

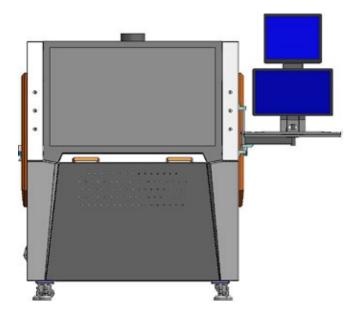


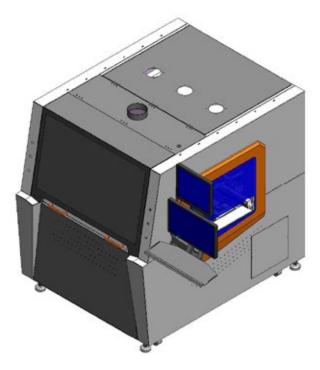
PCB Unlimited

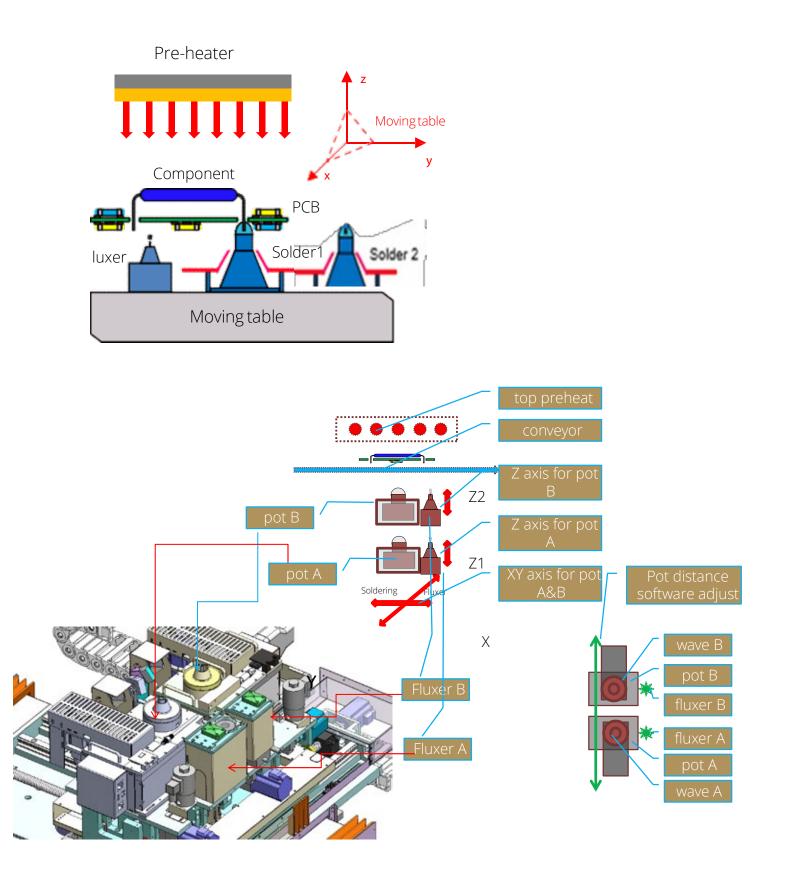
Features

Flex-i2 is the new generation selective with below feature:

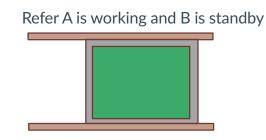
- XY servo table for solder station, servo axis Z1 for
 solder pot 1, servo axis Z2 for solder pot 2. Optional with electro-magnetic pump made in Germany.
- Standard equipped with one drop jet fluxer. It's in same XYZ table with solder pot. Optional for 2nd drop jet fluxer.
- Top & bottom IR preheating zone.
- Standard equipped live-on camera for both solder pot's soldering process.
- Standard equipped with wave height calibration.
- Windows 10 system English version.

