China Techwin

After-sales service in more than 10 provinces and cities.
Expanding overseas market in Japan, South Korea, Malaysia, and Thailand.
Establishing global sales and service network.

CTW
China Techwin

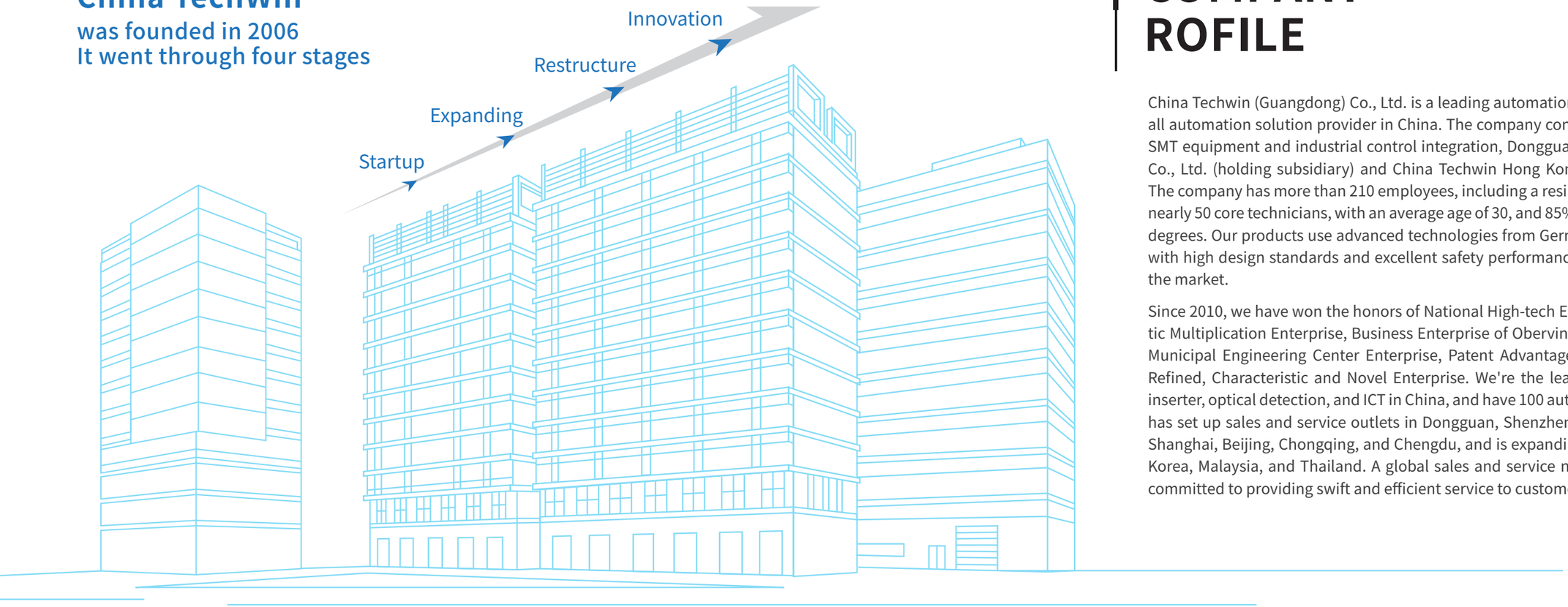
Industry leader of odd-form components inserter Automation total solution provider

National "little giant" firm

China Techwin (Guangdong) Co., Ltd.

Address: No. 317, Jinxing Road, Xixi, Liaobu Town, Dongguan City.
Tel.: 86+0769-39002366
Fax.: 86+0769-39002368
Web.: http://www.chinatechwin.com

China TechWin
was founded in 2006
It went through four stages



COMPANY ROFILE

China Techwin (Guangdong) Co., Ltd. is a leading automation integration service and overall automation solution provider in China. The company consists of intelligent equipment, SMT equipment and industrial control integration, Dongguan TechWin Testing Equipment Co., Ltd. (holding subsidiary) and China Techwin Hong Kong (wholly-owned subsidiary). The company has more than 210 employees, including a resilient R&D team, which consists nearly 50 core technicians, with an average age of 30, and 85% have bachelor's and master's degrees. Our products use advanced technologies from Germany, Japan and South Korea, with high design standards and excellent safety performance, making us a great power in the market.

