

# IR SERIES CURING OVEN

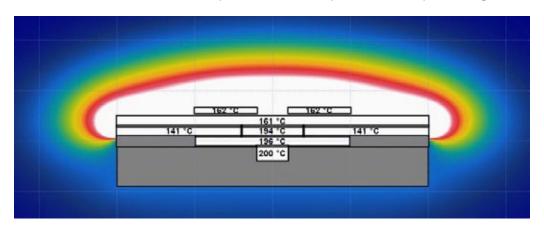


#### **Features**

- The In-line Curing Machine (IR Panel Series) is ideal for high-volume curing production. They are easy to integrate with different Conformal Coating machines.
- Available in different lengths, they provide the flexibility to match your production requirements. Also with robust construction and a streamlined appearance.

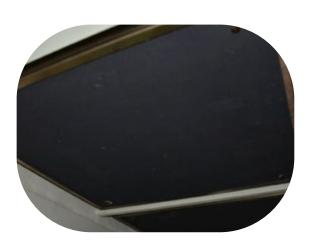
### **Heating system**

• The cure chamber achieves a thermally uniform atmosphere with Japan designed Far IR Panel.





- Far IR Panel specially designed for coating process, high IR to heat exchange ratio, 100mm distance to IR panel surface can meet 50--250c degree. For IR tube, it can meet 50--200c degree.
- Benefit from the high IR/heat exchange ratio (0.9--0.95), Far IR Panel can save 30--50 electrical power compare with IR tube.



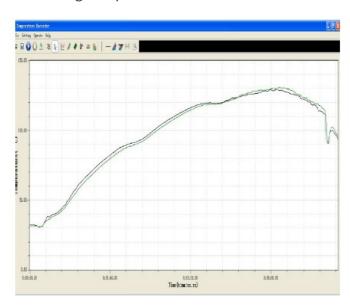




- IR panel surface with special water-proof treatment, when coating material need higher humidity to curing, heater can stand it too.
- IR panel's has a much long life time.

From heater's arrangment, IR Panel is with whole surface for heating, for IR Tube there are gap between tubes where is no heating source.

 Temperature Profile Comparison with IR Panel and IR Tube Setting Temperature 200C





As for above profile, IR panel can get better uniform temperature than IR tube.

Meanwhile, when setting temperature is same, PCB under IR Panel is with higher temperature than IR tube. Means IR panel is more efficient.



 Energy consumption comparison list.
IR2030P IR panel and IR Tube

As for above test, IR panel can can save 25% power than IR tube during production.

Item	IR Panel	IR Tube
Seting Temperature	200C	200C
Heating Up Time	12 minutes	8 minutes
Heating Up Power Consumption	2KW	1KW
Running Power Consumption	3KW/H	4KW/H
Total Power of The Oven	10KW	8KW

- The inner tunnel of the oven is made of stainless steel which easy for cleans.
- Specially enlarged the heat-resistant layer to 50mm, prevent the heat lose effectively, so to save energy lose.
- With electrical pole for oven tunnel & upper cover lifting. No need air source.





## **Specification**

Machine Model List:

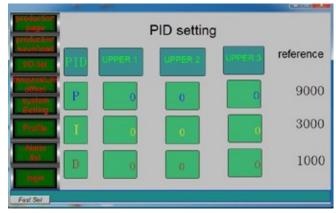
Machine	Heater configuration	Rated Power	Consumption power	Tunnel length	Machine dimension	Machine weight
IR-2030P	Top 3, Bottom 0 (Panel heater)	10KW	around 3kw	1740mm	L2000mm*W1135mm*H1310mm	490kgs
IR-2033P	Top 3, Bottom 3 (Panel heater)	19KW	around 5kw			550kgs
IR-2640P	Top 4, Bottom 0 (Panel heater)	13.5KW	around 4kw	2320mm	L2600mm*W1135mm*H1310mm	520kgs
IR-2644P	Top 4, Bottom 4 (Panel heater)	26KW	around 7kw		L2777mm*W1135mm*H1310mm	600kgs
IR-3350P	Top 5, Bottom 0 (Panel heater)	17KW	around 5kw	2900mm	L3200mm*W1135mm*H1310mm	700kgs
IR-3355P	Top 5, Bottom 5 (Panel heater)	33KW	around 8.5kw		L3350mm*W1135mm*H1310mm	800kgs
IR-4060P	Top 6, Bottom 0 (Panel heater)	20KW	around 6kw	3480mm	L3800mm*W1135mm*H1310mm	880kgs
IR-4066P	Top 6, Bottom 6 (Panel heater)	38KW	around 10kw		L3950mm*W1135mm*H1310mm	1000kgs



Transport System	
Transport Height	900±20mm
Transport Speed	200-1000mm/min
Transport Direction	L-R
Transport Motor	AC220V 90W
Transport Mode	Pin Chin (35B 5mm Stainless Steel)
Width Adjustment	MAX 450mm (Manual adjustment)
Top clearance	90mm
Bottom clearance	90mm
Control System	
Control Mode	Touchscreen + PLC
Power Supply	3phase 380V or 3phase 220v
Cover Lifting Mode	Electric Screws

## **Control System**





Touchscreen & PLC for controlling system. Can PID for temperature controlling. save all the temperature, speed parameters.

## Conveyor



Stainless steel chain conveyor with harden guiding rails, 5MM pin length for conveyor chain.



At entrance and exit there are plate we can adjust the height, so to prevent heat lose from both end.



## **IR-2030P Series Curing Oven Conveyor**

