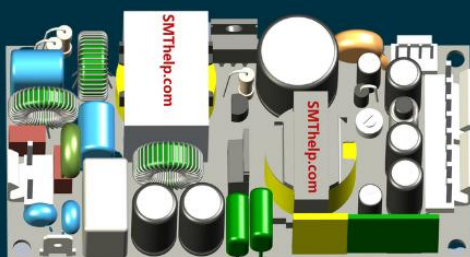




## MANUAL TO AUTO INSERTION PCB ASSEMBLY



REVIEW OF EMS NEW TECHNOLOGY

# SMT PCBA MACHINE

Everything you need to know

[INFO@SMTHELP.COM](mailto:INFO@SMTHELP.COM)

### 1、 Resistance / diode / fuse-molding lead cutter series

- SM-100U / F ..... Page 1
- SM-201U / F automatic belt resistance molding .....Page 1
- SM-101M / MB / MBK Automatic band resistance diode molding .....Page 2-3
- SM-101F / FB / FBK Automatic band resistance diode molding .....Page 2-3
- SM-102DQ automatic fuse ring molding lead cutter ..... Page 4

### 2、 Capacitor / LED-molding lead earing series

- SM-300 / 306 Bulk Capacitive Spper ..... Page 5
- SM-301 / 310 fabric with capacitive lead cutter ..... Page 6
- SM-320 radial element ..... Page 7
- SM-307 Bulk radial element lead cutter .....Page 8
- SM-309A / B / C Bulk radial element forming lead cutter .....Page 9-10

### 3、 crystal vibration-molding lead shear machine series

- SM-308 quartz machine .....Page 11

### 4、 Triode / MOS Tube / Transistor-molded lead shearing series

- SM-800K Bulk Tripole Cutting Set .....Page 12
- SM-806K tube-mounted Tripole lead cutter .....Page 13
- SM-808 Multifunction Bulk Triode Pod Cutting Set .....Page 14
- SM-6900 transistor, heat sink automatic lock set installed by .....Page 15
- SM-8180A Triode sleeve magnetic ring dot adhesive swing disc all-in-one machine .....Page 16

### 5、 IC-molding lead shearing machine series

- SM-400 IC shaping .....Page 17
- SM-402 IC Machine .....Page 18

### 6、 Jumper-molding lead cutter series

- SM-500 Waste Free Jumper Machine .....Page 19
- SM-506 wire special shape molding machine .....Page 20
- SM-505 jumper per .....Page 2

### 7、 Bushing-Cupper Series

- SM-700 Microcomputer Pipe Cutter .....Page 22

## SM-100U, 100F hand shake belt resistance molding machine

## SM-201U, 201F automatic belt resistance forming machine

### Equipment use

Bend lead and cutting lead of axial elements such as resistance and dipole

### Equipment introduction

- 1、 Small volume and light weight, lock and buckle on the work surface;
- 2、 Artificial hand-shaking operation;
- 3、 Gear drives the continuous feeding of tape-cutting components;
- 4、 Cut feet, bending feet, return material continuously completed;
5. The span and lead length size are adjustable.

