

# WHA3000PS

DIGITAL HOT AIR REWORK SYSTEM

## THE WELLER ADVANTAGE:

This station has high-end versatility to meet your most demanding rework challenges, including repair of fine-pitch components on densely-packed boards.



### WBHS

Circuit board holder with hot air pencil stand holds the HAP3 hot air pencil perpendicular to the printed circuit board under repair, raises and lowers it precisely onto the component being reworked.



### WHA3000P

700-watt hot air station features patented Weller nozzle technology for maximum process control and user friendly operation, plus a powerful variable speed-controlled turbine for an air volume of up to 50 liters/min

### WHA3000PS Components & Specifications:

#### WHA3000P

Voltage	120V (Input)
Power Consumption	700 W
Temperature Range	150° F – 999° F (50° C – 550° C)
Dimensions	9.5 x 10.6 x 6.7 in. (240 x 270 x 170 mm)
Pump Type	Maintenance-free Rotary Vane
Vacuum Pressure	-0.6 bar
Air Flow Volume	5 l/min. – 50 l/min.
Temperature Accuracy	+/- 54° F (+/- 30° C)
ESD Safe	Yes

#### WBHS Circuit Board Holder with Tool Stand

Order No. 0053316599  
(See Page 36 of this catalog for specifications)

#### WHP3000 Heating Plate

(See Page 36 of this catalog for specifications)

**FEATURES AND BENEFITS:**

- 700 watts of power allow work on larger dual in line and quad pack components
- An ion trap assures that only ESD safe hot air is directed at the component
- Memory to store up to 10 thermal profiles ensures process repeatability
- Holds circuit boards up to 310 mm x 320 mm for outstanding versatility
- IR heating plate has a total heated area of 120 mm x 190 mm with 3 ceramic elements for controlled, even heat.
- Set and read temperatures are digitally displayed
- An external sensor can be connected to display actual temperatures at specific areas of the circuit under repair to further guard against damage to sensitive components
- The hot plate can be controlled from its own independently or integrated into the control system of the WHA3000P or WHA3000V
- Three position foot switch: OFF – HOT AIR – VACUUM
- Self contained internal air and vacuum
- System includes a 0.669" x 0.925" (17.0mm x 23.5mm) hot air nozzle (Order no. 0058750721) For full range of hot air nozzles, see page 41



**WHP3000**

Positioned beneath the WBHS circuit board holder, this IR heating plate preheats circuit board under repair to reduce possibility of thermal damage.



# WHA3000PS

## COMPONENTS AND ACCESSORIES



### WBHS

#### CIRCUIT BOARD HOLDER AND TOOL STAND

- Holds circuit boards up to 310 mm x 320 mm for outstanding versatility
- Precision glides allow board to be precisely positioned and secured at any point along the X and Y axes
- Accommodates both single and double sided boards
- Holds PCBs totally flat for added precision and repeatability
- Tool holder positions hot air pencil perpendicular to the PCB
- Smooth-acting lever raises and lowers the tool precisely onto the component 1.4 in. (35 mm) along the Z axis

#### WBH CIRCUIT BOARD HOLDER (not shown)

Same as WBHS, but without tool holder

### WHP3000

#### INFRARED HEATING PLATE

- Reduces risk of thermal damage by providing controlled, even heat
- Set and read temperatures digitally displayed for added control of process
- Optional Type K thermocouple can be connected to display actual temperatures at specific areas of the circuit under repair to further guard against damage to sensitive components
- Can be used alone or beneath WBHS or WBH circuit board holders
- Can be controlled independently, or can be integrated into the control system of either the WHA3000P or the WHA3000V



### Components & Specifications

#### WBHS

Dimensions 12.6 x 17.6 x 17.3 in. (320 x 446 x 440 mm)  
Order No. 0053316599

#### WBH

Dimensions 12.6 x 17.6 x 3.9 in. (320 x 446 x 100 mm)  
Order No. 0053316499

#### WHP3000

Voltage 120 V  
Power Consumption 200 W (small heating zone);  
600 W (large heating zone)  
Temperature Range 150° F – 750° F (50° C – 400° C)  
Dimensions 10.0 x 15.6 x 2.8 in. (254 x 395 x 70 mm)  
ESD Safe Yes

### Accessories

0058754873 Adjustable circuit board stop  
0058755745 Support for large circuit boards  
0058755741 Circuit board clamp  
0058754924 Clamp set for irregular-shaped circuit boards (mobile phones, digital cameras, etc.)



0058754873



0058755745



0058755741



0058754924



# WHA3000P

DIGITAL HOT AIR STATION

## THE WELLER ADVANTAGE:

This 700-watt hot air station has advanced features for unsurpassed process control and a quiet, yet powerful internal air source for maximum portability.