Since 2010, we have won the honors of National High-tech Enterprise, Dongguan Synergistic Multiplication Enterprise, Business Enterprise of Oberving Contract and Valuing Credit, Municipal Engineering Center Enterprise, Patent Advantage Enterprise, and Specialized, Refined, Characteristic and Novel Enterprise. We're the leader of odd-form components inserter, optical detection, and ICT in China, and have 100 authorized patents. The company has set up sales and service outlets in Dongguan, Shenzhen, Xiamen, Hangzhou, Suzhou, Shanghai, Beijing, Chongqing, and Chengdu, and is expanding overseas markets in Japan, Korea, Malaysia, and Thailand. A global sales and service network is taking shape. We're committed to providing swift and efficient service to customers.

DEVELOPMENT COURSE

2006-2009
STARTUP STAGE

- China Techwin (HK) Co., Ltd. and Dongguan Zhongjida Precision Machinery Co., Ltd. were founded.

2010-2013
EXPANDING STAGE

- China Techwin factory was established, and Zhongjida merged with it to complete the asset reorganization.

2014-2016
RESTRUCTING STAGE

- China Techwin (Dongguan) Automation Equipment Co., Ltd. was established.
- Become the largest agent of Samsung/Hanwha SMT machine.

2016 to now
INNOVATION STAGE

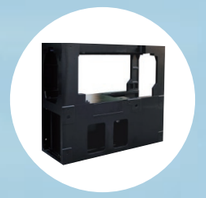
- China Techwin (Guangdong) Co., Ltd. founded and industry consolidation completed.
- MEKA Vision Research Institute was built in the industrial park of Meizhen Town, Dongguan in 2020

HONORARY CERTIFICATE

The company has more than 100 domestic patents.

PRODUCT INTRODUCTION

The products use advanced technologies from Germany, Japan and South Korea, with main accessory from top suppliers, ensuring the stability and service life. Our products are the best in the industry with unconventional design, unique algorithm, reasonable mechanical structure, and fast mounting speed and high accuracy.



RACK

The whole machine is supported with cast iron frame, which is subject to aging treatment to eliminate internal stress for higher stability.

ELECTRIC BOX

The control system is integrated with modular and draw-out design, which is convenient for maintenance.

WIRING HARNESS

The main wiring harness uses LS wiring harness imported from South Korea, which reduces the probability of soft faults during operation, and ensures prolonged service life.

GENERAL TECHNICAL PARAMETERS

Track adjustment mode	Automatic adjustment	Plug-in re-positioning accuracy	±0.025mm
PCB delivery method	On-line	Mounting accuracy	±0.05mm
PCB transmission direction	Left to right/right to left	Insertion pressure	0-40N
Maximum conveying speed	20m/min	Plug-in drive shaft	X/Y/Z/U
Substrate edge	>5mm	Operating voltage	AC220V、50Hz
Substrate positioning method	Camera positioning	Total power	< 4KW
Substrate mounting mode	Mechanical fixation and visual positioning	Air pressure requirements	0.5-0.7Mpa
Insertion angle	Any angle	Air consumption	<50L/min
Plug-in picking method	Pneumatic clamping jaw, suction disc	Track height	920±20mm (adjustable)
Feeding mode	In bundle, bulk, tube, tray	Host noise	<75dB

SMT MACHINE FUNCTIONS

Automatic detection of pins	Standard	Material monitoring system	Standard
Automatic positioning of substrate hole coordinate	Standard	Replacement	Standard
Plug-in slow descent	Standard	Wire mixing	Optional
Smart avoidance	Standard	Damaged board recognition	Optional
Data recording	Standard	MES connection	Optional
Insertion pressure feedback	Standard	QR code and barcode scanning	Optional

Industry leader of odd-form components inserter, Automation total solution provider.