### Equipment configuration and parameters

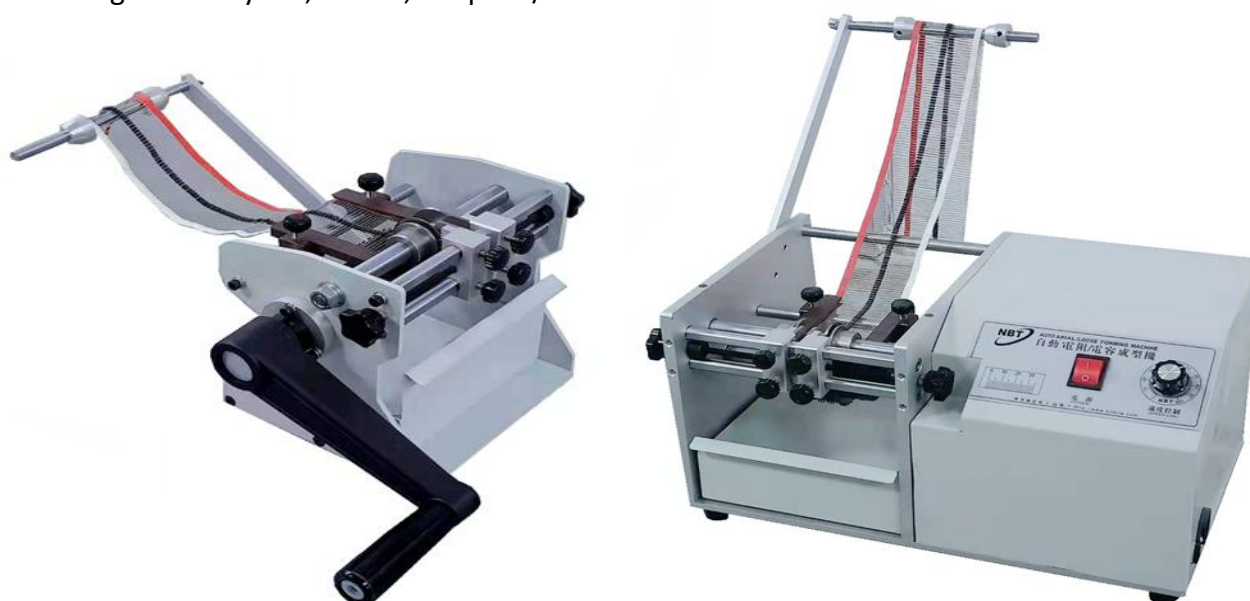
Tool / mold material: SKD11, Japan

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

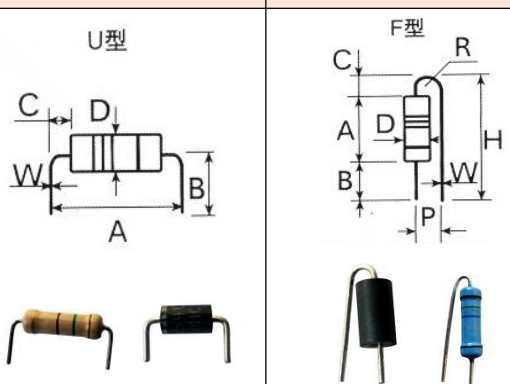
Overall dimensions: L430 \* W300 \* H280mm

Weight: 13KG

Processing efficiency: 30,000-60,000 p c s / H



unit:m/m

	SM-100U	SM-100F	SM-201U	SM-201F	U mould	F mould
A	6-40	4-18	6-40	4-18		
B	3.6-15	2-20	3.6-15	2-20		
C	1.2(Min)	3.5(Min)	1.2(Min)	3.5(Min)		
D	1.5-8	1.5-8	1.5-8	1.5-8		
W	0.35-1.0	0.35-1.0	0.35-1.3	0.35-1.0		
H		25(Min)		25(Min)		
P		3-13.5		3-13.5		
R		1		1		

Tel: 0755-83203237; Fax:0755-23240492 Website: [www.SMThelp.com](http://www.SMThelp.com)

## SM-101M / 101F resistance molding

## SM-101MBK / 101FB K Resistance Machine

### Equipment use

Belt and scatter resistance / diode isoaxial element vertical / horizontal double K molding and cutting lead

### Equipment introduction

1. Complete mechanical structure of gear, cam, groove wheel and dial wheel combination;
2. Bulk materials are sent to the main engine through the vibration plate and S-shaped arrangement and descending orbit;
3. The tape material is sent into and cut the paper belt by combining the hanging gear rolling round knife. After cutting the lead twice, the components are sent into the mold structure by the dividing plate to complete the horizontal bending lead, double K lead molding and return;
4. Motor drive, fixed speed;
5. With automatic and inch motion selection;
6. The span and lead length are adjustable, and the frame height is fixed;

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Electrical appliances: Omron / Delixi

Motor power: 120W

Power supply: 220VAC / 50HZ

Overall dimension: L850xW560xH760mm

Weight: 115Kg

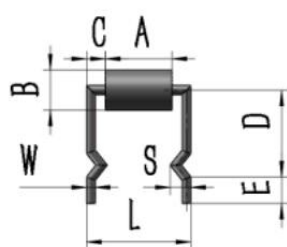
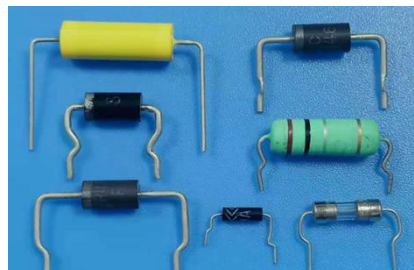
Processing efficiency: 6,600 p c s / H

Description: SM-101M is suitable for processing bulk and strip components;

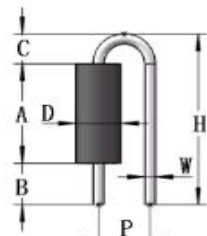

SM-101MBK is suitable for machining and tape components;



unit:m/m

	A	Body length	3.8~20	adjustable
	B	Ontology size	1.8~9	adjustable
	C	Shoulder distance	1.2(Min)	adjustable
	D	altitude	5~12.5	Fixed cannot be adjusted
	E	lead length	adjustable	adjustable
	S	supporting points	2~3	
	L	lead width	A+2C	adjustable
	W	Line diameter	0.4~1.3	0.4~0.8 Sharing 0.9~1.3 Sharing

unit:m/m

	A	Body length	3.8~20	adjustable
	B	Ontology size	2.3~9	adjustable
	C	shoulder height	1.2(Min)	adjustable
	D	lead span	5(Min)	adjustable
	H	lead length	3(Min)	adjustable
	W	Line diameter	0.4~1.3	0.4~0.8 Sharing 0.9~1.3 Sharing

