Part Ⅰ: SM-LⅡ Selective Wave Solder Technical Specifications

Features:

1. Using industrial computer + professional multi-axis motion control card control, high-precision motion control can be realized;
2. Independent design control software, can directly use PCB pictures or GERIBER documents for path programming, path start point, welding moving speed, empty travel speed, Z axis height, wave height and so on can be set on the computer;
3. The machine can automatically monitor and record key process parameters including inlet air pressure, transportation speed, preheating temperature, tin furnace temperature, etc., and the machine has automatic alarm and prompt functions for various common faults;
4. The machine comes with a formula function, which can automatically record the setting of various process parameters to facilitate the saving and recall of product production documents;
5. The movement of flux nozzle and solder nozzle adopts aluminum integrated precision X and Y platforms with protection, which are driven by precision ball screw + servo motor, which is controlled accurately and can achieve low-noise high-precision transmission;
6. The product conveying is driven by their own independent stepper motors, which are implemented in two sections, the front section (including flux spraying section and preheating section) is an aluminum guide rail + imported roller chain conveying structure, and the rear section (solder section) adopts a precision stainless steel roller conveying structure, which can realize the stability and accuracy of product transmission;
7. The product welding process can be displayed in real time, and can be transmitted to the computer software through the camera, and the welding process can be photographed, recorded and saved;
8. The whole frame adopts steel welded structure, which is stable and durable, and is not easy to deform.

Specifications and technical parameters:

Machine overall		
1	Machine size(mm)	2950(L)×1650(W)×1675(H)
2	Total machine power/operating power	20kw/6-8kw
3	Power supply	Single phase 380V
4	Weight	1500KG
5	Air source requirements	Pressure 0.4-0.6MPa, flow rate 8-12L
6	Nitrogen source requirements	Pressure 0.3-0.5MPa, flow rate not less than 5 cubic meters / hour, purity not less than 99.998%
7	Air volume requirements	Above the spray: 800-1000cbm/h; Above the tin furnace: 600-800cbm/h
Pallet		
1	Pallet pass dimensions	L260×W260-L500×W500 mm (Vehicle process edge thickness: 4-10mm)
2	Double nozzle spacing	165~265 mm
3	Maximum welding area	L500×W500 mm
Control & Transportation		
1	Control system	Industrial computer + controller
2	Shipping width	50-500 mm
3	Product conveying	spray with preheating section; chain conveying; Solder section; Roller conveying
4	PCB shipping direction	Transport from left to right, horizontally
5	The maximum height of the component	Board upper 100 mm, board lower 30 mm

6	Transporting load-bearing	Less than 10kg
7	Shipping height	900±20mm
Spray motion platform		
1	Motion axis	X,Y
2	Motion control	Closed-loop control + Servo motor
3	Positioning accuracy	±0.15 mm
Rosin management		
1	Flux nozzle	Stainless steel electronic injection mesh*2
2	Flux container	Pressure tank, capacity 1L*2
3	Alcohol volume	Pressure tank, capacity 1L*1
Warm-up section		
1	Warm-up method	The upper hot air is preheated, and the lower infrared is preheated
2	Warm-up power	13kw
3	Temperature range	Room temperature -240°C/Often wet -240°C
Solder motion platform		
1	Motion axis	X,Y,Z
2	Motion control	Closed-loop control + Servo motor
3	Positioning accuracy	±0.15 mm
Solder part		
1	Tin bath capacity	15kgX2
2	Tin temperature control	PID
3	Melting time	≤40 Minutes
4	Maximum tin furnace temperature	350℃
5	Tin bath power	1.2kwX2
6	Nozzle material	Low expansion alloy
7	Tin nozzle as standard	5pcs X 2
Nitrogen management		
1	Nitrogen heating PID control	0-350℃
2	Nitrogen consumption/tin nozzle	1-2m³/Hours per tin spout

Note: The picture is for reference only, and the specific specifications and models are subject to the text content.