

Specification of YSL Inline Selective Soldering YSLHPS-12

1. Company profile

YSL was built in 2014, founded by professionals from SMT. Main productions: multi-points/signal-point selective soldering machines, lead-free all hot air reflow soldering machine, lead-free wave soldering machines and SMT peripheral equipment.

YSL is committed to environmental protection and energy saving electronic equipment R&D and manufacturing.

2. Introduction of selective soldering machine

2.1 Brief introduction:

1. Selective wave soldering is a special form of wave soldering which is developed to meet the needs of the development of the through hole components;
2. Selective soldering, each solder joint soldering parameters can be tailored, engineers have enough space to adjust each solder joint soldering parameters (such as: amount of flux, soldering time, soldering wave height) adjusting to the best, defect rate will be reduced largely, even to achieve zero defects.
3. Configuration: Single Track, Two Soldering pots. Welding two piece of PCB at the same time to double the throughput. Fixtures needed.





1.2 Structure:

1.2.1 Fluxing module:

1.Imported German nozzle (130 microns in diameter);

2.selective spray flux, soldering flux saving at least 90%; Spray flux width can be as small as 2mm, reducing pollution, cleaning free ion; XY axis servo motor control, high positioning accuracy;

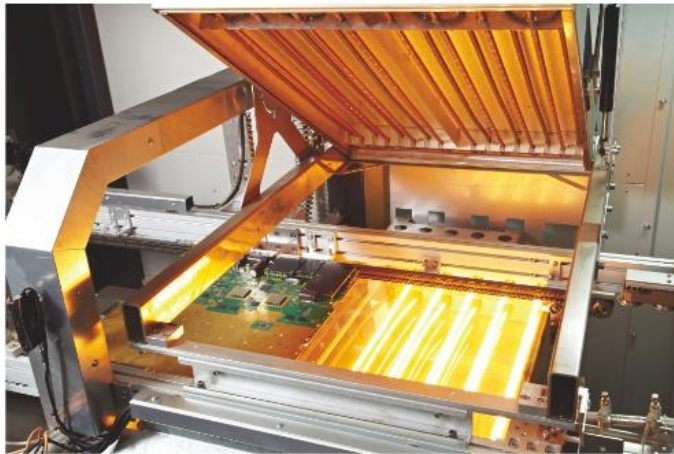
2.2.2 Preheating Module:

1.Segmented modular layout, preheating more flexible;

2.IR preheating at the bottom, improve the efficiency, hot air convection on the top, preheating even;

3.Ensure the lead-free soldering, multilayer board, hot melt components, long and dense pitch components preheating.

预热模块



1.2.2 Soldering module:

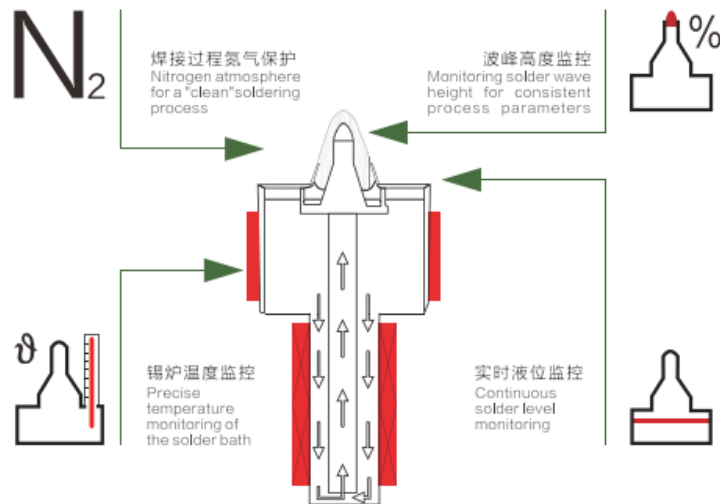
1.XYZ three axis servo motor control, high control precision;

2.imported servo system and linear conveyor;

3.Ti alloy cylinder, plugging nozzle, convenient replacement, simple and quickly;

4.Minimum nozzle diameter 3mm, according to the different through hole components, adopting PTP soldering or drag soldering;

- 5. The wave peak is 5mm controlled, which can greatly increase the Tin climbing rate;
- 6. Nitrogen protection, Tin dross can be as less as 1kg/ week;
- 7. Tin furnace temperature, wave height, solder liquid level" real-time monitoring, and real-time compensation, at all times maintaining a smooth peak state.
- 8. Imported German "electromagnetic pump", no mechanical moving parts, no wear, to ensure the long-term stability of the peak!