## SM-102QDAutomatic fuse ring forming lead shmachine

### Equipment use

Fuse automatically circle, molding, cut feet;

### Equipment introduction

1. Automatic feeding of the vibration plate;
2. Electrical combination, the manipulator completes the material picking, positioning, combination of ring, forming, throwing and other actions;
3. The ring height can be adjusted, and the lead length can be adjusted,;
4. The molding shape is fixed by the mold, and different shapes are required to customize the mold;
5. PLC program control;
6. Touch screen man-machine interface, which can set the quantity and output, and automatically stop after the production quantity reaches the set output;
7. Material shortage and material blocking alarm function;
8. Equipped with photoelectric induction, vibration plate feeding and host work can be intelligently controlled;

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Power supply: 220VAC

Gas source: 5-7mpa

Overall dimension: L950xW550xH850mm

Weight: 125Kg

Processing efficiency: about 1500PCS / H;



## SM-300 / 306 Bulk Capacitive Spper

### Equipment use

Automatic cutting cutting for bulk capacitance

### Equipment introduction

- 1、 Equipment composition: vibration plate + lead cutting host + car;
- 2、 The vibration plate separates the bulk components and orderly them into the host guide rail;
3. Automatic feeding by the plane vibration of the main engine, and the feeding speed and slow speed are adjustable;
4. Flat delivery track width is adjustable, suitable for components of different specifications;
5. Especially design the movable pressing device to ensure the accuracy of lead length size;
6. Hidden protection design of the cutter structure to ensure the safety of production and operation;
7. The cutting length can be adjustable and adjusted through the knob screw with scale reference;

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Motor power: 60W

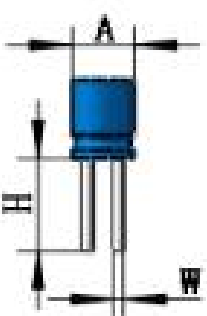

Power supply: 220VAC / 50HZ

Overall dimension: L900xW600xH580mm

Weight: 120Kg

Processing efficiency: 7,000-12,000 p c s / H



	A	Body length	3-25mm
	H	lead length	3-20mm
	W	Line diameter	0.4-2.0mm
		amount of finish	150pcs/min
			

## SM-301 / 310 made with capacitive lead cutter

### Equipment use

With capacitance, inductance, LED, triode and other radial elements cutting lead

### Equipment introduction

1. Manual hand-shaking operation / electric drive;
2. The needle wheel drives the continuous feeding of the tape components;
3. Cut feet and return materials continuously;
4. lead length and size are adjustable;
5. The center distance of the tape hole: 12.7mm and 15mm can not be shared

### Equipment configuration and parameters

Tool / mold material: SKD11, Japan

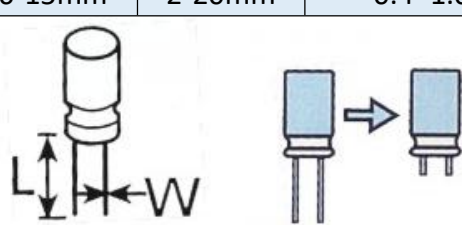
Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Overall dimensions: L430 \* W300 \* H300mm

Weight: 15KG

Processing efficiency: 30,000-60,000 p c s / H



L	lead length	3-20	adjustable
W	3.6-15mm	2-20mm	0.4~1.0mm
			

## SM-320 winding tape radial element molding machine

### Equipment use

Radial elements such as capacitance, inductance, LED, triode are cut into feet and formed

### Equipment introduction

1. Motor drive, precision camcam gear wheel full mechanical structure;
2. Needwheel belt drives paper belt automatic feeding;
3. The two groups of structure design of molding mold and knife mold, which can be formed and cut feet, or only cut feet, and the lead length can be adjustable;
4. Adjustable speed;
5. Replace the mold to process in different shapes.
6. Optional mounting counter;
7. The center distance of the tape hole: 12.7mm and 15mm can not be shared.