"Stop and Go" tool holder automatically switches hot air pencil to "standby" mode, reducing air flow but maintaining operating temperature

## FEATURES AND BENEFITS:

- Self-contained bench-top unit – no external air source required
- Capable of performing demanding repair tasks on PCBs with complex fine pitch surface mounted components
- Set and read temperatures are digitally displayed
- Automatic mode allows up to ten separate programs to be stored in memory, each with a unique air temperature / air volume / process time profile for the ultimate in control and process repeatability
- Special ionizing circuit assures hot air is static-free to protect sensitive components
- Optional nozzle change tool allows quick changeout of nozzles, even when hot
- Works with optional Type K thermocouple to measure temperature on specific area of PCB for more precise process monitoring
- Three position foot switch: OFF–HOT AIR–VACUUM
- System includes a 0.669" x 0.925" (17.0mm x 23.5mm) hot air nozzle (Order no. 0058750721) Hot air pencil accepts wide range of patented technology nozzles for maximum versatility, see page 41

## WHA3000V

Similar to the WHA3000P, except without internal turbine air source; uses compressed air or inert gas

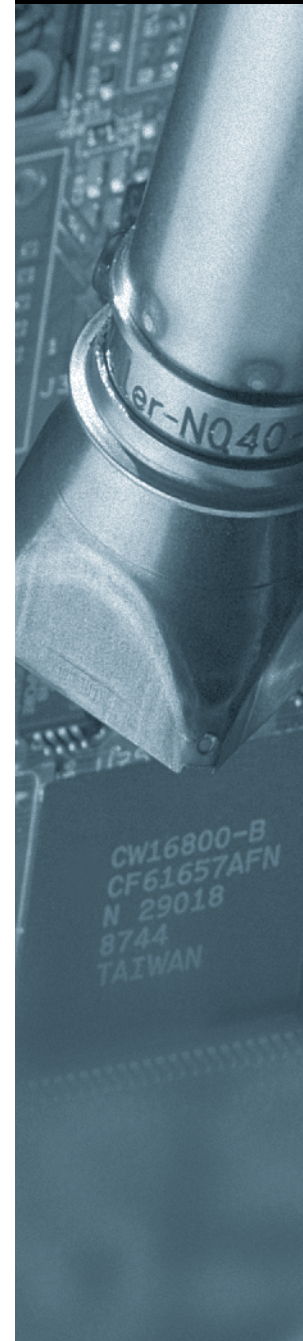


## WHA3000P Components & Specifications

<b>Power Unit</b>	
Voltage	120 V
Power Consumption	700 W
Temperature Range	150° F – 999° F (50° C – 550° C)
Dimensions	9.5 x 10.6 x 6.7 in. (240 x 270 x 170 mm)
Pump Type	Rotary Vane
Vacuum Pressure	- 0.6 Bar
Air Flow Volume	5 l/min. – 50 l/min.
Temperature Accuracy	+/- 54° F (+/- 30° C)
ESD Safe	Yes

## Accessories for WHA3000P and WHA3000V

0051504999	Nozzle change tool
0058755782	0.10 mm Type K external sensor
0053119099	0.50 mm Type K external sensor
0051504899	Stand for hot air nozzles



