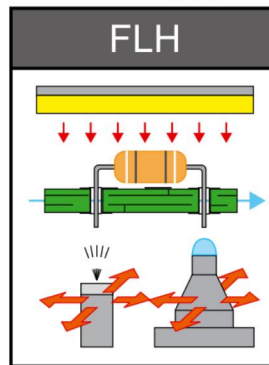
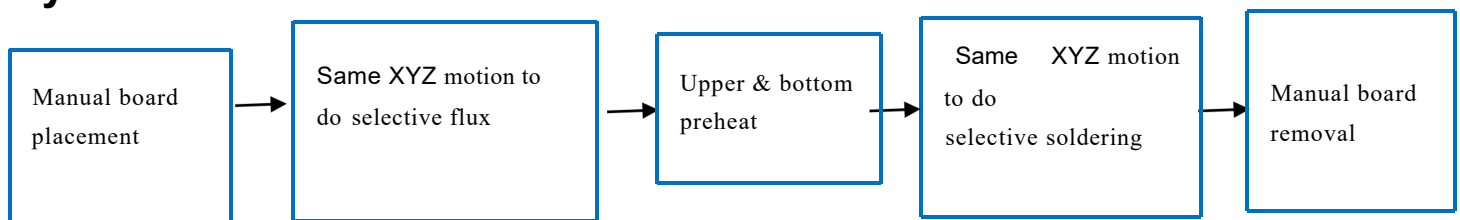


Mini selective soldering SL-600 Specification:



喷雾 + 预热 + 焊接
Flux spraying Preheating Soldering

System Process Route:



Advantageous:

- (1) Integrated full-functional model, the whole motion platform integrated spray and welding, compact space.
- (2) PCB plate fixed, spray and welding platform moving.
- (3) High welding quality, greatly improve the pass rate of welding.
- (4) Modular design of SMEMA online transportation, support customers for flexible line formation.
- (5) Full PC control. All parameters can set in PC and saved to PCB menu, like moving path, solder temperature, flux type, solder type, N² temperature etc, best trace-ability and easy to get repeat soldering quality.

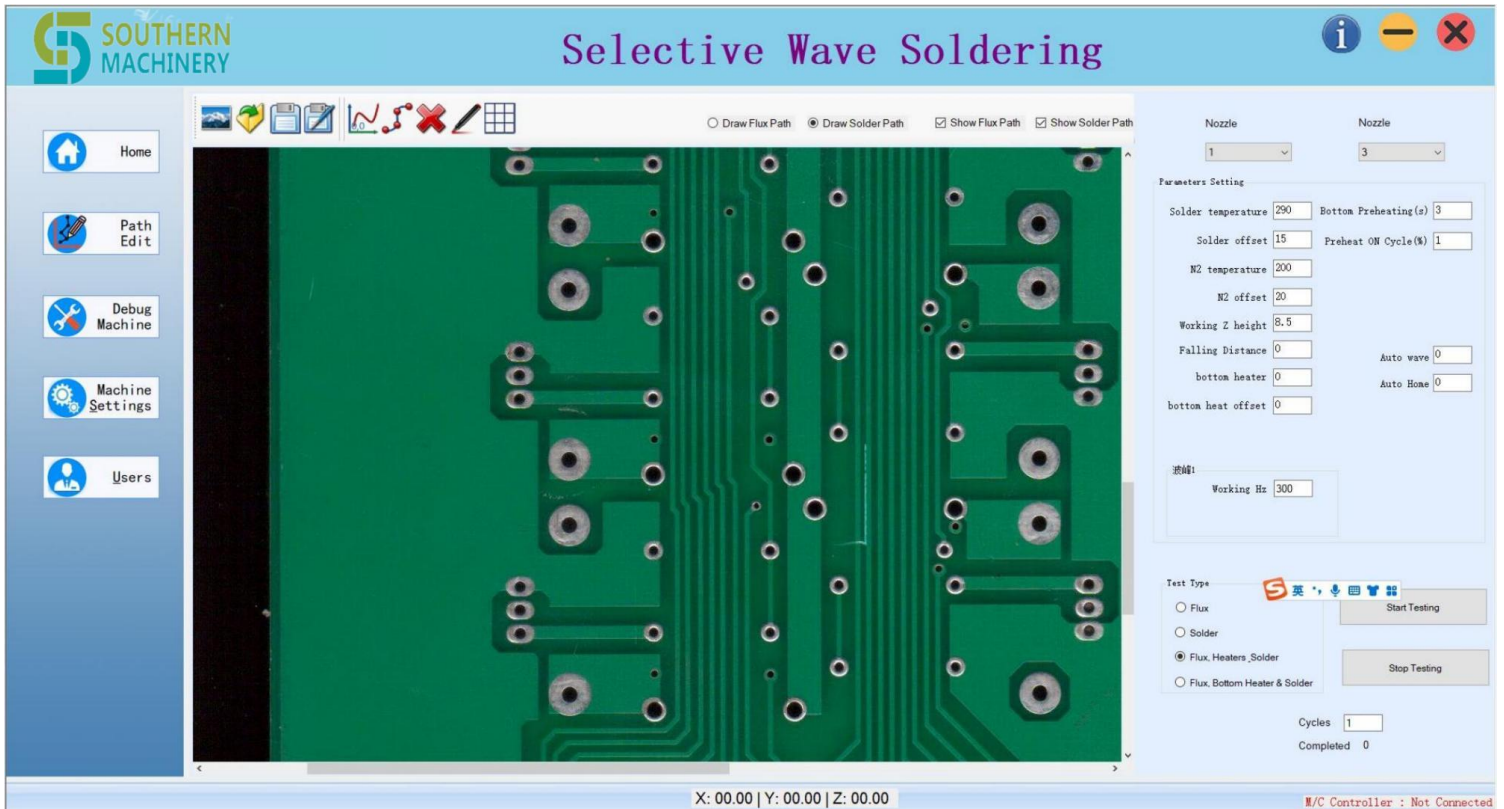
Standard machine include:

