1 "Vision on the Fly" camera Head에 부착 된 Fly Vision

- Head-mounted camera on the placement head
- To allow image processing and alignment during traveling
- Maximum for 16mm X 14mm component

2 Reference camera 2개의 기준점 카메라

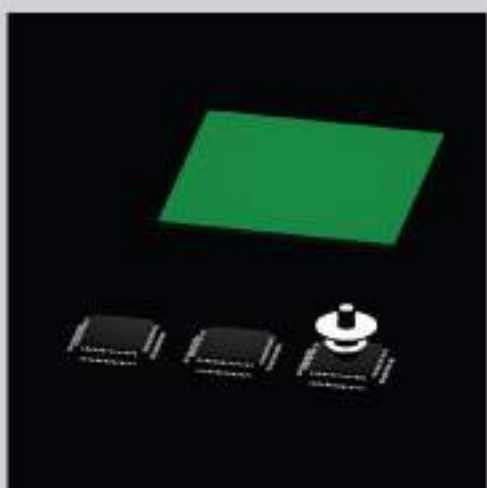
- For X and Y coordinate reference
- To recognize fiducial mark, pick up and placement location

3 Bottom Vision Alignment System Under Vision Camera

- Devices with alignment features on the bottom side
- Features with split image diagonal vision processing software, for maximum component sized 150mm X 100mm (option BV38)

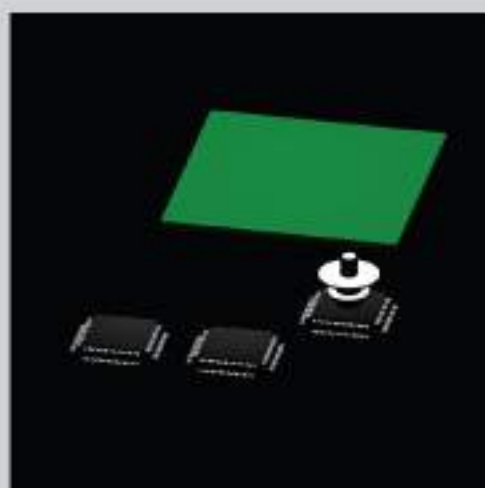
Vision on the fly process

Head에 부착된 Fly Vision 이동 시, 부품의 좌표점을 자동교정하여 실장



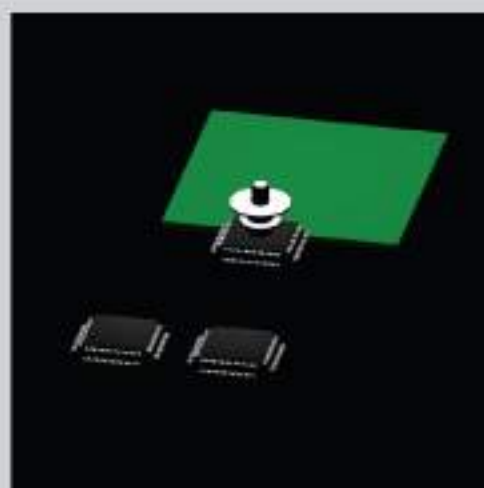
(1)

Placement head moves to feeders location to pick up component.



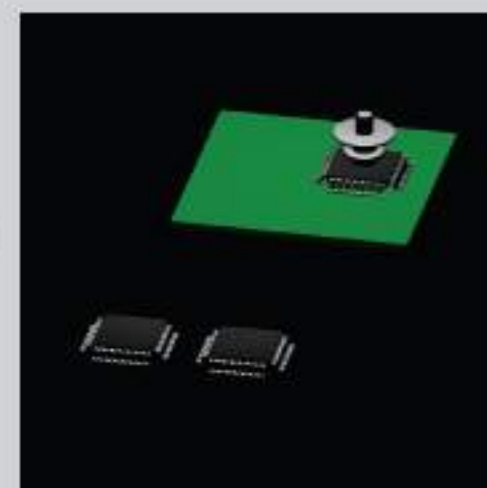
(2)

By using vacuum, the component is picked up by nozzle.



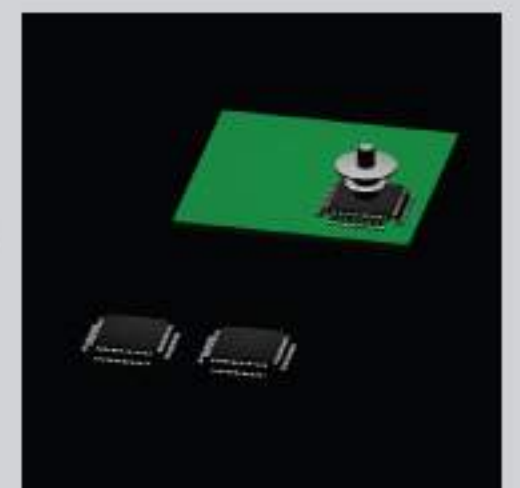
(3)

During the travel, the component is aligned.



(4)

The component is moved to assigned location.

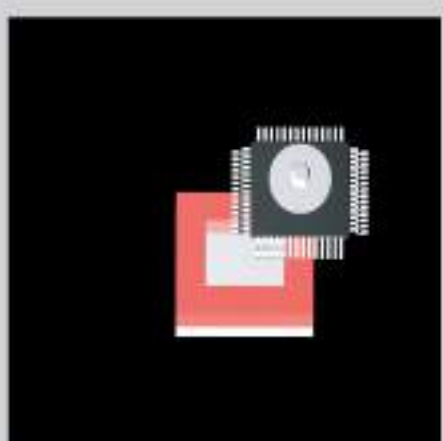


(5)

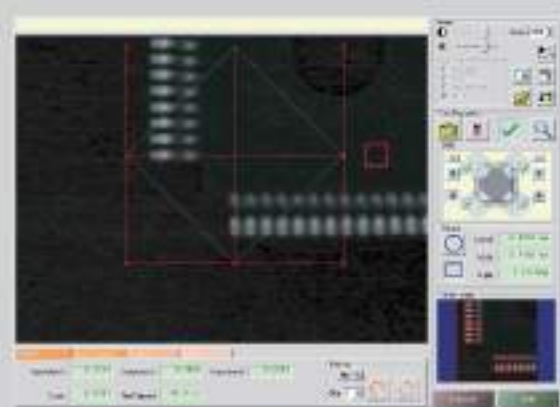
The component is placed on the assigned location accurately.

Diagonal Vision Processing software

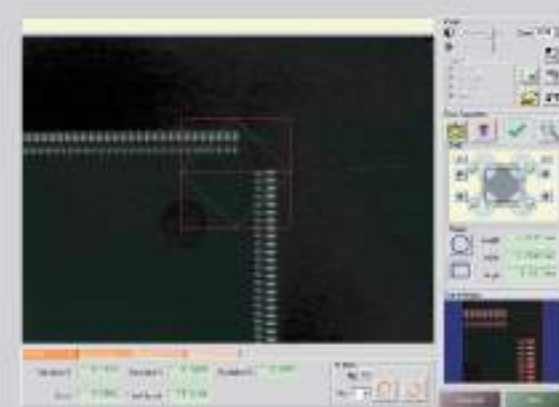
큰 SMD 부품의 경우, 분할 인식하여 Software에서 자동 합성 후 실장



Step 1



Step 2

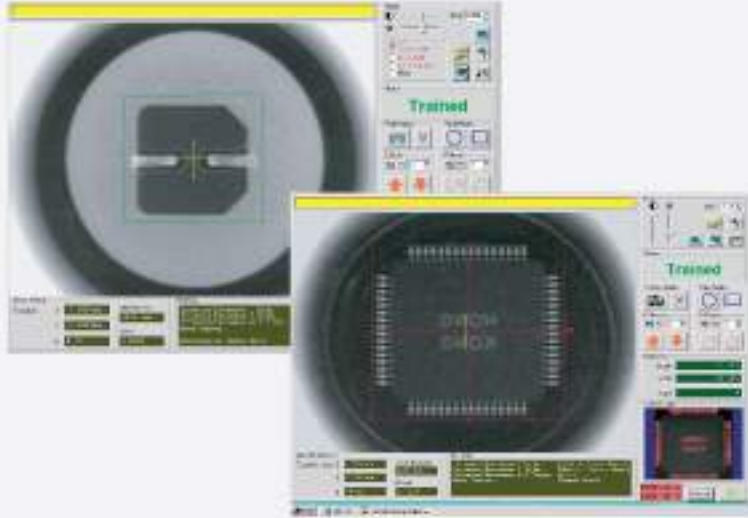


Features with Diagonal Vision processing software, for maximum component sized 150mm X 100mm (option)

누구나 쉽게 SMD 실장기 운영이 가능한 문답형 장비
매우 다양한 부품 Library가 있어 쉽게 프로그램 운영

EASY OPERATION

Feeder Bank의 위치 및 PCB Simulation Over View,
실장진행을 Display 상으로 확인가능



Standard Component Library

Standard component library is inbuilt in the each Autotronic machine. User can easily select the component data from the library to set up the production procedures. User can also set up the library for their unique or special component.

