



Prey By Detech



PowerOven Series
Machine Brochure



PowerOven Series

Lead Free Reflow Oven

The PowerOven series offers several oven lengths that offer a combination of high-mass heat sources and efficient thermal transfer, allowing for excellent reflow soldering results and throughput with a shorter-than-average heating tunnel.

Our PowerOvens include a wide combination pin-over-mesh belt conveyor, consisting of a 570mm wide mesh conveyor belt combined with a 450mm pin conveyor. This conveyor transports the PCB through the 2,050mm or greater heated tunnel at a controllable and adjustable speed giving the flexibility to create the correct profile for even the most complex PCBs. Every machine variant from the PowerOven series includes two large cooling zones to ensure a reliable and correct solder joint formation while maintaining board integrity.

The PowerOven range has several variants to allow for anything from low throughput to high volume manufacturing, offering a reliable and effective solution to the challenges posed by today's ever changing mix and complexity of SMT Manufacturing. The PowerOvens are all designed with a compact principle in mind as we understand that factory space is almost always at a premium. The efficient energy transfer capabilities mean that power usage is kept to a minimum.



The combination of heat transfer efficiency, smaller footprint and the controllable heat up times, mean that the PowerOven offers an exceptional return on investment compared to many other models available in the market today.

Contact us for more information or to request a live demonstration at sales@detech-europe.com or call us on +44 (0)1262 409944

Key Features



Individually Controlled Zones



Automatic Chain Lubrication



High Quality Electrical Wiring

Technical Specifications

| | PowerOven6 | PowerOven8 | PowerOven10 |
|---------------------------------------|------------------------|------------------------|------------------------|
| Operating / Max Power | 48KW | 60KW | 60KW |
| PCB Dimensions | Upto 450mm Wide | Upto 450mm Wide | Upto 450mm Wide |
| PCB Top / Bottom Clearance | 30mm / 25mm | 30mm / 25mm | 30mm / 25mm |
| Machine Dimensions | 4.1m x 1.51m x 1.55m | 4.8m x 1.51m x 1.55m | 5.5m x 1.51m x 1.55m |
| Net Weight | 1,700kg | 2,000kg | 2,100kg |
| Power Requirements | 380VAC/50Hz 3Ph | 380VAC/50Hz 3Ph | 380VAC/50Hz 3Ph |
| N2 Requirements (Optional) | 20 - 30 M3/h | N/A | N/A |
| Exhaust Requirements | 3 Vents, 400CFM Each | 3 Vents, 400CFM Each | 3 Vents, 400CFM Each |
| Industrial PC | Included | Included | Included |
| Control Type | Software Controlled | Software Controlled | Software Controlled |
| | | | |
| Heated Board Width | 570mm | 570mm | 570mm |
| Mesh Belt Width | 570mm | 570mm | 570mm |
| Mesh Belt Clearance | 65mm | 65mm | 65mm |
| Pin Conveyor Min/Max Width | 50mm / 450mm | 50mm / 450mm | 50mm / 450mm |
| Pin Conveyor Clearance | 30mm | 30mm | 30mm |
| Automatic Chain Lubrication | Yes | Yes | Yes |
| Conveyor Speed | 400 - 1,800mm/min | 400 - 1,800mm/min | 400 - 1,800mm/min |
| Conveyor Height | 900mm +/- 20mm | 900mm +/- 20mm | 900mm +/- 20mm |
| Conveyor Direction | Left to Right | Left to Right | Left to Right |
| Component Max Hegt | T: 30mm B: 25mm | T: 30mm B: 25mm | T: 30mm B: 25mm |
| | | | |
| Controlled Heating Zones | 12 Zones, T: 6 B:6 | 16 Zones, T: 8 B:8 | 20 Zones, T: 10 B:10 |
| Temperature Accuracy | +/- 1°C | +/- 1°C | +/- 1°C |
| Temperature Tolerance | +/- 2°C | +/- 2°C | +/- 2°C |
| Temperature Range | Ambient - 350°C | Ambient - 350°C | Ambient - 350°C |
| Time To Heat Up From Cold | < 15 Minutes | < 15 Minutes | < 15 Minutes |
| Profiling Channels | 3 Thermocouples | 3 Thermocouples | 3 Thermocouples |
| Standard Cooling Method | Air Cooling | Air Cooling | Air Cooling |
| Internal Chilled Water Cooling | Optional | Optional | Optional |
| Number of Cooling Zones | 2 Air, 1 Water Chiller | 2 Air, 1 Water Chiller | 2 Air, 1 Water Chiller |
| Cooling Tunnel Length | 900mm For Both | 900mm For Both | 900mm For Both |



 **etech**
europe

Make things simple...

Detech Europe Limited

The Farm Office, Model Farm,
Atwick Road, Bewholme,
East Riding of Yorkshire,
United Kingdom

Phone: +44 (0) 1262 409944

Email: sales@detech-europe.com

Website: www.detech-europe.com

