## KTR-1200D Specification:

Model	KTR-1200D	Control	Industrial computer			
Heating zones quan.	Top 12, bottom 12	Cooling zones quan.	Top 3, bottom 3			
Heating zone length	4675mm	Current plate	Thick copper plate			
Weight	APPROX:2700KG	Dimension	7050*1680*1530mm			
Exhaust capacity	10 <sup>m²</sup> /min×2	Color	Grey			
<u>Control system</u>						
Electricity supply	3P 380V/220V 50/60HZ	Temp. control range	Room temp. ~ 300°C			
Total power	96KW	Temp. control accuracy	±1°C (static state)			
Start power	42KW	Temp. control method	PID +SSR drive			
Consumption power	11KW	PCB temperature deviation	±1.5°C			
Speed control	3 sections with 3 inverters	Data save	All profiles can be saved			
Warm up time	Apprx.30minute	Abnormal alarm	High, low temp. alarm			
Conveying system						
Rail structure	2 Sectional structure	Rail fixed method	Front fix			
Chain	Stuck-free stainless steel type	Conveying height	900±20mm			
PCB Max. width	50-300mm	Conveying method	Rail+ chain			
Component height	Top/bottom 30mm	Conveying speed	300-2000mm			
Conveying direction	Left to right	Lubrication	Automatic			
<u>Cooling system</u>						
Cooling method	Forced air cooling					

Heating features				
Heating zones	Top 12,bottom 12 (4675mm) can meet the need of the peak lead-free technique.			
Cooling zones	After cool down by air, PCB temp. is ≤70°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	< 15min			
Heating zone temp.	±1°C			
PCB temp. deviation	±1.5°C			
Empty→ full load heat balance respond time	≤20 s			
Heating zones	Every heating zone can be closed separately on computer. When the bottom heating zones are			
separately close	closed, the PCB two sides temp. different reaches max (PCB of different material, thickness,			
function	size, the temp. difference value is different.)			
<u>Heating parts</u>				
Hot air motor	Import anti high temperature motor, RPM:2800rpm. Adopts inverter to control, can adjust the speed of motor from 0to 3000, 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.			

<u>Transmission parts</u>				
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 adjusting			
Machine structure				
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	Windows7 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.			
After-sales services				
Warranty	2 years for the whole n	nachine, 5 years for motors, heaters.		
Out of warranty	Charge only the cost for parts.			
Service respond time	12 hours			
Other features				
SMEMA		Available for both upstream and downstream		
UPS		Available. To protect control section and for conveyor in case of main input power failure		