

MINIOVEN 05

Compact hybrid reflow oven

The MINIOVEN 05 is a compact and robust table-top device specially designed for reballing of BGAs and prebumping of QFN components. The device is used in development and production. The efficient hybrid heating technology heats up electronic components evenly from all sides and thereby guarantees reproducible reballing results. Up to 25 heating profiles can be set up, administered and saved through the intuitive menu navigation. An additional external temperature sensor is used to ensure the highest possible reliability as the device automatically adjusts the reballing profiles. Through



the sensor, the optimal profile settings for achieving the specified component temperatures are determined through the sensor. The EASYBEAM software allows for the convenient editing of reballing profiles as well as for the temperature history to be depicted. Aside from the reballing process for BGA components, there are also images and provisions available for the prebumping of QFN components. The device possesses a connection for process gas. This allows the reflow processes to be easily converted to nitrogen-based atmospheres.

Top Features

Hybrid heating technology for the best temperature distribution



Process reliability

Optimized heat distribution via convection



Flexibility

Reflow of solder paste or solder balls



Plug and Play

Compact format, innovative design and intuitive operation



Precision

Nitrogen connection for optimal reflow of solder balls



Process control

Use of temperature profiles via PC software

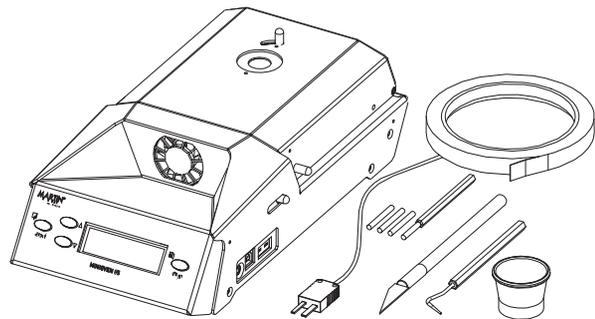


Support

Tailored mask design

Standard equipment

- MINIOVEN 05 Base Unit
- Sensor for temperature (K-Type)
- Cutter knife
- SMD hook

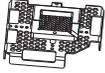


Technical details

Power consumption:	550 VA	
Power heating system:	500 W	4 x IR-lamps
Size heating system:	105 x 130 mm ²	
Max. component size:	55 x 55 x 4 mm ³	

Mains:	1Phase, 230 VAC
Number of temp. sensors:	1 x internally inst. & 1 x external opt.
Number of profiles:	25 memory slots
Dimensions:	150 x 300 x 40 mm ³

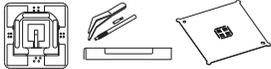
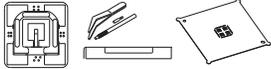
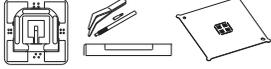
MINIOVEN 05: Optional extras

	Article nr.	Name
	HB00.0112	Switch Box Process Gas for MINIOVEN 05 with connection set
	HB00.4005	Process Gas Connection Set for MINIOVEN 05
	LW40.0251	Reballing Fixture CSP 27*27mm for MO-04/05 Standard
	LW40.0236	Reballing Fixture BGA 45*45mm for MO-04/05 4 downholder clips
	LW40.0237	Reballing Fixture BGA 45*45mm for MO 04/05 - 4 clips and support grid (for PS3)
	LW40.0252	Prebump fixture with printer QFN 27*27mm for MO 04/05

Consumables

	VD90.5104	Solder balls, 50,000 pc, leadfree CSP Sn96.5Ag3Cu0.5 250µm (=3g)
	VD90.5101	Solder Balls, 50,000 pcs., lead free BGA Sn96.5Ag3Cu0,5 762µm (=86g)
	HT00.0009	Flux Pen lead free 0405 C, no clean, RELO

Application Sets

	LW50.9001	Reballing-04 Set eco Standard
	SF29.0002	Prebumping-05 Set QFN
	LW50.9003	Reballing Set PS 4

More accessories and consumables at www.martin-smt.de