

Technical Data



WHA 3000P

WHA 3000V

WQB 4000SOPS

Dimensions (B x L x H) mm:	240 x 270 x 170	240 x 270 x 101	630 x 630 x 650
Dimensions (W x L x H) inch:	9,44 x 10,63 x 6,69	9,44 x 10,63 x 3,97	248 x 248 x 256
Mains supply voltage:	230 V	230 V	230 V
Power Output:	700 W	700 W	2300 W
Top heating:			700 W
Heating plate:			large 1600 W (260 x 260 mm) small 400 W (120 x 120 mm) (switchable)
Compressed air supply:	–	400 – 600 kPa clean, dry compressed air	400 – 600 kPa clean, dry compressed air
Temperature accuracy:	50°C – 550°C +/- 30°C (+ - 54°F)	50°C – 550°C +/- 30°C (+ - 54°F)	continuously variable 50°C – 400°C Control accuracy ±10°C
Air volume hot air:			continuously variable 5 – 50 l/min
Air consumption:	5 – 50 l/min	5 – 50 l/min	60 – 100 l/min
Safety Class:	1 (control unit and hand piece hard grounded)	1 (control unit and hand piece hard grounded)	1
Order-no.	T005 33 346 99	T005 33 366 99	T005 33 706 99

WHA 3000PS Set – The versatile system for repair and rework of fine pitch and BGA components

The WHA 3000P will perform demanding repair tasks on circuit boards with complex fine pitch surface mounted components. The advanced control technology coupled with user-friendly operation, guarantees precision of repair processes. While the sophisticated automatic operation mode guarantees repeatability of the process and increases productivity and quality. Extensive range accessories compliment the machine to promote flexibility. Further Accessories see page 73.

Patented Weller nozzle technology for maximum process control and user friendly operation. The powerful variable speed controlled turbine generates an air volume of up to 50 litres/min. Hot Air Nozzle flows hot air at the component. Memory space to store up to 10 thermal profiles to ensure process repeatability. Manual operation or operation via PC software.



WHA 3000PS Set

- 700 W Hot air station
- Integrated turbine
- Set with Infrared preheating plate and circuit board holder

BGA Hot air nozzles
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Order-no.	Model	Description
T005 33 556 99	WHA 3000PS Set	Hot air station

Scope of supply:

1	T005 33 346 99	WHA 3000P	700 W Hot air station with integrated turbine
2	T005 33 165 99	WBHS	Circuit board holder with pivoting stand
3	T005 33 386 99	WHP 3000	Infrared preheating plate, 600 W

WHA 3000P

- 700 W
- Hot air station with turbine

BGA Hot air nozzles
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Order-no.	Model	Description
T005 33 346 99	WHA 3000P	700 W Hot air station with turbine

BGA/QFP Rework Systems

WBHS Circuit board holder with a pivoting stand for the HAP 3000 hot air pencil. Circuit boards upto 310 mm x 320 mm can be accommodated. The circuit board holder ensures that the hot air pencil is vertical to the printed circuit board under repair and the pivoting stand allows the HAP 3000 hot air pencil to be raised and lowered precisely onto the component being reworked.



WBHS

- Circuit board holder with a pivoting stand
- For boards upto 310 x 320 mm

Order-no.	Model	Description
T005 33 165 99	WBHS	Circuit board holder with a pivoting stand

WHA 3000VS Set

- 700 W
- For use with inert gas



Figure shows WHA 3000V

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Order-no.	Model	Description
T005 33 596 99	WHA 3000VS Set	700 W Hot air station

Scope of supply:

T005 33 366 99	WHA 3000V	Hot air station 700 W for use with inert gas
T005 33 165 99	WBHS	Circuit board holder with pivoting stand
T005 33 386 99	WHP 3000	Infrared preheating plate, 600 W

WHP 3000 Infrared preheating plate

- 600 W, 230 V
- Board size upto 120 x 190 mm
- Temperature range 50°C – 400°C
- Digital display for set and actual temperature
- Digitally controlled
- 3 Infrared high temperature ceramic elements for fast and efficient heat up
- 2 heated zones can be selected
- External sensor (accessory) connectable
- RS 232-Interface cable e.g. for connection to WHA 3000 hot air station
- Easy Fix board holder (as WHP 200 see page 80)
- K-type thermo couple socket for monitoring



