

Benchtop Reflow Oven HR-30

All in One Smart Equipment with Nitrogen Atmosphere



- Extra large process chamber even for 600 mm long LED boards
- 4 External thermocouples available for Thermo-profile recording
- Controlled via buttons and Touch-screen LCD display at front panel
- Programmable itself or using PC and Windows application
- Integrated exhaust of fumes inside the chamber after reflow
- Additional exhaust above the doors during reflow process
- Integrated Nitrogen supply with programmable parameters
- Controlled Nitrogen supply ensures the purity of the N₂ atmosphere during reflow at a level of 98-99% purity.
- Motor driven door opening - programmable
- Automatic forced PCB cooling after reflowing
- Linear or Saddle type Thermo-profile with 6 segments
- Special Drying profile up to 16 hours at 150 °C
- 3-phase Power supply and Thermal heating up to 7800 Watt

Reflow process with N2

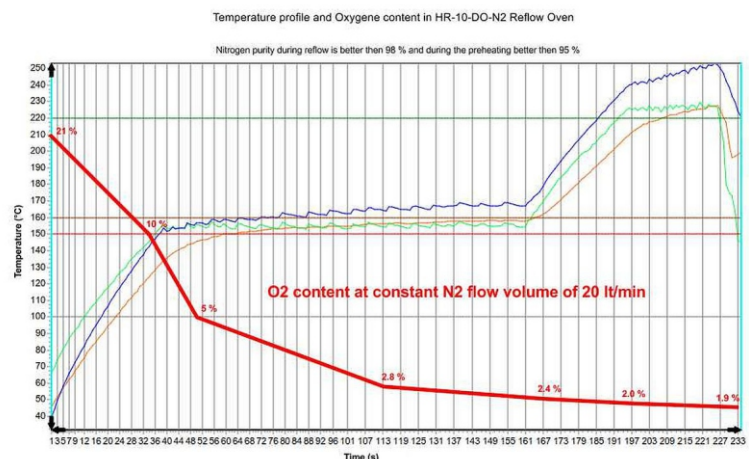
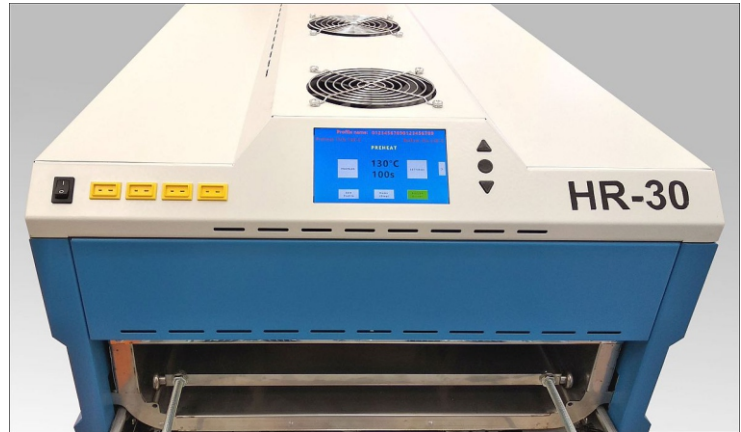
Benchtop reflow oven with IR and convection heating. After the nitrogen is connected, an inert atmosphere is created in the chamber and the wettability of the surfaces and the rise of solder paste are improved. Forced hot nitrogen convection ensures an even temperature profile throughout the soldering chamber. Controlled cooling fan power under the rack ensures optimal cooling of PCBs.

How does it work?

Connect the oven to a power source, N2 input to regulated Nitrogen supply and the dump exhaust to an external tube or unit. The oven is ready for running last used profile, change profile or edit settings.

Programmable independent using built touchscreen or connected to PC using Windows control app. You can set basic oven parameters as well as an options to program desired temperature profiles. When the oven is properly programmed, the user can control the process with buttons and LCD display at the front panel. There is an sound signal when the reflow process is over. Immediately after soaking is started internal exhaust and doors are automatically opened. At opened doors bottom fans started forced cooling.

Using 4 external thermocouples you can record real thermo profile at 4 various places on the PCB. Recorded data are processed and analysed using MTPWIN software.



Technical details

Max. PCB size	600 x 410 mm
Max. preheat tempaure	200 °C
Preheat time	10 - 600 s
Max. reflow temperature	260 °C
Reflow time	1 - 300 s
Max. drying temperature	150 °C
Drying time	1 - 999 mins = 16 hours
Cooling	4 fans on the base, 4 x 720 l/min
Solder fumes exhaust 1 + 2	1. Above door during process 2.After reflow, 1500 l/min
Number of programm	99 - reflow or dry
Measuring thermocouples	K-type, 3 pcs insde chamber + 4 external
Max. component height	55 mm to the top, 30 mm to the bottom
Power supply / consumption	3x380 V, 50 Hz, 3-phase, 3500 W average, 7800 W max.,
N2 consumption	Average 560 lt/hour - max. 1200 lt/hour
N2 input pressure	2 - 6 bar
PC connection	USB 2.0
Dimensions (L x W x H)	896 x 545 x 420 mm
Weight	41 kgs