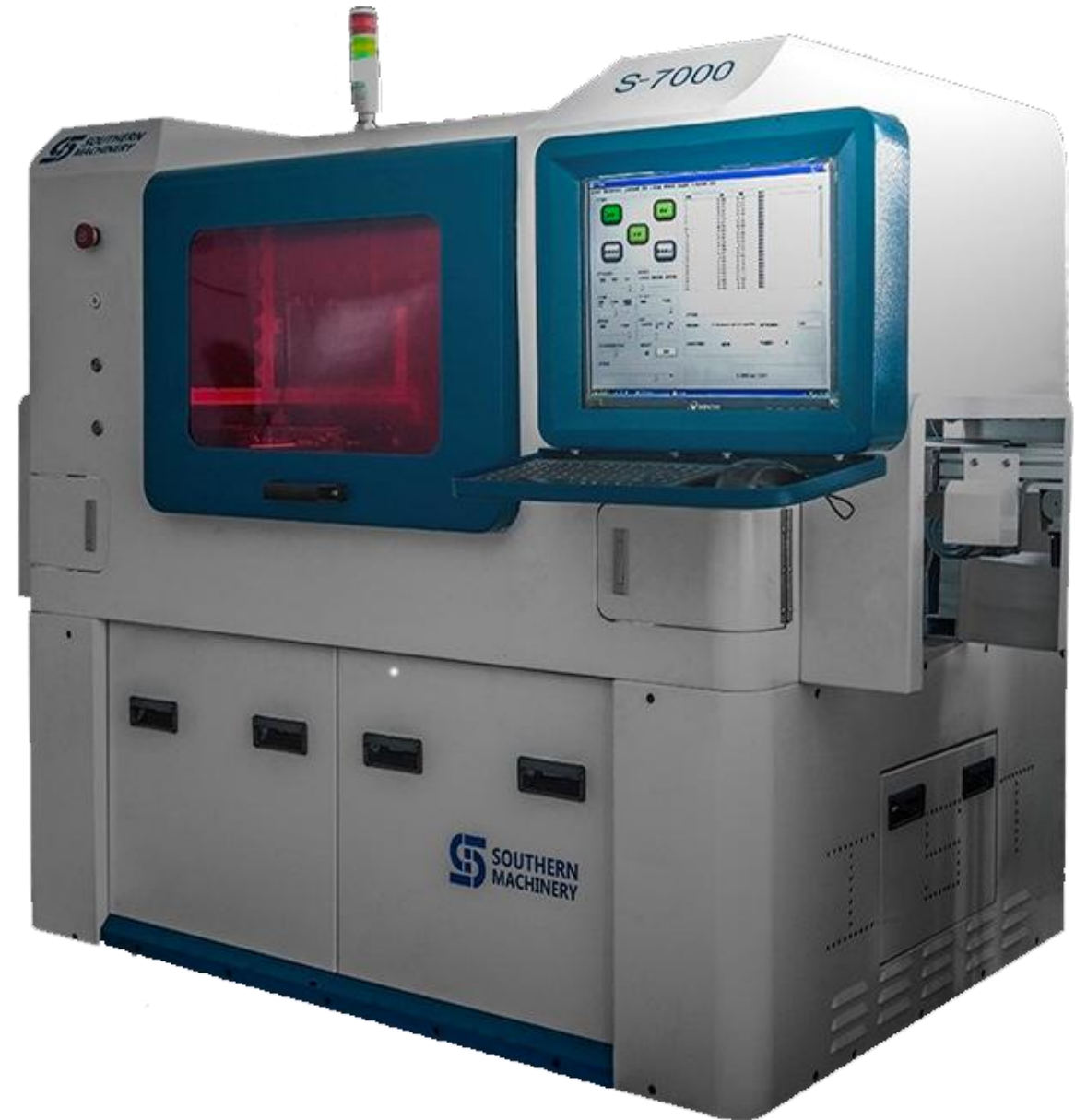




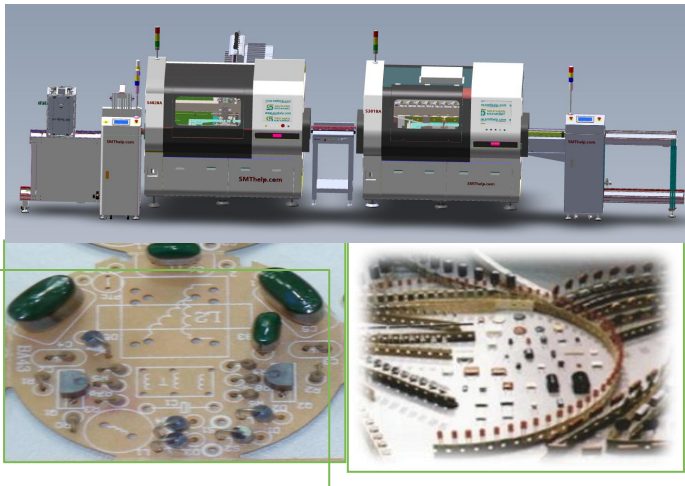
**ODD-FORM
COMPONENT**

INSERTION MACHINE



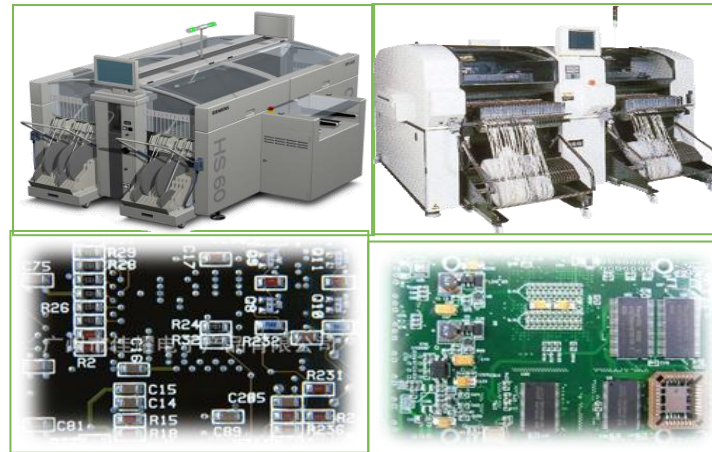
PCBA MANUFACTURING PROCESSES

Component assembly processes



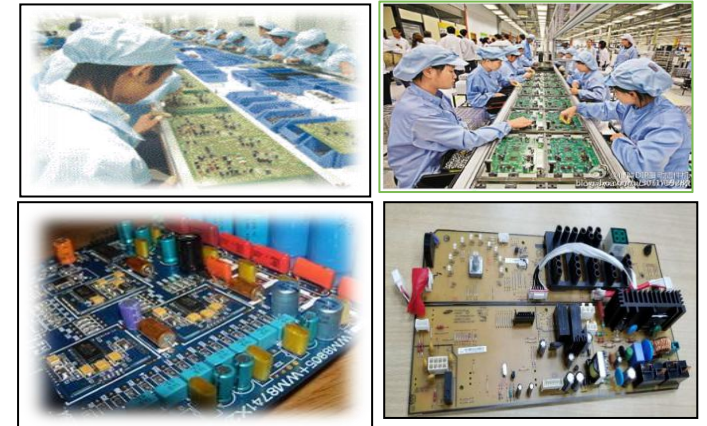
AI

Standard Auto Insertion



SMT

Surface Mount Technology



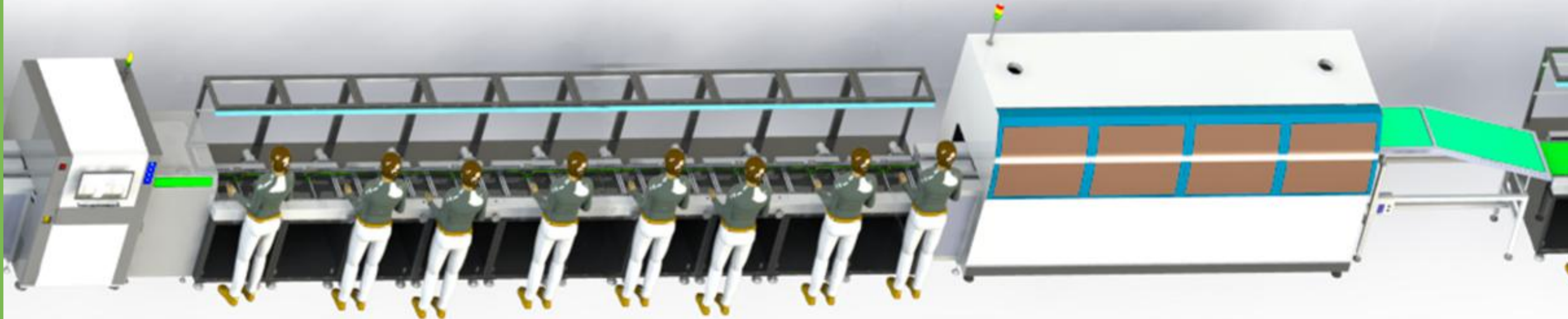
MI

Manual Insertion

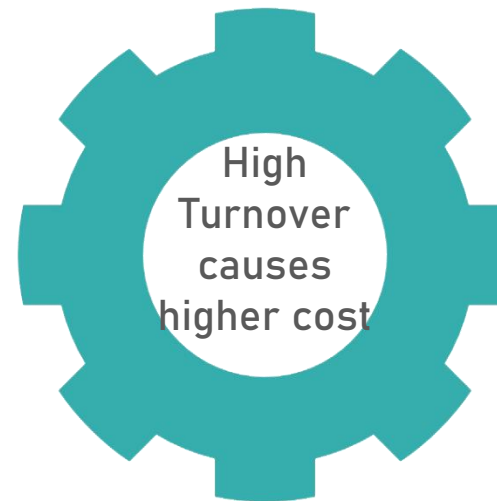


PCBA MANUFACTURING PROCESSES

Operator for manual
processes



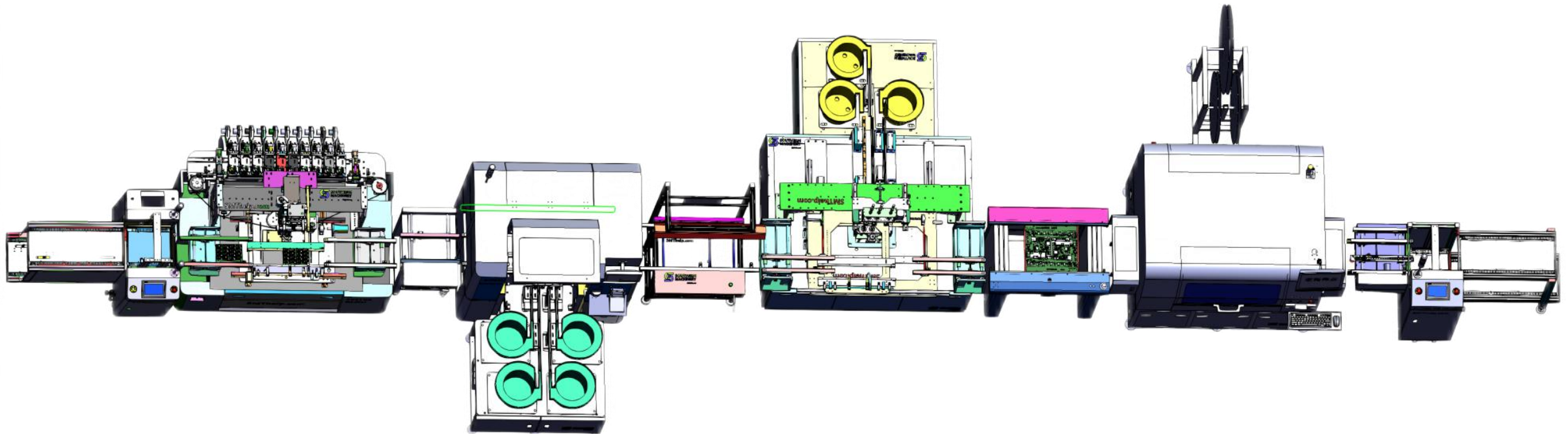
THE PROBLEMS WITH MANUAL INSERT



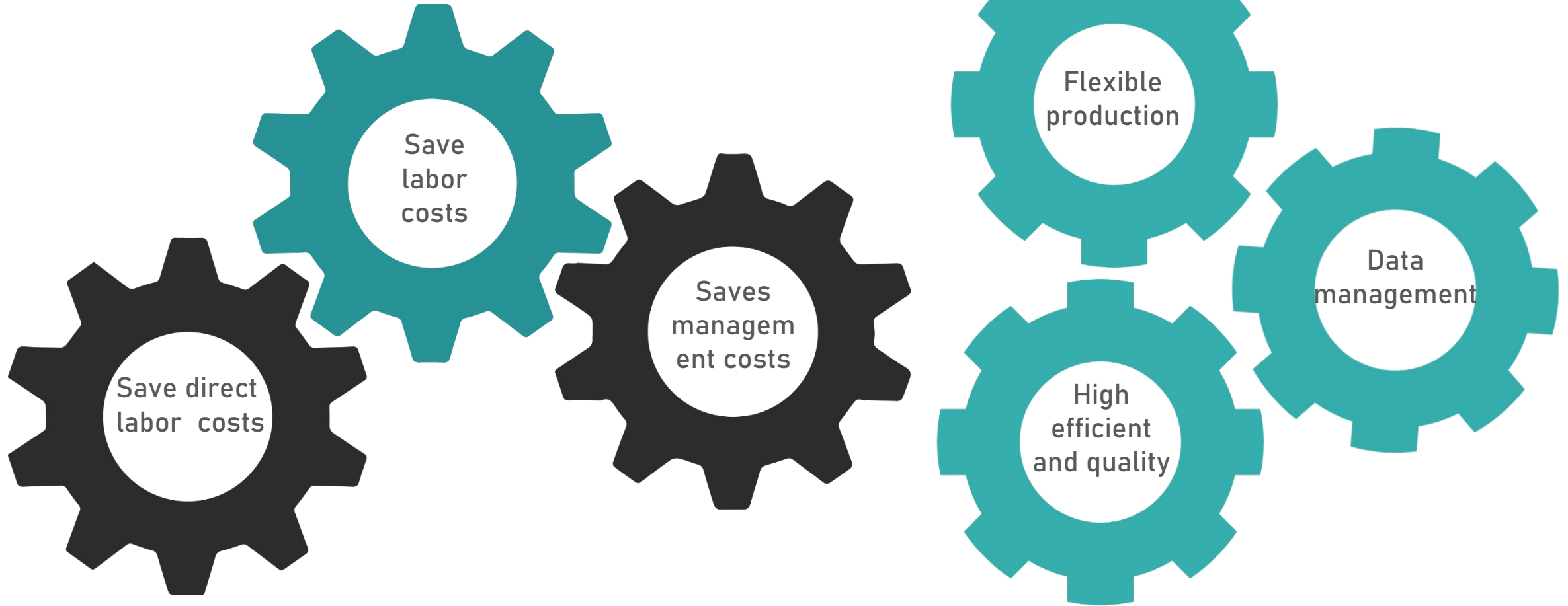


PCBA MANUFACTURING PROCESSES

Automatic Insertion Machines



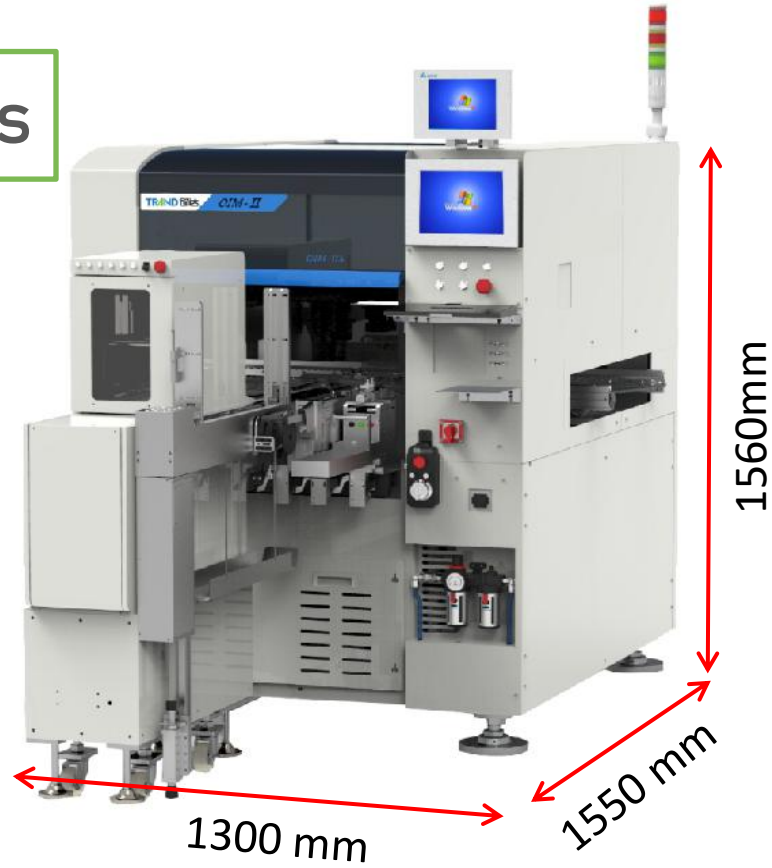
ADVANTAGES FOR AUTO INSERTION



MACHINE APPEARANCE

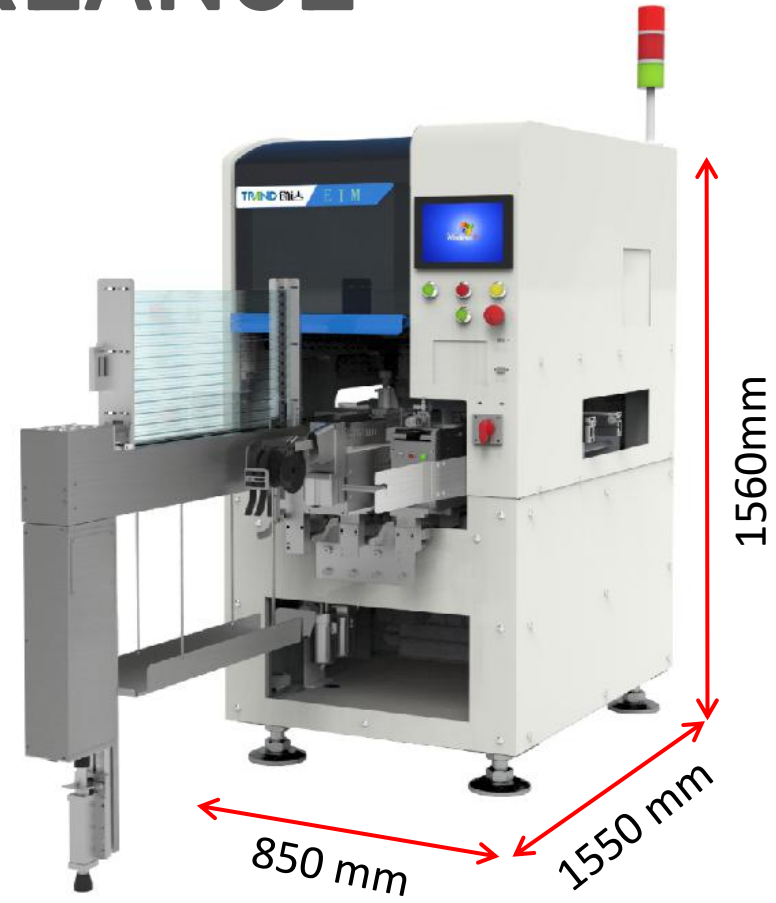
OIM Series

Multi