Serial	Item	content	Quantity
1	Controlling system	PC & monitor	1 (set)
		Live on monitor camera	
		motion control	
2	PCB Motion table	xyz motion table	1 (set)
		3 axis equipped with ball screw & linear guild rail	
		3 axis equipped with servo motor & driver	
3	Fluxing system	Imported fluxing jetting valve	1 (set)
		flux tank	
		flux pneumatic system	
4	preheating system	IR heater at bottom	1 (set)
5	Soldering pot	15kg capacity solder pot, impeller, tunnel, servor motor	1 (set)
		solder temperature over heat alarm system	
		solder temperature controlling system	
		N ² inline heating system	
		Comes standard with 5 welding nozzles (ID 4mm x 3pcs, 5mm, 6mm).	
6	Conveyor system	PCB side clamping system	1 (set)
7	Machine chassis	machine frame/cover & painting	1 (set)

Machine explanation

Part1: Software

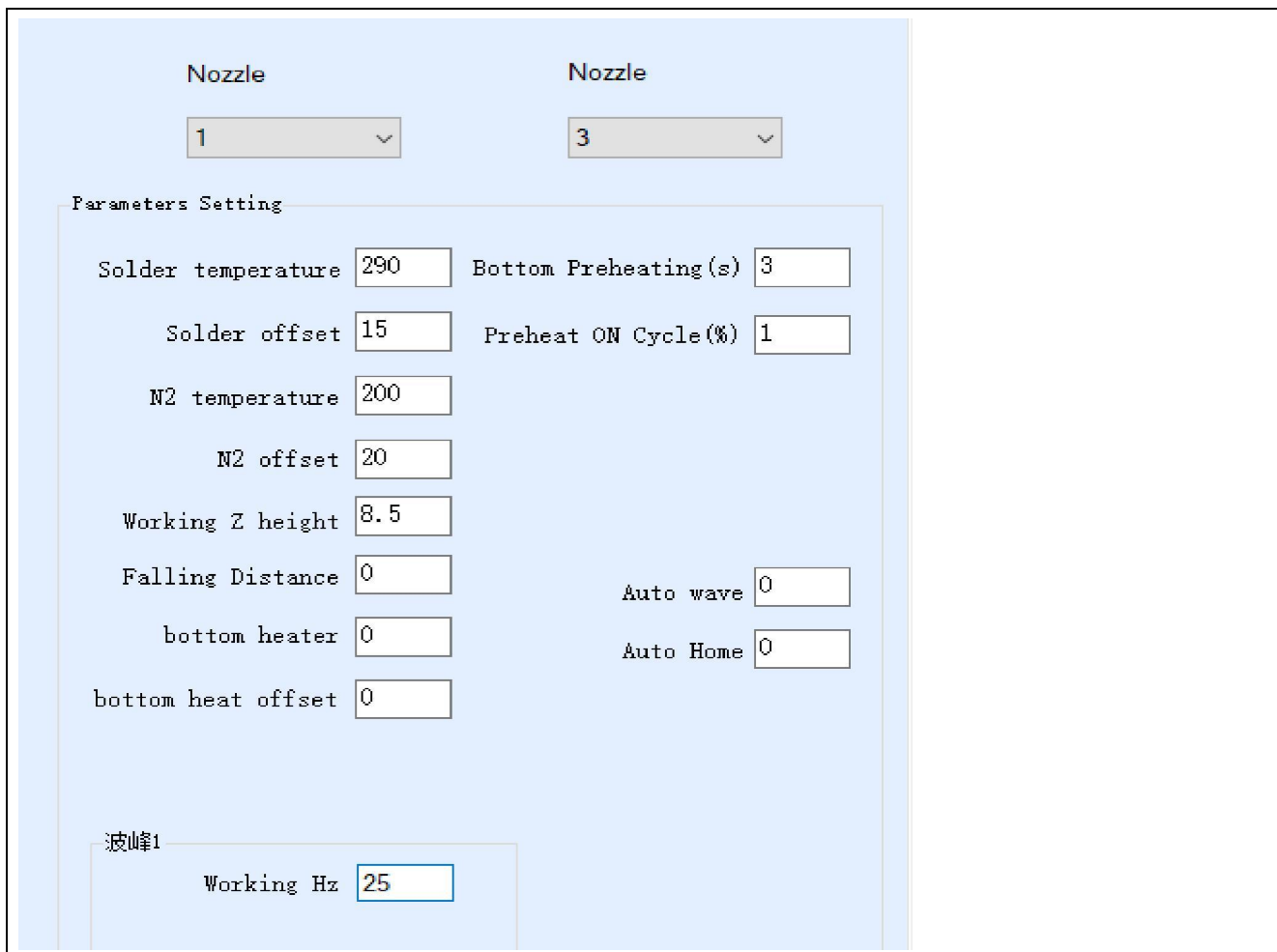
- All software system developed by base on Windows10system, with good trace-ability.



