

FULLY AUTOMATED

# FULL AUTOMATIC DIP SOLDERING MACHINE

Save Tin/Save Power/Long Foot Work

THIS MODEL IS A HIGH-END WELDING EQUIPMENT CURRENTLY DEVELOPED  
FOR PLUG-IN ELECTRONIC PRODUCT WELDING. IT IS THE CRYSTALLIZATION OF THE LATEST DESIGN  
USING MODERN HIGH-TECH TECHNOLOGY.



[SIX CORE ADVANTAGES]

# SIX CORE SELLING POINTS

## EXCELLENT QUALITY



Patented Products Factory Direct Sales Authentic guarantee

PATENT PRODUCT MANUFACTURER'S DIRECT SELLING AUTHENTIC PRODUCT GUARANTEE



**Product Upgrade**



**Configuration Upgrade**



**High-Quality Materials**



**Perfect After-Sales**



**Exquisite Workmanship**



**Quality Assurance**



In Board Device

# NO NEED FOR CONVEYOR DIRECT CONNECT TO PLUG-IN LINE

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Adopt the integrated structure with the front conveying system to ensure the PCB enters the conveying system smoothly.

The imported photoelectric sensor is used to ensure accurate PCB detection and effectively avoid repeated feeding.



# THE MOTOR DRIVES THE CHAIN TRANSMISSION

## SMOOTH AND RELIABLE TRANSMISSION

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The tin scraping system is driven by the motor to automatically scrape the tin, and the tin scraping is stable, which avoids the air pressure instability of the pneumatic way of scraping the tin surface, which leads to the waste of tin scraping outside the furnace body





Spray System - Spray Flux

# HIGH-PRECISION SPECIAL NOZZLE

STEPPER MOTOR DRIVE AUTOMATICALLY  
ADJUSTS SPRAY WIDTH

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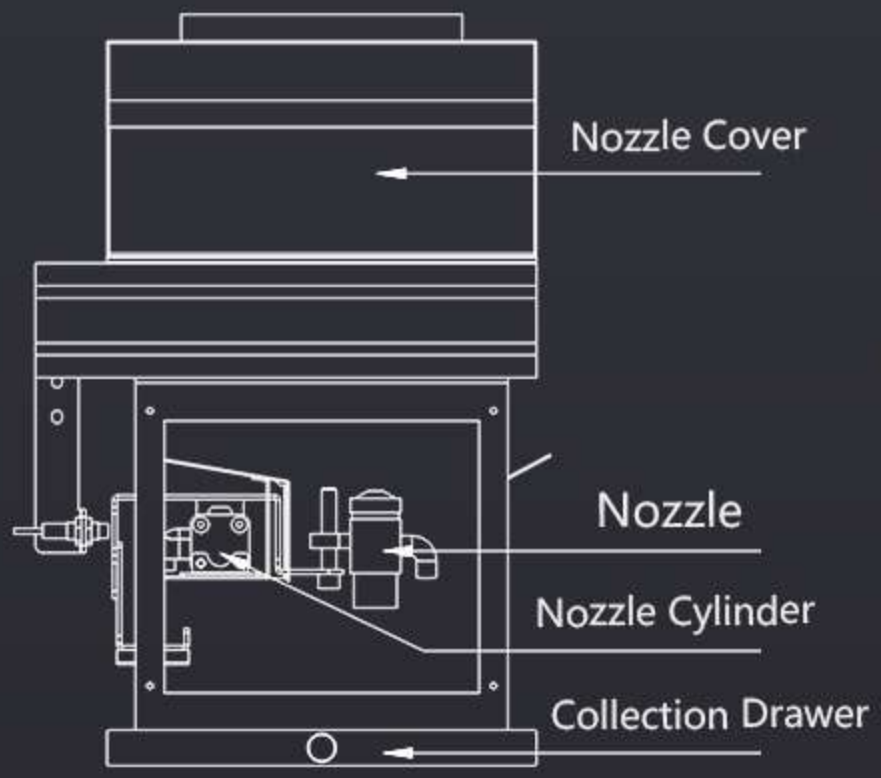
It adopts Stepper motor drive and high precision nozzle spray evenly,  
and can monitor the length of PCB in real time to complete automatic tracking spray,  
and is equipped with double curtain to prevent flux fog from spreading outward and reduce pollution.