기본적으로 제공 SMD Library 및 Edit



Smart Fiducial System

Besides the standard fiducial mark, either square SMD PCB pad or plate-through hole can also be trained as fiducial mark.

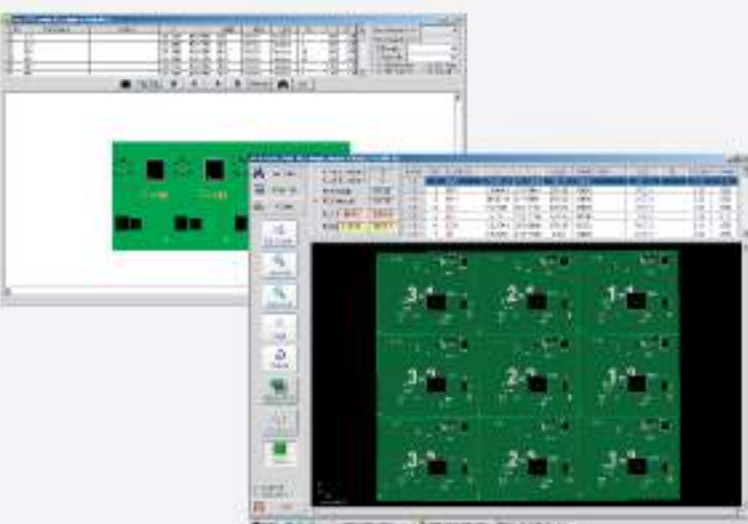
Smart한 초기점 인식 시스템



Universal CAD Conversion

Beside the direct input of data by teach-in camera, an optional CAD conversion program for directly transferring of CAD generated pick and place data is available.

Universal CAD 변환으로 보다 쉽고 빠르게
프로그램 작업



PCB Setup Stimulation

According to the parameters entered, the build-in software can display the preview of the PCB with placed components. Setting error could be greatly reduced.

프로그램 된 내용을 가상 실장 및 실장 시, 작업진행
과정확인 가능



Smart Feeder Arrangement Preview

Feeder build-in memory module records individual tape feeders to specific component data. The smart Autotronic software can communicate with feeder, and preview the feeder arrangement for optimizing the best location and efficiency.

Feeders의 Feeder bank Over View를 보여줌으로
보다 효율적인 장비사용 가능



원격 Remote 제어 유지보수가 가능



Autotronik SMT 장비의 3가지 특징

- Bond or Solder Dispenser
- Short tape, Bulk
- Vision Inspection

Lab, Proto, Small & multi 생산가능

Vision Inspection

With the built-in software, the camera can move automatically and display the image in the monitor screen, user can manually check the printing accuracy of solder paste, quality of the soldering, accuracy of component placement, etc...

Vision Inspection 기본기능
실장 후, Reflow 투입 전 검사

Remote Service Kit

Optional Remote Service Kit allows a remote access to machine by Internet, so that programming, calibration and service can be done by our worldwide remote service center.

원격 유지보수를 위한 Service Kit기능

Operation

The machine operation is run under stable and universal Windows XP software. Multi international language, such as English, German, French, Chinese, is supported.

Windows 환경의 다양한 언어지원

Universal CAD Conversion

By using the UCAD data conversion software (option), various file formats, such as ASCII, AutoCAD and EXCEL data, could be transferred directly to Autotronik Pick & Place machine.

Universal CAD 변환프로그램으로 프로그램 시간 단축 및 ASCII data 변환으로 어떠한 프로그램과도 변환 가능



Step



(1)

Load the DATA files.



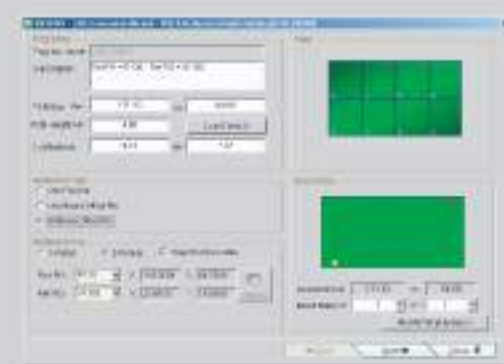
(2)

Load the Bill of Material File (BOM) file.



(3)

Define CAD field position, including location, X-coordinate, Y-coordinate, rotation, component...



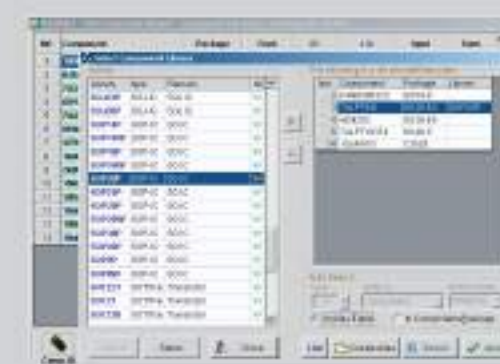
(4)

Define the reference point, and PCB matrix.



(5)

Setup the I.D and feeder type and library.



(6)

By simple selecting the component library, the UCAD software will auto-adjust the data.

OPTION ACCESSORIES

Accessories for Autotronik Pick & Place machines are interchangeable.

By this means most reliability and easy maintenance for all models is guaranteed.

Auto Tape Feeder (KFTA) 다양한 Smart tape Feeder 8,12~72mm

The innovative design of KFTA feeder bases and mounting hardware allows almost limitless flexibility in feeder combinations and arrangement schemes, as almost every feeder can be ordered, loaded, programmed and mounted independently. KFTAs are available from 8 mm up to 72 mm tape width.



Universal IC Tube Feeder

IC Tube Feeder Bulk SO type 사용

KFTB universal tube feeder combines vibration and belt driven technique. It is able to handle IC-Sticks with max. 50 mm width.

KFTB-2 (10 pcs of 8 mm IC-Sticks)
KFTB-4 (20 pcs of 8 mm IC-Sticks)



Vertical Dome Feeder

수직 Feeder Dome Switch등을 공급

Vertical Dome feeder (VF-DOME-K) is design to supports the metal dome in tube packing, which diameter varies from 5mm to 12mm. It allows placing tactile metal domes on printed circuit boards, membranes or flex circuits.



Cut Strip Tape Holders

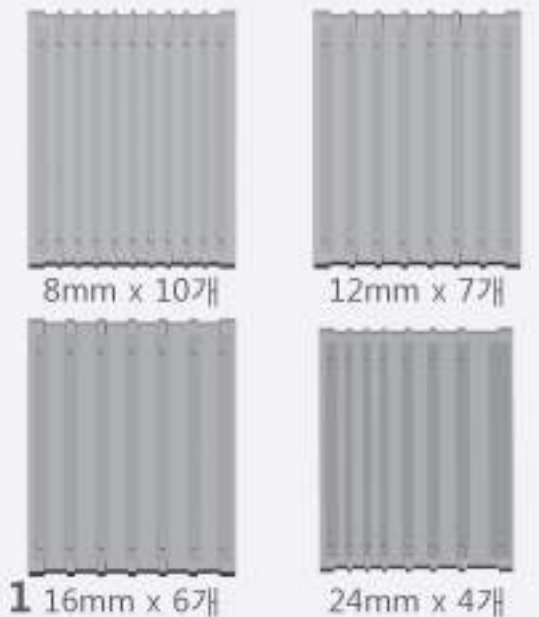
Short tape을 사용, Bulk 부품 사용

Cut Strip Tape Holders is a handy accessory for presenting components that are supplied in short lengths of tape due to their low quantity of usage. It can also prevent the waste of components in sections of tape that are too short to be loaded into tape feeders.

TS-CST08-10 (10 lanes of 8mm tape width)
TS-CST12-7 (7 lanes of 12mm tape width)
TS-CST16-6 (6 lanes of 16mm tape width)
TS-CST24-4 (4 lanes of 24mm tape width)
TS-CST-M4A (3 lanes of 8mm tape width, 2 lanes of 12mm tape width, 1 lane of 16mm tape width, 1 lane of 24mm tape width)

TS-CST-M4A

8mm x 3, 12mm x 2, 16mm x 1, 24mm x 1



Bulk Pack Component Tray

Bulk 부품 Tray / 18개 부품

Designed for bulk pack component, Bulk Pack Component Tray (TS-D18) can handle any bulk pack component under the semi-auto production mode. A single tray contains 18 individual slots for maximum 18 types of components.