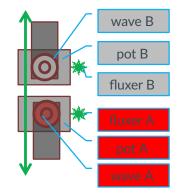




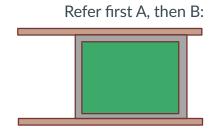


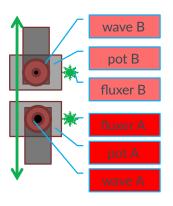
Flux		Solder		Application explanation	Max PCB	
Fluxer A	Fluxer B	Wave A	Wave B			
Work	Stop or spare	Work	Stop or spare	Use only one fluxer and one solder pot.		
Work	Stop or spare	Stop or spare	Work	Another fluxer and solder pot stop or	W450mm x L508mm	
Stop or spare	Work	Work	Stop or spare	standby. Another fluxer can equip another flux,		
Stop or spare	Work	Stop or spare	Work	another solder pot can fill different solder. To to meet quick change production line	LOUGMM	





Flux		Solder		Application explanation	Max PCB	
Fluxer A	Fluxer B	Wave A	Wave B			
Work	Work	Working with type 1 nozzle	Working with type 2 nozzle	Use two different solder nozzle in two pot. Big nozzle to solder big connectors, after that small nozzle to solder small clearance components	W450mm x L508mm	

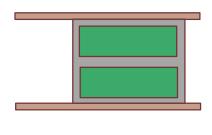


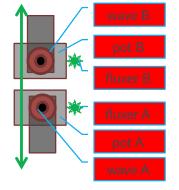




Flux		Solder		Application explanation	Max PCB	
Fluxer A	Fluxer B	Wave A	Wave B			
Work	Work	Working with type 1 nozzle	Working with type 1 nozzle	Feed two same board on pallet to machine, two drop jet fluxer will flux to board at same time. Then solder two same board paralley, double the production	W235mm x L508mm	

Refer A/B working simutaniously:





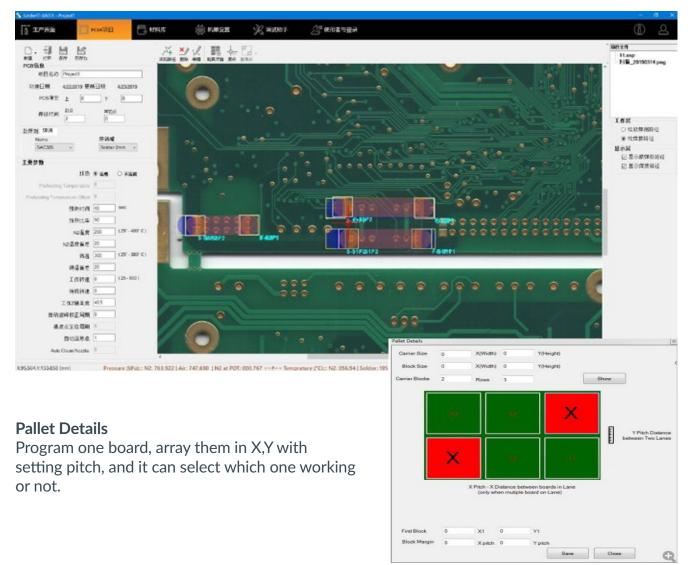
Factory Status	Machine application	Advantagous
Small volume, many different board. Two different flux, two different solder	Each drop jet flux with one tank, each tank with one kind of flux. Each solder pot with one solder.	When change process from board A to board B, no need spend time to load different flux and different solder, easy to exchange process in 10 min.
Middle volume, high mixed components(big different heat absorbing charactor)	Use bigger soldre nozzle to solder big coomonents, grounded point, heat sink etc.	Tailor-made process, easy to get good soldering quality and volume.
Higher volume (may use two set of Flex-i2 or one MAS-i2 plus one Flex-i2)	Use same solder nozzle to solder two same board together.	Double the production

Software System

Solder It

"Solder It" is a Windows Prof essional 10 based software designed to create a solder program for each single solder point. It's easy POINT AND CLICK tool ensures that a repeatable solder program is done within minutes.





All motion path can be editable, include soldering

speed, empty move speed, dwell time, solder Z height, wave height, wave slop speed etc.

lame	Sequence	Use in Production?	Z-Offset	Pump RPM Offset	EmptyMove Time	Site Working Time	Total Time
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S1	3	2	0	0	1.707	3.800	6.607 [
\$3	4	[w]	0	0	3.760	4.858	8.618
P2	30.000	20.828			000.0	0	0.0
	ell Time						
4C+4	e First Point De	well :	Site O	ther Point Dwel		Update E	Iwell

Date base information

Engineer can input all solder, flux, solder nozzle information to machine. When doing programming, they can add the se information to programming of board. In future to produce the same board, it will be easy to get not only motion information, but also what flux/solder/nozzle was used before, easy to repeat soldering quality.

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3 Level logging rights and date log information records. Who use machine, when use machine, what unnormal happen on machine, all these will be recorded.

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Hardware



Drop jet fluxer Drop jet flux made in Germany



Mechanical pump Mechnical solder pot with Ti tank.