- Use scanned picture as background for path programming, moving speed, dwell time, empty move speed, Z height , wave height etc all programmed for different solder site.
- Showsolder process with live on camera.
- Critical parameters are totally under monitoring by PC software, like temperature, speed, pressure etc.

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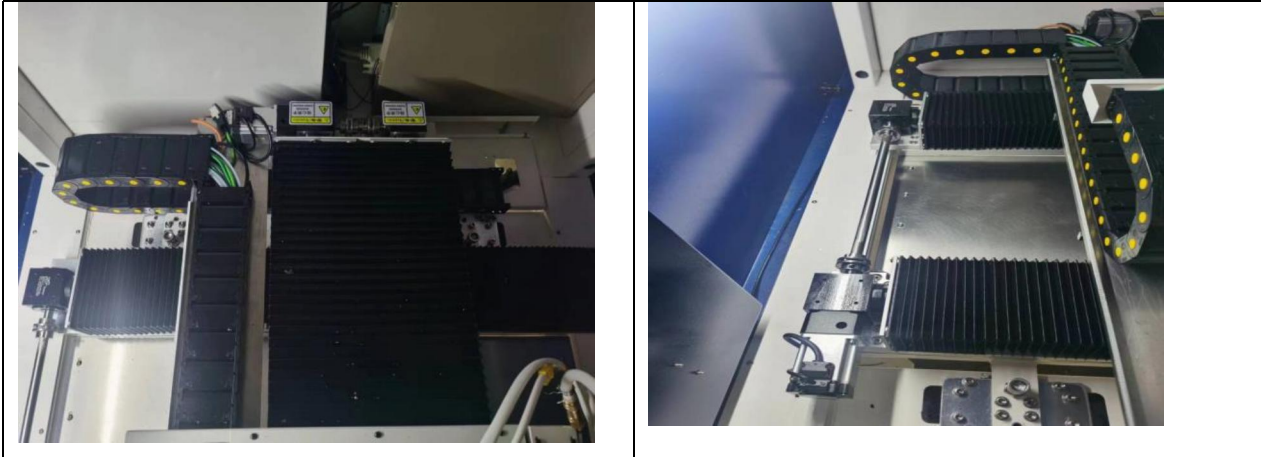
- Can upgraded to be with auto wave height calibration function, to check & calibrate wave's height after every certain pcb, so to keep a very good stability of wave.
- About PCB's menu in soldering machine, all information will be stocked in one file. It will include PCB dimension and picture, used flux type, solder type, solder nozzle type, solder temperature, N2 temperature, motion path and each site's related wave height and Z height etc. When customer to solder same PCB, they can get full information about how it's done in history, also easy for trace.