### Equipment configuration and parameters

Tool mold material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

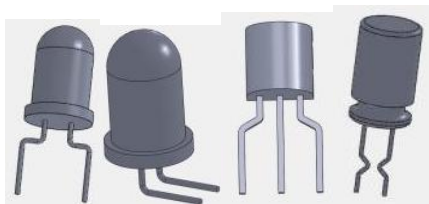
Motor power: 90W

Power supply: 220V 50HZ

Overall dimension: L450xW350xH450mm

Weight: 45Kg

Processing efficiency: 7,200 p c s / H



## SM-307 Bulk radial element molding cutter

### Equipment use

For the molding and lead cutting of radial elements such as bulk capacitor, inductor, LED and MOS pipe

### Equipment introduction

1. Automatic feeding of the vibration plate;
2. Electrical combination, by the manipulator in turn to complete the material extraction, shaping, lead cutting, molding, throwing and other actions;
3. lead length can be adjusted, with a reference scale, and the knob can be adjusted up and down;
4. The molding shape is fixed by the mold, and different shapes are required to customize the mold;
5. PLC program control;
6. Optional touch-screen man-machine interface, which can set the quantity and output, and automatically stop after the production quantity reaches the set output;
7. Material shortage and material blocking alarm function;
8. Equipped with photoelectric induction, vibration plate feeding and host work can be intelligently controlled;

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

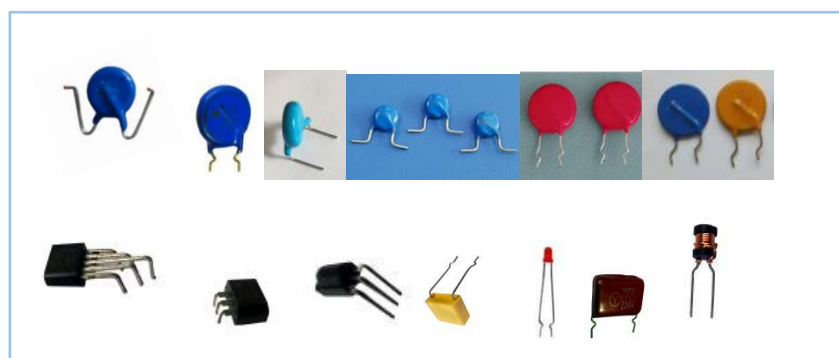
Power supply: 220VAC

Gas source: 5-7mpa

Overall dimension: L950xW550xH850mm

Weight: 125Kg

Processing efficiency: about 1800-3000pcs / H



## SM-309 Bulk radial element

### Use of equipment:

Bulk capacitance, LED and other radial components polar forming and cutting

### Equipment Profile:

- 1、Vibrating plate automatic feeding;
2. Electrical combination, the cylinder provides active force, and the manipulator completes the material-plastic-pole  
Sex detection-commutation-polarity detection-lead cutting-molding-throwing;
3. Elastic clamping will not cause damage to the component body;
4. Using group mold is more convenient and easy, which can deal with different molding requirements;
5. Each group of molds can be adjusted separately, with a scale for reference, and the molding size can be adjusted flexibly;
6. Different shapes and special sizes should be customized separately.
7. Material shortage and material blocking alarm function;
8. Set the quantity and output available;
9. PLC program control system, touch screen operation.

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Power supply: 220VAC / 50HZ

Gas source: 5-7mpa

Overall dimension: L1450xW950xH1500mm

Weight: 380Kg

Processing efficiency: 3000-4500pcs / H





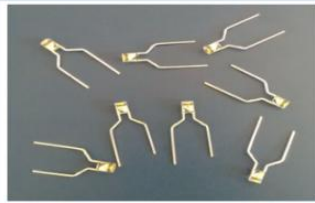
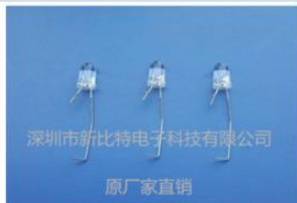
产品案例

Product case



产品案例

Product case



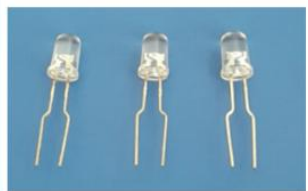
产品案例

Product case



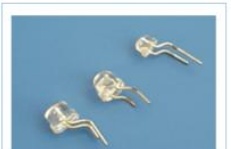
产品案例

Product case



产品案例

Product case



## SM-308 quartz crystal vibration and lead shear molding machine

### Basic features:

1. This machine is driven by a motor, combined with precision mechanical action, Complete the feeding fork, cutting lead forming material and other actions in turn, convenient operation;
2. The whole process of mechanical hand grip, stable quality, the length of cutting feet, bending height can be adjusted;
3. Corresponding molds and jigs can be customized according to customer molding requirements;
4. The machine can be manual feeding or combined with the vibration plate to achieve automatic processing;
5. No segment speed, according to the material can choose the most reasonable speed processing, to ensure quality;
6. Combined mold, mold and tool materials are made of Japanese SK D 11 exquisite, durable.
7. The equipment has the card material shutdown alarm function in;