Order-no.	Model	Description
T005 33 386 99	WHP 3000	Infrared preheating plate 600 W / 230 V with Easy Fix board holder

WHP 3000 Infrared preheating plate

- 1200 W, 230 V
- Board size upto 190 x 245 mm
- Temperature range 50°C – 400°C
- Digital display for set and actual temperature
- Digitally controlled
- 3 Infrared high temperature ceramic elements for fast and efficient heat up
- 2 Easy Fix board holder (as WHP 200 see page 80)
- K-type thermo couple socket for monitoring



Order-no.	Model	Description
T005 33 646 99	WHP 3000	Infrared preheating plate 1200 W / 230 V with Easy Fix board holder

Accessory:

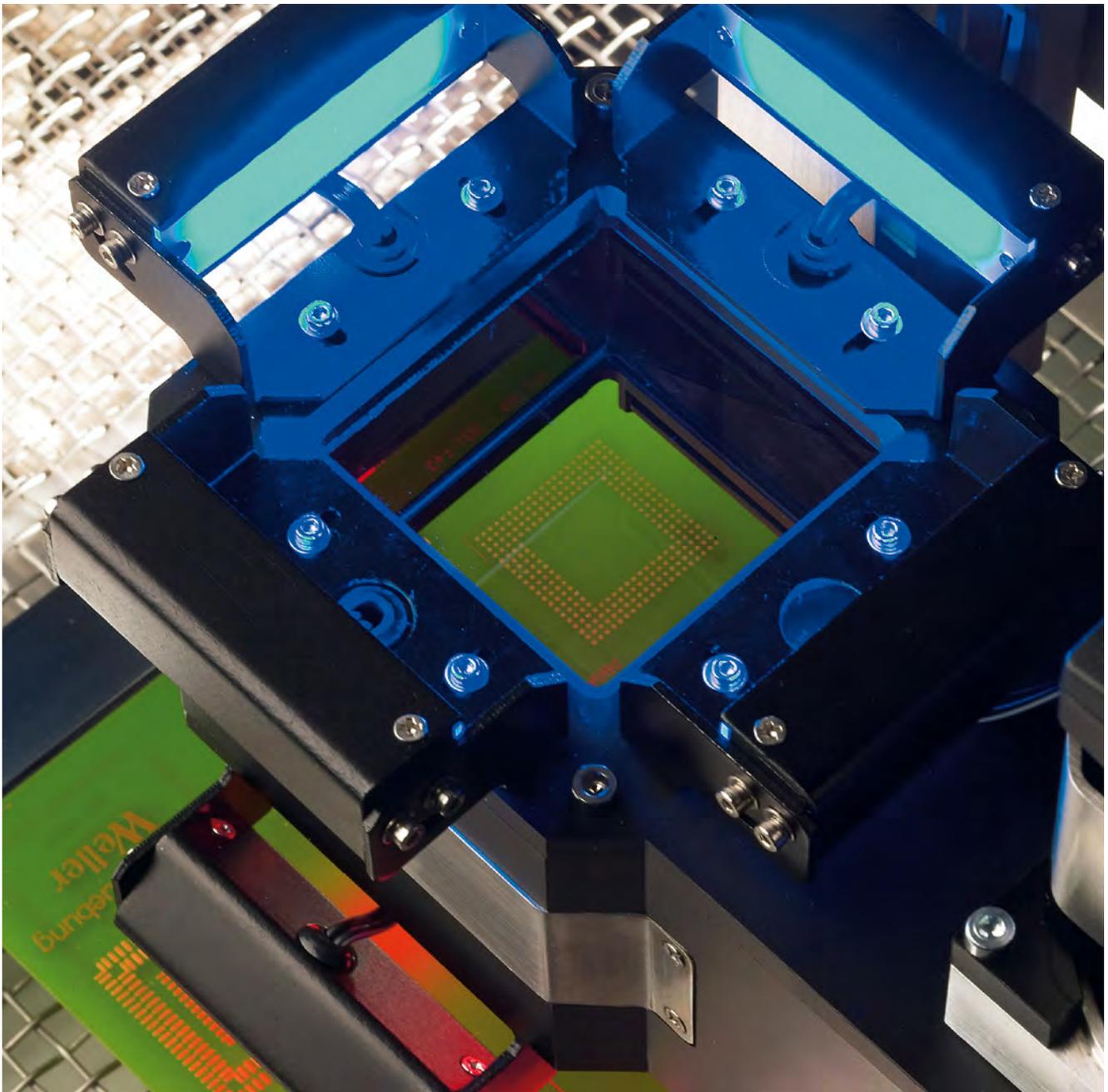
T005 31 191 99		RS 232 Interface cable
T005 31 190 99		K-Thermoelement 0,5 mm
T005 33 165 99	WBHS	Circuit board holder with pivoting stand
T005 33 164 99	WBH	Circuit board holder without pivoting stand

