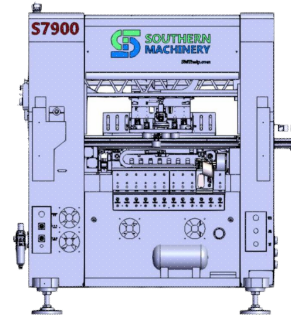
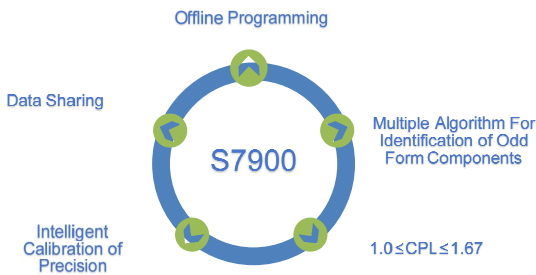


Southern Machinery S7900 Odd Form Insertion Machine



Introduce:

Southern Machinery S7900 Odd Form Insertion Machine has successfully overcome the process problem of the combination of high speed and versatility.

Its unique innovative technological revolution integrates low maintenance linear motor, high-resolution digital camera, and advanced optical sensor. It still shows excellent performance and extraordinary production efficiency in a compact unit space. This means that you no longer have to compromise the efficient productivity of the whole line for the special-shaped component insert process that hinders the operation of the system for a long time.

At the same time, its modular structure design allows you to arrange the production line according to the growing process demand at any time. All technologies and functions that keep pace with the times are only to keep your investment more long-term value.

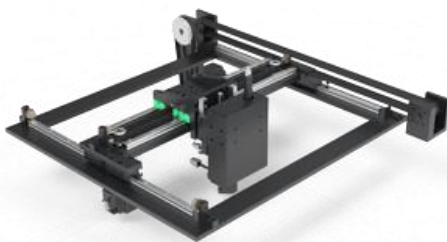
Southern Machinery OFM series is a device for the insertion of special-shaped components through modular design. And can adapt to various, connectors, transformers, and so on. The OFM series equipment is equipped with multiple high-precision plug-in heads and a more flexible and diversified feed system, which is the simplest and most effective way to cores pond to different type components. Flexibility, simplicity, efficiency, and stability are the remarkable characteristics of the OFM series.

Features:

1. Offline Programming(Optional): Plug-in programming software can be installed on any computer outside for programming.
2. Data Sharing: The program data of the machine and the production data (PCB size, component data, coordinates, etc.) can be shared to other device calls.
3. Intelligent Calibration of Precision: The equipment can improve the accuracy through a variety of precision algorithms and intelligent correction of error of production data analysis equipment.
4. $1.0 \leq CPK \leq 1.67$: Through the standard CPK program, the accuracy proof process, the CPK test result are between 1.0 and 1.67.
5. Multiple Algorithm For Identification Of Odd Form Components: The results of corrective analysis through multiple recognition components.

Option Features:

- Some models can be equipped with components lead bent to realize automatic bent lead after component plug-in, so as to prevent the floating phenomenon during component welding. The lead diameter of the bent foot shall be less than 1.0mm, and the length of the leaking lead shall be not less than 2mm.