Nozzle		Nozzle	
1	▼	3	▼
Parameters Setting			
Solder temperature	290	Bottom Preheating (s)	3
Solder offset	15	Preheat ON Cycle (%)	1
N2 temperature	200		
N2 offset	20		
Working Z height	8.5		
Falling Distance	0	Auto wave	0
bottom heater	0	Auto Home	0
bottom heat offset	0		
波峰1			
Working Hz	25		

Part2: motion system

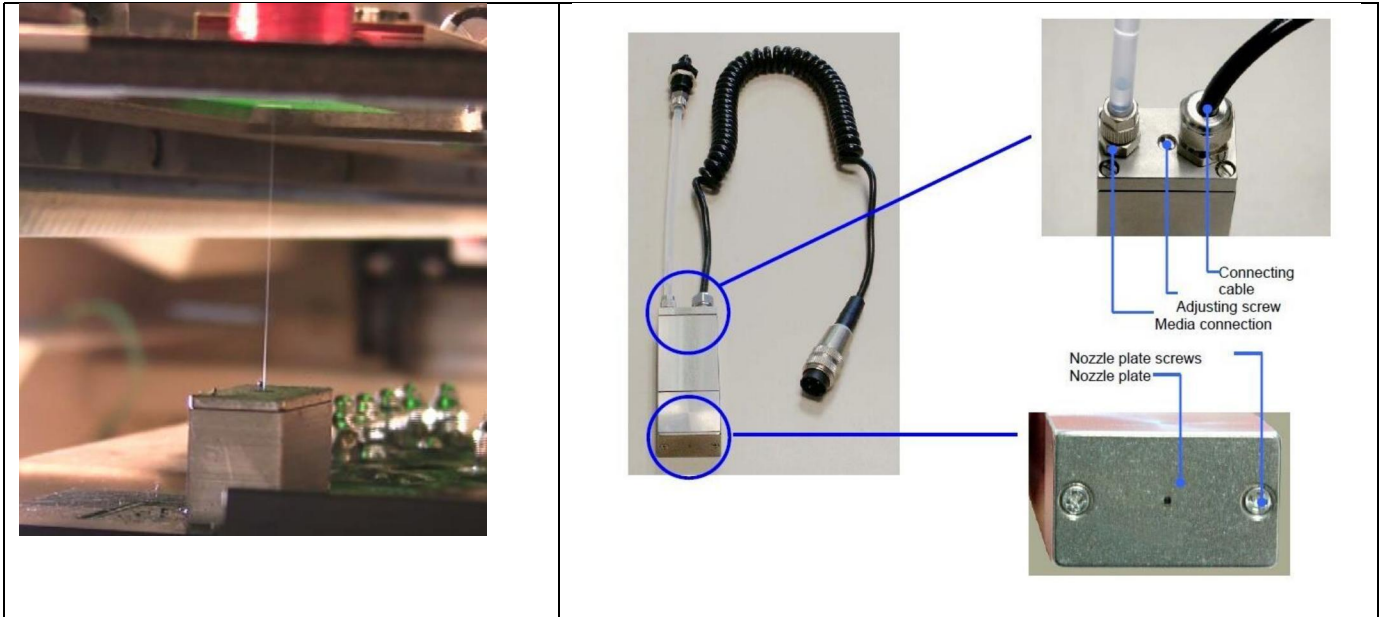
- Self design motion table with cast aluminum, lighter weight with quick motion speed.



- Panasonic servo motor & driver provide stable driving power, with screw pole & linear guide rail for guidance. Precise position, less noise, stable movement.
- With dust proof plate above motion table, so to avoid flux or solder drop to damage ball screw.

