



Selective Soldering Machine Manufacturer

Sixteen Years Focused on Soldering Process



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AST (Shenzhen) Intelligent Technology Co., Ltd.

Company Profile



AST (Shenzhen) Intelligent Technology Co., Ltd. is a high-tech company dedicated to the industry of PCBA board soldering and cleaning, offering customers high-quality selective wave soldering and PCBA water cleaning machines. Founded in 2009, the company has its own research department and a comprehensive service team, providing customers with a complete system of pre-sales, mid-sales, and after-sales services. The company has established branches and offices in cities such as Suzhou, Tianjin, Chongqing, Xi'an, and Zhengzhou. It collaborates with American RPS and TDC companies on technology, and in China, it partners with Harbin Institute of Technology to create a technical exchange platform, jointly focusing on scientific research and technological innovation in the field of soldering technology. Currently, the company's products are widely used in photovoltaic, new energy, military, aerospace, automotive electronics, precision medicine, and communication instruments. AST is committed to manufacturing the world's most precise soldering equipment, further advancing the technological progress of selective wave soldering and cleaning equipment in the industry, and becoming a pioneer in China's electronic manufacturing sector.

Partial customer on-site

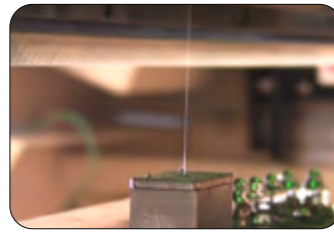


Partial cooperative Customers



Flux spraying module

- High precision spraying system;
- Point to point spraying, saving a lot of flux;
- Clean, environmentally friendly, and free from cleaning



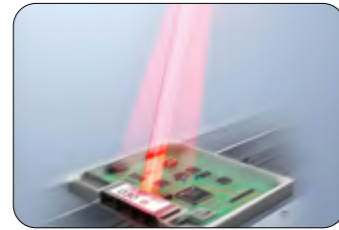
Preheating zone --Top hot air preheating

Set preheating temperature and time according to different products;
Max temperature: 200°C



Online QR code recognition function

Automatically recognize the QR code of the PCB board, record the soldering information of each PCB board, and facilitate transmission to the MES system.



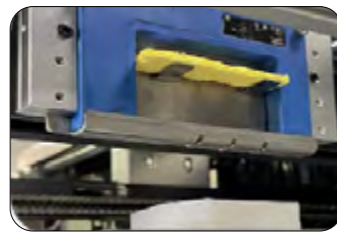
MARK point positioning system

can be selected to reduce issues such as improper stopping, product misalignment, and fixture deviation; MARK point camera can also be used for online camera scanning programming,



Flux spray valve blockage detection system

The spray area is equipped with an optical spray blockage monitor to prevent poor soldering caused by missed spray in the spray area



Automatic wave height correction system

The peaks are controlled by closed-loop servo, and regular self correction of peak height can be set; Ensure the stability of the peak.



Preheating zone --Bottom IR preheating

IR heating has high efficiency and fast heating; Combined with hot air convection heating method, it can ensure the uniformity of PCB board temperature



Double pot Z-axis independent lifting system

Two solder pots can operate independently, Flexible craftsmanship; Can install nozzles of different sizes for soldering

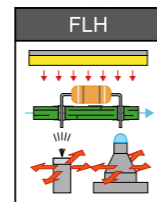


Selective Wave Soldering Machine Introduction

Economical and practical type Off-line selective soldering ASEL-450

Product Advantages

- Economic offline selective wave soldering;
- Compact structure, complete functions;
- One module integrates three processes: flux spraying, preheating, and soldering
- High flexibility; You can choose to only spraying flux or only soldering
- Low power consumption, low flux consumption, low tin slag oxide

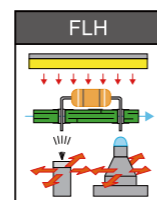


喷雾 + 焊接
Flux spraying Soldering

ON-LINE Selective soldering SELPOT-400

Product Advantages

- **Fully functional**
One module integrates three processes: flux spraying, preheating, and soldering
- **High precision**
Soldering accuracy up to $\pm 0.05\text{mm}$.
- **High flexibility**
You can choose to only spraying flux or only soldering
- **Low energy consumption**
Low power consumption, low flux consumption, low tin slag oxide
- **Optional**
You can choose single solder pot or double solder pot