### essential parameter:

Power supply: 110V / 220V AE.60HZ/50HZ

Dimensions: L1050 \* W750 \* H1000mm

Weight: 160KG

Work efficiency: 3000-4500PCS / H (adjustable speed)



## SM-800K Triode molding

### Equipment use

Triode, IC, bridge pile and other bulk components cut lead molding

### Equipment introduction

1. Straight vibration automatic material delivery and material discharge;
2. All-mechanical mechanism, motor drive;
3. Disk structure, precision cam Separator positioning;
4. Small PLC control system;
5. Equipped with photoelectric induction, vibration plate feeding and main engine work can be intelligently controlled;
6. The forming height and cutting length are adjustable, with a reference scale, and the knob can be adjusted up and down;
7. Replace the mold to process in different shapes.

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Electrical appliances: Omron / Mitsubishi

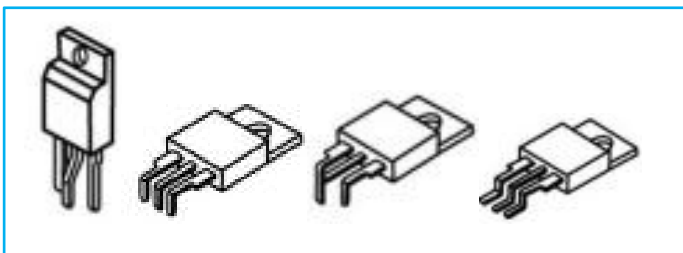
Power supply: 220VAC 50HZ

Motor power: 180W

Overall dimension: L950xW600xH850mm

Weight: 145Kg

Processing efficiency: 5,400 p c s / H



## SM-806, triode molding

### Equipment use

Tripole, IC, bridge pile and other components cut lead forming

### Equipment introduction

1. The pipe material is inserted into the track, and the material automatically slides into the module;
2. Motor drive, full mechanical mechanism, precision mold molding;
3. Small PLC electrical control system;
4. Equipped with photoelectric sensing and intelligent control to prevent material blocking;
5. Unsegmented speed regulation;
6. The forming height can be adjustable, and the size of the lead below the bending point cannot be adjusted;
7. Replace the mold to process different shapes, replace the whole mold, and quickly replace it;
8. A 20-pipe feeder can be installed to realize a long time without manual pipe replacement.

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Electrical appliances: Omron

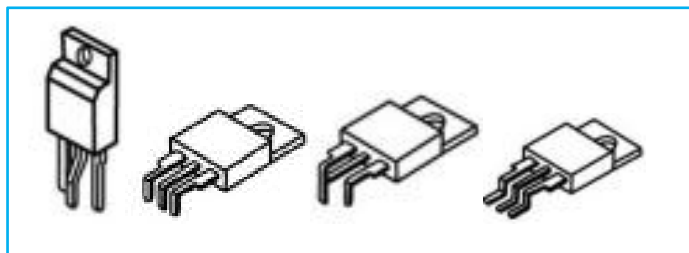
Power supply: 220VAC 50HZ

Motor power: 90W

Overall dimension: L500xW450xH450mm

Weight: 65Kg

Processing efficiency: 5,400 p c s / H



## SM-808 Triode molding machine

### Equipment use

Forming of five or more different shapes in bulk or tube

### Equipment introduction

1. Vibrating plate or intubation automatically deliver materials, the main machine successively picking, cutting feet, forming, throwing, automatic complete;
2. PLC program control system, with stable performance;
3. Equipped with photoelectric induction, the vibration plate feeding and the main engine work can be intelligently controlled;
4. Abnormal shutdown alarm function;
6. Man-machine interface, set the output, and automatically stop when the production quantity reaches the set output;
7. Multiple sets of molds are installed at the same time, independent of each other. When one of the shapes needs to be processed, it can only be controlled on the touch screen.

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Electrical appliances: Omron / Mitsubishi

Power supply: 220VAC 50HZ

Gas source: 5-7Mpa

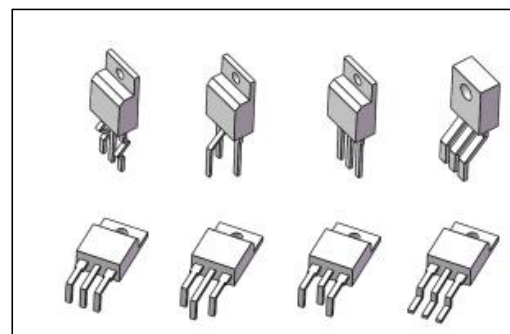
Power: 100W

Overall dimension: L1100xW600xH850mm

Weight: 155Kg

Processing efficiency: 2800-3600pcs / H

Special note: one machine can be installed with multiple sets of molds, without mold change;



