SAMSUNG

DECAN Series

Wide Range Mounter for the Next Decade

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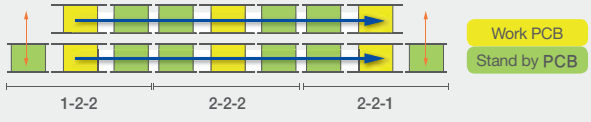
HIGH PRODUCTIVITY

Optimizing PCB transportation paths for the highest productivity using

Modular Conveyors

- Shuttle and dual lane configurations are supported with a modular conveyor that is replaceable on site.
- PCB supply time is shortened as a result of the high-speed shuttle conveyor.



	Standard	1st Machine	Medium Machine	Last Machine	Extra Large PCB
In-let	1 (Shuttle)	1 (Shuttle)	2	2	1
Work	2	2	2	2	1
Out-let	1 (Shuttle)	2	2	1 (Shuttle)	1
Configurations					

Minimized head path for improving equipment speed

Twin Servo Control

- Linier motors ensure high-speed operation
- Twin servo control

High-speed Flying Head

- Minimized head movement path through recognizing parts on the fly

DECAN F2

High Speed Wide Range Mounter *for the Next Decade*

Best in Class Productivity
Best for High-speed Placement of Small Component (□ 8mm)

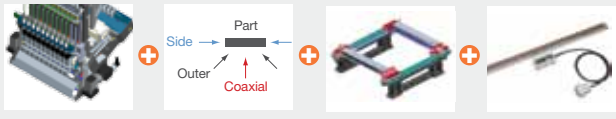
- Speed : **80,000 CPH (Optimum)**
- Structure : 2 Gantry x 10 Spindles/Head
- Accuracy : ±40μm Cpk≥1.0 (0402 chip)
  ±30μm Cpk≥1.0 (IC, Stage vision)
- Parts Size : 0402 ~ □ 16mm, H10mm
  ~ □ 42mm, H15mm
- PCB Size : 50 x 40 ~ 510 x 460mm (Standard)
  ~ 740 x 460mm (Option)
  ~ 1,200 x 460mm (Option)

FS10 Head
Light & Narrow Pitch Flying Vision

- 15mm Pitch x 10 Spindle Head,
  10 Components Simultaneous Recognition & Placement
- Flying Vision : ~ □ 16mm
  Stage Vision : ~ □ 42mm (Option)

Best in Class Productivity

- Optimal Floor Space Performance in its class

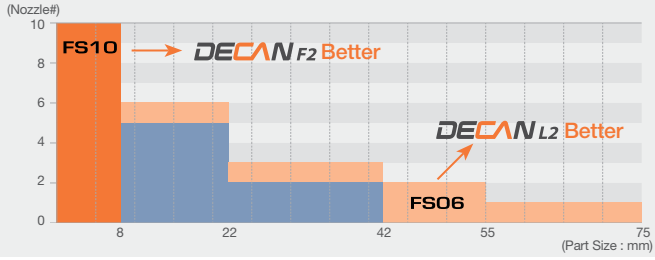


10 Spindles | Flying Vision | Linear Motor | Using High-precision linear scale

80,000 CPH / ±40μm Cpk≥1.0

High-speed Placement of Small Components

- 10 nozzles allow high productivity of small component (□ 8mm) placement



DECAN L2

Flexible Wide Range Mounter *for the Next Decade*

Provides Optimal Line Balance with DECAN F2

Large Component- Max. □ 55mm, L75mm, H25mm

LED & LED Lens Placement

- Speed : **56,000 CPH (Optimum)**
  0.55 sec/component (QFP100 0.5P)
- Structure : 2 Gantry x 6 Spindles/Head
- Accuracy : ±40μm Cpk≥1.0 (0402 chip)
  ±30μm Cpk≥1.0 (IC, Stage vision)
- Parts Size : 0402 ~ □ 21mm, H12mm
  ~ □ 55mm, H25mm
- PCB Size : 50 x 40 ~ 510 x 460mm (Standard)
  ~ 740 x 460mm (Option)
  ~ 1,200 x 460mm (Option)