喷雾 + 焊接
Flux spraying Soldering

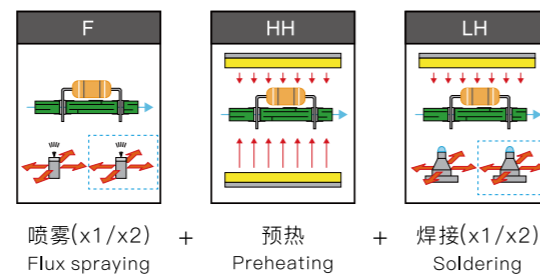
	Moder	ASEL-450 (Offline)	SELPOT-400(Online)
Machine Specs:			
General	Machine size	L1400mm X W1500mm X H1650mm	L1520mm X W1650mm X H1650mm
	General power	12kw	18kw
	Power supply	Single-phase 220V 50HZ	Three-phase five-wire system 380V 50HZ
	Net weight	700KG	1200KG
	Required air source	0.4-0.6MPa	
	Required N2 purity	» 99.999%	
	Exhaust stacks:	1 pc., OD 150 mm	
	Exhaust volume per stack:	300--450 m³/h	
	PCB max carrier size	L450 X W400MM	
	PCB edge	≥ 5mm	
	Controlling	Windows 10 English system	
	Conveyor up clearance	120mm	
	Conveyor bottom clearance	30MM	60MM
	Conveyor load	≤ 5kg	≤ 10kg
	Conveyor height	900±30mm	
Soldering way	Solder pot fixed, PCB board platform XYZ moves for soldering	PCB board fixed. Solder pot platform XYZ moves for soldering	
Position accuracy	±0.15 mm	±0.05 mm	
Flux Module	Flux nozzle	jet valve (130 μm nozzle)	
	Flux storage tank:	3L	
	Liquid level monitor	Low liquid level alarm	
	Cleaning storage tank:	1L	
Preheating	Preheat method	bottom IR heating	Top & bottom IR heating
	Heater's power	9kw	13.5kw
	Temperature	25--200 C	
Solder Module	Standard pot number	1 Pot;	
	Solder pot capacity	13 kg /Pot	
	Wave drive mode	Electromagnetic pump	
	Melting time	≤ 75 Minutes(280 C)	
	Max solder temperature	350 C	
	Tin level monitoring	Low liquid level alarm	
	Solder heater	1.35kw/pot	
	Soldering module top preheating compensated	/	IR heating; Power:6kw / area
	Maximum crest height	MAX: 5mm	
	Wave height detection	standard equipped	
	On-line CCD monitoring	standard equipped	
	N2 heater	standard equipped	
	N2 consumption	1--2 M3/ H/ Nozzle	
Programmatically	Online; Pictures and Gerber files are all acceptable;		

Selective Wave Soldering Machine Introduction

On-line one-piece type selective wave soldering SEL-31/32

Product Advantages

- The three processes of flux spraying, preheating, and soldering are completely independent
- Standard electromagnetic pump, Wave peak is stable, easy maintenance
- You can choose single solder pot or double solder pot
- Online CCD image scanning programming, quick and easy, 10 minutes to complete the programming;
- Max PCB board size is 510*510mm or 610*610mm optional;



Technical Parameters

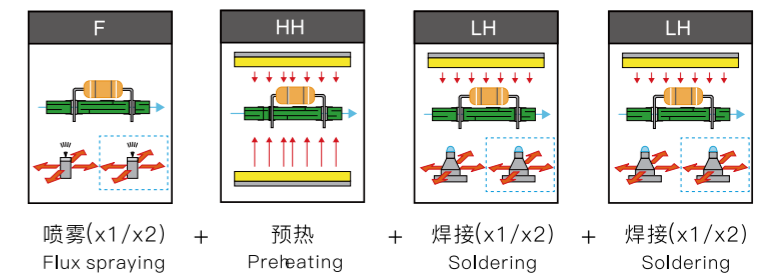
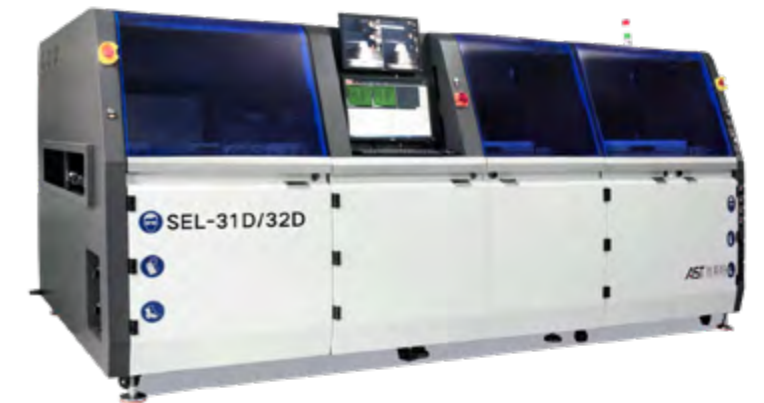
Model		SEL-31	SEL-32
Basic system	Machine size	2850*1650*1650mm	
	Conveyor width range	50-510mm	
Conveyor system	Conveyor height	900+30mm	
	PCB Max size	L510*W510mm	
	Solder system	Electromagnetic pump	
Solder module	Solder Pot	Single pot	Double pot