## SM-6900 transistor / radiator lock screw set installed

### Use of equipment:

Suitable for the automatic assembly of heat sink, transistor and screw;

### Equipment Profile:

- 1) . Put the heat sink to the conveyor belt;
- 2) The mechanical arm grabs the heat sink and put it into the rotary table;
- 3) Precision split machine turntable turns to the next station;
- 4) Each station of the disc completes the conveying transistor, heat rubber, locking screws;
- 5) Mechanical arm grasp the material into the finished product placed plate orderly swing plate;
- 6) PLC program control, touch screen operation.

### Equipment configuration and parameters

Tool material: Japan SKD11

Power: 800-1200W

Power supply: 220VAC 50HZ

Gas source: 5-7 Mpa

Overall dimension: L1450xW1350xH1750mm

Weight: 450-550 Kg

Processing efficiency: 800-1200pcs / H



## SM-8180A triode sleeve magnetic ring dispensing glue swing disc all-in-one machine

### Equipment use

Triode sleeve magnetic ring, dot glue, cutting lead forming, swing plate

### Equipment introduction

1. Install a 20-pipe automatic feeding device at one time;
2. Automatic glue dispensing, you can click either one lead or two feet at the same time;
3. Automatic wear magnetic ring, you can wear one lead or two feet at the same time;
4. Forolding and cutting function;
5. Automatically put the processed materials in the 20-trough tray;
6. For different triodes, they can be processed only by adjusting the guide rail;
7. PLC program control system;
8. Human-machine interface, touch screen operation;
9. Count function;
10. Automatic leak detection and fault alarm function.

### Equipment configuration and parameters

Tool material: Japan SKD11

Electrical appliances: Omron / Mitsubishi

Power: 350W

Power supply: 220VAC 50HZ

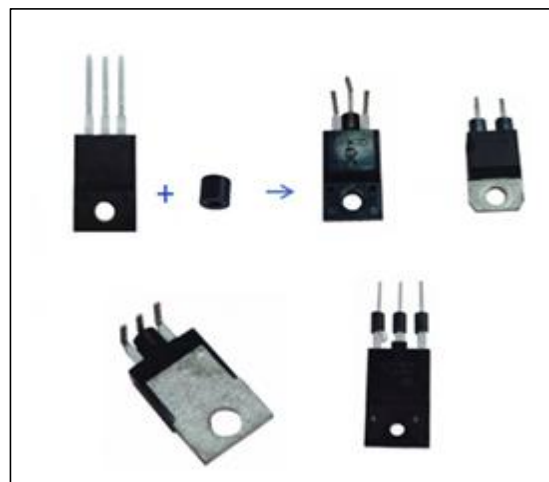
Gas source: 5-7 Mpa

Overall dimension: L1450xW820xH1500mm

Weight: 230Kg

Processing efficiency: 3,000 p c s / H

**Tips: The shape and organization of this model is exclusively designed and produced by the company, and the company has applied for a patent**



## SM-400 IC machine

### Equipment use

The double row of feet IC eight shape integrated into parallel vertical down to facilitate the plug-in

### Equipment introduction

1. The tube mounting IC is directly inserted into the upper end of the guide rail, and the knob adjusts the tightness;
2. Adopt bearing and roller mode to quickly complete the lead;
3. The orbit does not need to be replaced, and different types of IC are processed by adjusting the width by torsion;
4. The end of the guide rail can be inserted into the empty IC pipe to access the processed IC.

### Equipment configuration and parameters

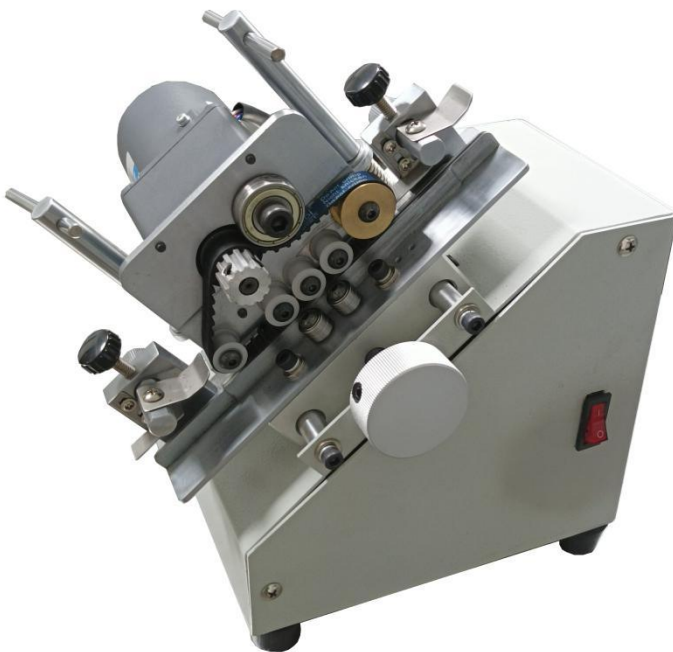
Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Overall dimensions: L260 \* W220 \* H230mm