CAM
High-speed machine series

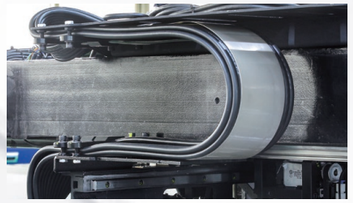
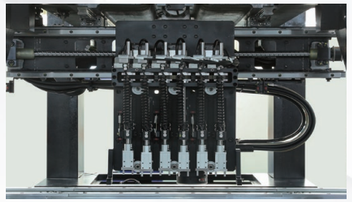
FEATURES:

- Faster than conventional machine.
- Small in size and easy for wiring.
- Streamlined design for easy installation and commissioning.
- High return on investment.

APPLICATIONS:

- Materials and components of same type.
- High productivity.

PRODUCT DETAILS


CAM-16
HIGH SPEED MACHINE

Technical parameters

Dimension: L1300* W1680* H1670

Weight: 1350KG

Number of picking clamps: 4

Number of rack stack positions: 4

Applicable size of substrate:
L50*W50*T0.75~L300*W400*T4.5

Insertion coverage: L300*W400

Applicable size of component:
L3*W3*H3~L35*W35*H30

Function parameters

6000	0.6	±0.025	⩾1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

CAM-18
HIGH SPEED MACHINE

Technical parameters

Dimension: L1500*W1680*H1670

Weight: 1700KG

Number of picking clamps: 4

Number of rack stack positions: 6

Applicable size of substrate:
L50*W70*T0.75-L400*W400*T4.5

Insertion coverage: L320*W400

Applicable size of component:
L3*W3*H3-L35*W35*H30

Function parameters

7200	0.5	±0.025	⩾1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

CAM-19
HIGH SPEED MACHINE

Technical parameters

Dimension: L1500*W1680*H1670

Weight: 1700KG

Number of picking clamps: 6

Number of rack stack positions: 6

Applicable size of substrate:
L50*W70*T0.75~L400*W400*T4.5

Insertion coverage: L350*W400

Applicable size of component:
L3*W3*H3~L35*W35*H30

Function parameters

6600	0.54	±0.025	⩾1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

CAM
Multi-function machine series

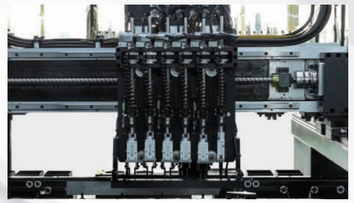
FEATURES:

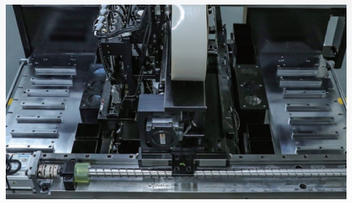
- More stack positions.
- Multi-functional.

APPLICATIONS:

- Small batch and multiple varieties.
- More types of materials.

PRODUCT DETAILS





CAM-20M
MULTI-FUNCTION MACHINE

Technical parameters

Dimension: L1600*W1600*H1670

Weight: 1400KG

Number of picking clamps: 6

Number of rack stack positions:
8 in the front 8 in the rear/
10 in the front 10 in the rear (optional)

Applicable size of substrate:
L50*W50*T0.75~L450*W400*T4.5

Insertion coverage: L400*W400

Applicable size of component:
L3*W3*H3~L35*W35*H30

Function parameters

6600	0.54	±0.025	≥1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

CAM-20
MULTI-FUNCTION MACHINE

Technical parameters

Dimension: L1600*W1700*H1670

Weight: 1500KG

Number of picking clamps: 8

Number of rack stack positions:
10 in the front 10 in the rear

Applicable size of substrate:
L50*W50*T0.75~L450*W550*T4.5

Insertion coverage: L450*W550

Applicable size of component:
L3*W3*H3~L35*W35*H35

Function parameters

6900	0.52	±0.025	≥1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

CAM-30
MULTI-FUNCTION MACHINE

Technical parameters

Dimension: L1600*W1580*H1670

Weight: 1450KG

Number of picking clamps: 2

Number of rack stack positions:
10 in the front

Applicable size of substrate:
L50*W50*T0.75~L450*W550*T4.5

Insertion coverage: L450*W550

Applicable size of component:
L3*W3*H3~L35*W150*H30

Function parameters

1800	2	±0.025	≥1.33
Per hour (CPH)	Insertion speed (s/pc)	Re-positioning accuracy (mm)	Process capability