IC Tray Holder

IC Tray, Bulk Tray를 사용 할 때 필요

The standard TS-1 Tray Holder occupies approximately 330mm X 140mm of work area and is designed to hold a standard 316mm X 136mm JEDEC Matrix Tray. The TS-1 provides adjustability for wide variety of smaller matrix tray and waffle pack combinations and can easily be modified for custom tray configurations.



Buffering Nozzle

다양한 노즐이 있으며, 검정 / 흰색 Cup이 있어, Vision capture 인식능력이 높으며, 특별 Nozzle 주문생산 가능

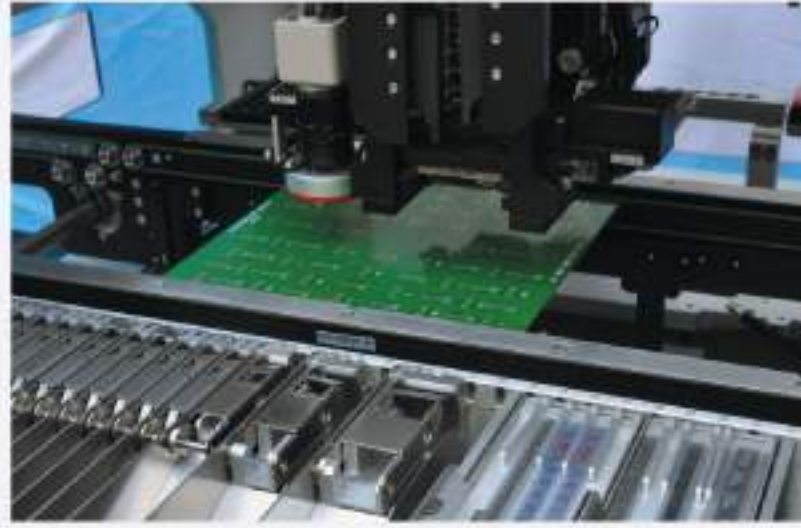
A series of Nozzle has been designed for components from 0201 to 50mm X 50mm sized. Customized nozzle could be also tailor made for special component. Spring buffering design can automatically adjust the placement pressure for different height of component.



Conveyor System

기본장비구성 : Off-line. Conveyor 선택가능

Three stages conveyor system is fully adapted to SMEMA Mechanical Equipment Interface Standard. The conveyor system with SMEMA Interface and automatic width control speeds up the handling of PCB and in-line production.



Dispenser System Autotronik 장비는 Solder 'Dispense' 사용가능

Optional stand alone dispenser head for adhesive & solder paste dispensing. Perfect for quick, small volume production without making stencil.

CAD변환 사용 1~2개



Bar Code Reader 부품수량 및 Feeder ID data 인식

An optional Bar Code Reader (BC-01) can be used to quickly read and enter component value, lot code, date code and starting quantity directly from component reels or other packing when programming Feeder ID data.



Feeder Rack

한 면에 32,48개 Feeder Bank가 있으며, 2,3,4면에 확장가능

(Model 별로 상이. 기본 32 Bank)

FR-32K and FR-48K feeder rack contain 32 and 48 port DB-9 interface connector respectively. Since most Autotronik feeders are compatible with DB-9 interface connector, feeders can be easily plugs in to either the 32-ports or 48-ports Feeder Bases on BS series pick and place system.



Feeder Rack Trolley

빠른 Model 변경에 효율적 장치

During production the user is able to change all 32 or 48 Feeders by rapidly changeable Feeder Trolley at the same time. This is also a convenience for quick and efficient setup and change over for various research & development projects. This handy accessory can be wheeled easily from the storage area to production floor.



Feeder Carts 32,48개 Feeders Bank를 한번에 교체가능. 운반 Carts

The sturdy, dual-tiered Smart Tape Feeder Storage Cart is designed for transport, store, and protect the valuable feeder. The model FR-ST64 holds as many as 64 individual 8mm Smart Tape feeders. The heavy-duty tubular construction holds each feeder securely and shields them from impact as they move around the assembly floor.



Inspection Conveyor

Mount 전 / 후 공정에 Inspectino Work table을 선택 사용가능



CT-90L



CT-150L-S3



CT-180L-S3

3 stages and SMEMA compatible inspection conveyor enhance production speed and get better control of quality and labor cost. Available in model CT-150L-3S, CT-180L-3S, which is in 3 stages and in length 1.5m and 1.8m respectively. CT-180L-3S can handle maximum PCB sized 550mm X 440mm.



Component Tester

SMD components Resister, Capacitor, Coil, LED 측정 Test 가능

Component Tester is an innovative accessory for precise quality control. Before placing the component in assigned location, the component could be tested by the measuring the corresponding electronic value. Hence, only the passed component will be placed; while the failed one will be dropped. The quality of each single component could be accurately controlled, which is especially designed for high requirement or technology product, such as Aeronautics

products. With the standard clamping device, any component with two poles could be clamped and measured. Customized clamping device could also be tailor made for special component, such as component with four poles.



Features



Feedback signal between tester and pick & place machine



Repeat sampling to increase the data confidence



Auto-save of data at database for better data management



Bulk Pack Component Tray

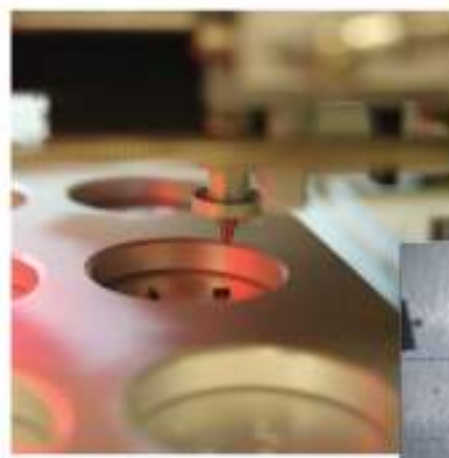
SMD 날개 부품을 실장할때 사용

Bulk Pack Component Tray (TS-D18) is a Under the semi-auto production mode, the preferably accessory for processing components that are in loose or bulk package. Each bulk component. This prevents the waste of TS-D18 contains 18 slots for maximum 18 components that lose in tape or tube pack-types of components, and each slot could age, or supplied in sample component with-handle up to 1.25" diameter components. out package.



Step

Bulk 부품 실장 진행. Symbol을 일치시킨 후, 자동 실장



(1) Pick up the component under semi-auto production mode.



(2) Align during transport.



(3) Place the component automatically.

Cut Strip Tape Holders

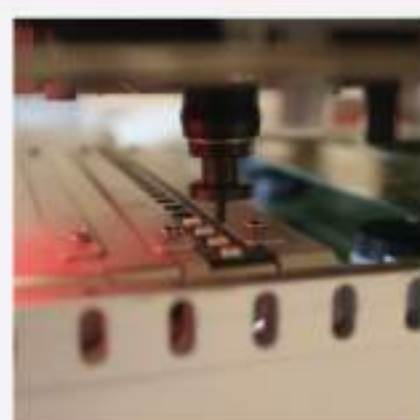
소량 다품종 샘플생산에 유익한 장비로 가장 많이 사용

Cut Strip Tape Holders is a handy accessory for presenting components that are supplied in short lengths of tape due to their low quantity of usage. This innovative holder also prevents the waste of components in sections of tape that are too short to be loaded into tape feeders. To facilitate the efficiency, each lane of the Cut Strip Tape holder can be ordered, loaded, and pro-

grammed independently. Autotronic Cut Strip Tape Holders are available for 8mm, 12mm, 16mm and 24mm tapes width. Other sizes are available upon special request.