Mounter



EIM Series

Modular
Mounter



SPECIFICATION

Specification		Model		
		OIM-3S	OIM-2FS	EIM-2
No. of Insertion Heads		6	4	2
PCB Size (LxW)		50x50mm to 300x350mm	50x50mm to 500x500mm	50x50mm to 300x550mm
Carrier Size (LxW)		300x350mm	500x550mm	450x550mm
PCB thickness		0.6~2.0mm	0.6~2.0mm	0.6~2.0mm
Max. PCB weight		2Kg	5Kg	2Kg
Max. Component height		20mm	30mm	25mm
Max. Component Width		28mm	50mm	50mm
Speed / Component	*1	0.6S~3.0s	0.7s ~ 3.0s	1s ~ 3.0s
Placement Accuracy		3σ, ±0.050mm	3σ, ±0.050mm	3σ, ±0.050mm
Vision System	Mark CCD (Top)	1	1	1
	Component CCD (Bottom)	3	4	2
Supporting Mechanism		Servo	Servo	Servo
Conveyor Type		Chain	Chain	Belt
Conveyor PCB Mounting		Edge Clamping	Edge Clamping	Edge Clamping
Conveyor Section		3	3	1
Conveyor Adjusting		Auto	Auto	Auto
Conveyor Height	*2	900 ± 20mm	750 ± 20mm	750 ± 20mm
Max. Stations	Tape Feeder (SMT)	12	6	2
	Tape Feeder (AI)	12	6	2
	Tube Feeder	12	6	2
	Bowl Feeder	6	2	2
	Tray Feeder	1	1	1
Operation system		Windows	Windows	Windows
Monitor Display (Operation Side)		2	2	1
No. of Door		2 (Double Side)	1 (Single Side)	1 (Single Side)
Size(LxWxH)		1300x1550x1560mm	1300x1550x1560mm	850x1550x1560mm
Weight		1730Kg	1650Kg	800Kg
Auto Nozzle Changer Unit	*4		Option	
Lead Clinching Unit	*5		Option	
Programming		Vision Teaching System		
AC Power		380V 20A 50/60HZ		220V 20A 50/60HZ
Apparent power		4.5KVA		3.5KVA
Air Supply		4.0~8Kg/m2		
PCB direction		L to R (R to L)		
Insertion direction		0~360 Degree		
Applicable Component		Connector, switch, socket transformer coils, ports, capacitors, Resistors, etc		
MEMA		Standard Configuration		
IES Connection	*6	Standard Configuration		
Safety Grating (Door)		Standard Configuration		