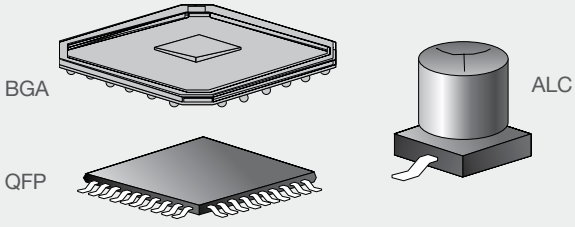
FS06 Head

Improved Component Range

- 6 Spindles + 6 Flying Visions,
  Simultaneously Recognition & Placement
- Flying Vision : ~ □ 21mm
  Stage Vision : ~ □ 55mm (Option)

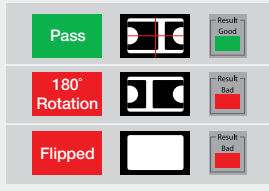
Improved Odd-form Component Range

- Max. □ 55mm, H25(28)mm with Stage Vision (Optional)

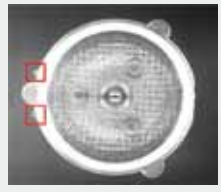


LED & LED Lens Placement

- Check LED component flipped
- Recognition of LED Lens protrusions & Center of light source



Check LED flipped



LED Lens protrusions Cognition

HIGH RELIABILITY

Prevent the placement defect by Nozzle checking system

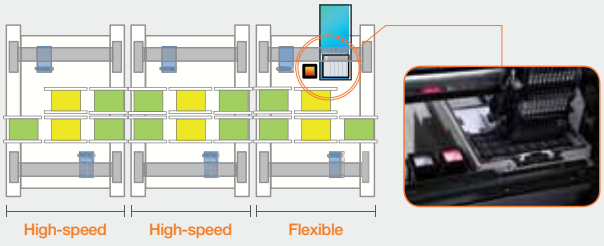
- Using flying camera to Check Nozzles before & after placement
  - Prevent the placement defect (Missing /Wrong Component)

FLEXIBLE LINE SOLUTION

Provides optimal line solutions through versatility and productivity improvement

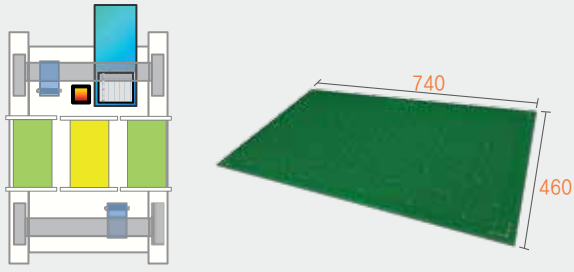
DECAN Line

- Optimal line configuration from chips to odd shaped components in a single platform



Equipment capable of placing to large PCBs, and can be reconfigured on site

- Standard equipment can be reconfigured for 740mm x 460mm PCB's



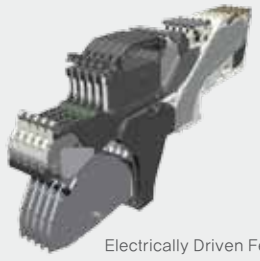
EASY OPERATION

Easy, User friendly software

- Convenient editing of work programs through built-in equipment optimization software
- Large-scale LCD screen

High-precision, convenient electric feeders

- Calibration and maintenance-free.
- Convenient operation with single reel bank mounted feeder
- Improved productivity through automatic part pick-up position alignment

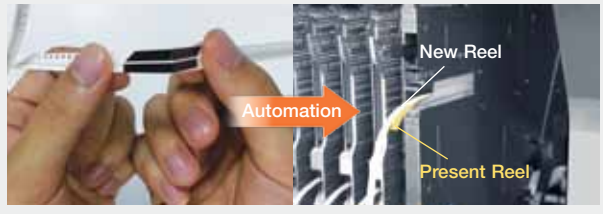


Electrically Driven Feeder

SMART Feeder

Reduced work load through automated components loading smart feeder

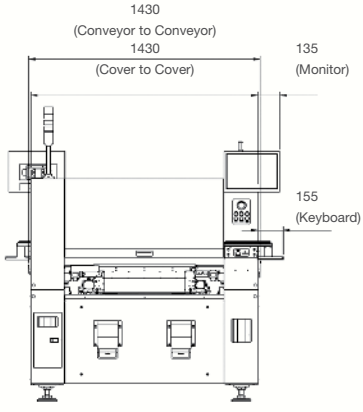
- Industry first automatic loading and splicing capabilities
  - Significantly reduces setup and changeover times
- Zero consumables costs for splicing