Selective Wave Soldering Machine Introduction

On-line Double solder modules system SEL-31D/32D

Product Advantages

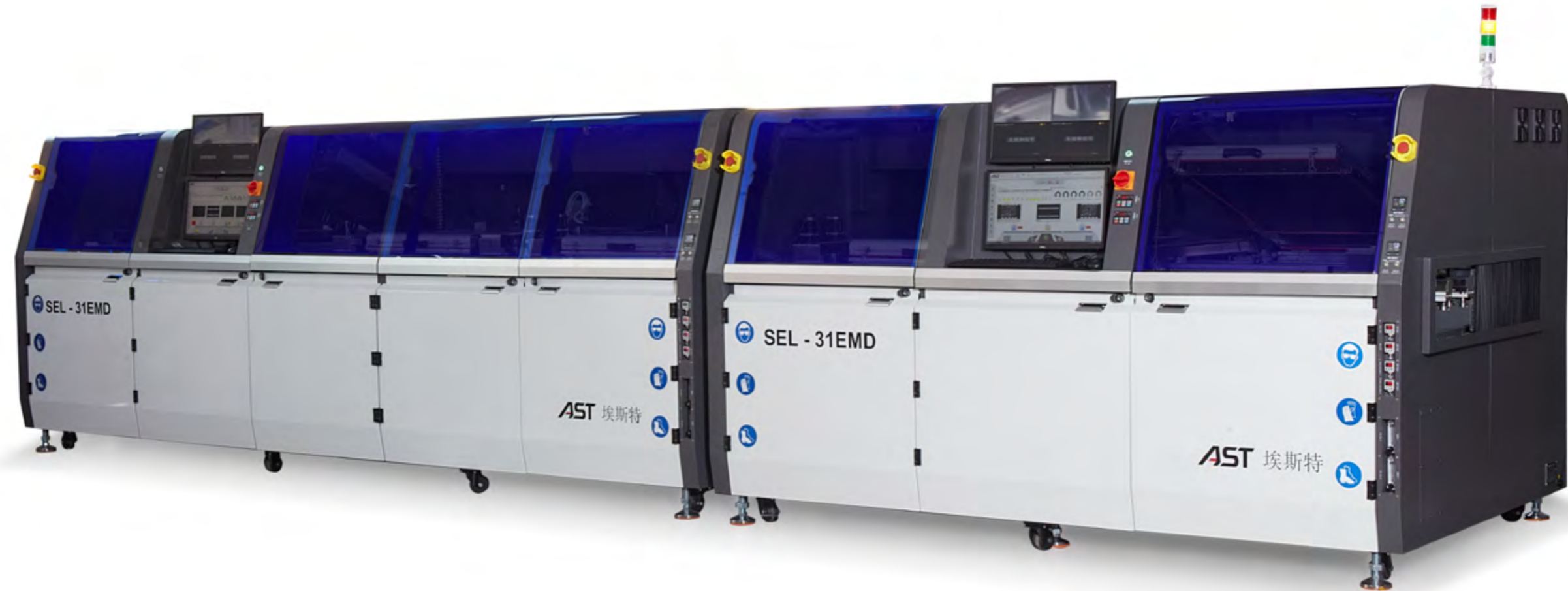
- Equipped with dual soldering modules, each soldering module can be single pot or dual pot;
- High efficiency, suitable for mass production
- Optional Mark point positioning function to provide positioning accuracy
- Soldering process visualization, can trace the soldering quality of products at any time;
- Modular design, flexible process, can increase the preheating or soldering module according to user requirements;



Technical Parameters

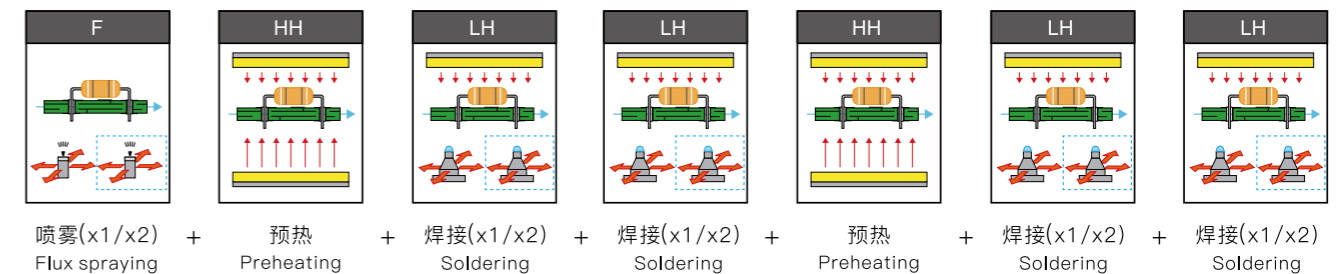
Model		SEL-31D	SEL-32D
Basic system	Machine size	4200*1650*1650mm	
	Conveyor width range	50-510mm	
Conveyor system	Conveyor height	900+30mm	
	PCB Max size	L510*W510mm	
	Solder system	Electromagnetic pump	
Solder module	Solder Pot	Two soldering modules, one solder pot per module	Two soldering modules, two solder pot per module

Online four soldering module eight pots selective soldering system



Product Advantages

- Spray + preheat + soldering 1 + soldering 2 + preheat + soldering 3 + soldering 4 module design
- Four soldering modules, each with one or two solder pot option.
- Suitable for mass production and improve production efficiency.



Modular design, flexible expansion, and can be combined according to specific needs