*1 depends on different components

*2 Conveyor height of 750 and 900 are available

*3 No. of feeder depends on the combination

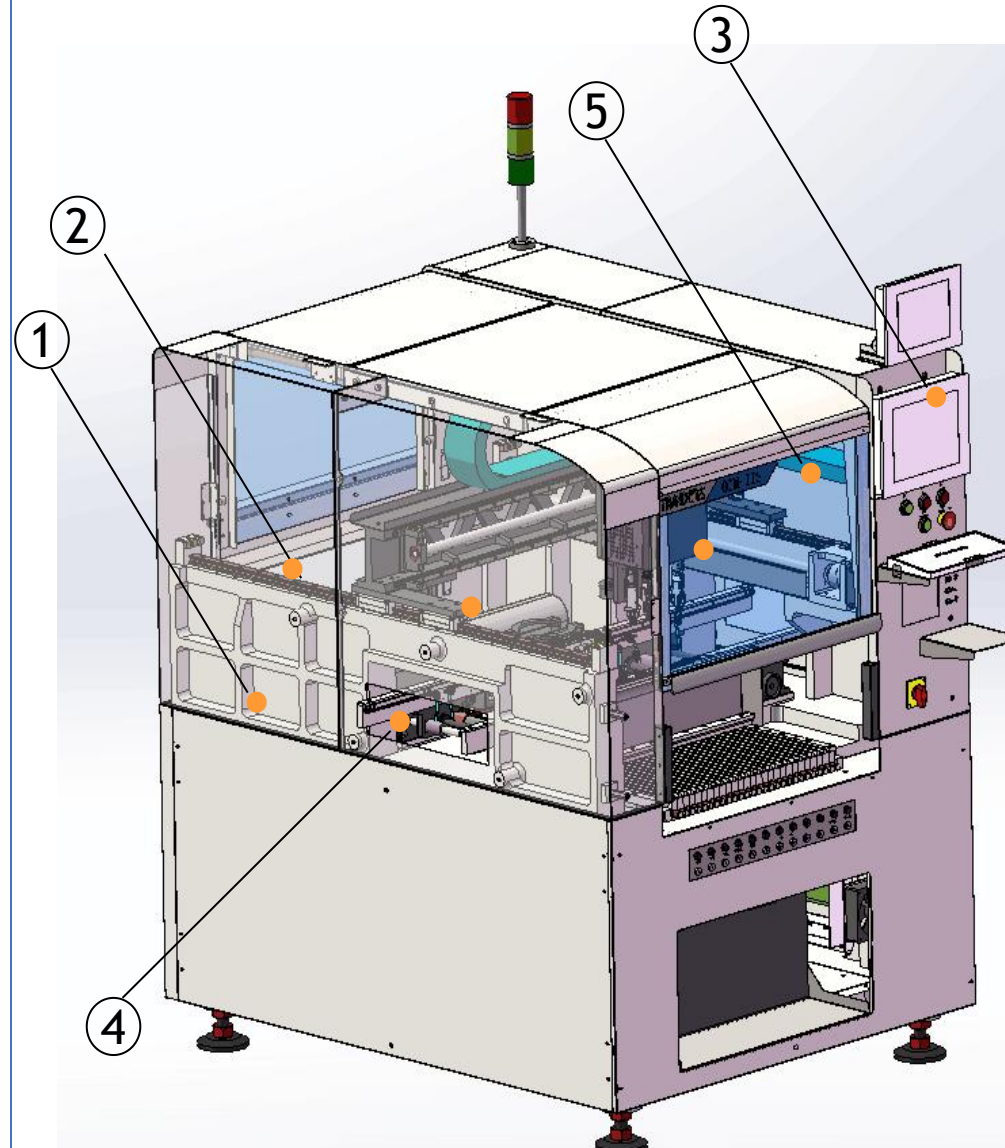
*4 Conditional

*5 Lead Clinching Unit will replace the PCB Supporting Mechanism

*6 Only provided the original data format, the rest should be customer made

MAIN FEATURES

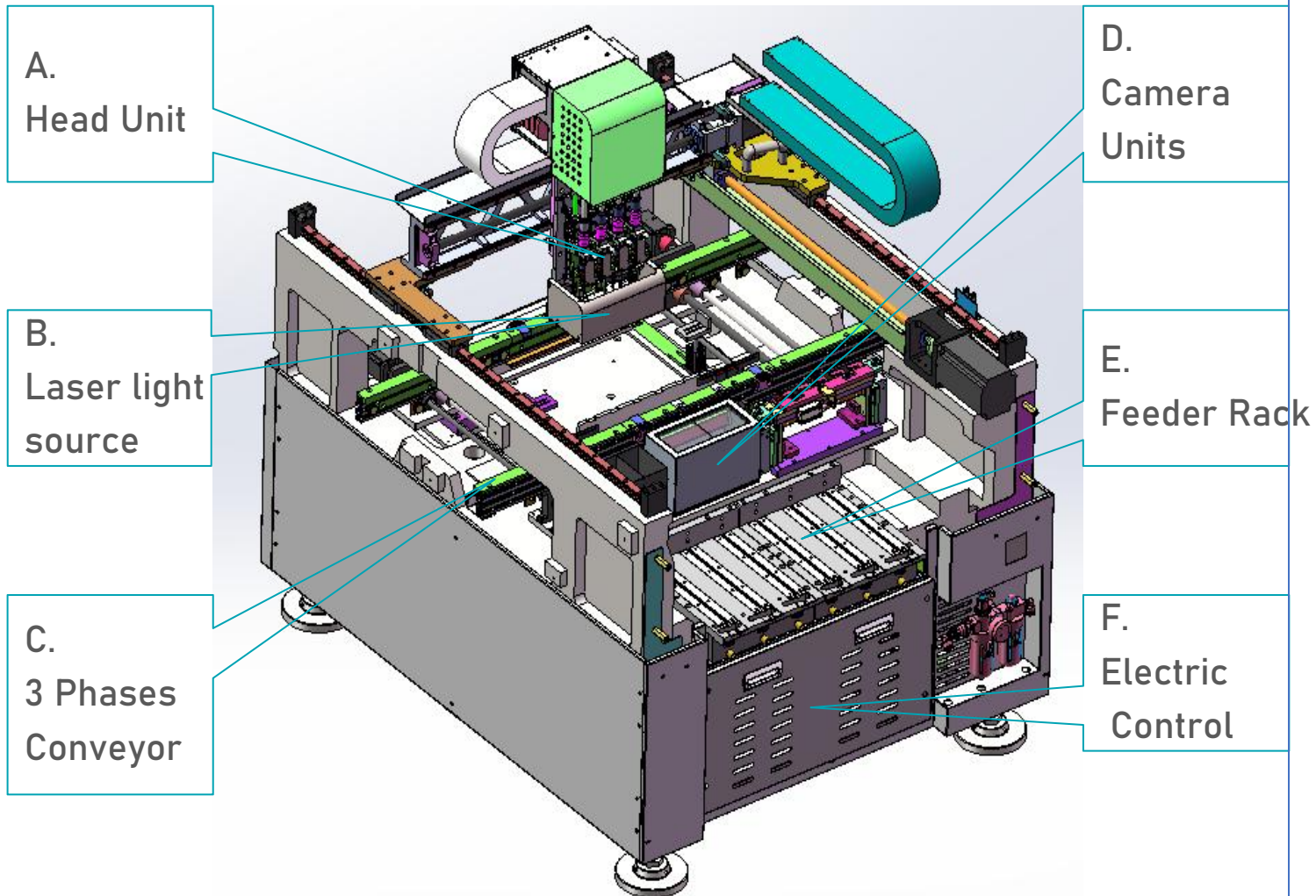
- ✓ Modular Design: Flexibility, small foot print.
- ✓ Precise design for high speed and high accuracy.
- ✓ Independent Feeder system for universality and installation.
- ✓ Advance pickup head: Vacuum Nozzle and Air Gripper for high stability.



REMARKS:

- ① One-piece cast frame body for Stability and Accuracy.
- ② Imported major parts eg. ball screw, sliding block, motor, servo, etc. and ensure the accuracy in +/- 0.03mm.
- ③ OS under Windows platform with multi language, Touch screen panel control for more user friendly
- ④ 3 phases conveyor system for faster transportation of PCB, to increase the productivity.
- ⑤ Machine with advance safety assurance like door sensor, safety light curtain and emergency stop, etc.

HARDWARE



REMARKS:

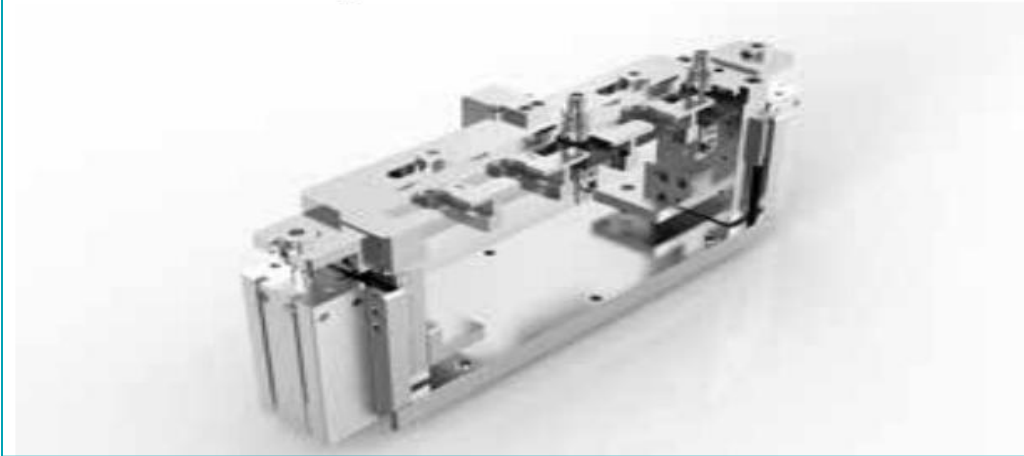
- A. Head Unit be divided into three kinds, 2 heads/ 4 heads/ 6heads.
- B. The Laser light ensure the high light source for camera unit.
- C. 3 phases conveyor to ensure the high speed and stability for PCB transportation.
- D. Camera Units : All models consist of 1 top camera, and 2 to 4 bottom cameras depends.
- E. Feeder Rack for fast and easy installation of all kind of feeders.
- F. All Electric devices and control units are inside the basement which easy for maintenance.



**SOUTHERN
MACHINERY**

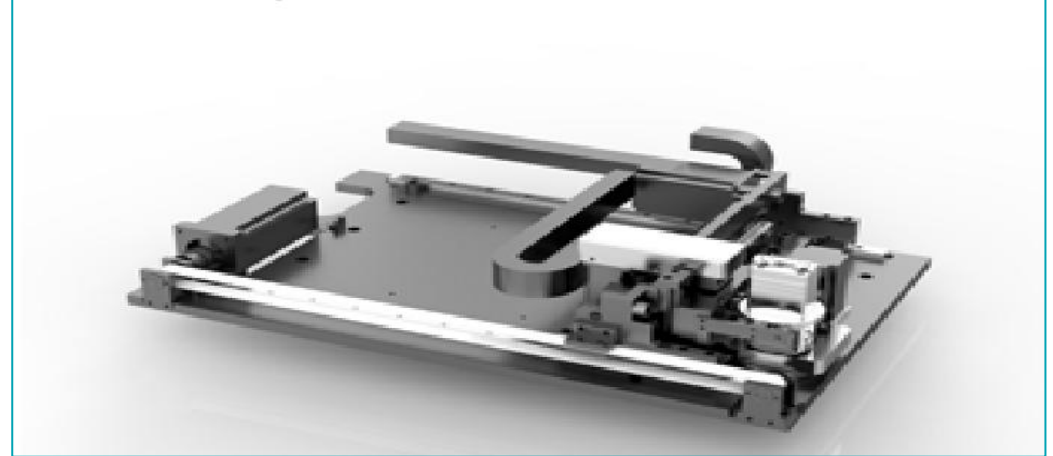
SPECIAL HARDWARE UNIT

Auto Nozzle Changer Unit

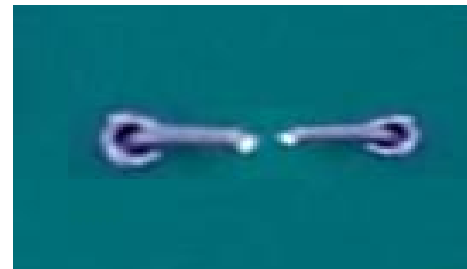


Auto Nozzle Changer Unit : Programmable to automatically change the pickup head nozzle.