Preheating zone Standare with top and bottom IR preheating zone.

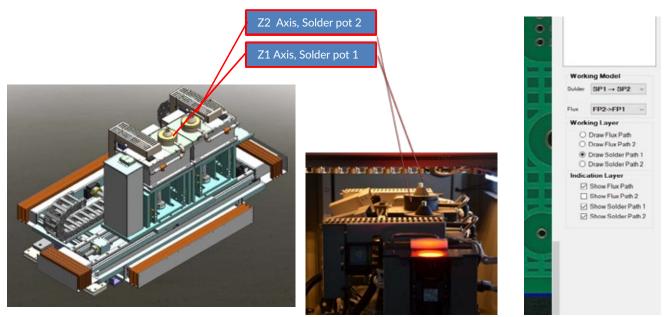


Dia 3MM, 4MM, 5MM, 6MM, 8MM as standard. Customzied nozzle avaliable.

Motion table

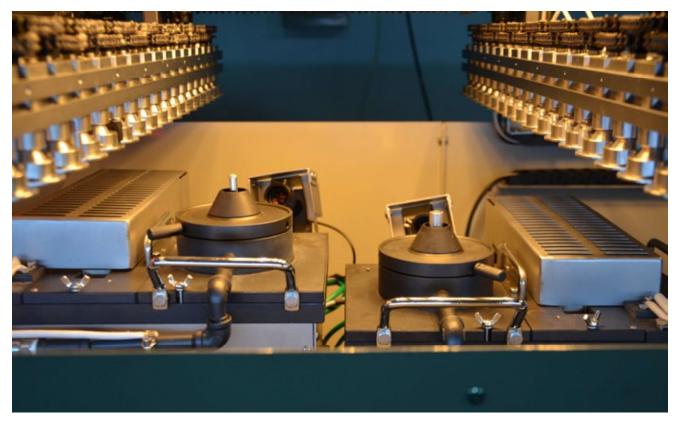
Can sequence use solder pot 1 & solder pot 2, or use them in simutiously for double production. Can use one fluxer for all pads, or use two fluxer to double producton.

Individual Z axis at each solder station.



Various Soldering Application

Z axis individual run, can equip with different nozzle. For different application like First pot 1 then pot 2 for soldering or first pot 2 then pot 1, or one solder working and another standby waiting for next programmed board



Two same nozzle. For same PCB in carrier. Solder two boards at same time to double production.





FLEX-i2 Specifications

General	
Operating power/Max power	6KW/16KW
Conveyor width	80508mm
PCB top clearance	100mm
PCB bottom clearance	35mm
Machine dimension	1420(L)*1725(W)*1700(H)
Net weight	1000KG
Power supply	3PH 380V 50HZ
Air supply	3-5 bars
Exhausting required	800M3/h
PC	Yes
Typical Program Time	10 Minutes
PCB Robotic Platform	
Flux Nozzle Type	Drop jet fluxer made in Germany
Flux Nozzle Quantity	Standard equip 1 set, optional to equip another set
Flux Tank Capacity	1L
Flux Tank Quantity	Standard equip 1 set, optional to equip another set (when use two different flux)
Flux Nozzle	Adjustable with solder pot together
Axes of Motion	Share XYZ table with solder pot
Position Accuracy	+ / - 0.05mm
Preheat	
Preheating method	Top & bottom IR
Solder Management	
Solder pot type	Standard equipped mechanical pump, optional with electro-magnetic pump(made in Germany)
Standard Solder Stations	2
Solder Pot Capacity	15 kgs (mechanical pump), 11kgs (electro-magnetic pump)
Solder pot distance	180mm250mm (mechanical pump), 160250mm (electro-
	magnetic pump)
Soldering area	Max PCB W450 x L508mm (18" x 20") (Two nozzle solder individually)
	Max PCB W235 x L508mm (9.25" x 20") (Two nozzle solder parallel)
Solder Temperature Control	PID
Heat-Up Time	About 30mins
Max Temperature	350 °C

Mini Wave Nozzles	Dia 4,6,8,10,12mm				
Customized nozzle	Available				
Solder nozzle Distance	Adjustable by software				
Axes of Motion	X, Y, Z1, Z2				
Motion Control	All servo control with ball screw				
Position Accuracy	+ / - 0.05mm				
(N2) Inertion Management					
N2 Consumption per Nozzle	1.5m3/H Total: 3m3/h				
Required N2 Purity	>99.99%				

