

FALCON 5C™

Don't let its small size fool you. Watt density of the heat modules and use of the "Dwell Time Feature" results in the most powerful furnace of its kind and results in a flow through furnace of infinite heated travel length. All in a table top size unit. SIKAMA International's patented Falcon 5/C™ reflow furnace combines bottom-up conduction and top-down convection technology with precise calibration of the temperature and purity of the atmosphere for ultimate control of your solder reflow process. The Falcon 5/C is a table top system intended for production runs of moderate product sizes and is manually operated.



The Falcon 5/C is a seven zone system featuring a liquid-cooled loading platform, four bottom conduction/top convection heat zones, one bottom conduction/top convection liquid-cooled zone, and a liquid-cooled offload platform. Each heated zone has independent set point controls and gas flow controls to ensure consistent and precise temperatures for greater profile flexibility. The internal liquid-cooled zone ensures a process cool-down in an inert atmosphere prior to the product exiting onto the offload platform. Parts are transported through the system using sweeperbars that can operate continuously or in a "dwell" (timed delay) mode. The system may be operated with air, nitrogen or forming gas. The inert gas flow enters the reflow chamber through small orifices in the top heated platens and exits the sides to prevent contamination of adjoining zones and eliminates completely flux buildup.

In addition to heating the inert gas, the top platens also contribute significant radiant heat to the reflow process and are easily adjusted to minimize the opening of the reflow chamber (to as low as 0.25 inch) thus conserving inert gas consumption while maintaining the desired oxygen level in the chamber.

Capable of heating up to 420° C, the 5/C is targeted at applications involving fluxless gold tin reflow, singulated ball reflow of BGA's, fixtured double-sided boards, large microwave components and a variety of substrate materials.

The Falcon 5/C's efficiency of operation and minimal use of electricity and gas are the result of SIKAMA's unique patented design for balanced heating and cooling. These features are designed to minimize your initial capital outlay as well as production costs. SIKAMA International's Falcon 5/C™ produces impressive results with powerful repeatable profiles that will increase your yields, improve your bottom line and safeguard your product integrity and your reputation.

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FALCON SYSTEMS

FALCON 5C™



SPECIFICATIONS...

Heating Zones	4
Cooling Zones	2
Loading Zones	1
Total Number of Zones	7
Platen Size	5" x 6.5" (125 mm x 162 mm)
Maximum Substrate Size	5" x 5.75" (1254 mm x 144 mm)
Speed Mode (Inches Per Minute)	3 to 50 in/min. (7.5 to 125 cm/min.)
Time Mode (Dwell)	1 sec. to 99 min. 59 sec. (per zone)
Transfer Time	Minimum 7 sec.
Temperature (Standard)	Up to 420° C
Temperature Accuracy	± 2° C
Warm-up Time to 230° C	10 minutes
Coolant Flow	1 GPM (4 liters/min.)
Alarms	Over/Under Temperature, Speed & Torque
Parts Flow (Specify When Ordering)	L to R or R to L
Gas Consumption	Typical 1/4" opening, 100 to 500 CFH (47-236 liters/min.)
O2 Level	10 PPM, 1/4" opening
Voltage (Specify When Ordering)	200 to 240 VAC, 50/60 Hz, 1 or 3 Phase
Start-up Power (KW)	7.7 KW @ 240 VAC
Power Consumption	50% or less
Basic Unit Weight	200 Lbs. (91 kg.)
Basic Unit Dimensions	L 53 x W 25 x H 26 inches (1346 x 635 x 660 mm.)

* Specifications subject to change

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