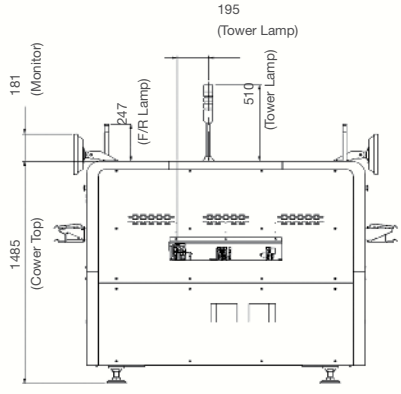


Specifications

Model	DECAN F2	DECAN L2
Head Type	FS10	FS06
Placement Speed	80,000 CPH (Optimum)	56,000 CPH (Optimum) 0.55 sec/component (QFP100 0.5P)
# of Spindles	10 Spindles x 2 Gantry	6 Spindles x 2 Gantry
Vision	Flying Vision (FOV 20.5mm) Stage Vision (Option)	
Placement Accuracy	±40μm Cpk≥1.0 (0402 chip) ±30μm Cpk≥1.0 (IC, Stage Camera)	
Component Range	Flying : 0402 (01005inch) ~ □16mm, H10mm Stage (Option) : Max. □42mm, H15mm	Flying : 0402 (01005inch) ~ □21mm, H12mm Stage (Option) : Max. □55mm, H25mm
PCB Size	50 x 40 ~ 510 x 460mm (Standard) / ~ 740 x 460mm (Option) / ~ 1,200 x 460mm (Option)	
Conveyor Configurations	Standard : 1-2-1 Option : 1-1-1 / 1-2-2 / 2-2-2 / 2-2-1 Factory Option : Single Conveyor (Jedec Tray 2ea)	
Feeder Capacity	120ea (8mm)	
Power	Voltage : 3 phase AC 200/208/220/240/380/415V ±10% Frequency : 50/60Hz Power Consumption : Max. 5.0 kVA	
Air Consumption	50 Nl/min	
Weight	About 1,800kg	
External Dimensions (mm)	1,430(L) x 1,740(D) x 1,485(H)	

Dimension





Nozzle

			External Diameter	Internal Diameter	Component
CN Nozzle	Small Type (Ø9.8)	CN020	Ø0.5	Ø0.16	0402 (Exclusive)
		CN030	Ø0.6	Ø0.28	0603 (Exclusive)
		CN040	Ø0.75	Ø0.38	1005 (Exclusive)
		CN065	Ø1.2	Ø0.65	1608
		CN080	Ø1.2	Ø0.65	2012
		CN140	Ø2.2	Ø1.4	3216
		CN140-P	Ø2.2	Ø1.4	3216
		CN220	Ø3.6	Ø2.2	SOP
		CN220-P	Ø3.6	Ø2.2	SOP
		CN400	Ø6.2	Ø4.0	SOP, TSOP
		CN400-P	Ø6.1	Ø4.0	SOP, TSOP
	Medium Type (Ø13.4)	CN400N	Ø6.2	Ø4.0	SOP, TSOP
		CN400N-P	Ø6.1	Ø4.0	SOP, TSOP
		CN750	Ø9.0	Ø7.5	QFP, BGA
		CN750-P	Ø9.5	Ø7.5	QFP, BGA
	Large Type (Ø15.6)	CN110	Ø12.7	Ø11.0	QFP, BGA
		RN10-N	Ø10.0	Ø6.0	QFP, BGA
		RN12	Ø11.6	Ø3.8	QFP, BGA

• 'N', 'P' : Urethane pad attached nozzle tip

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