BULK FEEDER

- Applicable component: 65*35*25

0.5s Feeding speed

30 min Feeding frequency

Pin cutting

Pin adjustment

Ammeter varistor

Mainboard varistor

Touch switch

Remote control clip

Charger common mode choke

Charger clip

Remote control spring

Chip terminal

RJ45

TUBE FEEDER

- Applicable component: 40*25*30

0.5s Feeding speed

160 mm Bin volume

Pin cutting

Pin adjustment

Relay

Photoelectric switch

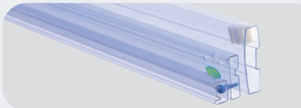
Bridge rectifier

Network transformer

MOS tube

Photoelectric chip

Common mode choke



Tube model (≤550mm)

TRAY FEEDER

Dual tray feeder
Convenience tray feeder

- Applicable component: 60*40*40

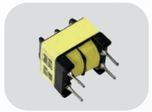
1.0s Feeding speed

270 mm Bin volume

Flip

Pin adjustment

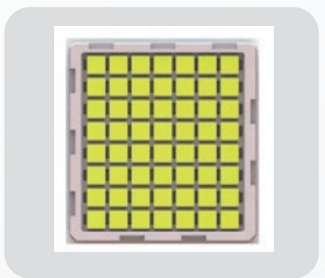
Small appliance spring



Large transformer

Control lever

Digital display

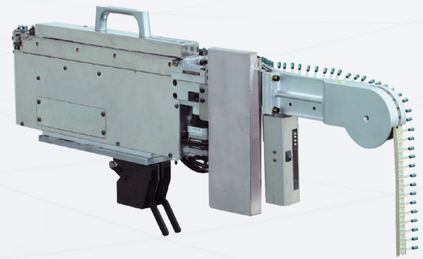


Vacuum tray model (320*300mm)

Common mode choke

BUNDLE FEEDER

- Applicable component: Φ16*25

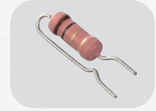


0.8s Feeding speed

Bundle shearing

Pin cutting

Pin adjustment

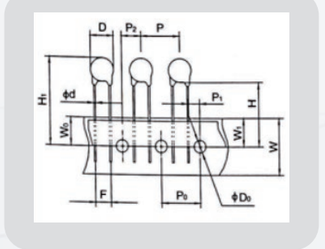


Color ring resistance

Varistor

Electrolytic capacitor

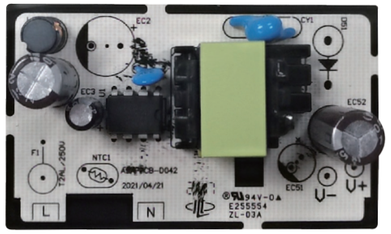
Projector



Bundle material

DR core

SUCCESSFUL CASES



• 1#PCBA (Power adapter)

Note:

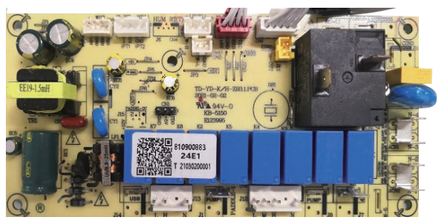
(1) Substrate features: Small spacing between parts, strong interference between parts, and high insertion precision;

(2) Optimized substrate material layout with automatic feeding for improved production capacity.

