

#### **TC88 Features**

- Better Airflow management = better thermal control
- Improved Shutter Design
- Long Lasting Maintenance Free Heating Elements
- Optional 24/7 Temperature Profile
- Optional Data log ready
- Optional Exhaust air flow / CFM monitor system
- Clean Air Filtration System
- High Air flow up to 17,000m3/hr. (10,000cfm)



### **Product Description**

The most accurate oven in the PCB industry has been improved to meet and exceed today's more advanced technical requirements, offering various added features. TC88 produces the most uniform, accurate temperature profiles available combined with the widest range of transport systems offered.

These conveyorized ovens improve productivity, decrease variability, and increase yields in liquid photo imageable ink processes such as solder masks, legend ink, primary image, and dielectric. Airflow in the TC Series oven is directed to achieve temperature uniformity unmatched by competitive ovens. Tack-dry is one of the most critical steps in liquid photoimageable solder masks, and the TC Series ovens can make the difference between success and failure. All of the TC-Series ovens may be used for either tack-dry or final cure applications. Our ovens come equipped with an alphanumeric LCD operator interface, annunciator panel, programmable logic controller, and chart recorder.

#### **Temperature Uniformity**

Taiyo Circuit Automation has developed and patented controls that intermix the airflow from end to end inside the fan plenum and modulate flow via computer-controlled dampers. These controls enable the oven to maintain optimum temperature profiles regardless of loading or panel size mix.

These patented features, available only on Taiyo Circuit Automation ovens, result in exceptional temperature uniformity. TC-Series ovens ramp up to temperature rapidly and smoothly and maintain the setpoint temperature throughout the heated chamber. Ovens are calibrated at the factory so that setpoint temperature is the actual panel temperature. SSR controllers sensitive to changes of ±0.5°C maintain oven temperature.



Taiyo Circuit Automation Temperature Profile: Rapid ramp-up allows full utilization of heated zone to maximize productivity. Temperature uniformity unmatched by competitive ovens: ±1°C at tack-dry temperatures.

## **TC88 Layout**



# **Specifications**

Specifications	тс88
Transport	Rack
Throughput-Panel/hr (1)	160
Heat Chamber Length	3.3m (129")
Number of Heat Zone	1
Maximum Temperature	190°C (350° F)
Maximum Panel Dimension - W x H	660mm X 760mm (26" X 30")
Panel Thickness (2)	0.01 mm ~ 12mm (0.004" ~ 0.5")
Heater Capacity	44kW
Heater Element	Incoloy
Number of Heating Element	6
Air Recirculation	Up to 17,000m3/hr (10,000cfm)
Internal Air Temperature Uniformity	±2°C (±3.6F°)
Electric Service	380~480 VAC, 3 PH, 50/60Hz, 100A
Exhaust Requirements	1200m3/hr (700cfm)
Number of Exhaust Ducts	3
Intake Air Requirements	420m3/hr (250cfm)
Number of Intake Duct	1
Pneumatic	Not Required
Length	211.50"
Height	102.00±2.00"
Width (Cabinet Door Closed)	62.50"
Width (Cabinet Door Open)	96.00"
Pass Height	30.00±2.00"
Weight	5800lbs

(1) Based on 60min curing time (2) Optional racks may be required



Follow us on social media in

in 🖸

Website: www.taiyocircuitautomation.com Email: Info@TaiyoCircuitAutomation.com Now located in Carson City, Nevada, (775) 885-9959