3 Technical data:

Device brief introduction	Model	YSLHPS-12
	Place of Origin	China
	Soldering Mode	Solder nozzle moving
	Dimension (L*W*H, mm)	2453mm*1733mm*1645mm
	Opened height	2060mm
	Weight(KG)	Appx. 1000 kg
Transport Parameters	PCB width (Max.mm)	450 mm
	PCB Length (Max.mm)	510mm
	Transport width adjustment	50-450 (mm)
	Transport width adjustment mode	automatic
	PCB transport direction	L to R
	Conveyor fix mode	Front
	Conveyor height	850±20 (mm)
	Flux and preheating module transport speed	11m/min
	Solder module transport speed	9.8m/min
Flux module	Positioning mode	2-axis servo control
	Positioning speed(mm/s)	400 mm/s
	Spray speed (mm/s)	20mm/s
	Nozzle max. speed (m/min)	7m/min
	Positioning accuracy (mm)	±0.2 mm
	Spray width (mm)	2...8 mm (nozzle size 130 μm)
	Flux module x axis distance	510mm
	Flux module y axis distance	450mm
	Flux content	2L
	Flux type	RO/RE/OR level L0/L1/M0 according to IEC61190-1-1
	Spray pressure	0.5...1.0 bar
	nozzle	130 μm, alternative diameter (Germany imported)
Preheating module	Preheating mode	Dynamic preheating / IR preheating
	Heating speed (°C/s)	0.4°C/s
	Top heater power	4KW
	Top heater voltage	220V
	Bottom heater power	10.4KW
	Bottom heater voltage	220V
	CDA pressure	0.5-0.7MPa
	Solder pot and drive	3-axis servo control
	Additional top heater above solder pot?	Y
	Solder content	13KG * 2
	Solder head position	middle
	pump	Germany imported induction pump
	Solder nozzle fix mode	Plug in and out
	Solder nozzle spray mode	Immersing

Soldering module	(immersing?)	
	Nozzle lifetime	2-3 months
	Nozzle change time (S)	20s
	Min. nozzle diameter(mm)	3 mm, external diameter 4.5 mm
	Max. Nozzle diameter(mm)	Internal diameter 25mm external diameter 29mm
	Max. wave height ((mm)	5mm
	Max. soldering temperature (°C)	350 °C
	Heat time (Min)	Approx. 75 Min.
	X/Y positioning speed (mm/s)	200 mm/s
	Z positioning speed (mm/s)	100 mm/s
	Soldering speed (mm/s)	10 mm/s
	Positioning accuracy (mm)	±0.15 mm
	Soldering X Max. distance(mm)	510mm
	Soldering Y Max. distance(mm)	450mm
	Max. Z axis distance(mm)	58mm
Max. pot moving speed(m/min)	5.8m/mim	
Gas parameters	Max. air consumption(m ³ /h)	5 m ³ /h
	connector	NW 8
	Exhaust tube diameter	2 X Φ150mm 、 3 XΦ150mm
	Overall exhaust level(m ³ /h)	300 m ³ /h、 450 m ³ /h
	Exhaust level for each connector(m ³ /h)	150 m ³ /h
	Inlet pressure(bar)	3 bar-6bar
	Nitrogen supply (L/Min, single pot)	Approx. 25L/Min
Recommended level of purity	5.0 (equal to 99,999 % or max. 10 ppm of other gases).	
Ambient conditions	Ambient temperature	10...40 °C
	Air humidity	20...95 % (Non-condensing)
	Continuous sound level	< 60 dB (A)
	Main switch	lockable
	Emergency off switch	3 x
	Exhaust monitor	Pressure transducer
	hood	Software control /trigger with switch
	Abnormal alarm	Higher or lower temperature warning
	Board drop warning	3 color signal light: yellow-warm, green-constant temperature, red- abnormal
Electronic parameter	Main voltage	3 x 220/380 V, N
	Voltage tolerance	±10 %
	Main frequency	50 / 60 Hz
	Back-up fuse	3 x 80 A (slow-blow)
	Normal power consumption*	25 kW
	Normal current consumption	60.5 A