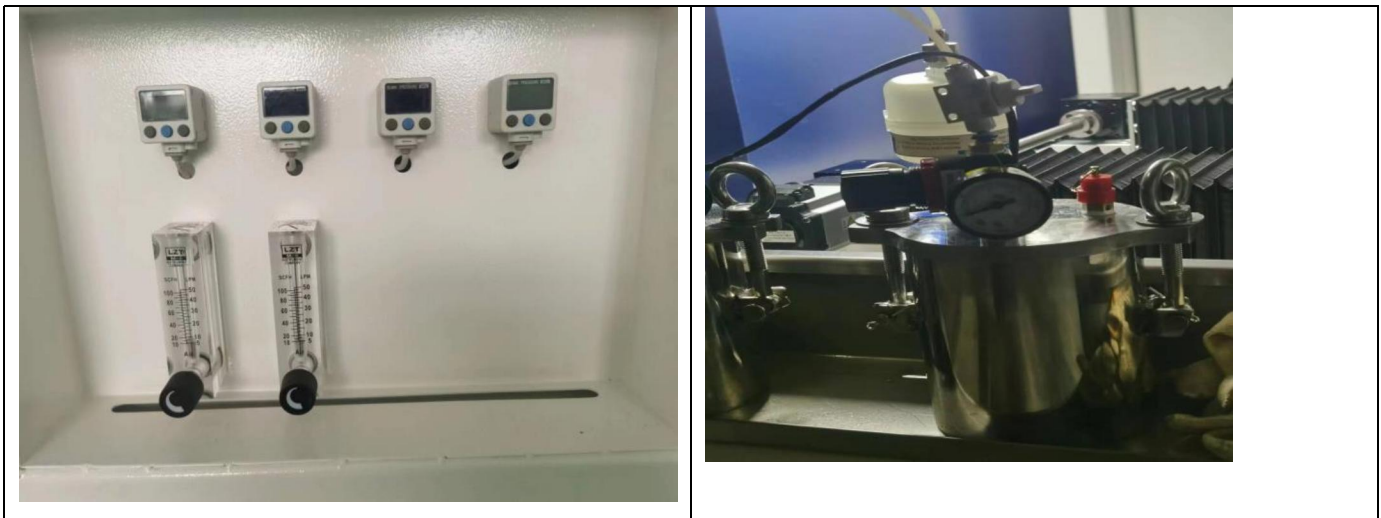
Part 3: fluxing system

- Standard equipped with imported jet valve to get precise fluxing result with small flux dot, please note flux solid content should be less than 8%.



- Flux is stocked

by PP plastic pressure tank, make sure pressure stable without influenced of amount of flux.



Part 4: Preheat

- Bottom preheating is standard equipped in machine, Position is adjustable.
- Heating ratio is adjustable by PC, from 0 ---100%

Part 5: solder pot

- Solder temperature, N2 temperature, wave height, wave calibration etc all able to set in software.
- Solder pot is made of Ti, not leakage. With cast iron heater outside, robust & quick heat up.
- Solder pot is wired with quick connector. When exchange solder pot without re-wiring required, just plug & play.
- N² online heating system, to wet the soldering perfectly and reduce the solder dross.
- With solder level checking & alarm.

Part 6: conveyor

- With stainless steel roller for conveyor, not wearable with long term usage. Also make sure solder nozzle can approach to board's edge 3mm.
- With PCB clamping system at conveyor.

Component 7: Machine housing:

- Metal welding structure, with thick metal plate as base, so to reduce vibration and make machine more stable.

Machine specs

Machine name	SL-600	
General		
dimension	L1500 x W2200 x H1700mm (Includes release mechanism)	
general power	12kw	
consumption power	4--6kw	
power supply	Single phase 220V 50HZ	
net weight	900KG	
required air source	3-5 Bars	
required air flow	8-12L/min	
required N ² pressure	3-4 Bars	
required N ² flow	Greater than 2 cubic feet per hour	
required N ² purity	>99.998%	
required exhausting	500---800cbm/h	
PCB 板 carrier or PCB		
carrier	Necessary	
max carrier size	L600 X W600MM <small>Note: W is the machine width direction</small>	
pcb edge	3mm above	
controlling & conveyer		
controlling	PLC + controller	
conveyor width	100-600MM	

conveyor type	manually
conveyor thick	1---4mm
conveyor direction	front and rearListen
conveyor up clearance	160MM
conveyor bottom clearance	30MM
conveyor load	<30kg
conveyor rail	aluminum frame
conveyor height	900+/-30mm
Motion table (fluxing)	
motion axis	X, Y
motion control	servo control
position accuracy	+ / - 0.05 mm
chassis	metal welding
Flux management	
flux nozzle	jet valve
nozzle durability	stainless steel
flux tank capacity	1L
flux tank	pressure tank
Preheat	
preheat method	upper & bottom IR heating
heater's power	6kw
temperature range	25--240c degree
Motion table(soldering)	
motion axis	X, Y, Z
motion control	servo control
motion motor	Panasonic servo motor

ballscrew	Hiwin
position accuracy	+ / - 0.05 mm
chassis	metal welding
solder pot	
standard pot number	1
solder pot capacity	13 kg
solder temperature range	PID
melting time	30--40 Minutes
max solder temperature	350 °C
solder heater	1.2kw
solder nozzle	
nozzle dim	customized
material	high carbon alloy
standard equipped nozzle	(Inner diameter 3mm, 4mm, 5mm, 6mm,8mm)
N² management	
N ² heater	standard equipped
N ² temp range	0 - 350 °C
N ² consumption	1-2m ³ /h/pot