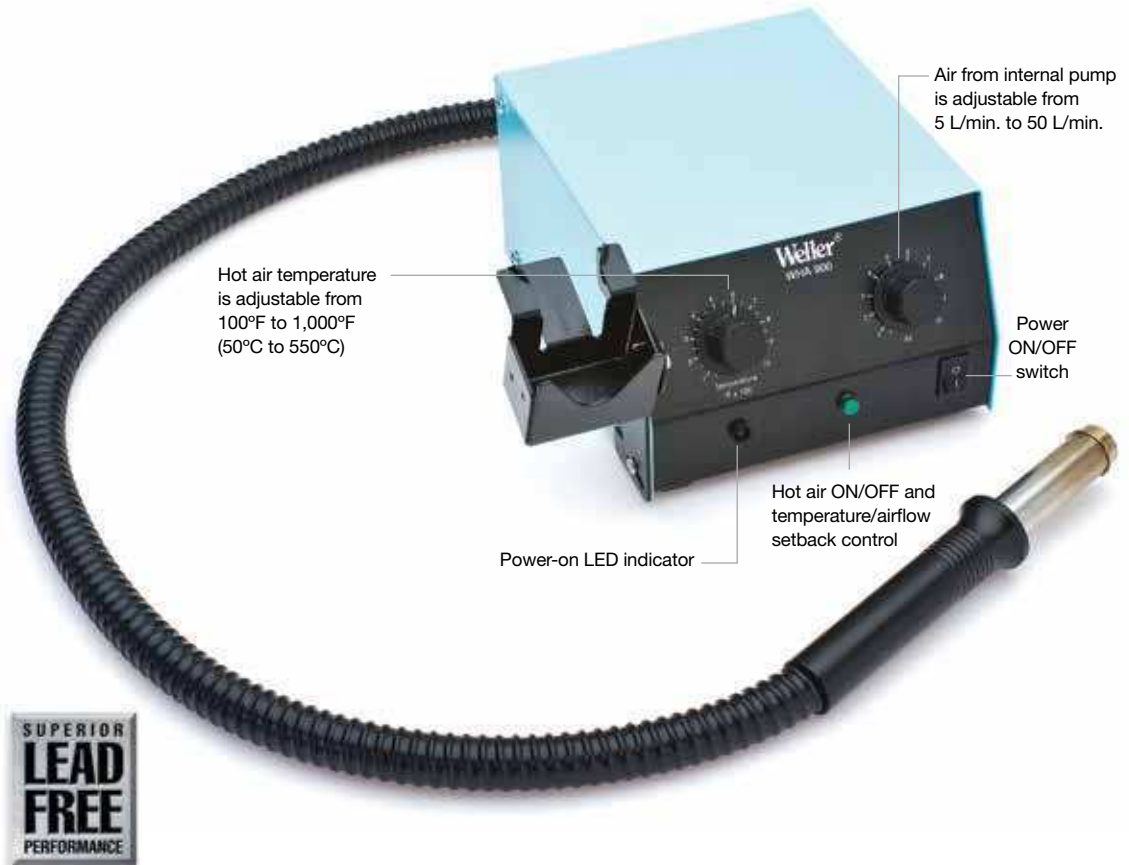
HOT AIR STATIONS

# WHA900

SELF CONTAINED HOT AIR REWORK STATION

## THE WELLER ADVANTAGE:

The WHA900 has a closed loop feedback that continuously monitors and controls the temperature. Set it once and forget it.



## FEATURES AND BENEFITS:

- Temperature and air flow setback can be pre-selected by the user
- Closed loop feedback continuously adjusts heat output
- Hot air hand piece uses WHA nozzles found on page 41

## WHA900 Components and Specifications:

<b>Power Unit</b>	
Voltage	120 V (input); 120 V (output)
Power Consumption	750 W
Temperature Range	150° F – 1000° F or 50° C – 550° C
Dimensions	8.125 x 6.625 x 4.25 in. (206 x 168 x 108 mm)
Pump Type	Turbine
Air Flow Volume	5 l/min. – 50 l/min.
Temperature Accuracy	+/- 54° F (+/- 30° C)
ESD Safe	Yes
Closed-loop temperature control	Yes



Patented Weller nozzle technology safely removes surface mount components. Nozzle not included.



# WR2000

DIGITAL SELF CONTAINED HOT AIR REWORK STATION

HOT AIR  
STATIONS

## THE WELLER ADVANTAGE:

Digital microprocessor control and an internal air and vacuum source give this 300-watt dual channel rework station amazing performance and versatility.



## FEATURES AND BENEFITS:

- Self-contained air and vacuum
- Economy (ECO) button for "sleep mode"
- Programmable temperature presets for immediate temperature selection
- 2 independent tool channels with automatic tool recognition
- Simultaneous use of 2 tools (up to maximum 300 W power rating of the unit)
- ESD safe
- Hot air pencil uses HAP series nozzles found on page 33

## Components and Specifications:

Order No.	Model	Description
WR 2	WR 2	Power unit, 300 W
0052711599	HAP 1	Hot air pencil 100 W / 24 V fitted with 3.0 round nozzle
0051515299	WDH 30	Safety rest



# WAD101

DIGITAL COMPRESSED AIR HOT AIR STATION

**THE WELLER ADVANTAGE:**

Digital microprocessor control and the ability to use external compressed air or gas give this 100-watt hot air station amazing performance and versatility.