Spray

# SPRAY CONDITIONING SYSTEM

## MORE CONVENIENT TO ADJUST THE INDICATORS



The spray system adopts cylinder drive mode and high precision nozzle spray evenly, and can monitor the length of PCB in real time to complete automatic tracking spray.



Spray Filter - Pull-Out Design

# FLUX FILTER SCREEN

## EFFECTIVELY ADSORB EXCESS FLUX

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Ensure smooth PCB conveying process, pull design to facilitate daily cleaning, keep the equipment clean environment.





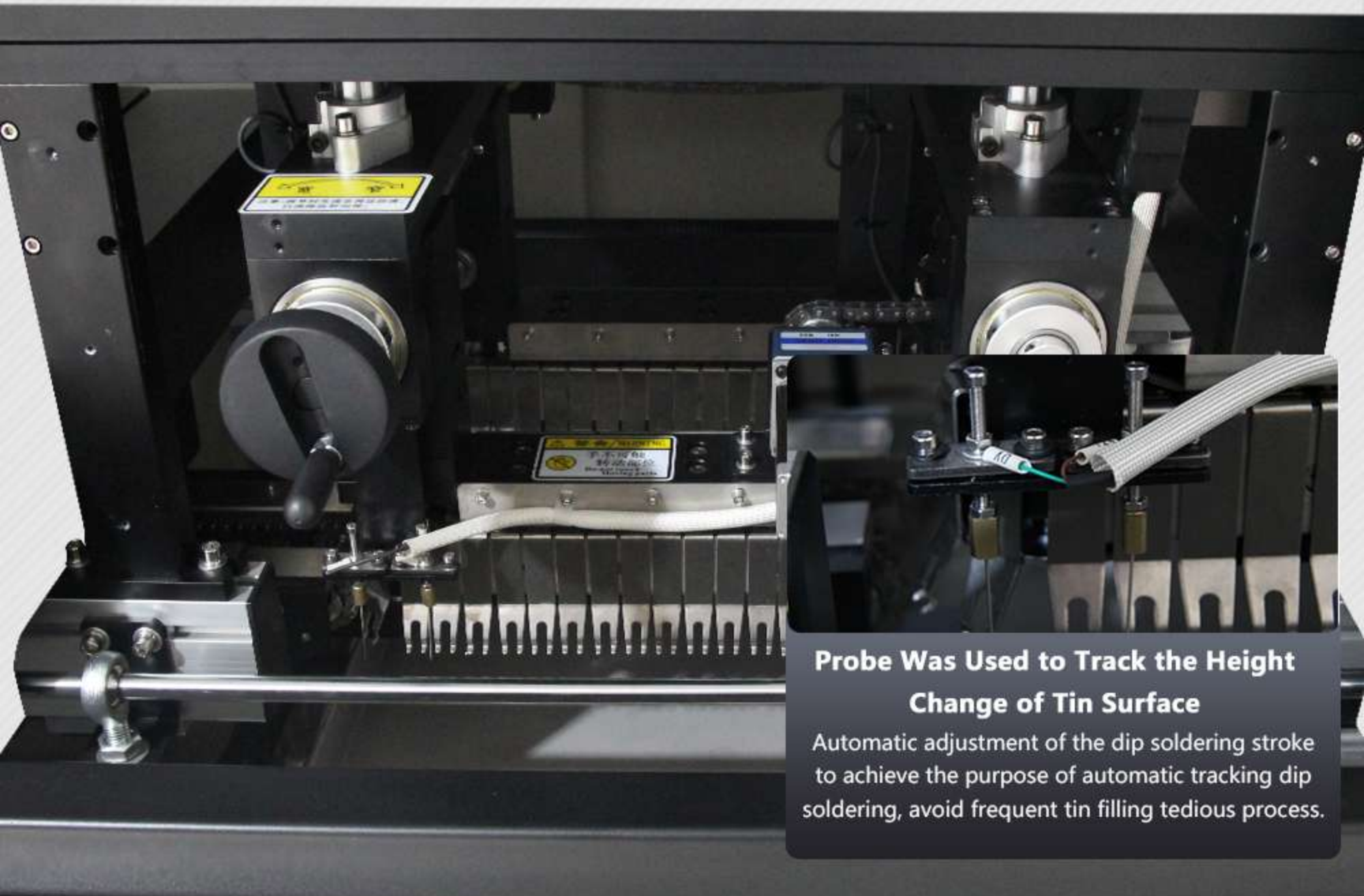
Dip Soldering - Double Closed Loop Step Drive