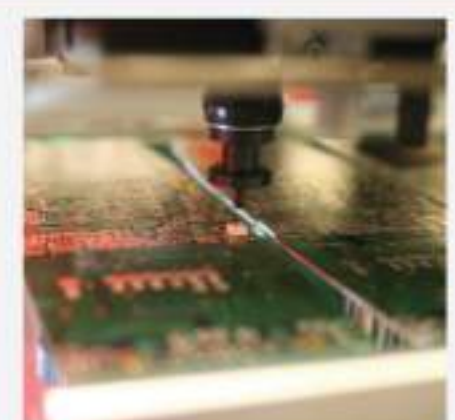
Step



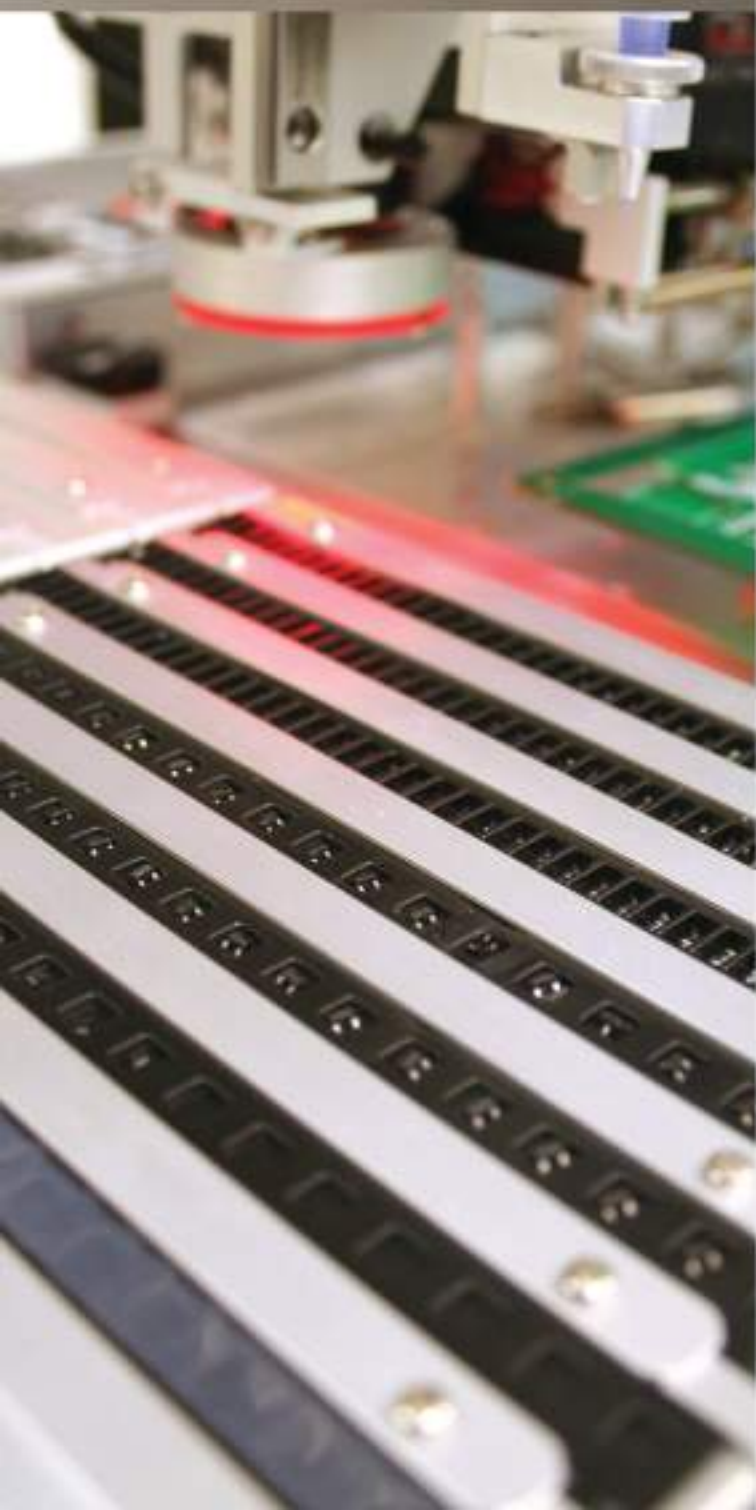
(1) Pick up the component.

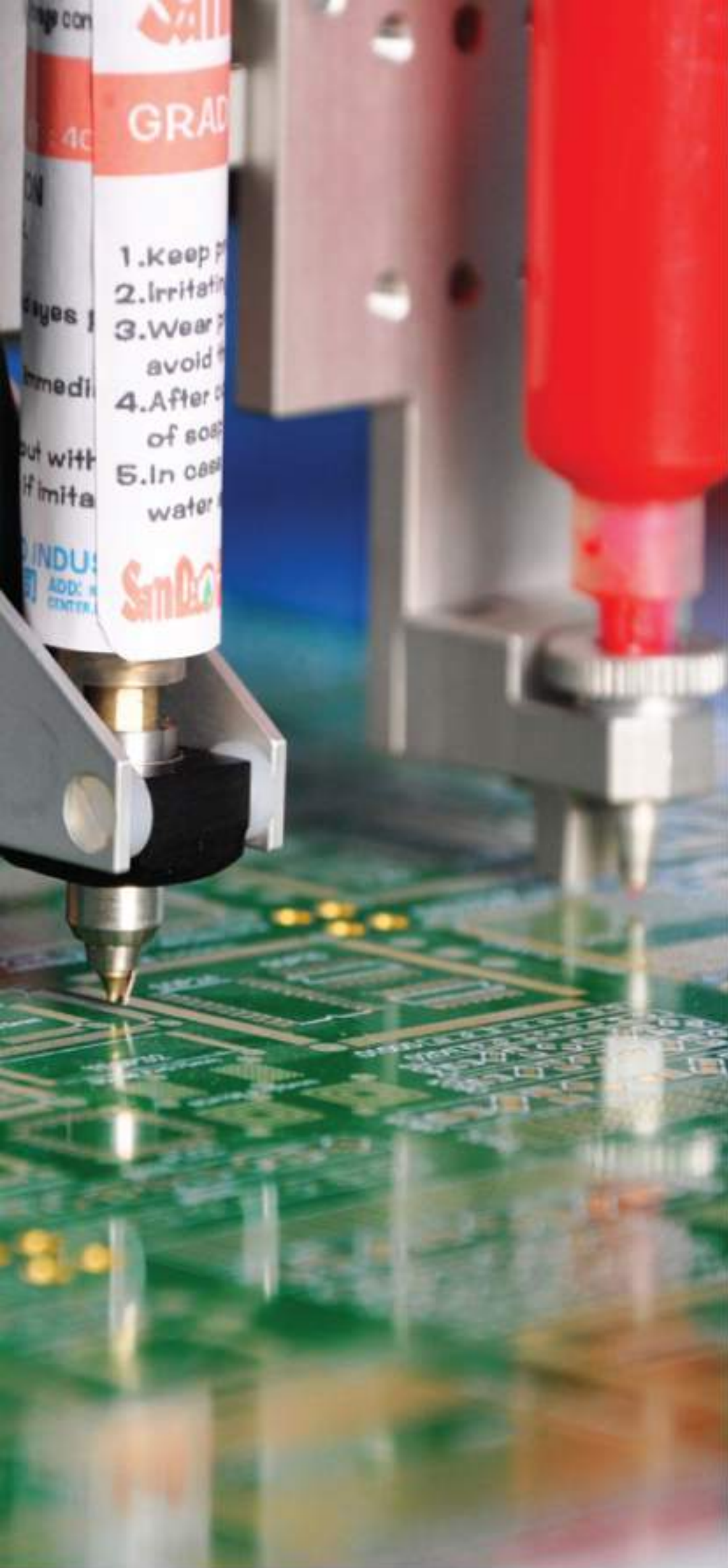


(2) Align during transport.



(3) Place the component automatically.





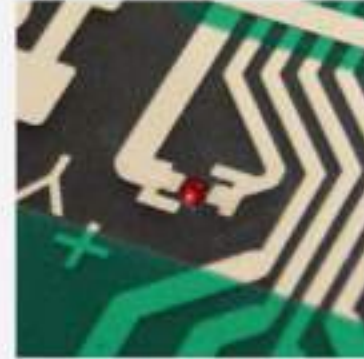
High Precision Dispenser System

Dispenser는 Normal / 고정밀 2가지 Dispenser 부착가능
 솔더 프린터 작업이 난해한 FPCB 특정작업에 매우 효율적 및 2차 작업에 용이

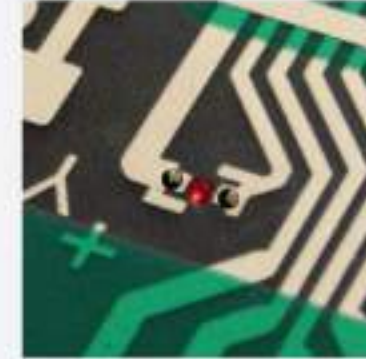
Everything about dispensing that has been valued in terms of precision and consistency. Autotronik High Precision Dispenser System was designed to concentrate on the essentials, which is cost effective and simple to maintain.

Super fast valves and clever control firmware ensure perfectly controlled dispensing processes. With this elaborate technology and little need for cleaning of the dispensing head, the unit can be used much more effectively. This does not only apply to conventional dot sizes, but also for any sort of microdot, down to a diameter of 0.5mm (or down to 15 mm, option with MT-4 system).

