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Euroflow 450CB (bench-top) solder reflow oven.

New design incorporates cross-belt zoning!

Our new design includes a new heater control system designed to overcome the most common problem with lead-free soldering, which is varying temperatures across the substrate. The oven is divided into three zones along its length (pre-heat, soak, and reflow), but the heating zones (pre-heat and reflow) are also divided into three sections across the conveyor. In the pre-heat section there are three zones of heat control across the conveyor (ie front edge, centre and back edge). In the soak (or stabilization) zone there is one zone of control. In the reflow zone there are again three zones of heat control across the conveyor. (Total = 7 zones).

This means that the operator can now easily overcome the problem of temperature variation across the substrate.

1. 450mm (18") wide stainless steel ladder type mesh conveyor belt.
2. 3 zone processing oven (pre-heat, stabilization and reflow), with closed loop PID temperature control in all of the zones.
Heated length = 900mm plus cooling zone = 400mm.
The processing chamber combines the benefits of forced hot air convection with fast response heater panels.
3. 7.5kW max. heater power, 415V 3-phase.
4. Cooling zone at exit from below conveyor for optimum processing.
5. Stainless steel internal oven and mesh conveyor belt. The design of the processing oven ensures correct air flow for convection currents, zone separation and exhaust of fumes. Outer shell and frame are powder coated mild steel. The machine's design allows easy access and serviceability.
6. The machine is run from a computer control system. The PC controller is used to create and store programs for any different product applications. The operator can load a program to control the set temperatures and the conveyor belt speed. The monitor will display the oven conditions, with colour graphics of each zone temperature. The system software, interface unit and data cable are supplied for use on a Pentium PC.
7. On-screen profile display of substrate temperature using up to three extended k-type thermocouples. The graphs may be saved and printed on paper.
8. Machine length = 1780mm, width = 750mm, height = 470mm (without table).