UP1200

Reflow Solder & Curing Oven

The UP1200 is a multi-purpose, continuous flow, Reflow Soldering Oven capable of temperatures up to 400°C. Designed to process up to 300mm wafers and any application requiring full chamber cover gas with <5ppm O2 levels across all zones, virtually no vibration, and complete profile customization. Utilizing Sikama's unique contact conduction heating in combination with thermal convection and radiant heating which provides unmatched thermal energy transfer and the lowest energy use of any comparable reflow oven.

With eight work zones internal to the oven, six heat zones, and two cooling zones, users can achieve complete control over profiles in the smallest footprint in the industry. We provide full SECS/GEM and SMEMA capabilities to allow easy integration into automated production lines and SPC data capture.

The UP1200 is built with either a walking beam transport or the LIFT system that accommodates warped wafers and heavier components. Both transport systems move the work item from zone to zone through the oven without friction or vibration. Each system lifts the component above the bottom contact heating zones and carries it to the next zone. The work item is not dragged or pushed, reducing the possibility of damage due to scraping, scratching, or vibration.

No other oven provides these levels of carbon-conscious performance with a space-saving footprint.

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SPECIFICATIONS

External	Zone-1	Zone-2	Zone-3	Zone-4	Zone-5	Zone-6	Zone-7	Zone-8	External
	Internal to machine								
Load zone	Cool top	Heat top	Heat top	Heat top	Heat top	Heat top	Heat top	Cool top	Unload zone
	---------- Conveyor Zone ----------								
	Cool bottom	Heat bottom	Heat bottom	Heat bottom	Heat bottom	Heat bottom	Heat bottom	Cool bottom	
Can be configured as right to left or left to right process									

FEATURES	
HEATING ZONES	6
COOLING ZONES	2
LOAD/UNLOAD BUFFERS	STANDARD
ZONE TEMPERATURES	752F° | 400°C ±2°C
DIRECTION OF FLOW	BI-DIRECTIONAL
TRANSPORT SYSTEM	WALKING BEAM | LIFT
AUTOMATION	SMEMA | SECS/GEM
MINIMUM O_2 LEVEL - PPM	10
CONVEYOR HEIGHT - INCH (MM)	35 (889) MIN | 39 (990) MAX

SUBSTRATE CAPACITY	
MIN/MAX DIMENSIONS - INCH (MM)	3 (76) W MIN 12.5 (318) L X W MAX
MAXIMUM HEIGHT - INCH (MM)	3.5 (89)
MAXIMUM WEIGHT - LBS (KG)	WB 1 (0.45), LIFT 5 (2.3) IF ALL ZONES USED
MAXIMUM SINGLE UNIT TRANSPORT CAPACITY - LBS (KG)	WALKING BEAM - 2.6 (1.2) LIFT – 5 (2.3)

TRANSPORT SYSTEMS	
WALKING BEAM	
NUMBER OF BEAMS	7
BEAM PITCH - INCH (MM)	1.75 (45)
BEAM SPAN - INCH (MM)	10.5 (267)
LIFT	
NUMBER OF BEAMS	7
BEAM PITCH - INCH (MM)	1.75 (45)
BEAM SPAN - INCH (MM)	10.5 (267)

FACILITY REQUIREMENTS	
INPUT VOLTAGE - VAC	220 | 380
INPUT CURRENT - AMPS	55 @ START-UP ≤30 @ STEADY STATE

SYSTEM POWER - KW	27 @ START-UP ≤13.5 @ STEADY STATE
TOTAL COVER GAS RATE - CFM	≤18.3
COOLING WATER FLOW - GPM	≤10
DIMENSIONS INCLUDING LOAD/UNLOAD - INCHES (CM) (W X D X H)	185 X 46 X 79 (470 X 117 X 201)
DIMENSIONS WITHOUT LOAD/UNLOAD (W X D X H) - INCHES (CM)	116 X 46 X 79 (295 X 117 X 201)
WEIGHT - LBS (KG)	1500 (680)

For more information contact sales@sikama.com