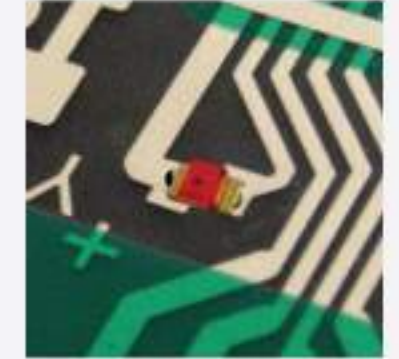
Dual dispensing for Flexible Printed Circuit Board (FPCB)



(1) Dispense the bonding glue.



(2) Dispense the silver paste.



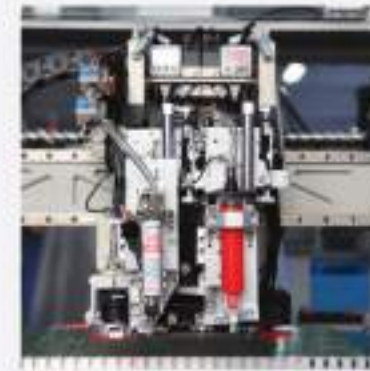
(3) Place the component.

Single or Double Dispenser Head

솔더 / Bond Dispenser 2개 부착가능 (2 head 경우)



Single Dispenser Head



Double Dispenser Head



SMD Pick & Place
 385V Series

Vertical Dome Feeder

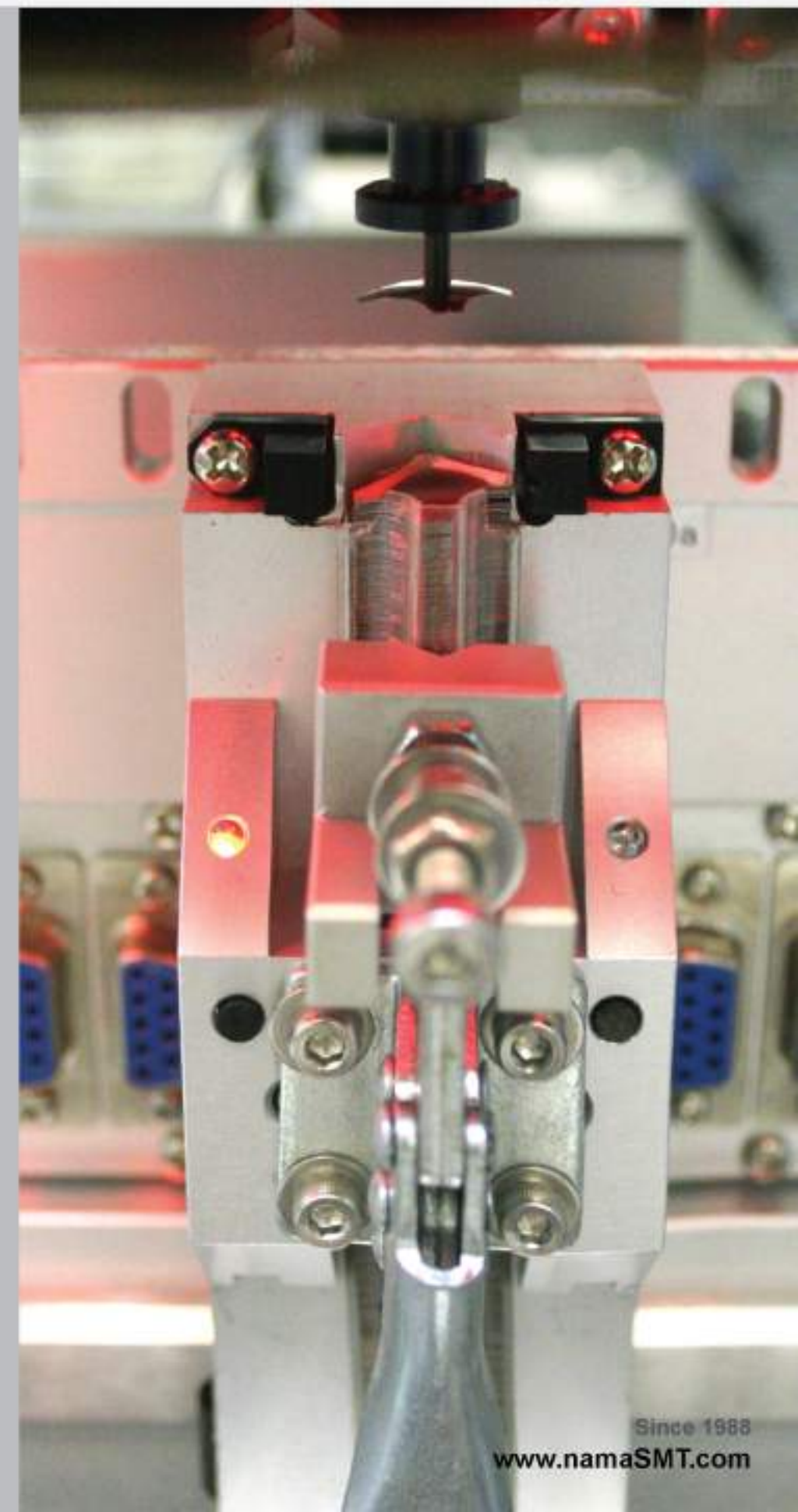
수직 공급 Feeder 장치. Switch, Pad 작업에 효율적

Autotronik Vertical Dome feeder was invented to tackle metal dome placement in production situations. Autotronik transforms the original time consuming and labor-intensive manual placement process into a modern efficient and accurate automatic process.

Vertical Dome feeder was design to supports the metal dome in tube packing, which diameter varies from 5mm to 12mm. The metal dome is delivered from lower to upper position of the feeder, and then to the designated position. The

whole process is monitored and controlled by the automatic mechanical system.

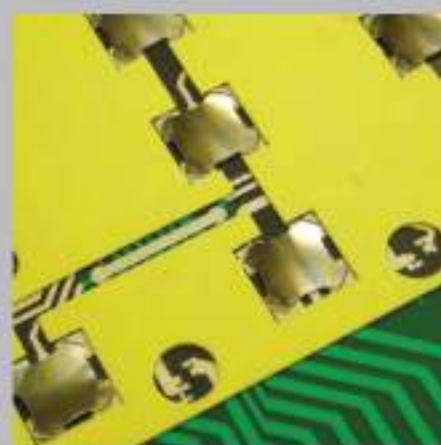
Besides placing the metal dome, Autotronik Pick & Place machines support to place a variety of SMT components, the users would greatly benefit by the flexibility in production. Optional dispenser system for dispensing microdot down to a diameter of 0.5mm is also available.



Step



(1) Pick up the dome disc, and align during transport.



(2) Place the dome disc

AUTOMATIC STENCIL PRINTER

AP430/AP1200



Features

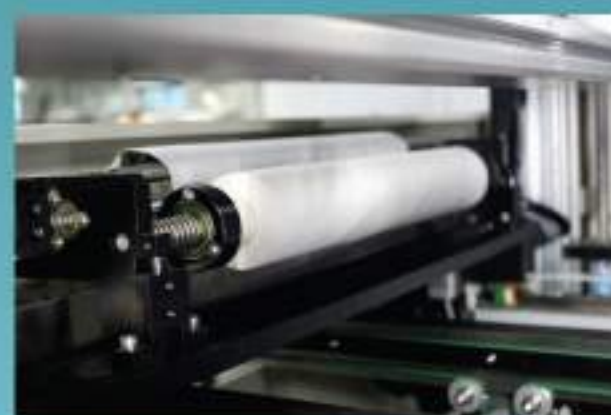
- Equipped with vacuum table holding fixture, keep long PCB lay flat for best printing result.
- Automatic conveyor width adjustment for convenient board loading.
- Precise height adjustment of PCB holding table using ball-screw driven control.
- Custom design clamping device that helps to hold long PCB straight and suppresses soft board bending problem.
- Accurate vertical adjustments of stencil frame driven by ball-screw in fast and quiet movements.
- Automatic stencil cleaning device included for ease of use and continuous production.
- The whole table fixture moves during alignment, keeping the PCB always held and printed at the center region of the blade.
- Advanced imaging system allows wide selection of fiducial mark patterns on stencil. No specialized fiducial mark on stencil is required. Alignment of stencil on PCB board can easily be achieved for the best printing result.
- With simultaneous control of all axis movements, machine can quickly restore to home position for quick restart of next printing task.