Motor power: 15W

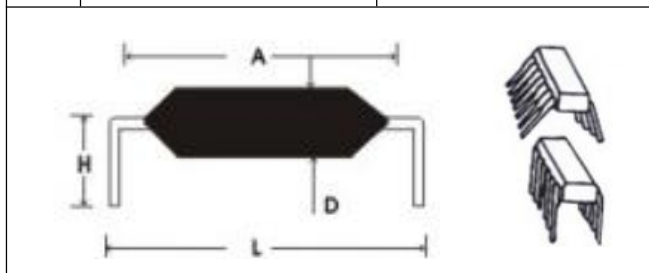
Weight: 8KG

Processing efficiency: 3 seconds / tube



A	width	6-18
H	lead length	4-9.5
D	thickness	3-12
L	Forming width	0.3"-0.6"

unit:m/m



## SM-402 IC expanded lead-shaping machine

### Equipment use

Expand the double row lead IC figure eight and form a parallel vertical down to facilitate the plug-in

### Equipment introduction

1. The tube mounting IC is directly inserted into the upper end of the guide rail, and the knob adjusts the tightness;
2. Expand the lead first, and then complete the lead, and complete it step by step;
3. The track should be replaced when processing different width IC;
4. The end of the guide rail can be inserted into the empty IC pipe to access the processed IC.

### Equipment configuration and parameters

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

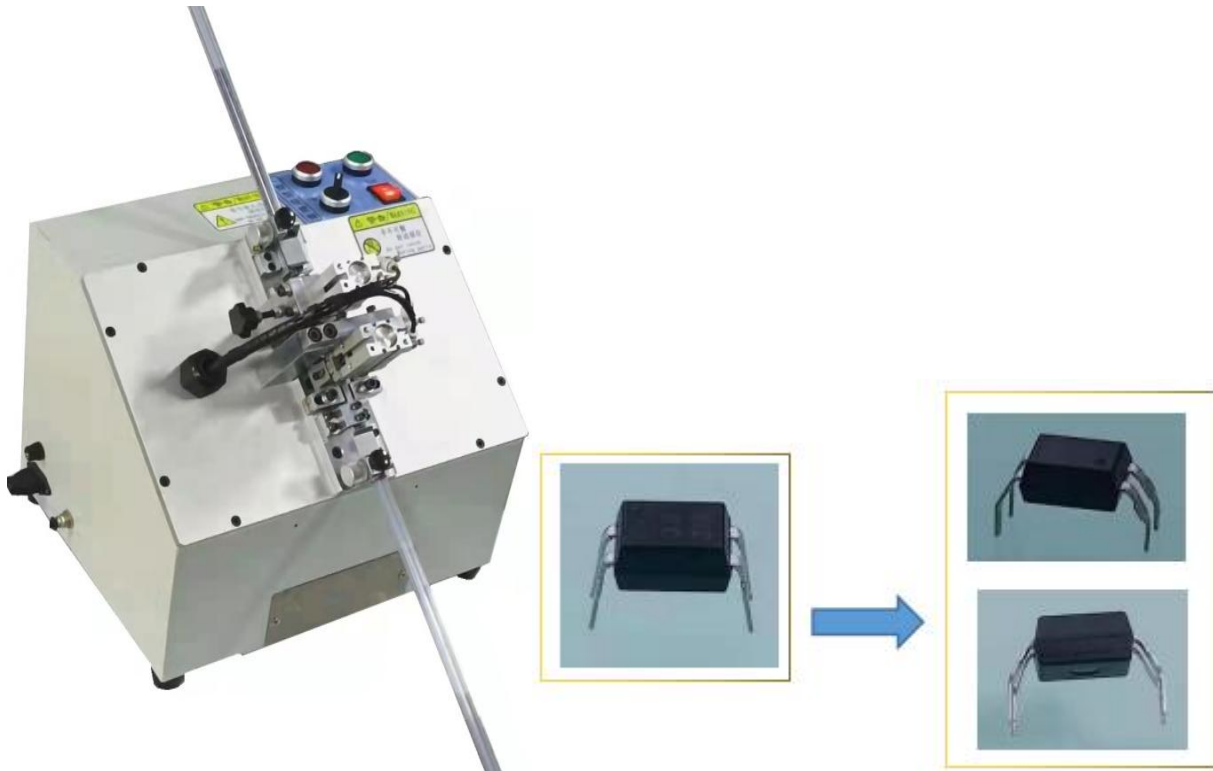
Overall dimensions: L450 \* W400 \* H450mm