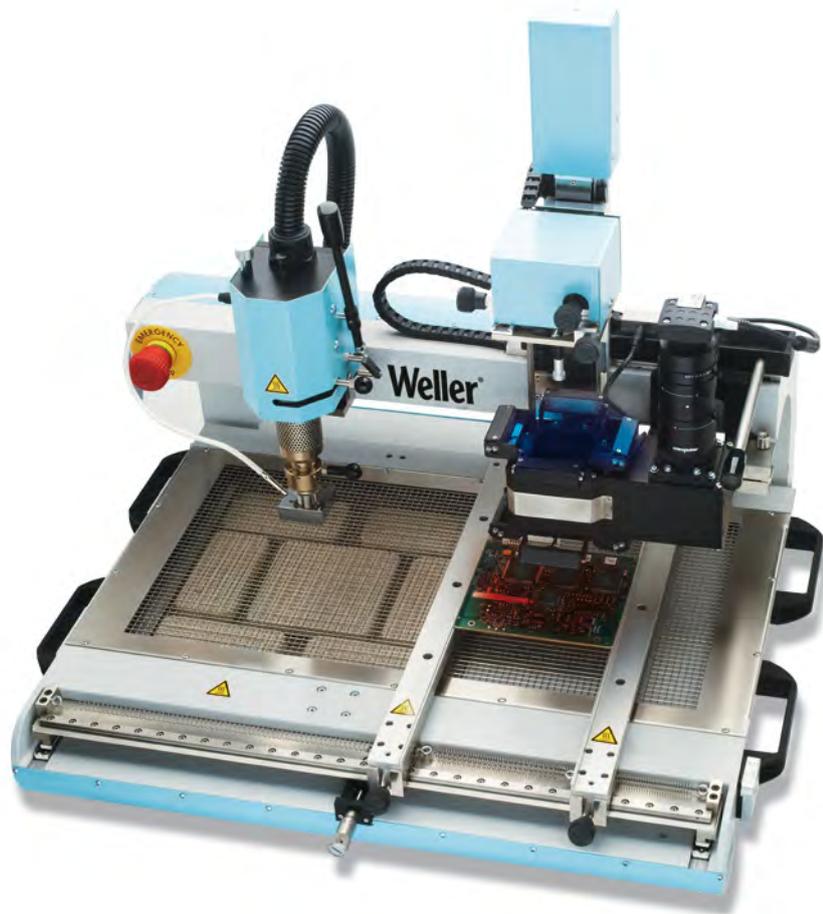
BGA/QFP Rework Systems

Weller WQB Rework System

The WQB 4000SOPS rework system upgrades the Weller product range in the SMD tool sector. A well thought-out design concept combines reliability and maximum process control with ease of use and technically advanced solutions. Usefull accessories increase the possible uses of these repair work stations. For the universal circuit board repair of BGA, QFP and SMD components, it is necessary to preheat the circuit board effectively from below and from above to precisely heat the components to be repaired to the reflow temperature as well as to reliably control the process. On the WQB 4000 the temperature regulated 2-Zone infrared bottom heater provides rapid warm-up and homogeneous substrate temperatures. The hot air top heater, with digital control electronics for temperature monitoring and regulation of the air flow rate, facilitates the finely metered supply of heat to the components.

A temperature sensor placed directly in the hot air nozzle efficiently regulates the top heater and thus provides maximum process control. On the digital programming unit all process steps can be programmed, saved and if necessary protected against unauthorized use as required. The most important process parameters are optionally displayed on the LC display during operation. Camera with two-color lighting for exact positioning.





