SAMSUNG

Fresh Energy in Your Business

Flexible
High Speed Chip Shooter
SM471

As a high performance chip shooter SM471 achieves 75,000 CPH- the highest in the world among chip shooters of the same class - with two gantries that have flying vision system and 10 spindle-heads. SM471 handles from 0402(01005 inch) chips to the largest □14mm ICs by default. SM471 increases actual productivity and placement quality by using an electrically driven high speed and high precision feeder. Moreover, it is designed to handle both electrical feeder & pneumatic feeder to maximize the customers' operational convenience.

- 75,000 CPH(Optimum)
- 2 Gantry x 10 Spindles/Head
- Part Size : 0402(01005 inch) ~ □14mm(H12mm)
- PCB Size : Max. 510(L) x 460(W)(Standard)
  Max. 610(L) x 460(W)(Option)
- Electrically Driven High Speed and High Precision Feeder
  - Able to use with an SM pneumatically driven feeder
- SMART Feeder
  - World's first Auto Loading and Auto Splicing

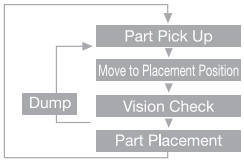
Flexible High Speed Chip Shooter

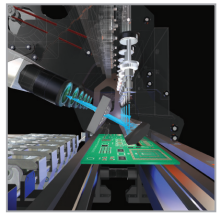
SM471

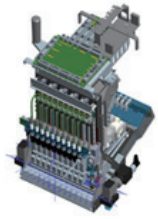
Achieves a Super-high Speed Placement Speed of 75,000 CPH

Achieves the Highest Placement Speed Among Chip Shooters of the Same Class by Adopting a New Flying Head Mechanism With 10 Spindles.

Since it allows part recognition without stopping after part pickup by using its original On-the-Fly image recognition technology, SM471 model maximizes the part placement speed by minimizing the time to move between the pickup position and placement position and by reducing the recognition time to almost zero.

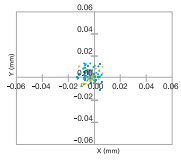






Placement accuracy correction system

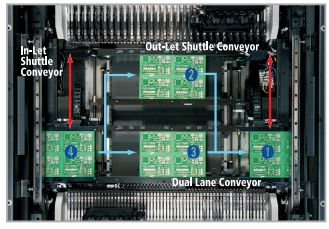
Chip ±50μm(Cpk ≥1.0)
The newly upgraded placement accuracy calibration system automatically checks and corrects the pickup point offset, head offset, C/V offset, etc. to allow reliable part placement.



Absolute Accuracy of±50μm(Cpk 1)

Dual Lane System

PCB Loading Time of "ZERO"
Maximizes actual productivity by minimizing the PCB transfer time by adopting a first-in-first-out type shuttle inlet conveyor. In addition, it supports various placement modes according to production characteristics.



Reinforced Applicability to Parts

Default Placement of Parts of 0402(01005 inch) ~ □14mm(H12mm)

Reinforced its applicability to odd shaped parts by using a 3-staged light system (side, coaxial and outer light). (CSP 0.4 possible)

Uses a New Vacuum System

- Minimized delay of part placement due to optimization of pneumatic path
- Achieves stabilized part pickup and minimized air consumption by using a vacuum pump

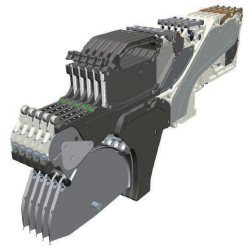
※Air consumption is less than 50Nl/min when using a vacuum pump.

Electrically Driven High Speed and High Precision Feeder

Electrically Driven SM Feeder

- Allows integrated use of 0603/2P/4P
- With a function to automatically align the pickup position between feeders to improve the simultaneous pickup rate.
- Able to set various part supply speeds to improve the stability of part supply.

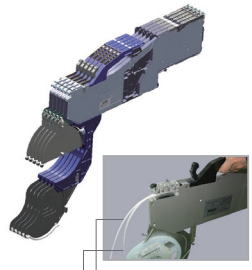
※Able to use with an SM pneumatically driven feeder



SM Smart Feeder

- The world's first feeder with Auto Splicing and Auto Loading functions
  - Maximizes work convenience and actual productivity by automating the splicing process for part reel replacement normally performed by hand.
- Applicable to reels with a small quantity of parts

※Able to use with an SM pneumatically driven feeder



Specifications

Model			SM471
Alignment			Flying Vision
Number of Spindles			10 Spindles x 2 Gantry
Placement Speed			75,000 CPH(Optimum)
Placement Accuracy	Chip		±50μm@μ+3σ (Based on the Standard Chips)
Component Range			0402(01005 inch) ~ □14mm(H12mm) IC, Connector(Lead Pitch 0.4mm) BGA, CSP(Ball Pitch 0.4mm)
Board Dimension (mm)	Minimum		50(L) x 40(W)
	Maximum	Single Lane	510(L) x 460(W) 610(L) x 460(W)(Option)
		Dual Lane	460(L) x 250(W) 610(L) x 250(W)(Option)
	PCB Thickness		0.38 ~ 4.2
Feeder Capacity(Based on 8mm)			120ea / 112ea(Docking Cart)
Utility	Power		AC200 / 208 / 220 / 240 / 380 / 415V(50/60Hz, 3Phase) Max. 5.0kVA
	Air Consumption		0.5 ~ 0.7MPa(5 ~ 7kgf/cm²) 350Nℓ/min 50Nℓ/min
Mass			Approx. 1,820kg
External Dimension(mm)			1,650(L) x 1,690(D) x 1,485(H)

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