# DIP SOLDERING SYSTEM

## ADOPT DOUBLE CLOSED LOOP STEP DRIVE MODE

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Can realize the first down first up after down after up swing action, effectively prevent tin splashing. For special PCB, direct down mode can also be adopted. There is a function switch button on the touch screen for customers to switch at will.



### Probe Was Used to Track the Height Change of Tin Surface

Automatic adjustment of the dip soldering stroke to achieve the purpose of automatic tracking dip soldering, avoid frequent tin filling tedious process.

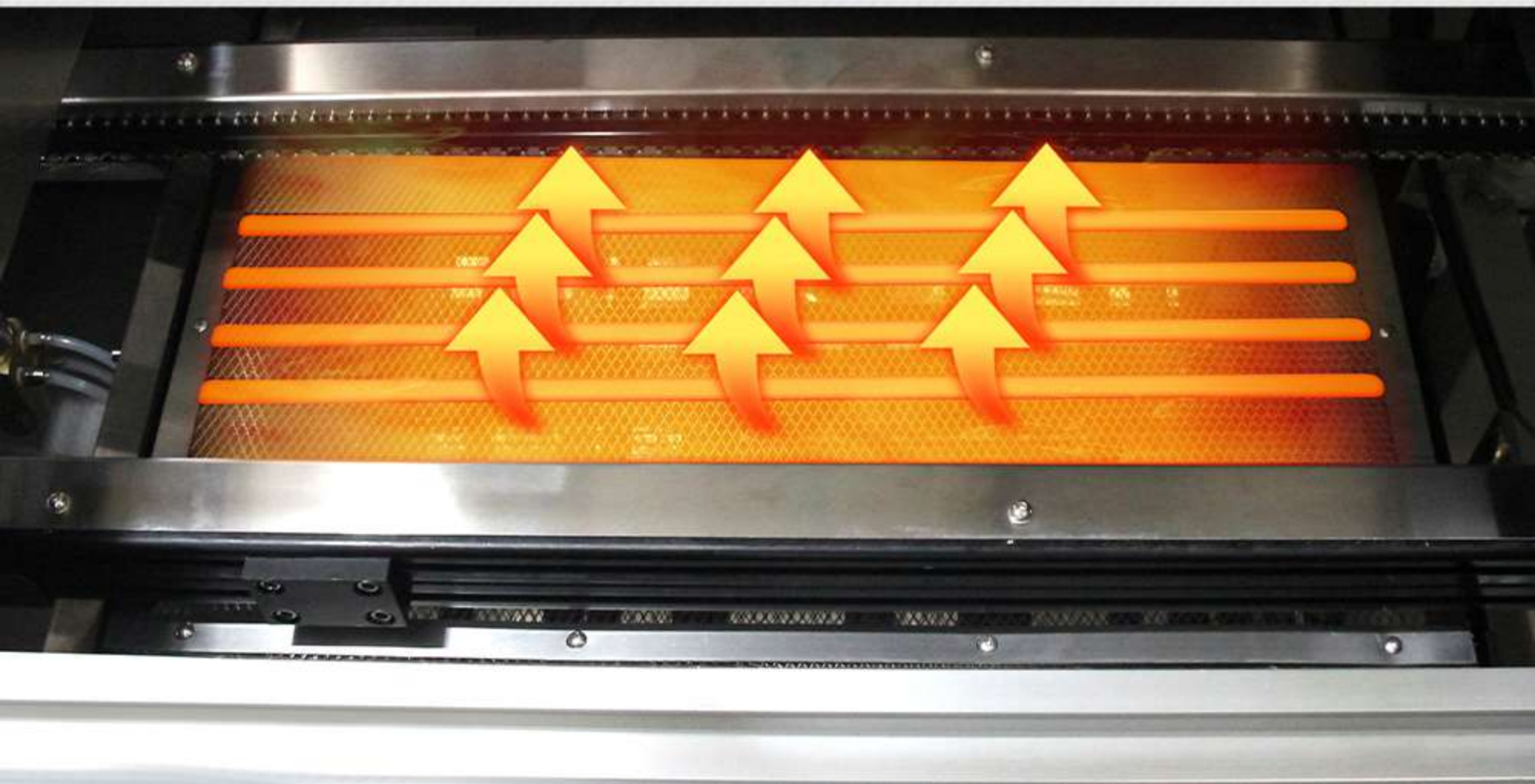


[PRODUCT MAIN FEATURES]

# INFRARED HEATING PREHEATING SYSTEM



The length of heating mode of preheating system is up to **600mm** to ensure the PCB surface is preheated evenly and fully. The temperature control mode adopts PID+SSR closed-loop control to ensure the precision and stability of control.



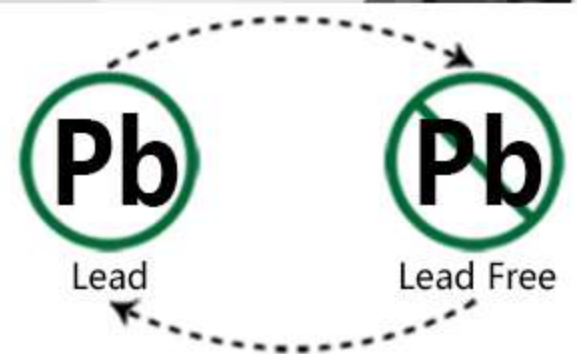


Soldering

# AUTOMATIC TIN SURFACE DETECTION

Compact design of furnace only needs **80KG** tin bar to reduce investment cost.

No need to frequent tin, soldering angle adjustable, tilt Angle adjustable



**Modular Design of Soldering Pot**

It is extremely convenient to upgrade lead to lead free, and the input cost is quite low.



Soldering Pot

# THE SODERING POT POSITION ADJUSTMENT

The soldering pot bracket is connected and fixed with the frame bolts through the fixed plate, which can be freely disassembled and assembled.

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The bottom of the soldering pot is about 58mm away from the bracket, the distance from the left side of the soldering pot to the support can be about 5mm.

