

J-CAT WAVE

IH Soldering Robot

Cell Production Type Robot

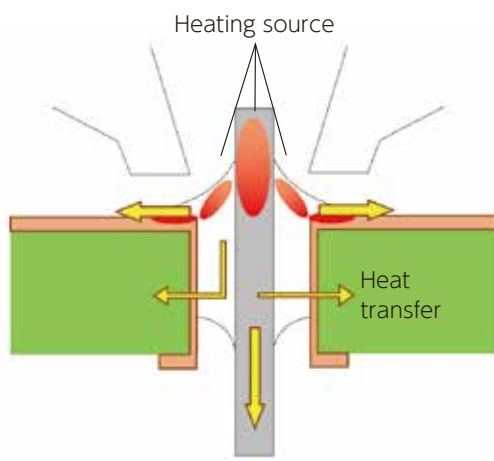
The IH (Induction Heating) soldering robot “J-CAT WAVE” is a non-contact soldering system that provides localized self-heating via the world’s first magnetic concentrating technology. The IH heating system can quickly solder an application having a large heat sink.



Non-contact & Local Heating

The J-CAT WAVE provides local self-heating that cannot be achieved with conventional resistance equipment.

The heating energy is increased about 1.5 times by the self-heating of the terminal, application, and solder compared to a conventional heat transfer method.

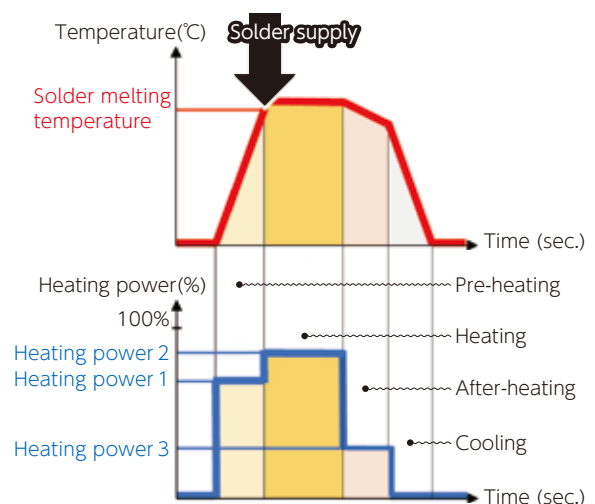


Freely Controllable Heating

“Pre-heating”, “heating” and “after heating” (post solder feeding) can be programmed individually for each soldering point.

The controller can change the heating power and achieves optimal soldering results.

It can also be used to reflow solder paste as well as solder wire.



Low Running Cost

Non-contact soldering reduces the running costs of consumable parts such as iron tips.

There is no need to replace or adjust the consumable parts as often. Therefore, it is possible to run the equipment for extended periods without stopping for a consumable change.

Also, cleaning during the operation is not necessary. The JCAT WAVE also reduces any wasted amount of solder as well as CO₂ which is much better for the environment.



Safer Soldering Environment

Due to induction heating technology, the maximum temperature of the tool is approximately 100 ° Celsius.

The tool's temperature is not always high, and the application's temperature decreases quickly after soldering, thus safer for the operators and sensitive electronics.

It does not require a safety device, such as when using a laser beam device.

This robot conforms to **ICNIRP** guidelines that restrict electromagnetic wave exposure to be safely used by the operator.

Simple Control

You can easily set and change the soldering conditions with the included teaching pendant.

Since each soldering parameter & function are pre-defined there is no need to learn complicated operations or programming sequences.

Type		J-CAT 330 WAVE	J-CAT 340 WAVE
Operation Range	X axis	300mm	400mm
	Y axis	320mm	400mm
	Z axis	100mm	150mm
	XR(application rotate) axis	±360°	±360°
Portable Weight (X stage)		6kg	
Repeatability		X、Y、Z axis ±0.07mm	
Teaching Method		Remote Teaching (JOG) / Manual Data Input (MDI)	
Program Capacity		999 programs	
Memory Capacity		32,000 points	
External Input /Output		IN: 16 OUT: 16	
Soldering Condition		500 conditions	
Solder Feeding Speed		1.0~50mm/s	
Solder Feeding Amount Resolution		0.1mm	
Solder Wire	Using Normal Roller	Φ0.3~1.0mm	
Diameter	Using Large Diameter Feeder	Φ1.2~2.0mm	
Power Source		AC94~260V (Single phase)	
Heater Capacity		880W (Maximum)	
Dimensions (W×D×H)	Robot	682×587×914mm	660×670×944mm
	Control Box	432×500×199mm	
	High Frequency Power Supply Unit	291×288×139mm	
Weight	Robot	51kg	60kg
	Control Box	13kg	
	High Frequency Power Supply Unit	8kg	

*Position repeatability is not a guarantee of absolute precision. With usage conditions, it may exceed the above value.

*J-CAT WAVE has been developed under an agreement between Apollo Seiko Ltd and S-FINX Technologies CO., LTD.

*These specifications may be changed for improvement without prior notice.