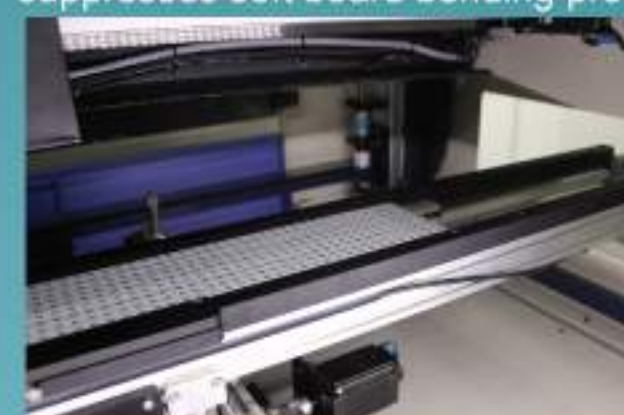
PCB positioning system



Custom design clamping device that helps to hold long PCB straight and suppresses soft board bending problem.



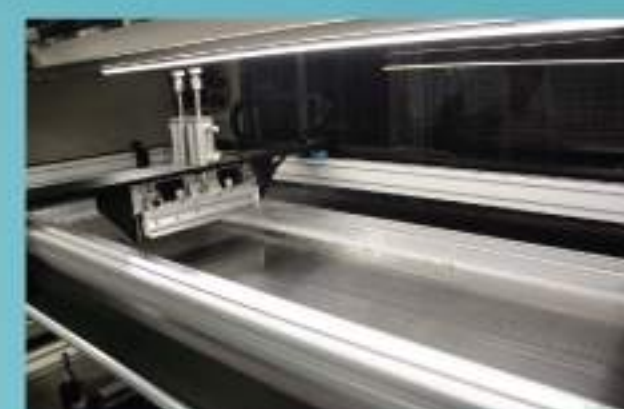
Underside Stencil cleaning system



Automatic conveyor width adjustment for convenient board loading.



Advance clamping device helps to suppress soft board bending problem.



Equipped with vacuum table holding fixture, keep long PCB lay flat for best printing result.



Highly adaptable stencil frame clamping system



Accurate vertical adjustments of stencil frame driven by ball-screw in fast and quiet movements.

SEMI-AUTOMATIC STENCIL PRINTER

SP600/SP900/SP1200

■ Huge print area capability

The huge print area capability allows printing up to 1200mm x 400mm. It accepts standard SMT frame sizes from 350 x 350 mm to 1480 x 500 mm (for SP1200), or 350 x 350 mm to 736 x 736 mm (for SP600L)

■ Vertical Separation of Stencil from PCB

4 corner ball screw system provides excellent separation control of stencil for high quality solder paste printing

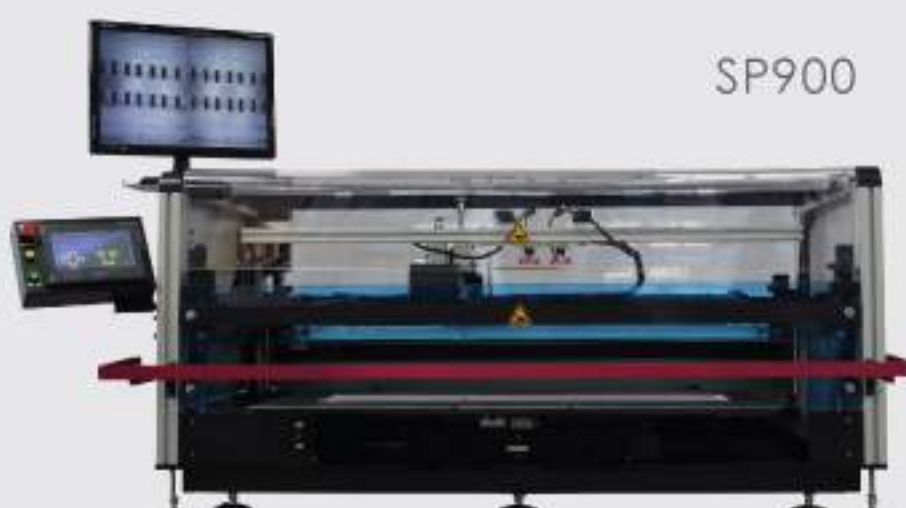
■ Programable Speed Control for both squeegee movement and stencil separation

■ Dual Camera system for quick PCB alignment

SP600



SP900



SP1200





Features

- ◎ True 'Vision On the Fly' Alignment
- ◎ Fiducial recognition and coordinate correction
- ◎ Assembles LED boards up to 1200 mm long in a single pass (option for 1800mm long)
- ◎ Positive air puffing at the pick-up nozzle ensures release of 'sticky' LED components during placement
- ◎ Large working platform allows multiply PCB production in one stage (for same type of PCB)
- ◎ Uninterrupted production by auto-selection for alternative when feeder is empty
- ◎ High-precision ballscrew drive
- ◎ Tape feeder allows tape connection to minimize production interruption

Machine Model

LD812V4

LD812W3

PCB specification

Max. board size (standard)
(option conveyor)
Board thickness
Board fixing principle

1200mm X 300mm
1200mm X 260mm
0.2mm to 3mm
Magnetic fixture (option conveyor)

1200mm X 300mm
1200mm X 260mm
0.2mm to 3mm

Placement Specification

Alignment principle
No. of placement heads
Placement rate (IPC 9850)
Component size

Vision on the fly camera

4

3

15 000 / hour
0.6mm x 0.3mm
to 8mm x 8mm

10 000 / hour
1mm x 0.5mm to
16mm x 14mm

Feeder capacity

Feeding capacity

Max. 16 feeder ports (8mm tape)

Mechanical Specification

XY axis drive mechanism

X axis: placement head;
Y axis: board transport
Working stage (option conveyor)
Supported by option conveyor system

Board loading method
In line production
Placement accuracy
X-Y Axis Resolution
Z Axis Resolution
R Axis Resolution

+/-0.05mm
0.02mm
0.02mm
0.18 degree

Programming

Operation system
Support language
Programming

Windows XP based
English (mult language support)
Easy programming
(option CAD import)

Physical specification

Approximate Net Weight
Machine dimension (LxWxH)

450KG
2630 X 1130 X 1490

445KG
2630 X 1130 X 1490

Facility Requirements

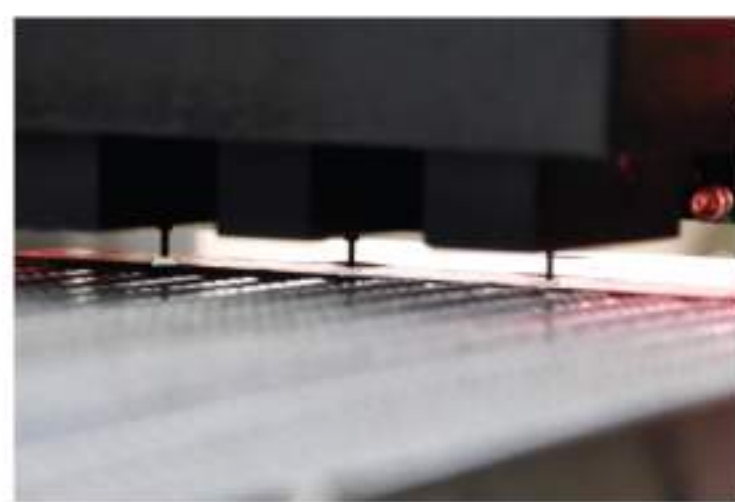
Air Pressure
Standard Voltage
Power

5.5 bar
220V(AC)
2200W

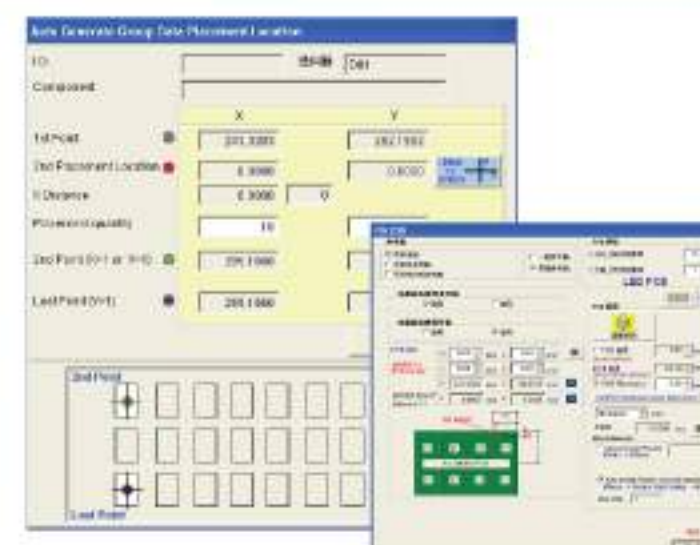
5.5 bar
220V(AC)
2200W



Heavy-duty welded, uni-body steel frame provides stability for precision placements even at high speeds



