

KTR-800 Specification:

<u>Machine Specification</u>			
Model	KTR-800	Control	Industrial computer
Heating zones qty.	Top 8, bottom 8	Cooling zones qty.	Top 3, bottom 3
Heating zone length	3110mm	Rectifying plate	Thick copper plate
Weight	Approx:2400kg	Dimension	5520*1430*1530mm
Exhaust capacity	11m ² /min×2	Color	Grey
<u>Control system</u>			
Electricity supply	3P 380V/220V 50/60HZ	Temp. control range	Room temp. ~ 300°C
Total power	64KW	Temp. control accuracy	±1°C (static state)
Start power	30KW	Temp. control method	Closed loop, PID +SSR
Consumption power	9KW	PCB temperature deviation	±1.5°C
Speed control	3 Inverters adjust	Data save	All profiles can be saved
Warm up time	Apprx.30minute	Abnormal alarm	High, low temp. alarm
<u>Conveying system</u>			
Rail structure	2 segments rails	Rail fixed method	Front fix
Chain structure	Stainless steel, stuck-free type	Conveying height	900±20mm
PCB Max. width	50-460mm	Conveying method	Chain+ mesh+ rail
Component height	Top/bottom 30mm	Conveying speed	300-2000mm
Conveying direction	Left to right	Lubrication	Automatic
Max. temp. difference between preheat zone and soldering zone: 90 °C			
Max. temp. difference between preheat zone: 50 °C			
Max. temp. difference between solder zone: 50 °C			
<u>Cooling system</u>			
Cooling method	Forced air cooling		

Heating features

Heating zones	Top 8,bottom 8 (3110mm) can meet the need of the peak lead-free technique.
Cooling zones	After cool down by forced air, PCB temp. is $\leq 70^{\circ}\text{C}$ at the exit.
Warm up time	From the normal temp. to set temp, approximate 30 minutes.
Warm up sequence	Warm up from two side, save the power and time
Profile transfer time	$< 15\text{min}$
Heating zone temp. control accuracy	$\pm 1^{\circ}\text{C}$
PCB temp. deviation	$\pm 1^{\circ}\text{C}$
Empty to full load heat balance respond time	$\leq 20\text{ s}$
Heating zones separately close function	Every heating zone can be closed separately on computer. When the bottom heating zones are closed, the PCB two sides temp. different reaches max.(PCB of different material, thickness, size, the temp. difference value is different.)
<h3><u>Heating parts</u></h3>	
Hot air motor	Import anti high temperature motor,RPM:3200rpm。 Adopts inverter to control, can adjust the speed of motor from 0 to 3200, stepless. Motor warranty is 5 years.
Heater	The heater is specially made, with high efficiency and sensitivity, warranty time is 5 years.
Air lane structure	High efficient air lane, provides abundant air
Exhaust system	Forced exhaust device, ensure no escape of flux.

<i>Transmission parts</i>	
Anti torque rail	High strength and hardened rail, is very durable and wear resistant.
Rail parallelism	±0.3mm
Chain stretch out length	Standard: 5mm, the chain is anti-stuck type, solve the soldering problem of small PCB
C/V speed set min.unit range	0.01m/min, 0~2m/min
C/V speed deviation range	Computer close loop, within ±2%
Chain tension device	Automatic adjust by spring, avoid the chain stuck due to the heating.
Conveying motor	Panasonic adjustable motor
Chain lubrication	The lubrication is controlled by PC, lubrication cycle and time can be set (there are three modes: fine, standard, economical. There is also manual lubrication in software)
Rail width-adjusting	Independent motorized adjusting
Mesh	500mm stainless steel mesh, runs synchronized with chain
<i>Machine structure</i>	
Frame	The frame is well soldered, firm and durable.
Door	Dismountable structure, provide wide space for maintenance.
Hood open method	Double electric cylinder to open the hood, with self-lock function, safe and reliable.
Cover open method	Self-made holder, easy to clean up

Electrical parts and control performance

Control system	Industrial PC	PLC+ Modular + PID, stable and reliable, with high repeat accuracy
Operation interface	Windows 7 with Chinese& English shift easily.	
Machine& operator safety	With creepage protector	
Electric part	All electric parts are imported, very durable, ensure the machine runs stably.	
Working mode	Three working mode: operation, edition and presentation, with on-line editing function	
Real time monitor	Generate the operation record daily, if there happen some problems, the responsible operator will be found easily.	
Temperature profile	Generate the profile for each zone daily, user can review and analyze. This function is not for PCB profile testing, just for inspecting when some problem happens in a certain zone.	
Production database	Generate production statement for all kinds of PCB and statistics, printable.	
Alarm list	The system saves all alarm information for user to review the alarm item and time.	
Alarm system	The system enters cool down mode when the alarm is strict.	
Profile test	With temp. profile testing function, can analyze according to the profile.	
Abnormal alarm	1.PCB runs abnormally 2. Operation abnormal 3.Temperature abnormal 4.Conveyor speed abnormal 5.Hot air devices abnormal.	
Flux recycle device	Standard configured. When use nitrogen, as it is closed recirculation, if the flux fog cannot be spread, it will pollute the PCB.	

<i>After-sales services</i>	
Warranty	2 years for the whole machine, 5 years for motors, heaters.
Out of warranty	Charge only purchase price for parts.
Service respond time	2 hours
Flux recycle device	Flux Management system is standard feature.
<i>Other features</i>	
SMEMA	Available for both upstream and downstream
UPS	Available. To protect control section and for conveyor in case of main input power failure