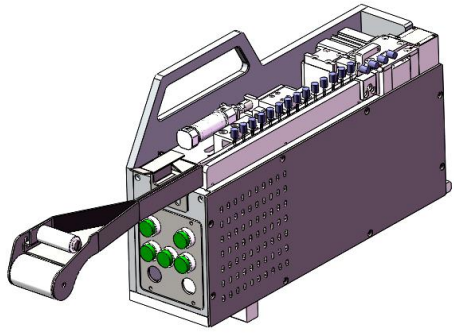
Lead Clinching Unit



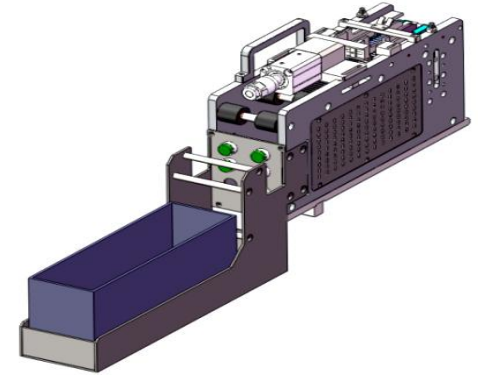
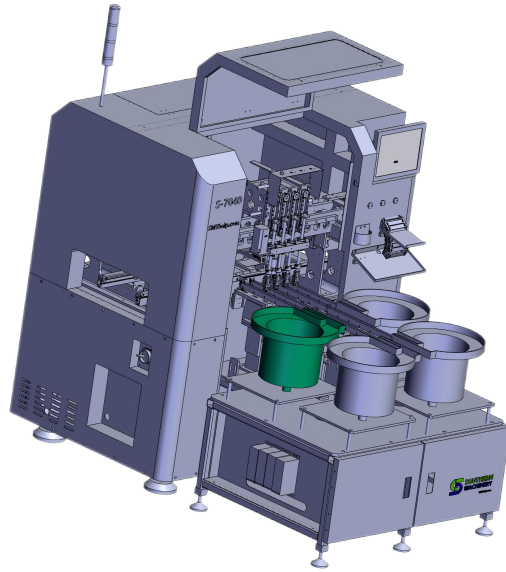
Lead clinching Unit : realizes the lead bending after insertion.



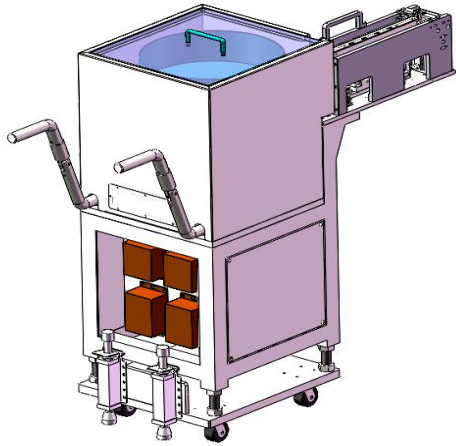
FULL SERIES OF FEEDER UNITS



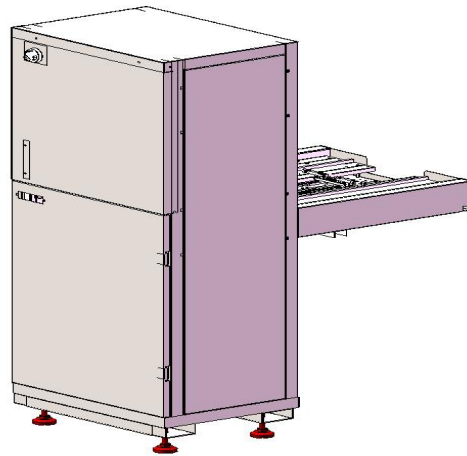
Tape feeder - Radial Type



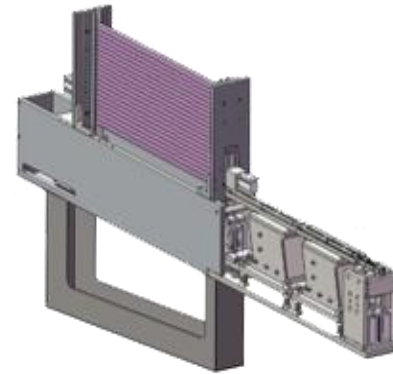
Tape feeder - Axial Type



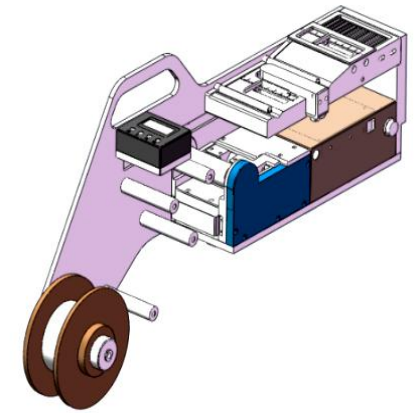
Bowl feeder



Tray feeder



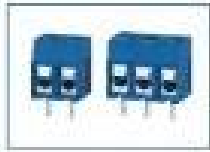
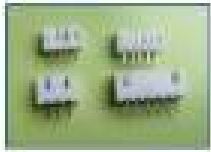
Tube feeder