Insertion Bent Foot Module



Outward bend



Inner bend

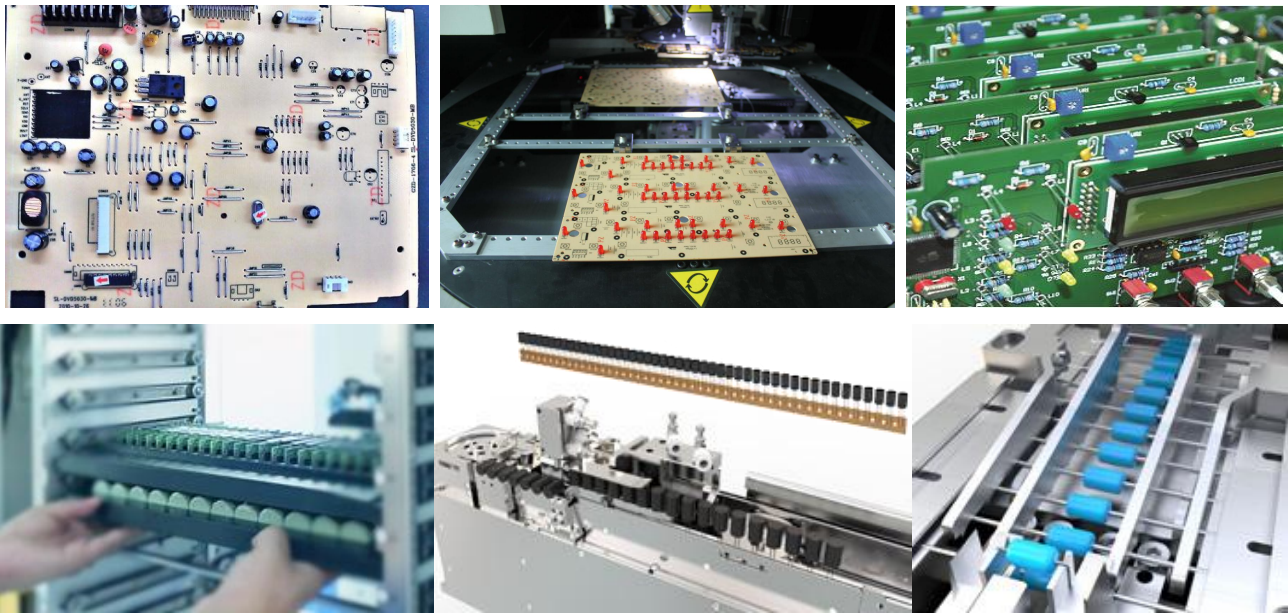


Circular(no direction, angle)



2 Turns(with specified angle)

Application:



Special Clamp Application:

In order to adapt to the diversity of special-shaped originals, according to the shape of different parts, the most suitable nozzle and gripper are designed to provide guarantee for high-speed plug-in machines.



IC, Capacitor



Tact Switch, VGA, Pin




Module, Transformer




USB, Connector, Coil

Feeder Type:

Feeder	Photo	Description
202 Axial Tape Feeder		It is specifically designed for horizontal lead braiding materials. Suitable for materials like resistor, capacitor and fuse etc. Advantage of universality, fast speed, high efficiency and low maintenance cost, also can customize.

<p>259 Radial Tape Feeder</p>		<p>It is specifically designed for vertical lead braiding material. Suitable for materials like capacitor and LEDs etc. Advantage of universality, fast speed, high efficiency and low maintenance cost, also can customize.</p>
<p>207 Radial Tape 90° Feeder</p>		<p>It is specifically designed for vertical lead braiding materials which need bending 90 degree before insertion. Suitable for materials like capacitor and LEDs etc. Advantage of universality, fast speed, high efficiency and low maintenance cost, also can customize.</p>
<p>248B&213A Tray Feeder</p>		<p>It is a specialized material supply device developed for pallet incoming material, suitable for IC, transformer, coil and other materials. With the characteristics of high efficiency, universality, high safety and high stability, also can be customized.</p>
<p>248C&215&206 Tray Feeder</p>		<p>It is a feed device developed professionally for pallet incoming materials. It is suitable for IC, transformer, coil and other materials, and has high economy and safety. High stability, strong versatility and other characteristics, can be customized.</p>
<p>203 Tube Feeder For Mid-Size Material</p>		<p>Designed specifically for pipe loading materials. It is suitable for capacitors, transformers, relays, VGA and other materials. It has the characteristics of high versatility, fast feeding speed, high working efficiency, low maintenance cost, and can be customized.</p>
<p>222 Tube Feeder For Small-Size Material</p>		<p>Designed specifically for small tube loading materials. It is suitable for IC, small crystals, etc. It has the characteristics of high versatility, fast feeding speed, high working efficiency, and low maintenance costs. It can additional configured lead cutting and pre-form function, and can be customized.</p>
<p>229 Tube Feeder For Large-Size Material</p>		<p>Designed specifically for pipe loading materials. It is suitable for capacitors, transformers, relays, VGA and other materials. It has the characteristics of high versatility, fast feeding speed, high working efficiency, low maintenance cost, and can be customized.</p>
<p>205 Single Layer Bowl Feeder</p>		<p>Developed professionally for pallet incoming materials. It is suitable for IC, Transformer, coil and other materials, and has high economy, high security, high stability, and strong versatility, also can be customized.</p>
<p>209 Double Layer Bowl Feeder</p>		<p>Developed professionally for bulk incoming materials. It can be used for plug-ins, terminals, small transformers, VGA, headphone connectors, USB, switches, HDMI, etc. Materials, Among them, the vibration disk is double layer, saves space, improves the feed efficiency, also can be customized.</p>