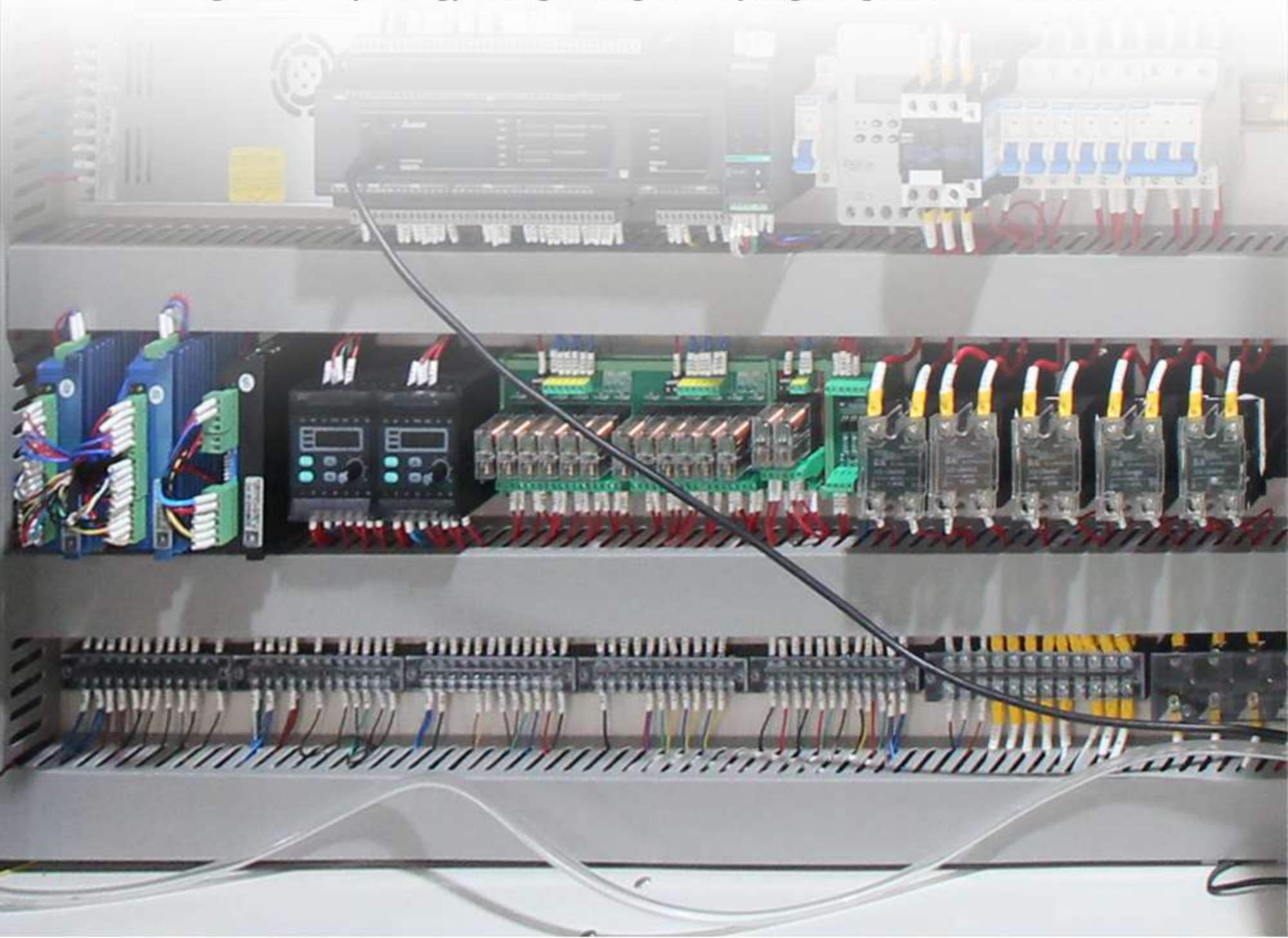


Configuration

# HIGH-END BRAND ELECTRONIC CONTROL SYSTEM

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High efficiency, energy saving, strong stability, high degree of automation





# USER-FRIENDLY OPERATING SYSTEM IS EASY TO GET STARTED



The control system adopts touch screen&PLC to make the operation simple and convenient.

**PARAMETER SETTINGS**

Frequency adjustment, easy to use, quick start

## PLC AUTOMATION SETTING

Powerful function, realize automatic operation.

定时	开始: 时-分	结束: 时-分	选择
定时一	0 0	0 0	开
定时二	0 0	0 0	开
定时三	0 0	0 0	开
定时四	0 0	0 0	开
定时五	0 0	0 0	开
定时六	0 0	0 0	开

