AUTOTRONIK BA388 is specially designed for long PCB board production with wide range of different feeders. With its extraordinary feeder capacity, fully loaded with as many as 256 Smart 8 mm Tape Feeders, BA388 is ideal for a wide variety of high-component mix product that will still fit within its massive 1250mm X 350mm placement area with conveyor, or 1100mm X 410mm placement area without conveyor.

For surface mount assembly contractors who build single component by utilizing multiple feeders, AUTOTRONIK BA388 which feature COGNEX® vision processing and headmounted for non-contact “Vision on the Fly” alignment, equipped with dual conveyored system and intelligent operation software, ensures the high effectiveness in pick and place production run.

In respond to the increased use and variety of surface mount LEDs supplied in tube packing format, AUTOTRONIK has develop series of accessories, such as Smart Feeders and teflon made nozzle, resulting in the industry’s most flexible, reliable, and cost-effective solution for presentation of LEDs package in tape.
DETAILS
Strong and rigid mechanical design
BA388 using welded steel frame and also heavy duty high precision Linear Ball Rail system to provide strong, rigid and long life time mechanism.

Enormous 1100 mm x 410 mm Placement Area with 256 Smart Tape Feeders; 1250 mm x 350 mm Placement Area with 192 Feeders and Conveyor
48-Port Smart Feeder Bases can be mounted on both the front and rear of the BA388 and 32-Port Smart Feeder Bases can be mounted on the left and right sides of the machine for a maximum capacity of 256 feeders. In this stand-alone configuration, a huge 1100 mm x 410 mm can be shared by PCBs and waffle trays. Placement area increases to 1250 mm x 350 mm with feeder bases mounted on only the front and rear of the system and an in-line conveyor installed.

COGNEX® Alignment System “Vision on the Fly”
The BA388 features COGNEX® vision processing and head-mounted for non-contact “Vision on the Fly” alignment. The machine BA388 assures high-precision placement of the full range of SMDs, from the smallest 0201 devices through CSPs, μBGAs, flip-chips, ultra-fine-pitch QFPs (0.3mm fine pitch), even odd-form components.

Bottom Vision Alignment System
A Bottom Vision Camera is used for large components up to 150 x 100 mm and devices with alignment features on their bottom side.

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

Dual-conveyor system available as option
Dual conveyor in action will shorten the machine idle time in PCB board loading / unloading. The overall placement speed will hence be increased effectively.

Powerful Windows®-Based Control Software
Intelligent software allows the easy set up for the complex and repeatable LED programming.

Auto Tape Feeder (KFTA)
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
KFTB universal tube feeder are using vibration driven technique. It is able to handle IC-Sticks with max.50 mm width.

CUT Strip Tape Holders
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.

Bulk Pack Component Tray
Designed for bulk pack component. Bulk Pack Component Tray (TSD18) 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
The standard Waffle Tray Holder occupies approximately 330mm X 140mm of work area and is designed to hold a standard 316mm X 136mm JEDEC Matrix Tray. This provides adjustability for wide variety of smaller matrix tray and waffle pack combinations and can easily be modified for custom tray configurations. Up to 6 waffle trays or more can be installed.

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

TEFLON LED Nozzle
TEFLON made LED nozzle in Autotronik BA388 machine, together with the positive air outputting pressure, is specialized design for LED application. The innovative design of Nozzle ensures the effective landing of sticky LED components.

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

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.

SPECIFICATION

- Number of Heads (Vision on the Fly): 2
- Placement rate:
  - 5500 CPH (IPC9850 Chip 1608)
- Feeder capacity (8 mm)
  - without conveyor: up to 256 Tape Feeders
  - with conveyor: up to 192 Tape Feeders
- IC Tray capacity:
  - up to 6 Waffle Trays
- Component Size (mm)
  - Handled by head camera: (0.6 x 0.3 mm)
  - Largest: 16 x 14 mm
- Component Size (mm)
  - Handled by fixed Bottom Vision Camera: (0.4 x 0.2 mm (option))
  - Largest: 150 x 100 mm (option)
- Resolution:
  - X/Y axis: 0.005 mm Servo Motor
  - Z axis: 0.02 mm Servo Motor
- Rotation:
  - 0 to 360° (0,045°/step) Servo Motor
- Placement Accuracy: +/- 0.03 mm
- X-Y Repeatability: +/- 0.01 mm
- Placement area:
  - Max: 1100 x 410mm without conveyor
  - Max: 1250 x 350mm with conveyor
- Programming:
  - Direct input
  - Vision teach-in
  - CAD Access (Option)
- Component Sense: Vision detection
- Main Control: Industrial PC
- Machine Size
  - Main body: 1780 x 1370 x 1395 mm (L x W x H)
  - Weight: 1200 kg
- Power: 230 V / AC, 2800W
- Pressure: 73 psi (5.9 bar)

We reserve the right to make changes without notice.