Automated state comparative analysis table

No.	Item	Personnel /shift	Number of plug-ins	Capacity	Operator time H/day	Capacity per shift PCS/shift	Capacity per day PCS/shift	Remarks
1	Manual	7	8	1000	20	8000	16000	Manual insertion, check for floating connectors
2	Automatic	0.5	8	1200	22	13200	26400	Manual inspection, troubleshooting

Note: After automation, the production capacity and quality have been improved; free of floating connectors or reverse insertion. The labor cost and post-furnace maintenance rate are reduced.



• 2#PCBA (appliance)

Note:

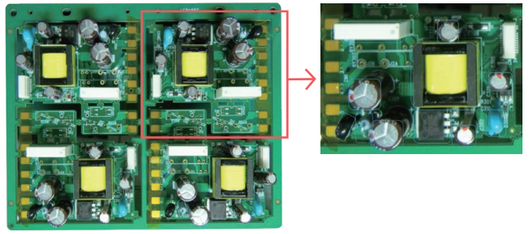
(1) Substrate features: Frequent product line changing, small spacing between parts, strong interference between parts, with large number of materials that need to distinguish direction;

(2) The image above shows automatic plug-in part, which is produced through man-machine technology. Common materials in different products are automatically inserted by machine.

Automated state comparative analysis table

No.	Item	Personnel /shift	Number of plug-ins	Capacity	Operator time H/day	Capacity per shift PCS/shift	Capacity per day PCS/shift	Remarks
1	Manual	6	23	350	20	3500	7000	Manual insertion, check for floating connectors
2	Automatic	0.5	23	420	20	4200	8400	Manual inspection, troubleshooting

Note: After automation, the production capacity and quality have been improved; free of floating connectors or reverse insertion. The labor cost and post-furnace maintenance rate are reduced.



• 3#PCBA (industrial control)

Note:

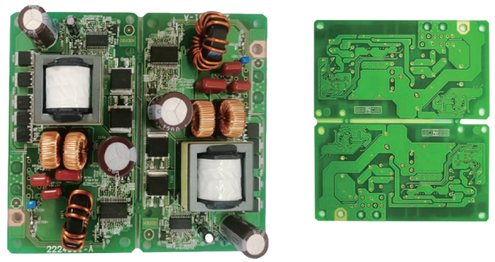
(1) Substrate features: Small spacing between components, strong interference between parts, and high product quality requirements;

(2) The image above shows plug-in parts of odd-form components inserter, and no manual insertion is required.

Automated state comparative analysis table

No.	Item	Personnel /shift	Number of plug-ins	Capacity	Operator time H/day	Capacity per shift PCS/shift	Capacity per day PCS/shift	Remarks
1	Manual	5	11	600	20	6000	12000	Manual insertion, check for floating connectors
2	Automatic	0.5	11	720	22	7920	15840	Manual inspection, troubleshooting

Note: After automation, the production capacity and quality are increased slightly, and free of floating connectors, electrolytic capacitors, and reverse insertions, thereby reducing the labor cost maintenance rate.



• 4#PCBA (automotive electronics)

Note:

(1) Substrate features: High product quality requirements; after insertion, the back needs to be bent in the direction of the small raindrops;