Upward-aimed true 'Vision On the Fly' Alignment cameras on the pick & place heads allow easy set-up for a wide range of LED components



With simply parameters inputs, the Windows-based software calculate the component coordination automatically



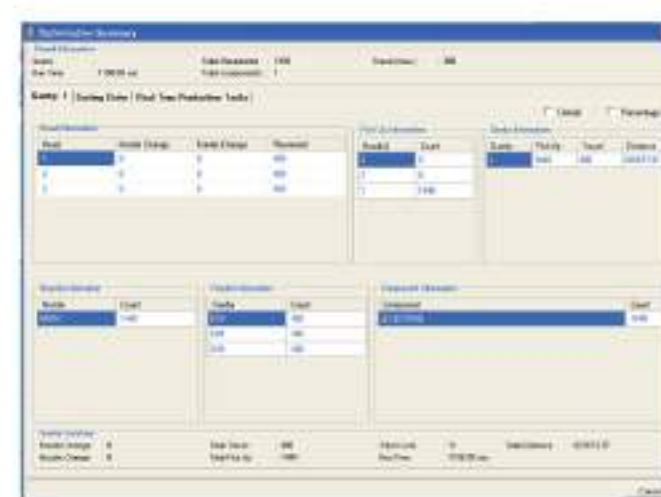
UCAD® universal CAD import and conversion for direct transfer of PCB data from ASCII, AutoCAD and Excel data formats



Support various PCB board type, includes, LED boards up to 1200 mm long (or option to 1800mm), flexible PCB , or circular PCB



Flying vision alignment on various LED components as well as SMDs. Teflon® nozzles also available for sticky LED components



Software tools analyze placement data and component mix to provide optimum feeder arrangement that minimizes head travel and tool changes

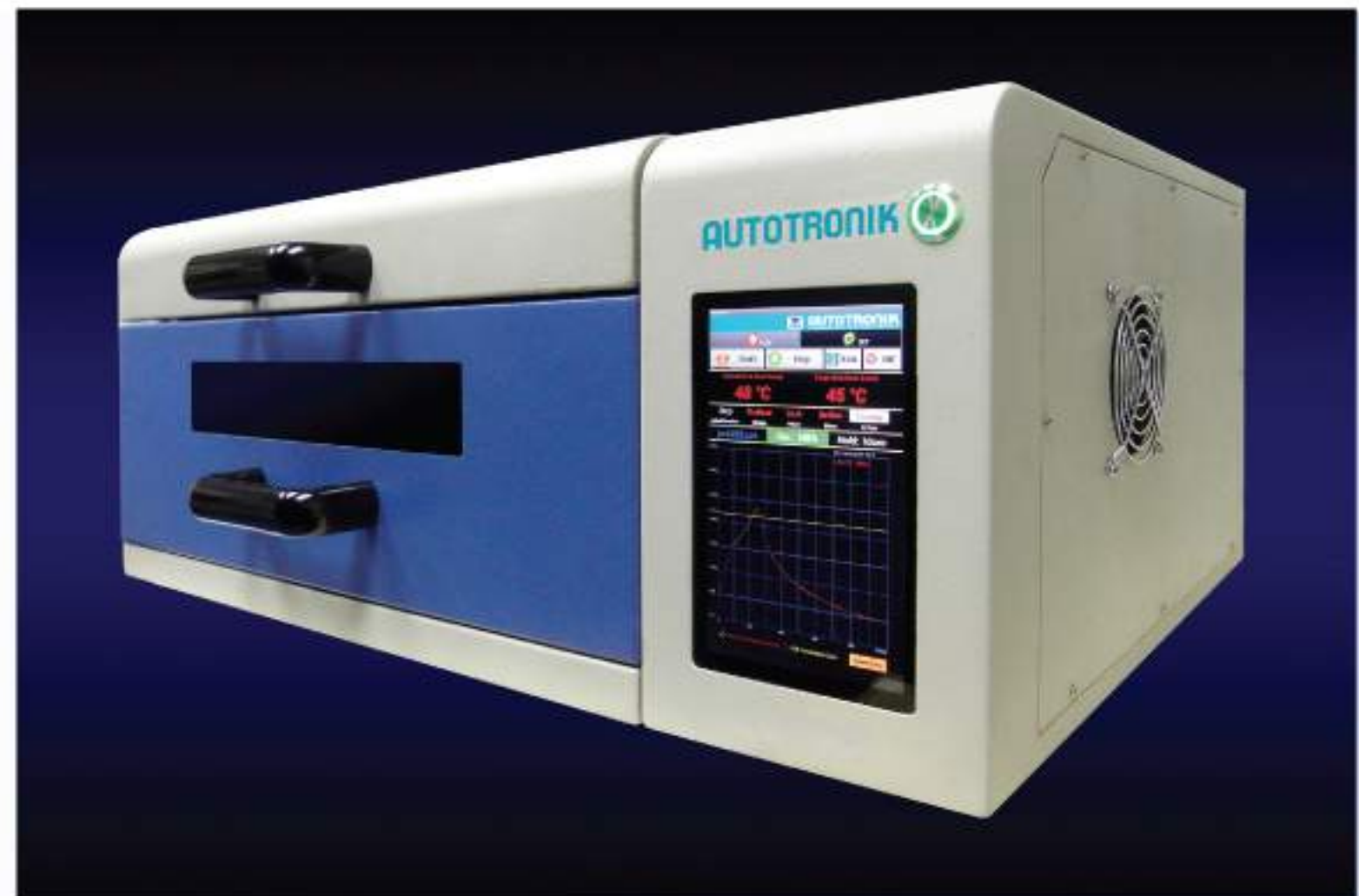


Real time monitoring screen for previewing production progress, production speed and production quantity during production

BT301

Dynamic Thermal Profile using a Batch Reflow Oven with Android™ Operating System

Match your thermal process specifications for pre-heat, soak, reflow, and cooling on the first PCB you produce with by using revolutionary new BT301 Batch Reflow Oven. Having the thermal conditions of an inline reflow system in a bench-top unit with a full dynamic thermal process.



Machine Model

Applicable solder types
PCB holding size
PCB effective heating area
Heating method
Temperature range
Temperature control method

Warm-up time
Computer control

Display panel
Temperature control setting

Temperature profile display
Temp profile printing
Storage

Electrical

Power
Dimensions
Weight

BT301

Lead-Free and Leaded
350 mm x 240 mm
250 mm x 200 mm
Quartz IR & Forced Hot Air Convection
Ambient - 310 °C

Real time close loop PID temperature control for lead free profile approx. 2 min.

Build-in dual core CPU on board computer

7" touch screen LCD display
Quick smart profile programming by temperature rising rate control (degree change per second)

