Roll to roll printer

*Model RTP-10*

- Suitable for MLCC, MLCV mass production applications
- Automatically prints A/B pattern
- Checks print quality by two CCD automatically
- Well suitable for high layer count application
- Punches registration holes for precise registration on stacker

Machine is designed to reel to reel print electrode pattern on to ceramic foil cast on carrier film (mylar). Punches registration holes (if needed) on edges of mylar tape and dry the print.
1. Pattern printing

By high precision screen printer. Tape is hold by vacuum during printing.

- Printing area: up to 200 x 200mm
- Carrier foil width: up to 250mm
- Drying length: 6 meter
- Efficiency: print to print 4s whiteout registration holes punching; 7s whit registration holes punching
- Squeegee speed: adjustable 1- 250 mm/s
- Squeegee force: 0-120N
- Modes: print/print, print/flood, flood/print
- Parameters: all parameters adjustable via control panel
- A-B print: programmable
- Print quality control: by vision system (2 CCD cameras)
- Automatic paste supply

2. Registration holes punching

Punching tool punches four registration holes on the edges of mylar for precise tape registration on Keko stackers. This function can be switched off if CCD does registration on stacker.

- Holes diameter: 5mm
- Tool material: tungsten carbide
- Foil fixing: by vacuum

3. Drying system

Remove solvents from printed electrodes. Bottom heating and air-drying.

- Number of drying zones: 5
- Drying zone length: 1,2m
- Temperature range: ambient to 100deg C
- Temperature control: 5 independent for bottom plates controllers, 1 hot air control
- Platen heaters: electrical resistance type, insulated and sealed in to the aluminum hard anodized plate
- Air supply: filtered room air, counterblow air movement, one exhaust at top of dryer entrance.
- Inlet air: adjustable up to 4m3/min
- Air inlet filter: 10micron rated, cartridge type
- Air volume control: Panel mouthed, under pressure sensor for safety operation
  (Air exhaust volume has to be bigger than air inlet)
- Exhaust: Exhaust diameter 130mm ha to be connected to customer supplied exhaust system.
  Manually controlled exhaust airflow.
- Construction: Insulated stainless steel air chamber

4. Dry tape winding

Tape up of dry tape on to spools
- Tape winding: core diameter 75mm, maximal outside diameter 350mm, PLC winding torque control, tape tracking control

5. Technical data

- Dimensions: (LxWxH) 3780 x 1130 x 1700mm
- Weight: 1800kg
- Connections:
  - electricity: 3x380V/50Hz, 32A (fuse)
  - compressed air: 0.6Mpa, 200NI/min
- Exhaust: D=130mm, 6m3/min