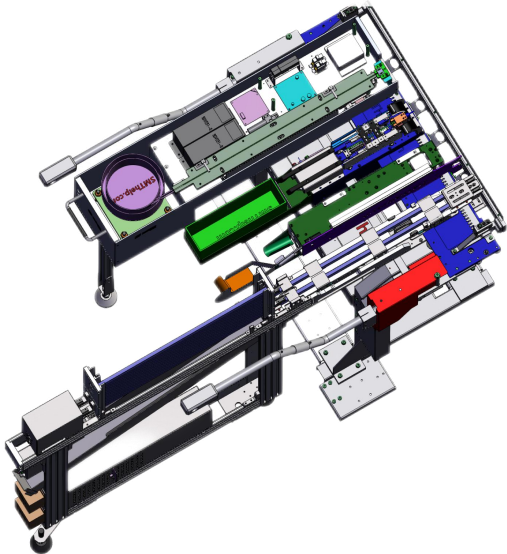
Label (Roll Type) feeder

VIBRATION BOWL FEEDER

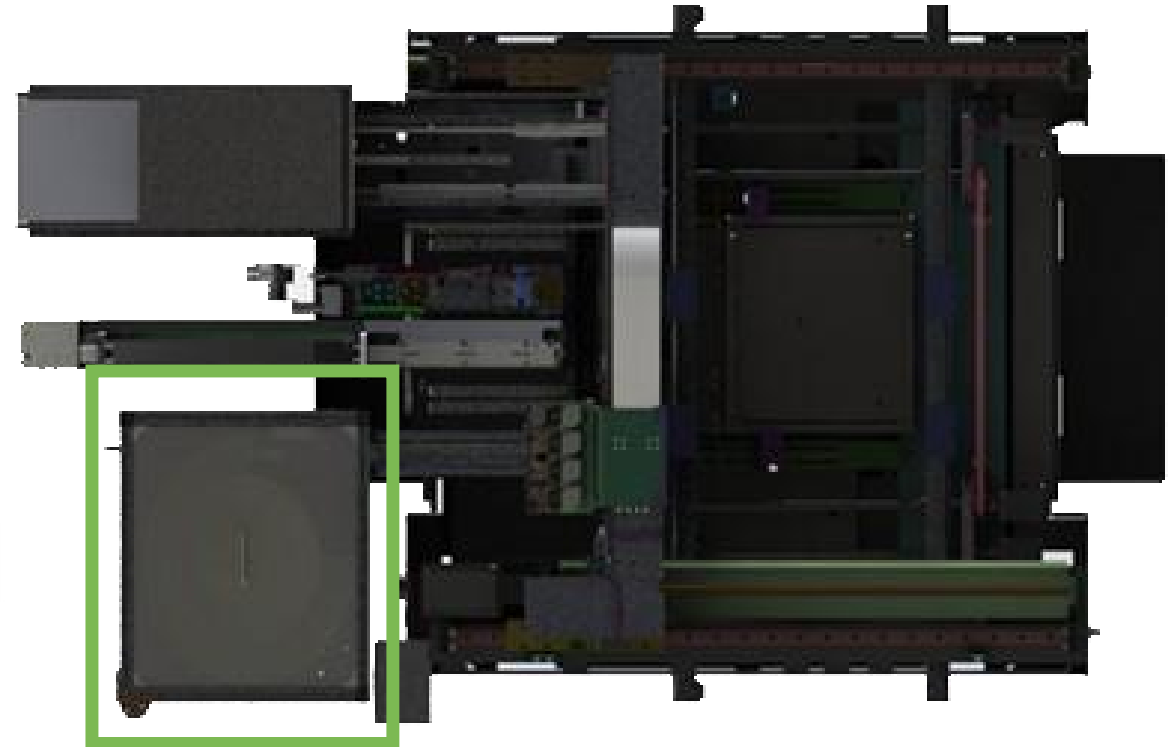
Connector and Terminal



Metal plug-in



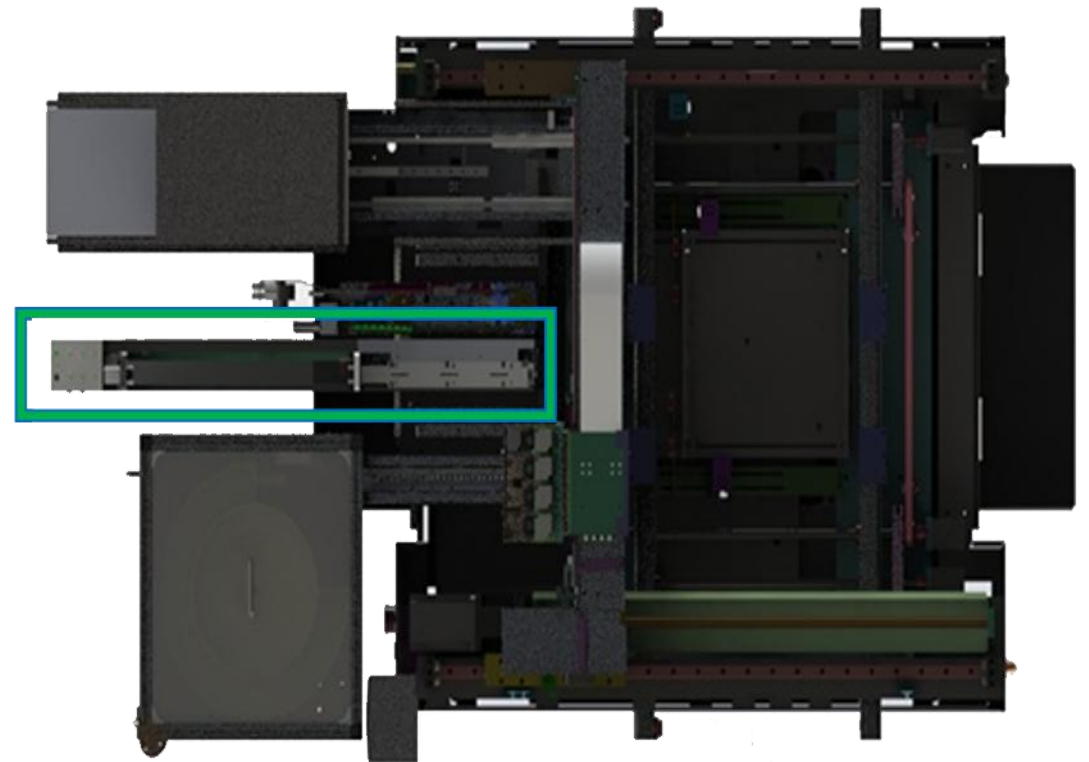
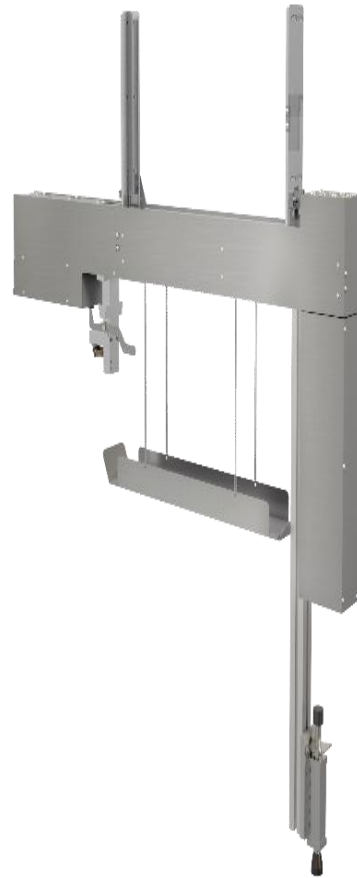
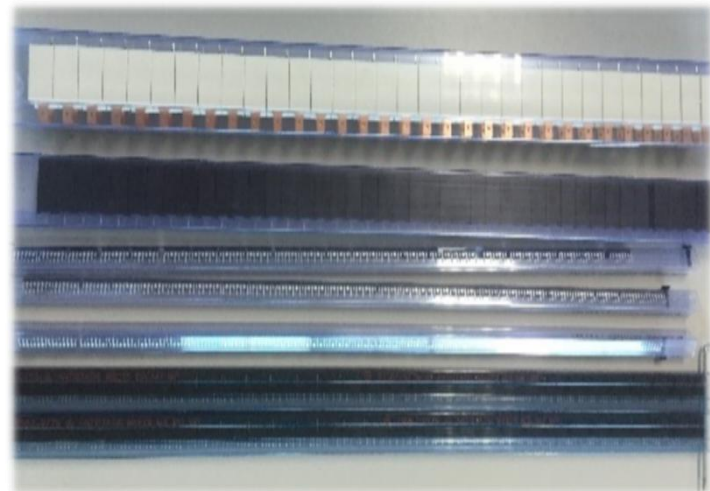
Fit for most bulk
packing materials,
can identify polarity,
lead preform, etc.