**TIMING SETTINGS**

Heat in advance, and work immediately without waiting

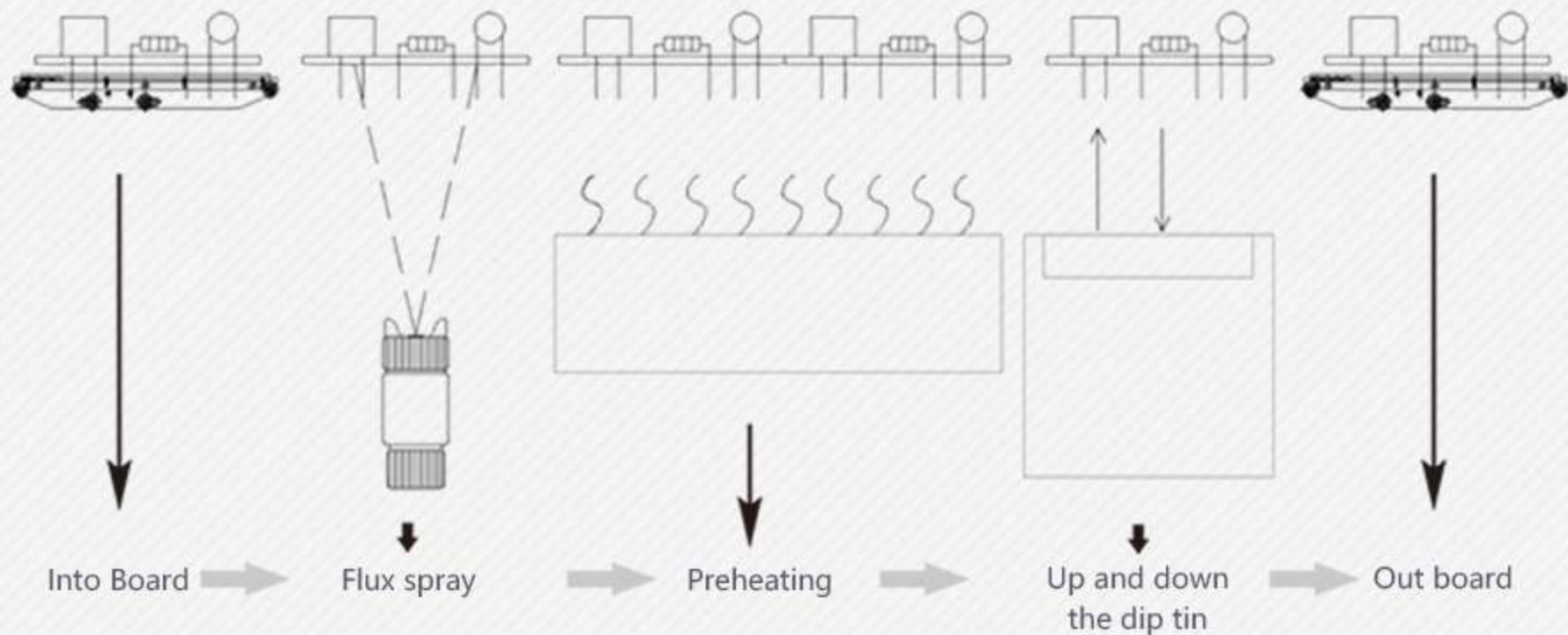
# [TECHNICAL PARAMETER]



<b>Machine</b>	Name	Full Automatic Dip Soldering machine
	Model	<b>ZB350M</b>
	Frame size	12600*w1100*h1675mm
	Overall size	12600*w1050*h1680mm
	Weight	650kg
	Power supply	AC380V/220V 50Hz
	Starting power	11KW
	Running power	3KW
	Control system	Touch screen&PLC
<b>Spray</b>	Output	MAX.2200PCS/8H
	spray start and stop mode	automatic tracking PCB length start and stop
	transmission mode	mechanical rodless cylinder
	spray pressure	0.25Mpa-0.4Mpa
	spray form	spray
	nozzle type	(Taiwan Weiner)
<b>Preheating</b>	flux capacity	5.5L
	preheating mode	Infrared heating
	temperature control mode	PID+SSR
	preheating zone number	1
	preheating zone length	600mm
	Temperature adjustable range	Indoor Temperature-150°C
	preheating zone heating time	10min(set temperature150°C)
<b>Transport</b>	preheating zone power	6KW
	Width of the PCB	50mm-250mm
	PCB transmission direction	L→R
	Transport section number	Section 3 (Into the board transfer + tin leaching + out board transfer)
	Range of transmission speed	1-74mm/s
	Transport height	750±20mm
	PCB component height allowed	<60mm
	Allowable PCB component pin length	<35mm
