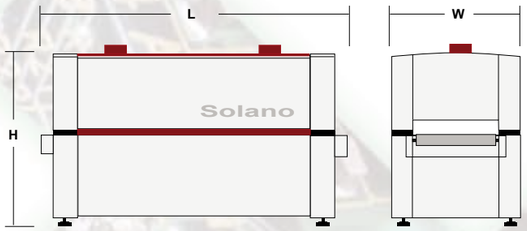
RO-500/510 Reflow Oven

Specifications



Artikle Nr.
RO-500 Solano convection reflow oven
RO-510 Solano convection reflow oven with pin conveyor

Dimensions
Mesh belt 2500mm L x 1000mm W x 1200mm H
Edge conveyor 2780mm L x 1000mm W x 1200mm H

Conveyor
RO-500 500mm stainless steel mesh belt, adjustable from 50-800mm/min.
RO-510 500mm stainless steel mesh belt, adjustable from 50-800mm/min
+ edge conveyor with 5mm pins (3mm optional)

Controller
Microprocessor controller with RS-232 interface for heating and cooling zones.
Speed and temperature profiling controlled via LCD display or by optional PC

Heating system
Full convection circulated hot air from the top and bottom. 4 top and one bottom heating zone, 1 cool down zone

Cooling
Radial ventilator at the bottom.

Heating power
17.5Kw

Software included
Evaluation oven manager software. Full license available under Nr SWRO-0330

Tunnel length
2250mm

Weight
575 / 610 Kg

Power requirements
3 Phase 380/420 Volt

Options
Monitor Stand
Computer
Oven Manager (Windows)
Signal light

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Specifications are subject to change without prior notice. RO0410E1

"The Solano RO-500 series is a flexible, full convection lead free approved reflow system"

DIMA SMT SYSTEMS
QUALITY SINCE 1986

To improve your productivity

SOLANO

The ideal oven for a heavy and complicated reflow job

DIMA established in 1986 continues to offer state of the art developments pushing the boundaries of R&D, striving for optimum performance, shorter production times, improved output and reduced costs. These goals have been achieved by close liaison and communication with DIMA's worldwide customer base. Global success has enabled DIMA to extract the knowledge required for continued advancement direct from the customer. This knowledge was of particular importance during the development of DIMA's latest Reflow Oven the Solano. The Solano offers the very best price performance ratio currently available in the industry.

Key Features

- 5 independent controlled heating zones
- Internal cooling zone
- Integrated Ioniser for ESD safe soldering
- DIMASoft reflow profiler software available
- Flux traps to minimize contamination of the system
- Easy to service one way approach heating units
- Mechanical SMEMA interface
- Microprocessor controlled
- Lead free approved
- Build in reflow tracker

Photo: Solano with optional monitor and keyboard

Today's best buy

From every parameter by which reflow systems are judged- heating uniformity, exacting and total process control, profiling flexibility and throughput - the Solano leaves nothing to be desired. As such, it is by far today's best buy in reflow!

Machine types

RO-500	Solano 500 mm wide convection oven lead free capable mesh belt only
RO-510	Solano 500 mm wide convection oven lead free capable mesh belt and pin conveyor
SWRO-0330	Software reflow oven manager

Air and component temperatures equalized

This is achieved with Solano circulating air speed of 1 to 1.3 meters per second. (Any faster could endanger chips from being misaligned or shifted.) However, many systems move the air at a much slower rate in some instances causing a substantial temperature imbalance between components and the air surrounding them. Faster air speeds are also ideal for densely populated and multi-layer boards, as well as in all other critical soldering soldering applications like lead free soldering. For ease of service the heating cells can be removed from the top without dismantling the process chamber.

Photo: Heating cell with cooling zone

Solano reflow oven

Exact control of all cells and total performance consistency even under varying loads are routine expectations for any top-of-the-line reflow. What makes Solano a most sought-after premium-level system are those capabilities, plus its singular ability to function as a full convection reflow. It's a fact that even the most sophisticated reflow systems will have some uneven heating due to unwanted IR energy emanating from areas of the process chamber that become hot. This can cause components with less density to heat up faster than larger ones.

The challenge is to minimize unwanted IR by eliminating its causes, such as heating chambers made of heavy aluminium castings with the heating elements inside.

Avoids IR emissions sources

Another problem is interior walls that are non-reflective. The 2.7m Solano system has been ingeniously designed to avoid both of those potential IR emissions sources. Thin, lightweight sheets of mirror-like polished stainless steel line the entire interior, with heating elements positioned outside the chamber. These innovations cause heat to be deflected instead of absorbed and emitted. A most important criterion by which convection reflow systems are judged is the speed of circulating air, which should be fast enough to equalize its temperature to that of the components within each zone. A digital encoder precisely controls belt speed, providing vibration-free belt movement - a must for double sided boards. A built-in process window is used to program, run and display each profile. PC software permits unlimited temperatures profiling in real time, continuous process status updates, overlay comparisons, and program storage. The Solano offers a high degree of flexibility and profile control, enabling the user to run a large variety of boards with fewer profiles. Uniform heating and high repeatability will be maintained under all load conditions - including load / no load (i.e., "zero spacing").

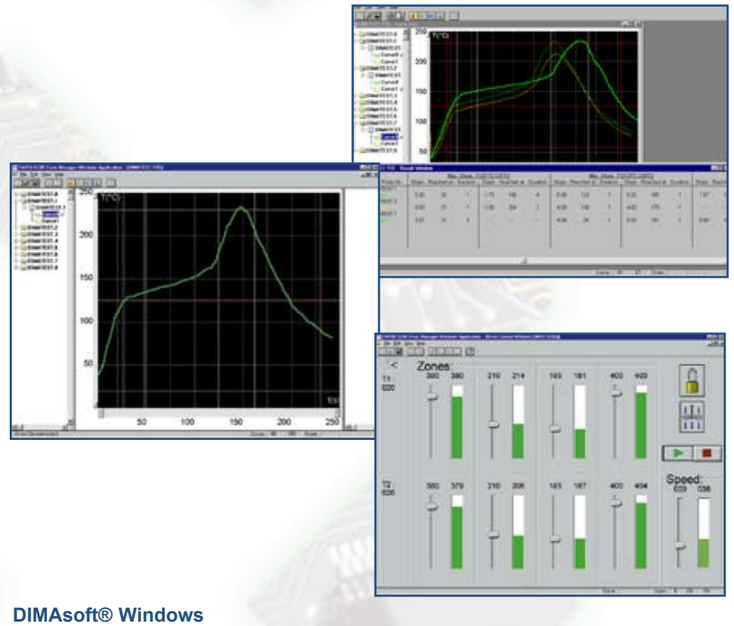
Lead free approved

After heavy testing the system is approved for lead free soldering by several leading solder past manufacturers.

Keep it under control

The system's memory stores up to 99 different profiles. The RS-232 port on the reflow oven allows PC interface for entry and storage of additional programs as well as remote control of operating procedure, QC monitoring, and generation of hard copies as needed. Oven Management software is optional available. PC, monitor and monitor/keyboard stand sold separately.

A standard build in dedicated LCD display permits continuous monitoring of the production run, with real time profiling shown in convenient graph format and board temperatures through each zone shown in real time.



DIMAsoft® Windows

Offers the user a programming software format making DIMASoft one of the most advanced easy to use interfaces available in the market today. Its unique capabilities offer quick, informative one key operations, drastically reducing setup time.