Tube Feeder For Small-Size Material

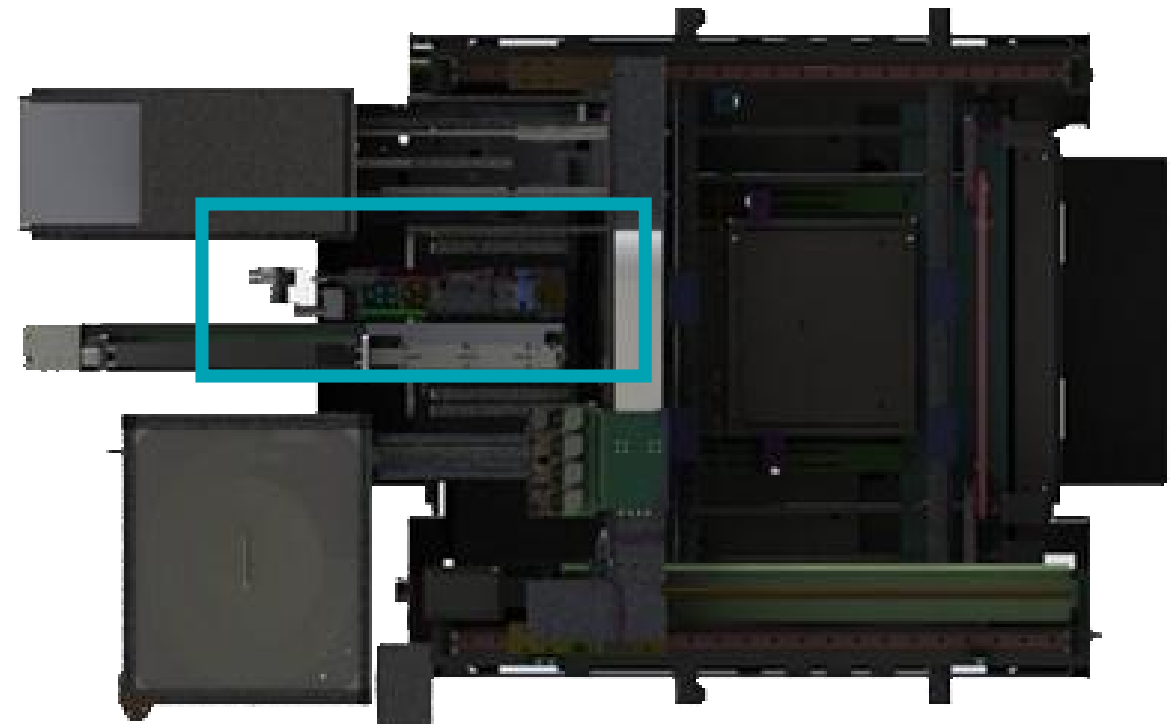
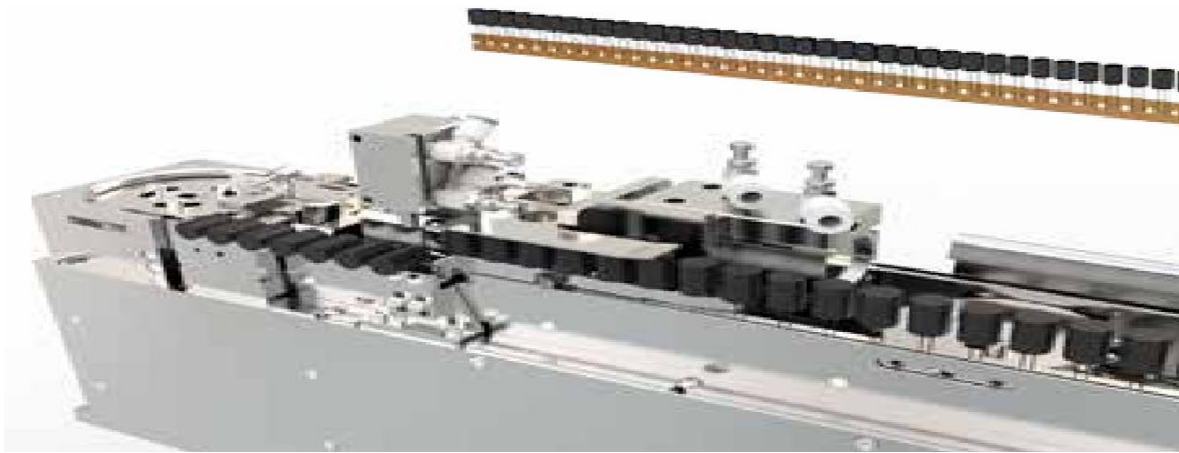
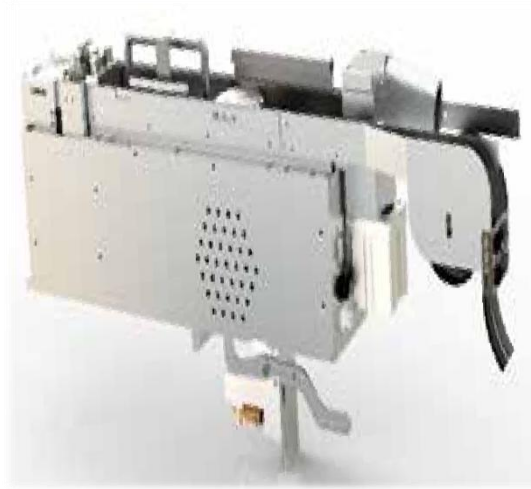
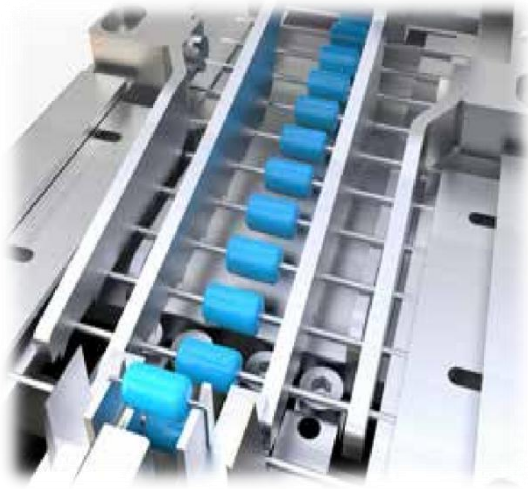
TUBE FEEDER

Fit for most
IC, Relay, Inductor,
transformer with
multi tube operation.



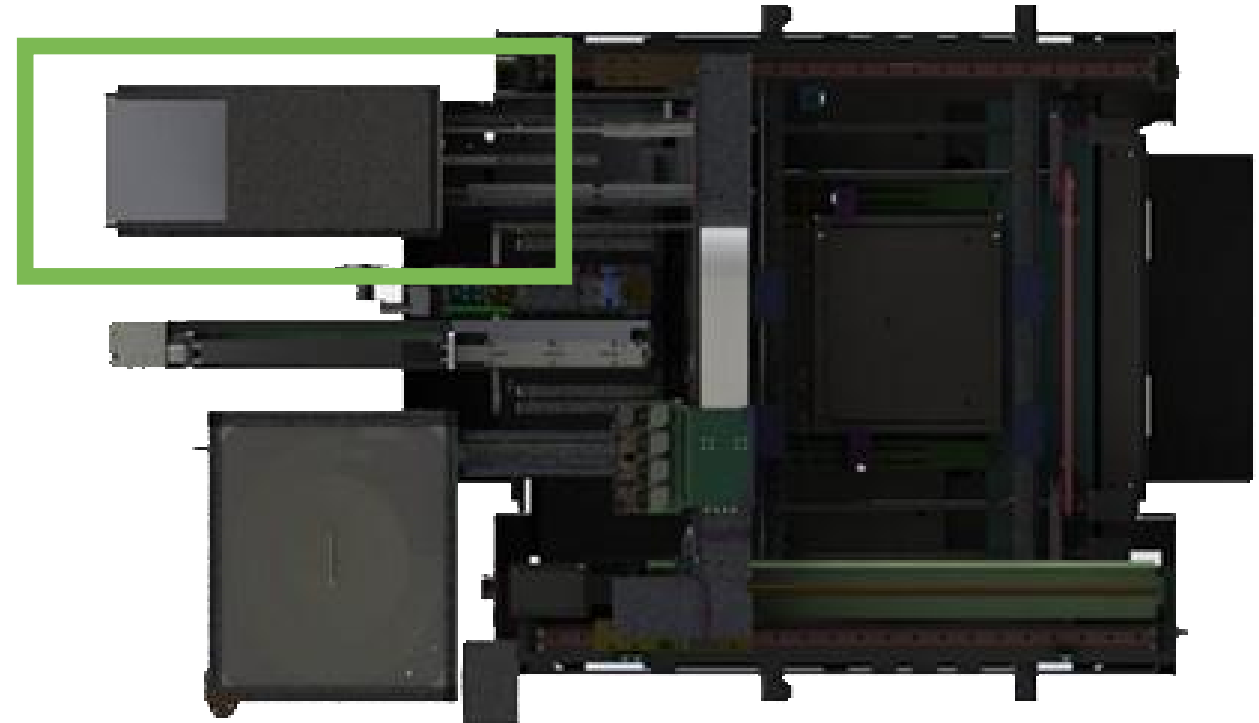
TAPE FEEDER

Axial Type and Radial type,
With cut and preform
function.