	Minimum PCB size allowed	MIN.50*130mm
	Maximum PCB size allowed	MAX.250*350mm
	Speed control mode	Touch screen to change parameters
	The mode of transportation	Nickel plated 35B chain
	Guide rail width adjustment mode	Hand adjustable wide
	<b>Dip tin</b>	Dip tin way
Dip tin incline height		0-30mm
Dip tin fast speed		1-80mm/s
Dip tin slowly		1-20mm/s
Dip tin time		1-99s
Tin surface detection method		Probe automatic tracking detection
Add tin way		Manually add tin
Tin surface too low alarm mode		Beep + text prompt
<b>Soldering pot</b>	Dip tin chain claw	Double claw (titanium alloy)
	Soldering pot type	regularly
	Soldering pot structure	Externally heated Soldering pot
	Soldering pot material	Independent modular type 304 stainless steel/titanium alloy 6=2.0mm
	Soldering pot heating plate power	3000 w * 2 = 6 kw
	Maximum Soldering pot temperature	400°C
	Soldering pot capacity	Article 70 kg tin (63/37)
	Soldering pot heating time	40min(set temperature 260C)
	Soldering pot control mode	PID+SSR
<b>Scraping the tin</b>	The Soldering pot is switched on	✓
	Scraping the tin way	Automatic
	Scraping drive mode	Gear Motor
	Scraping the tin speed	160mm/s
	Scraping the tin cycle	The 2-stage row is removable 1-50 times is adjustable
<b>Clean</b>	cleaner	Alcohol
	Alcohol tank capacity	2.4L



