

FALCON SYSTEMS

FALCON 5C™

REFLOW SOLDER/CURING OVEN

SIKAMA International's patented Falcon 5C solder reflow oven combines bottom-up conduction and top-down convection technology with precise calibration of temperature and purity of atmosphere for ultimate control of your solder reflow process. The Falcon 5C is a tabletop system intended for production runs of moderate product sizes and is manually operated.

The Falcon 5C 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 to the sides to prevent contamination of adjoining zones and completely eliminate 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 400°C, the 5C is targeted at applications involving fluxless gold/tin reflow, singulated ball reflow of BGAs, fixtured double-side boards, large microwave components and a variety of substrate materials.

The Falcon 5C'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. Combined with the small size of the unit, these features are designed to minimize your capital outlay as well as production costs. SIKAMA International's Falcon 5C produces impressive results with powerful repeatable profiles that will increase your yields, improve your bottom line and safeguard your product integrity and your reputation.

SIMPLE • EFFICIENT • ECONOMICAL

All SIKAMA products designed and manufactured in Santa Barbara, California
Specification subject to change without notice.
© 2008 All rights reserved. Content subject to change.

FALCON SYSTEMS

FALCON 5C

TYPICAL SPECIFICATIONS...

Heating Zones	4
Cooling Zone.....	2
Load Zones.....	1
Total Number of Zones.....	7
Platen Size.....	5 in x 6.5 in (125 mm x 162 mm)
Maximum Substrate Size.....	5 in x 5.75 in (125 mm x 144 mm)
Time Mode (Dwell & travel Time).....	1 sec to 99 min 59 sec (per zone)
Temperature (Standard).....	Up to 400°C
Temperature Accuracy.....	±2°C
Warm-up Time to 230°C.....	10 minutes (approx)
Coolant Flow.....	0.5 to 2 GPM (2 to 8 liters/min)
Alarms	Over/Under Temperature, Gas, Coolant Motor Torque
Parts Flow (Specify).....	L to R or R to L
Gas Consumption	120-150 cubic feet/hour
O2 Level.....	10 PPM, 0.25 inch opening
Voltage (Specify).....	200-240 VAC, 50/60 HZ, 1 or 3 phase
Start-up Power.....	11 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 (134.6 x 63.5 x 66 cm)

SIKAMA



For more information contact:

SIKAMA International Inc.
118 E. Gutierrez Street • Santa Barbara, CA 93101
Phone: (805) 962-1000 • Fax: (805) 962-6100
E-mail: sales@sikama.com • <http://www.sikama.com/>

SIMPLE • EFFICIENT • ECONOMICAL

All SIKAMA products designed and manufactured in Santa Barbara, California
Specification subject to change without notice.

© 2008 All rights reserved. Content subject to change.