

MODEL: BS384V1 / BS384V2 SMT PICK & PLACE MACHINE



SUMMARY

- High Accuracy and high Flexibility for 0201 (0.6 mm x 0.3 mm), SOIC, PLCC, BGA, μ BGA, CSP, QFP (0.5 mm pitch)
- Smart Feeder ID System provides Automatic feeder position checking, Automatic component counting, Production data Traceability
- Perfect for small & medium volume production
- COGNEX Alignment System "Vision on the Fly"
- Bottom Vision Alignment System for fine pitch QFP & BGA
- Built in Camera System with Auto Smart Fiducial Mark Learning
- Dispenser system
- Vision Inspection before and after production
- Windows 2000 Software
- Universal CAD Conversion
- Placement rate: up to 6.400 CPH
- Ball Screw System in X- and Y- Axis
- Suitable for 128 intelligent Auto Tape Feeder

The SMT Pick & Place Machines of **BS384-series** were especially designed for small and medium volume batch sizes. Various models are provided for different applications. Two different models are available, which distinguish between their placement speeds.

BS384 is fully compatible with BS391- and BS683- series and even the feeders are interchangeable. By this means most reliability and easy maintenance for all models is guaranteed. Preloaded Ball Screws with closed loop DC-Servo motor system provides high repeatability and stability.

Additionally, the BS384 series feature COGNEX vision processing and head-mounted for non-contact "Vision on the Fly" alignment.

MODEL: BS384V1 / BS384V2
SMT PICK & PLACE MACHINE



AUTOTRONIK
Fertigungssysteme für die Elektronikindustrie

AUTOTRONIK-SMT GmbH
Sulzbacher Str. 111
92224 Amberg, Germany
tel +49 (0) 9621-600 691
fax +49 (0) 9621-600 692
mail office@autotronik-smt.com
www.autotronik-smt.de

DETAILS

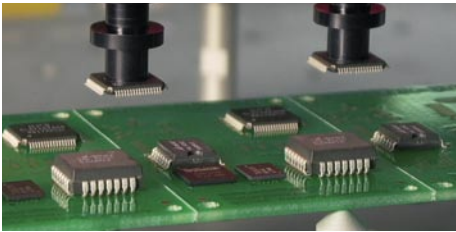
Strong and rigid mechanical design

BS384 using welded steel frame which guaranteed a strong and rigid mechanical design. Preloaded Ball Screws with closed loop DC-Servo motor system provides high repeatability and stability.



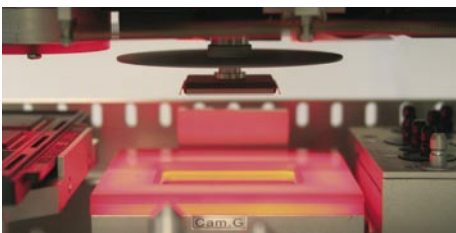
COGNEX Alignment System "Vision on the Fly"

The BS384-series feature COGNEX vision processing and head-mounted for non-contact "Vision on the Fly" alignment. The machine BS384 assures high-precision placement of the full range of SMDs, from the smallest 0201 devices through CSPs, μ BGAs, flip-chips, ultra-fine-pitch (0,5 mm lead pitch) QFPs, even odd-form components.



Bottom Vision Alignment System

A Bottom Vision Camera is used for large components up to 38 x 38 mm and devices with alignment features on their bottom side.



Dispenser System

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

Smart Fiducial System

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

Universal CAD Conversion

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

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.



Feeder Rack (FR-32K)

FR-32K is suitable for 32 x 8 mm KFTA Feeders or for 30 x 8 mm IC-Sticks (1x KFTB-2 / 1x KFTB-4).

Conveyor System

The conveyor system with SMEMA Interface speeds up the handling of PCB and in-line production.



Universal IC Tube Feeder

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)



Buffering Nozzle

The spring buffering design of Nozzle adjust the placement pressure for different heights of components automatically.

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):
BS384V1: 1 / BS384V2: 2
- Max. Speed
(under the optimum condition):
BS384V1: 4000 CPH / BS384V2: 6400 CPH
- Feeder capacity (8 mm)
without conveyer: up to 128 Tape Feeders
- Feeder capacity (8 mm)
with conveyer: up to 64 Tape Feeders
- IC Tray capacity: up to 2 Waffle trays
- Component Size (mm)
- Smallest: 0.6 x 0.3 mm
- Largest: 16 x 14 mm
38 x 38 mm (by optional bottom vision BV-38)
50 x 50 mm (by optional bottom vision BV-50)
- Resolution:
X / Y axis 0.0075 mm DC Servo Motor
Z axis 0.02 mm DC Servo Motor
- Rotation:
0 bis 360° (0.045°/ step) DC Servo Motor
- Placement Accuracy: +/- 0.05 mm
- X-Y Repeatability: +/- 0.015 mm
- Placement area:
Up to 415 x 405 mm with 32 Feeders
Up to 370 x 362 mm with 128 Feeders
- Programming:
- Direct input
- Vision teach-in
- CAD Access
- Component Sense: Vision detection
- Main Control: Industrial PC
- Machine Size: 1150 x 1000 x 1300 mm (L x W x H)
- Weight: 450 kg
- Power: 230 V / AC
BS384V1: 1800 W
BS384V2: 2100 W
- Pressure: 75 psi (5.5 bar)

We reserve the right to make changes without notice.