# [SCHEMATIC DIAGRAM OF SOLDERING PRINCIPLE]

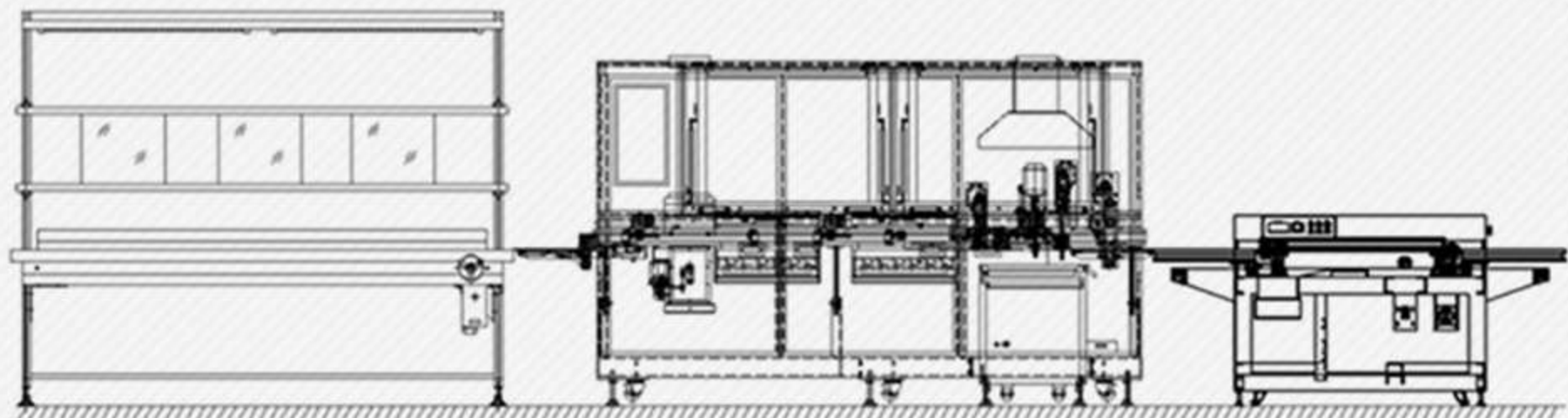


# [PERFORMANCE ANALYSIS COMPARISON TABLE]

Device Name	Hand Dip Tin Stove	Wave Soldering	Automatic Welding
Staff	1 Skilled Worker	NO	NO
Solder input	10-60KG	250-350KG	80KG
Tin consumption	0.5-1KG	2-5KG	0.5-1KG
Power consumption	1-3KW	11KW	3KW
Structure	Open, Poor environment	Enclosed and Tidy	Enclosed and tidy
Form a complete set of equipment	Spray stove, smoking facilities	The input machine and output machine, cannot connect to the automatic foot cutting machine	Without input machine, can directly docking plug-in line, can be directly matched with automatic foot cutting machine
Applicable Process	Long foot/short foot component circuit board welding	Only suitable for short foot, component circuit board soldering	Long foot/short foot, component circuit board soldering



