www.connect-agility.com

T-TRACK™

Precision Reflow Soldering Chamber capable of meeting new standards in temperature control

The T-TRACK™ Precision Reflow Soldering Chamber provides the most effective environment for the soldering of modern substrates and components. The use of lead-free solders and no-clean fluxes means that a much tighter tolerance is required during the reflow soldering process than in the past - tolerances that many conventional reflow ovens find difficult to achieve. The **T-TRACK™** with its Patented **T-SCAN™** heat delivery system utilises dual cross-flow impellers to provide substrates and components with a precisely controlled thermal front which sweeps across the entire chamber, ensuring high quality solder joints together with minimum thermal stress. An inert gas supply ensures better wetting, reduces risk of oxidation and provides a more uniform heat distribution. Hot gases are re-circulated to reduce gas and power consumption.

The **T-TRACK™** is a modular product capable of being used in a range of configurations:-

- **single unit, manual feed, for low volume or prototyping situations, or:-**
- **multiple unit, manual feed, with computer supervision and Statistical Process Control (SPC) for medium scale operations; or:-**
- **multiple unit, automatic feed, with full computer control, supervision, SPC, PCB barcode recognition for large volume, multi-product assembly lines.**

Benefits:

- ❑ T-SCAN™ dual-impeller heat delivery system - EC Patent EP1176629 and others
- ❑ Precision '32-zone' temperature control
- ❑ Inert atmosphere for reduced oxidation and better wetting
- ❑ Modular system
  - single or multiple manual feed batch operation
  - multi-chamber computer controlled automatic system
  - Independent ovens - significant reductions in system down time
- ❑ Fume extraction ensures cleaner joints, boards and environment
- ❑ Large savings in floor space

Features:

- ❑ 300°C Temperature range
- ❑ Instant Start - no waiting time
- ❑ Agile Assembly - run any number of different profiles consecutively
- ❑ Liquid nitrogen inerting and fast, controlled cooling
- ❑ Serial interface for computer control

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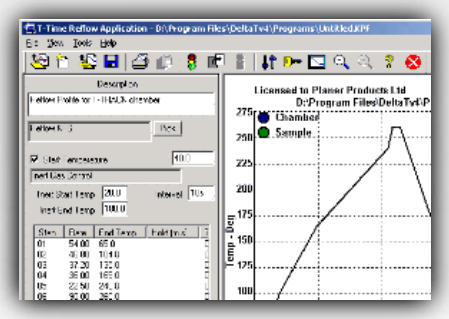
TECHNICAL SPECIFICATION

Temperature Range	0 C to +300°C
Heating Rates	0.1°C /minute to 120°C / minute
Cooling Rates	0.1°C/minute to 100°C/minute
Chamber Variation	+/- 5°C
Dimensions*	990 mm wide x 520 mm high x 610 mm deep
Maximum board size	300 mm x 250 mm
Maximum component height	30 mm (with standard board holder)
Power Consumption	12 kWmax (3 phase supply)
Cooling	Liquid Nitrogen at 22 psi
Controls	Simple two key RUN/STOP operation
Display	3.5 digit LCD for monitoring chamber and one addition probe
Communications	RS232 port for interfacing withT-Time™ Windows™ based Thermal Management Software
Storage Temperature	-10°C to +50°C
Storage Humidity	5% to 95% RH non-condensing
Operating Ambient Temperature	-10°C to +50°C
Operating Ambient Humidity	5% to 95% RH non-condensing
Fume Extraction Option	Extraction ports for attachment of external filter - HEPA (High Efficiency Particulate Arrestance) composite filter removes 99.97% of particles down to 0.3 microns

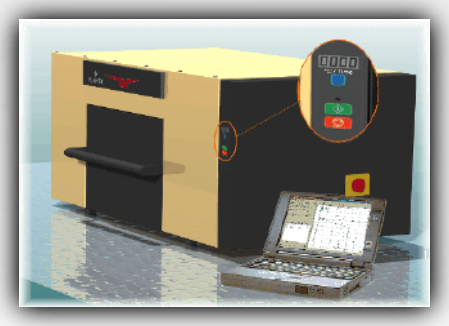
*(Excluding ducts, isolator and handles)

T-TIME™ SOFTWARE

- T-TIME™ is a Windows™ based software package which allows up to 32 temperature ramps and holds to be programmed, on screen, in a matter of minutes.
- T-TIME™ comes ready with many built-in reflow profiles from the worlds leading solder paste suppliers.



- There is no warm up time for T-TIME™ - as soon as the heating profile is loaded, the machine is ready to start the run.
- Virtually unlimited capacity of reflow profiles and data storage in easily managed computer files.
- SPC Data Analysis has never been this easy. Instant QA records - PCB serial number tracking.
- Plug in a laptop or desktop computer to download the T-TIME™ reflow profiles - after which the PC may be removed.
- To start a reflow run the operator simply presses the green button.



- A 3½-digit LCD display gives an indication of Chamber Temp with a resolution of 0.1ºC
- The blue button toggles the display between Chamber Temperature and Time Remaining in seconds.
- Temperature & time data from the last run is held in T-TRACK™ memory enabling full QA/SPC data analysis by the PC.

SUMMARY OF BENEFITS

- ✓ **Low Cost Entry - start with one T-TRACK™ - add units at future date**
- ✓ **Expandable system - in number and function - upgrade at any time**
- ✓ **Precision Soldering with T-SCAN™ heat delivery - unbeatable performance**
- ✓ **Inert Gas option- lower reflow temps - better wetting - faster cooling**
- ✓ **Inert Gas recirculation - lower nitrogen consumption**
- ✓ **Immediate use - NO warm up time**
- ✓ **Flexible Assembly - NO set-up time between products**
- ✓ **PC Interface allows easy programming with T- TIME™ software**
- ✓ **Convenient Serial Number tracking and SPC data logging**
- ✓ **Convenient Bench Mounting - or stack for minimum floor space**
- ✓ **NO Conveyors - low vibration - low maintenance - high reliability**
- ✓ **Fume Extraction - HEPA filter - Flux Management**
- ✓ **True multi-function capability:**
  - **reflow soldering**
  - **stress screening**
  - **burn-in**
  - **pre-conditioning**

T-Track™ brings truly Agile Assembly to the electronics industry