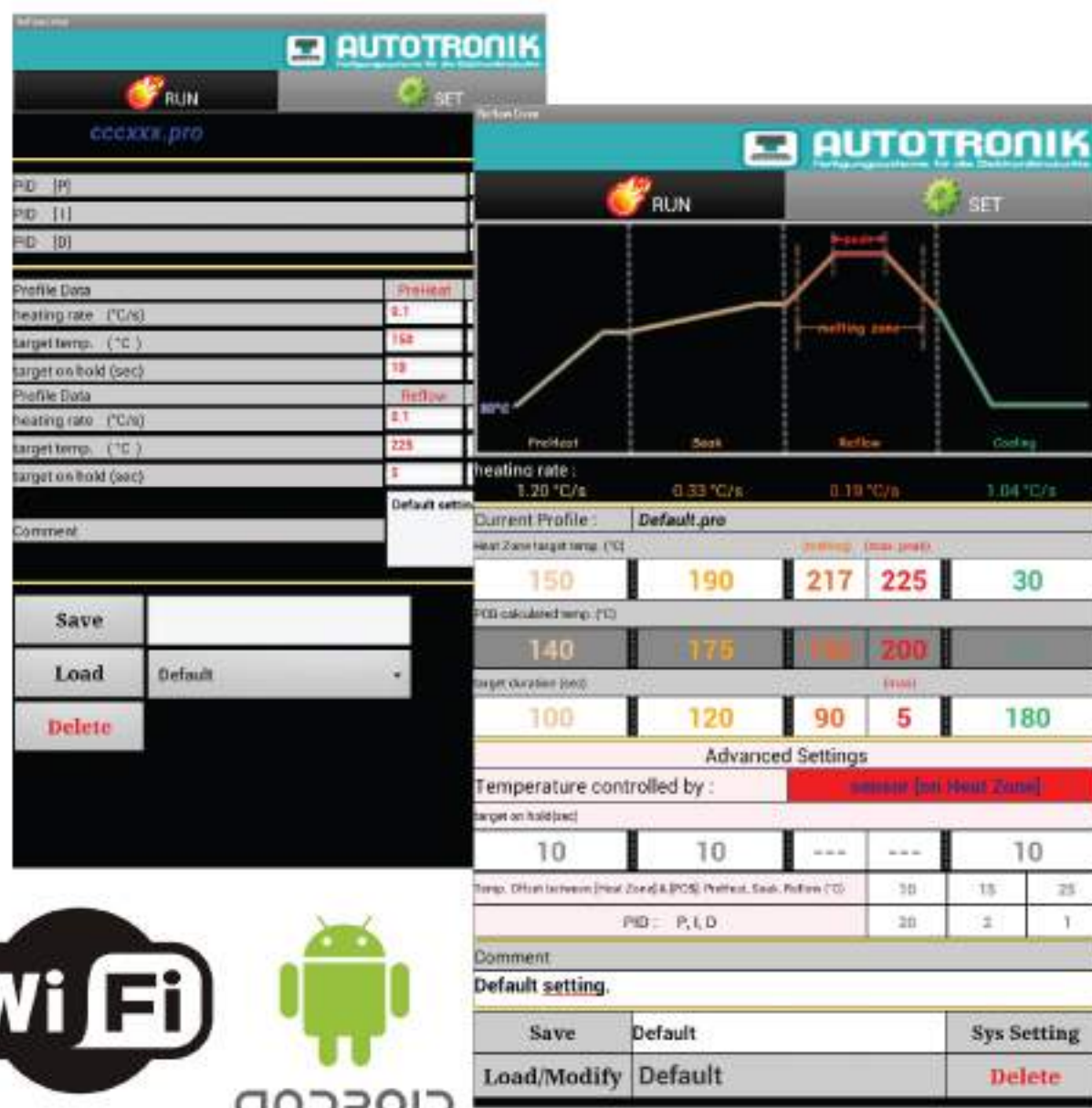
Real time temperature profile display
WiFi temperature profile printing
External data storage via WiFi connection

220 V, Single Phase, 50/60 Hz,
30A in peak, average 15A

6300W

690 mm L x 470 mm W x 270 mm H
approx. 45 Kg

* We reserve the right to make changes without notice.



The BT301 is ideal for product development, prototyping, and small series production. Solder profiles are easily set-up and stored through the control app of the BT301's exclusive hardware control and Android operating system. The dynamic control system takes care of size and complexity of your assembly and makes it a closed loop process, something only large and costly thermal systems can normally offer.

Features

- ◎ Real time close loop PID temperature control for leadfree profile
- ◎ Quick Smart programming by rising rate control (degree change per second)
- ◎ Infrared and forced convection combine for efficient lead-free reflow

- ◎ Real time temperature profile display
- ◎ Android system on multi-core CPU platform
- ◎ 7" touch screen high resolution LCD display
- ◎ Compact design ideal for labs, schools, prototyping and low-volume job shops
- ◎ WiFi temperature profile printing and data storage

AP430



SPECIFICATION

- PCB Max Size 400 x 350 mm
- PCB Min Size 50 x 50 mm
- PCB Thickness 0.4 - 5 mm
- Stencil Size
Min 420 x 380 mm
Max 737 x 737 mm
- PCB Warpage Max PCB 1% of diagonal line
- Repeatability ± 0.008 mm
- Printing Accuracy ± 0.02 mm
- Print Speed
Min 10mm/s
Max 120mm/s
- Transport cycle time 15s (exclude printing & cleaning)
- Transport Height 900 ± 20 mm
- Transport Direction Left-Right / Right-Left / Left-Left / Right-Right
- Transport Speed Speed 1 to 3 (default program setting), max=500mm/s
- Transport way One Stage
- PCB Fixation Side clamp, magnetic support pins, vacuum toolings
- Support System Conveyor stage and vacuum
- Interface SMEMA Interface
- Squeegee Type Metal / plastic squeegee (45 / 60 degree)
- Print Mode Single or double side printing
- Cleaning System Dry / Wet / vacuum
- Camera CCD
- CCD FOV 5 x 7 mm
- Fiducial Type Circular / square / triangular / rhombus / polygon etc..
- Fiducial Size 0.5 to 3 mm
- X, Y, R adjustment $X, Y \pm 10$ mm, $R \pm 2$ degree
- Operation System Windows 7
- Air pressure 4-6 kgf / cm²
- Power 220V $\pm 10\%$ 50-60hz 1kW
- Dimension L 1450 x W 1120 x H 1525 mm
- Weight 650KG

We reserve the right to make changes without notice.

FEATURES



PCB positioning system



Underside Stencil cleaning system



Conveyor side clamp system



Highly adaptable stencil frame clamping system

SMT PICK & PLACE MACHINE
SPECIFICATIONS



Model	BA385V1	BA385V2	BA388V2	BA388V4	BA389F3	BA392V1	BA392V2	BS281
Number of Heads	1	2	2	4	3	1	2	1
Max. Speed (IPC9850)	4000cph (3400)	6400cph (5500)	6400cph (5500)	8400cph (7000)	12000cph (10500)	4000cph (3400)	6400cph (5500)	3000cph (2500)
Feeder capacity (8 mm)								
- Standard	128		256		160	160		64
- With conveyer	64		192		96	96		-
IC Tray capacity	up to 2 Waffle Trays		up to 8 Waffle Trays		up to 3 Waffle Trays	up to 4 Waffle Trays		up to 3 Waffle Trays
Component Size (mm)								
- by vision on the fly head			(Smallest) 0.6mm X 0.3mm		(Option) 0.3mm X 0.2mm			(Largest) 16mm X 14mm
- by BV01005 (option)					(Smallest) 0.3mm X 0.2mm			
- by BV38 (option)			(Largest) 38 X 38mm		/ (by optional Diagonal Vision Processing software : 150mm X 100mm)			
- by BV50 (option)			(Largest) 50 X 50mm		/ (by optional Diagonal Vision Processing software : 150mm X 100mm)			
Placement Accuracy								
- normal component (CHIP)	± 0.05mm		± 0.05mm		± 0.05mm	± 0.05mm		± 0.05mm
- IC, QFP (option)	± 0.03mm		± 0.03mm		± 0.03mm	± 0.03mm		± 0.03mm
Rotation	0°-360°(0.045°/step)		0°-360°(0.045°/step)		0°-360°(0.045°/step)	0°-360°(0.045°/step)		0°-360°(0.009°/step)
Maximum Placement Area								
- Without conveyer	435mm X 430mm		1250mm X 330mm		650mm X 460mm	650mm X 350mm		320mm X 415mm
- With 1 IC tray	435mm X 270mm		1250mm X 330mm		650mm X 400mm	650mm X 330mm		320mm X 270mm
- With 2 IC tray	435mm X 130mm		1250mm X 330mm		650mm X 250mm	455mm X 330mm		(2 to 3 Waffle Trays)
- With 3 IC tray	-		(3 to 8 Waffle Trays)		650mm X 250mm	275mm X 320mm		according to case
- With 4 IC tray	-		according to case		-	-		-
- With conveyer	435mm X 460mm		1250mm X 420mm		650mm X 440mm	660mm X 330mm		-
- With 1 IC tray	435mm X 310mm		1250mm X 420mm		650mm X 380mm	650mm X 295mm		-
- With 2 IC tray	-		1250mm X 420mm		650mm X 230mm	650mm X 175mm		-
- With 3 IC tray	-		1250mm X 420mm		650mm X 230mm	650mm X 145mm		-
- With 4 IC tray	-		(3 to 7 Trays) 1250mm X 290mm		-	-		-
- With dual stage conveyor	-		1800mm X 420mm		-	1200mm X 330mm		-
Power supply	220V		220V		220V	220V		220V
Power	2400W		3800W		4200W	3800W		2400W
Pressure	75psi (5.5bar), 200L/min		75psi (5.5bar), 200L/min		75psi (5.5bar), 400L/min	75psi (5.5bar), 200L/min		75psi (5.5bar), 100L/min
Machine Size (mm)	990 X 1270 X 1320		1780 X 1370 X 1460		1300 X 1420 X 1460	1080 X 1050 X 1350		825 X 1060 X 590
Weight	710KG		1250KG		1100KG	630KG		165KG

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