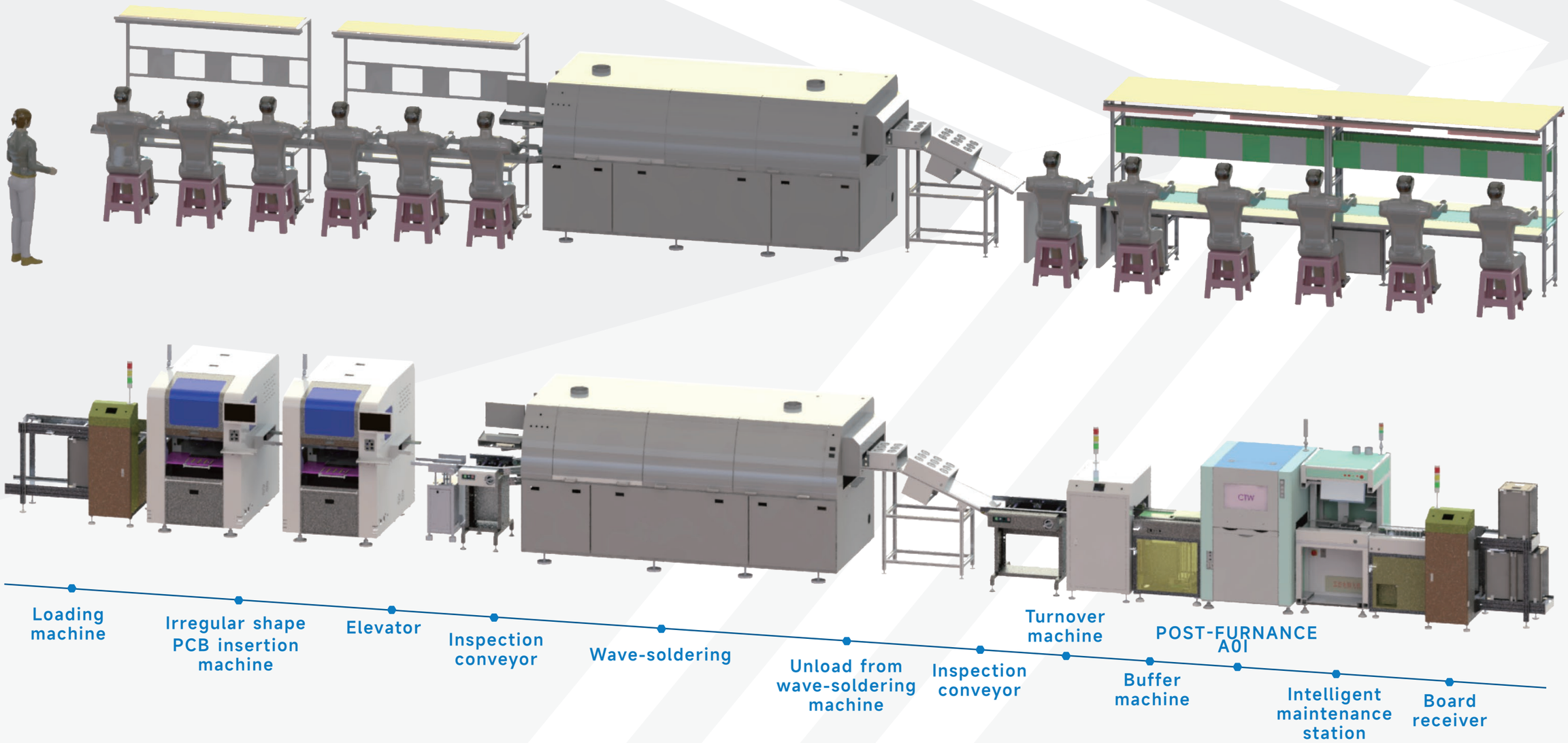
(2) Odd-form components are inserted online automatically, pins are bent according to customer requirements to avoid re-handling.

Automated state comparative analysis table

No.	Item	Personnel /shift	Number of plug-ins	Capacity	Operator time H/day	Capacity per shift PCS/shift	Capacity per day PCS/shift	Remarks
1	Manual	4	8	200	20	2000	4000	Manual insertion, check for floating connectors
2	Automatic	0.5	8	243	22	2673	5346	Manual inspection, troubleshooting

Note: After automation, the quality and efficiency are improved, there is no need to transfer wire again, and free of floating connectors and reverse insertion of electrolytic capacitors.

COMPARISON OF WHOLE LINE AUTOMATION



OUR STRATEGIC PARTNERS

*Partners above are in no particular order

We sincerely hope to cooperate with the industry colleages, develop together, and build an efficient, harmonious and win-win platform for custormers and enterprises.

CONCEPT

VISION

Devoted to providing automation integration services and overall automation solutions

VALUE

Integrity • Innovation • Pragmatism

OUTLOOK

To be a benchmark enterprise recognized by customers, employees and community in the field of automation. We will work together to achieve this goal!

CTW China Techwin

Forge ahead with intelligent technology!