WQB 4000SOPS

- 2300 W / 230 V
- BGA/SMT Rework system
- For components placing with camera support placing system



BGA Hot air nozzles
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Order-no.	Model	Description
T005 33 706 99	WQB 4000SOPS	BGA/SMT Rework system 2300 W / 230 V

Scope of supply:

Base unit with top heater, bottom heater, control electronics and pneumatic unit

Infrared radiation 1600 W

Positioning unit with digital camera and split optic

Circuit board holder with fine adjustment in X and Y direction

Temperature sensor PT 100

Nozzle change tool

Thermoelement type K 0,1 mm

5 pcs. Vacuum inserts Ø 4,5 mm

5 pcs. Vacuum inserts Ø 10,0 mm

Software WQB 4000 CONTROL and WQB 4000 SOPS

USB cable

Calibration tool

Vacuum pick up with 2 changeable vacuum inserts

Mains cable

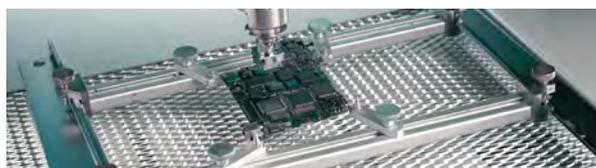
2 m connecting tube for compressed air

Instruction manual

Max. PC board size 450 x 500 mm

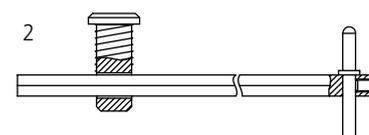
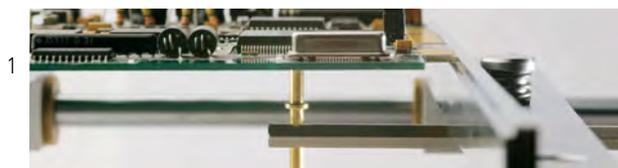
Accessories for für WQB 4000SOPS, WQB 3000OPS, WQB 3000 and WHA 3000 PS / VS

Clamping set



Order-no.	Description
T005 87 549 24	Clamping set for irregluar shaped circuit boards (e.g. mobilephones, video/digital camera boards, etc.)

Support



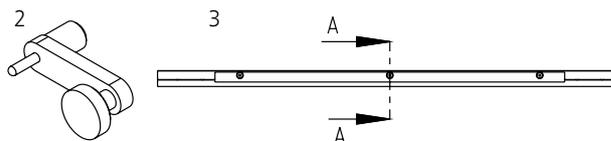
Order-no.	Description
1 T005 87 557 45	Support for large circuit boards for WQB 3000, WQB 3000OPS, WQB 4000SOPS with iron angle
2 T005 87 667 29	Support for circuit boards for WQB 4000 with aluminium angle

Adjustable circuit board stop



Order-no.	Description
T005 87 548 73	WQB 3000 Adjustable circuit board stop for WQB 3000 and WQB 4000

Downholder



Order-no.	Description
1 T005 87 557 41	Spring-loaded downholder with magnet stand for WQB 3000, WQB 3000SOPS, WBH, WBHS
2 T005 87 667 25	Spring loaded downholder with magnet stand for WQB 4000 with aluminium angle. Angle downholder please order separately.
3 T005 87 667 26	Angle downholder (for WQB 4000 with aluminium angle)

Temperature sensor

Order-no.	Description
T005 87 549 48	Temperature sensor for WQB 3000, WQB 3000OPS, WQB 4000SOPS



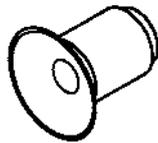
Thermoelement

Order-no.	Description
T005 87 557 82	Thermoelement type K, Ø 0,1 mm
T005 31 190 99	Thermoelement type K, Ø 0,5 mm



NQ-Adapter

Order-no.	Description
T005 87 549 70	NQ adapter for WQB 2000/3000/4000



Vacuum insert

Order-no.	Description
T005 87 137 99	Vacuum insert Ø 4,5 mm, 10 piece
T005 87 137 98	Vacuum insert Ø 10,0 mm, 10 piece