# [SCHEMATIC DIAGRAM OF THT SOLDERING PROCESS]



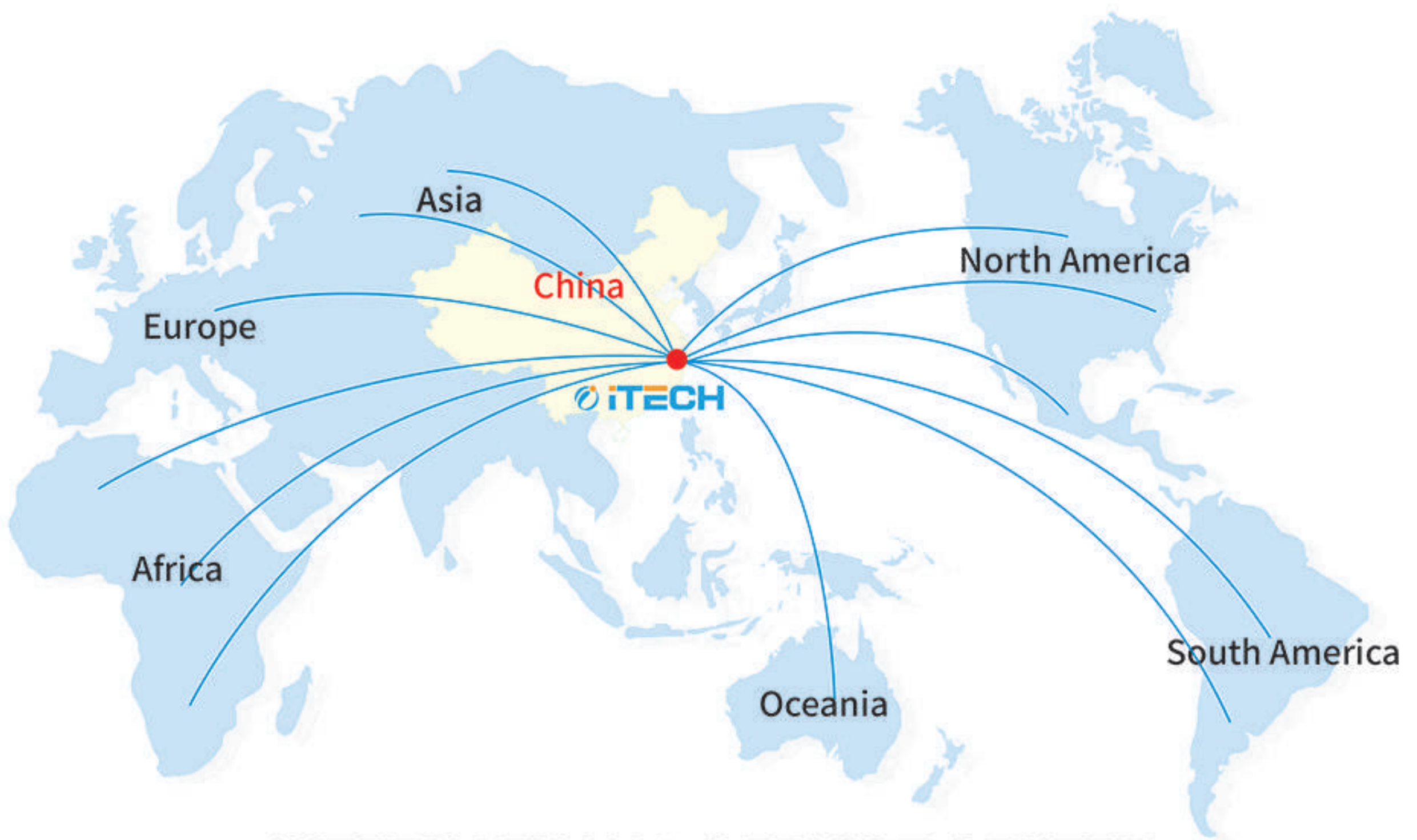
Automatic Plug-in  
Assembly Line



Automatic dip  
soldering machine



Automatic  
Cutting Machine



## INTERNATIONAL SERVICE CENTER



Cairo, Egypt



New Delhi, India



Koln, Germany



Madrid, Spain



Kyeongki-Do,  
South Korea



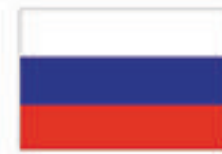
Buenos Aires  
Argentina



Istanbul Turkey



Sao Paulo Brazil



Moscow, Russia



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