Power supply: 220VAC

Air source: 0.4-0.7Mpa

Weight: 35KG

Processing efficiency: 15-30 seconds / tube



## SM-500 scrap-free jumper molding machine

### Equipment use

The whole coil of wire is automatically processed into various specifications of jumpers

### Equipment introduction

1. Automatic wiring, cutting, forming and unloading, without manual duty;
2. Waste-free jumper molding, wire utilization rate reaches 100%, saving cost;
4. Small volume, light weight, less power consumption, low price, fast recovery;
5. Full mechanical structure, stable work and durable;
6. Count function;
7. Suitable line diameter 0.5-0.8 mm, span 5-30mm adjustable, lead length 2-5mm adjustable.

### Equipment configuration and parameters

Tool material: Japan SKD11

Sheet metal process: high temperature spraying / surface anode, hard chromium

Electrical appliances: Omron, Delixi

Motor power: 65W

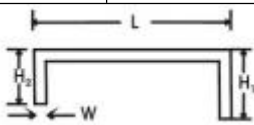
Power supply: 220VAC

Overall dimensions: L320 \* W300 \* H490mm

Weight: 35KG

Processing efficiency: 7200PCS / H



H1	3-8mm
H2	1-12mm
L	5-30mm
W	0.5-0.8mm (fixed)
	

## SM-506 wire special-shaped molding machine

### Equipment use

The whole coil of wire is automatically processed into a variety of different specification shapes

### Equipment introduction

1. Automatic wiring, cutting, forming and unloading, without manual duty;
2. Multi-group of mold combination design, can shape a variety of different shapes;
3. PLC control system, touch screen operation;
4. Stepper motor drives, and the length of the sending line is adjusted by the computer, with accurate size and convenient adjustment;
5. General line diameter: 0.5-1.2mm

### Equipment configuration and parameters

Tool material: Japan SKD11

Electrical appliances: Omron / Delixi

Motor power: 120W

Power supply: 220VAC 50HZ

Gas source: 5-7 Mpa

Overall dimension: L560xW420xH490mm

Weight: 85Kg

Processing efficiency: 3,600 p c s / H



## SM-505 jumper through casing molding machine

### Equipment use

The whole coil of wire will be fully pierced and formed

### Equipment introduction

1. Automatic wiring, casing, casing, cutting off and forming without manual duty;
2. Stepper motor is driven, and the transmission pipe length is accurate;
3. PLC control system, touch screen;
- 4, lead length, span adjustment is very easy, screen operation can be;
5. Teflon casing 1.2,1.5,2.0, wire range is 0.6-0.8mm, span 5-50mm is adjustable, and lead length is adjustable from 3-7mm.

### Equipment configuration and parameters

Tool material: Japan SKD11

Electrical appliances: Omron / Delixi

Motor power: 120W

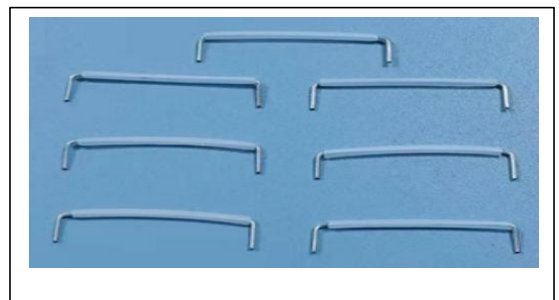
Power supply: 220VAC 50HZ

Gas source: 5-7 Mpa

Overall dimension: L320xW300xH490mm

Weight: 75Kg

Processing efficiency: 2,400 p c s / H



## **SM-700, a microcomputer tube cutter**

### **Equipment use**

Cutting the fixed length of heat shrink casing, drain line, PVC casing, etc

### **Equipment introduction**

- 1, Micro-computer CNC, LCD human-machine interface;
2. Stepper motor for pipe delivery, constant speed motor for control and cutting knife;
3. Adjustable track, which can be cut into three pipes at the same time;
4. Cutting length: 1-9999mm;
5. Cutting width: 1-100mm;
6. Cutting speed: 6,000 p c s / H (cutting length: 30mm).

### **Equipment configuration and parameters**

Sheet metal process: high temperature powder spraying / surface anode / hard chromium

Electrical appliances: Omron

Power supply: 220VAC / 50HZ

Overall dimension: L380xW320xH350mm

Weight: 32Kg