214 Identify Polarity Vibrant Bowl Feeder		Developed professionally for bulk LEDs and capacitors. This product can automatically distinguish LEDs, capacitive polarity and automatically adjust direction, with high economy, high security, high stability, strong versatility and other characteristics, also can be customized.
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Specification:

Model	S7900- II	S7900- IV	S7900- IV -P	S7900- VI	S7900- VI -P
Machine Photo					
Insertion Head	2	4	4	6	6
Machine Dimensions	1050*1680*1870	1300*1700*2000	1550*1900*2100	1550*1900*2100	1300*1700*2000
Weight	1250KG	1650KG	1750KG	1800KG	1730KG
Operation System	Windows				
Feeder Bank	Single Side		Double Side	Single Side	Double Side
Safety Grating (Door)	Standard Configuration				
Air Supply	0.5-0.65MPa (ANR)				
Max Power	4.5KW	5.4KW	6.3KW	6.3KW	5.4KW
Run Power	2KW	3.3KW	3.5KW		
Max Component Size	$\phi 50$ (35*35) mm			$\phi 50$ (35*35) mm	$\phi 30$ (17*17) mm
Component Height	≤ 25 mm	≤ 30 mm	≤ 25 mm	≤ 30 mm	≤ 20 mm
Component Picking Method	Nozzle / Clamp				
Speed / One Component	0.8 S	0.7 S	0.7 S	0.6 S	0.6 S
Accuracy CPK ≥ 1.0	± 0.05 mm				
Insert Power	≤ 29.4 N	≤ 98 N	≤ 29.4 N	≤ 29.4 N	≤ 29.4 N
Insert Component Object	Connector, Switch, Socket Transformer Coils, Ports, Capacitors, Resistors, IC, etc.				
PCB Size (L*W)	70*70~300*500mm	70*70~410*500mm	70*70~450*400mm	70*70~410*350mm	70*70~410*350mm
Fixture Size (L*W)	350*500mm	500*500mm	500*550mm	410*350mm	410*350mm
Conveyor Space (Upper/ Bottom)	25mm / 20mm	30mm / 20mm	25mm / 20mm	30mm / 20mm	20mm / 20mm
Max. PCB Weight	5KG	5KG	5KG	5KG	2KG
PCB thickness	0.6~2mm				

PCB Included Side Width	≥5mm				
PCB Fixed Type	Servo Top Plate / Cylinder Clamping				
Conveyor Type	Chain			Belt	
Direction	L to R (Optional R to L)				
Conveyor Section	3				
Conveyor Adjusting	Automatic				
Conveyor Height	750±20mm	900±20mm			
Insertion Bent Foot Module	No	No	Standard	Option	No
SMEMA	Standard Configuration				
Mark CCD (Top)	1				
Component CCD (Bottom)	2	4	4	6	2
Max Feeder Stations					
201 Radial tape feeder	4	6	6	6	10
218 Radial tape feeder					
207 90 degree Radial tape feeder					
259 Radial tape feeder	6	12	12	12	20
254 Radial tape feeder					
202 Axial tape feeder	4	6	6	6	10
222 Tube feeder	6	12	12	12	20
203 Tube feeder	4	6	6	6	10
205 Bowl feeder	4	4	8	4	8
Tray feeder	1	1	1	1	2
Remark: If different types feeders mixed using, the number of feeders are depended on combination.					

* Southern Machinery keeps working on quality and performance, specifications and appearance may be updated without particular notice.

Thanks for choosing Southern Machinery.
Southern Machinery looks forward to win-win cooperation.
Thank you.