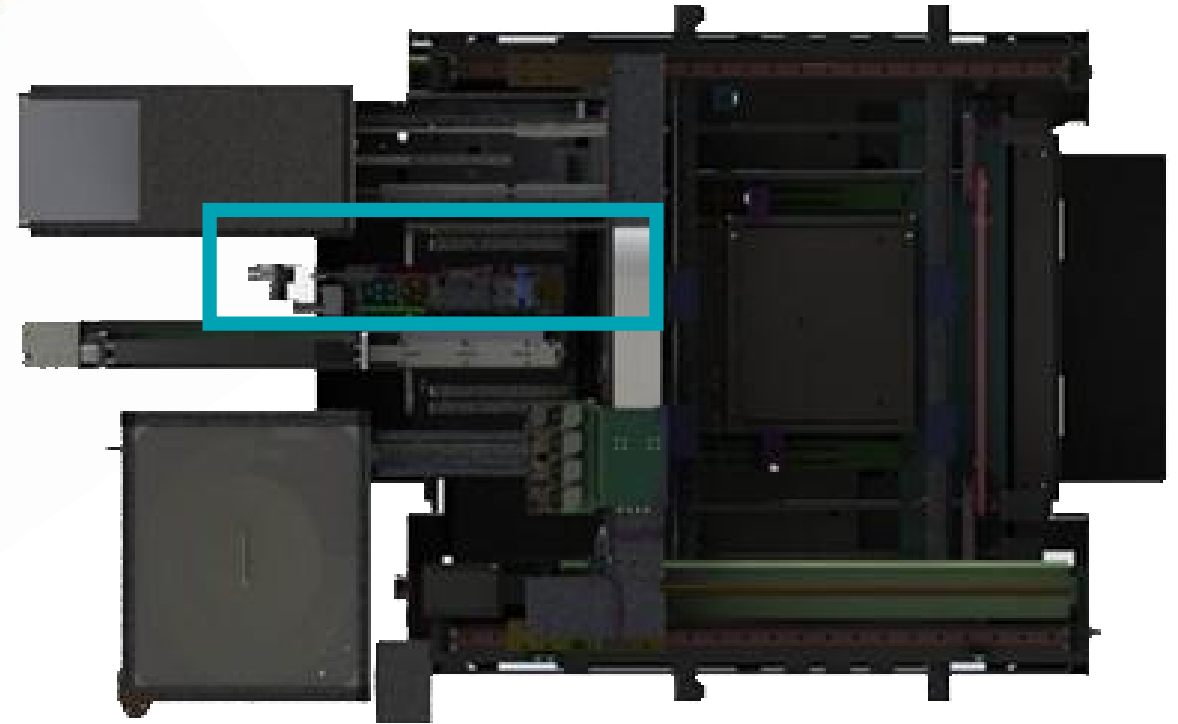
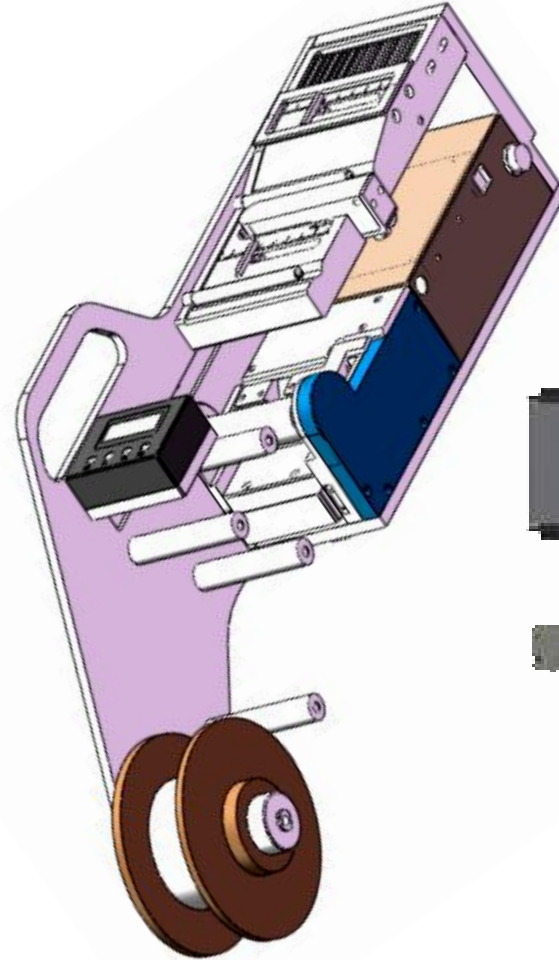
TRAY FEEDER

Specialized material handling
by tray form packing, like IC,
transformer, choke coil, large
capacitor, connector, etc.



LABEL FEEDER

Specialized material
handling by paper
roll, like bar-code
label, etc.



VACCUM NOZZLES AND AIR GRIPPERS

All Nozzles and Grippers are designed with a fast change mechanism.

Vacuum Nozzle

Air Gripper



Relay



IC



Relay



Large Relay



USB



VGA



Pin



Pin header



Switch



Pin header



Tact Switch



Capacitor



Resistor



Transistor



Choke Coil

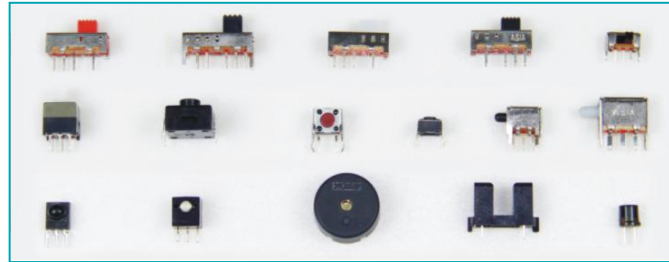


Transformer

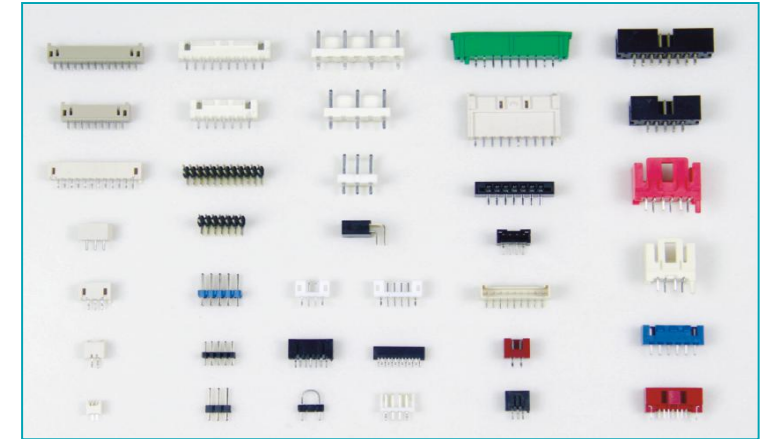
Capacitor



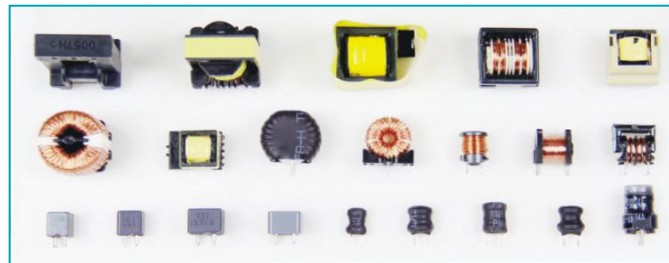
Switch &
Buzzer



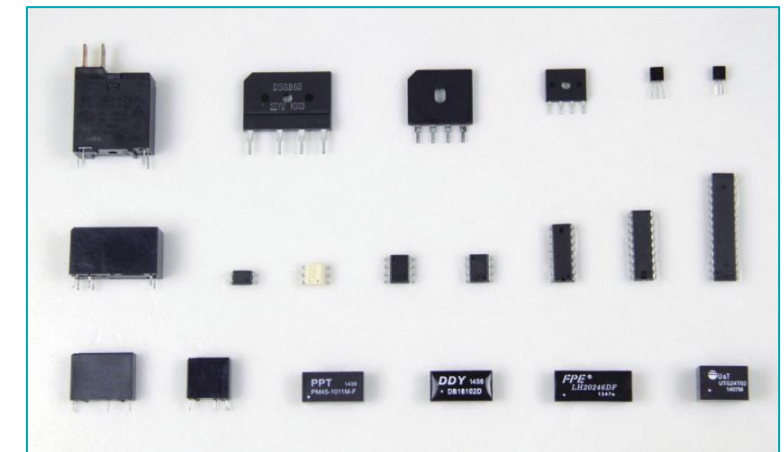
Connector and
Pin header



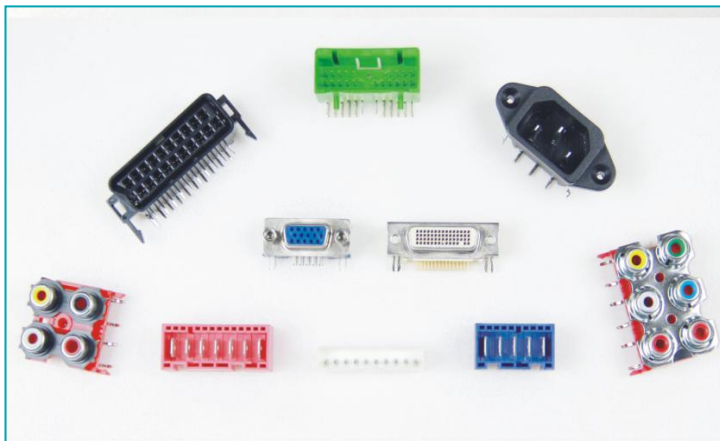
Transformer
& Choke Coil



IC and
Transistor



Terminal



Plug and
Socket





BEST AFTER-SALES SERVICE

- Worldwide Support
- Free Installation/ Training
- 1 day lead-time (spare parts)
- 1 Month customize solution





WELCOME INQUIRY

Google

Auto+insertion, to get more information's

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Know more about our team

<https://cn.linkedin.com/in/smtsupplier>

Looking forward to your email

info@smthelp.com

Welcome to our factory in Shenzhen China

See more machine working video on YouTube

[Auto Insertion](#)