Analog dial for manual control of hot air flow

Digital display shows set and actual temperatures



**FEATURES AND BENEFITS:**

- Powerful (100-watt) HAP1 pencil precisely delivers hot air to small SMT parts, reducing the risk of damage to adjacent components
- Finger-activated hot air switch on pencil provides exceptional control
- Digital temperature control has easy-to-read LED display for fast and accurate temperature set
- Optional WCB1 programming module provides temperature lock-out for process control, temperature set-back for extended tip life, and ° F to ° C conversion
- Hot air pencil uses HAP nozzles found on page 33

**WAD101 Components and Specifications:**

**Power Unit**

Voltage	120 V (input); 24 V (output)
Power Consumption	100 W
Temperature Range	150° F – 999° F or 50° C – 550° C
Dimensions	4.5 x 5.9 x 3.6 in. (114 x 150 x 91 mm)
Air Flow Volume	1 l/min. – 6 l/min.
Temperature Accuracy	+/- 54° F (+/- 30° C)
ESD Safe	Yes

**HAP1 Pencil**

Power Consumption	100 W
Heating Element Type	Nichrome wound; fiberglass and ceramic insulated
Cord Length	4 ft. (1.22 m)
ESD Safe	Yes
Supplied Nozzle	1.2mm nozzle (Order No. 0058727821)
Supplied Stand	KH 27

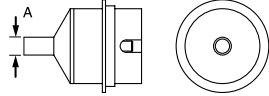
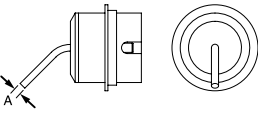
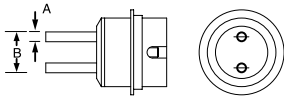
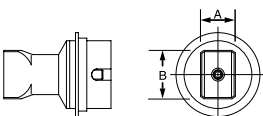
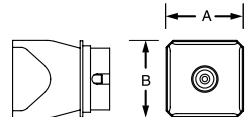
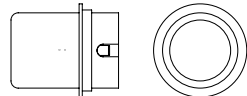


# NOZZLES

HOT AIR STATIONS

## FOR WHA SERIES STATIONS

(Δ) Denotes Make To Order. Contact us for a quote and lead-time.

<b>ROUND (NO VACUUM)</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736881	0.098	2.50	--	--	
	0058736867	0.157	4.00	--	--	
	0058736870	0.276	7.00	--	--	
	0058736836Δ	0.453	11.50	--	--	
<b>ROUND BENT (NO VACUUM)</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736882	0.059	1.50	--	--	
<b>ROUND DUAL (NO VACUUM)</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736883	0.098	2.50	0.374	9.50	
<b>2-SIDES HEATED</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736840	0.583	14.80	0.846	21.50	
	0058736842	0.394	10.00	0.551	14.00	
	0058736843	0.421	10.70	0.421	10.70	
	0058736841	0.472	12.00	0.748	19.00	
	0058736876Δ	0.472	12.00	1.063	27.00	
	0058736857Δ	1.496	38.00	1.496	38.00	
	0058736873Δ	1.575	40.00	1.575	40.00	
<b>4-SIDES HEATED</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736839	0.433	11.00	0.433	11.00	
	0058736818	0.583	14.80	0.583	14.80	
	0058736814	0.709	18.00	0.709	18.00	
	0058736807	0.807	20.50	0.807	20.50	
	0058736804	1.024	26.00	1.024	26.00	
	0058736833	1.260	32.00	1.260	32.00	
	0058736891	1.417	36.00	1.417	36.00	
	0058736890Δ	1.693	43.00	1.693	43.00	
	0058736838	0.394	10.00	0.571	14.50	
	0058736880Δ	0.472	12.00	0.945	24.00	
	0058736837	0.512	13.00	0.610	15.50	
	0058736892Δ	0.551	14.00	1.063	27.00	
	0058750721	0.669	17.00	0.925	23.50	
	0058736877Δ	0.669	17.00	1.142	29.00	
	0058736998Δ	0.906	23.00	1.398	35.50	
	0058736999Δ	1.201	30.50	1.909	48.50	
	0058736858Δ	1.260	32.00	1.732	44.00	
0058750709Δ	1.496	38.00	1.909	48.50		
0058750714Δ	1.496	38.00	2.402	61.00		
<b>ROUND DUAL (ADAPTER)</b>		Cat No.	A		B	
			IN.	MM	IN.	MM
	0058736819	--	--	--	--	
<b>CSF REPLACEMENT RUBBER INSERTS</b>		Cat No.	Description		O.D.	
			I.D.			
		W58713798	Ø.6 mm stem / Ø 10 mm cup (10 pcs.)			
		W58713799	Ø.3 mm stem / Ø 4.5 mm cup (10 pcs.)			





# WHP200

200 WATT IR PRE HEATER

## THE WELLER ADVANTAGE:

The WHP200 is a small, powerful, infrared preheater designed to minimize the risk of thermal damage and to speed up the repair process on small multilayer PCBs.



## FEATURES AND BENEFITS:

- Suitable for use with a range of consumer electronic boards. It is perfect for rework operations on digital camera, mobile phone, MP3 player, and PDA PCBs
- The infrared plate provides fast, precisely controlled heating to create an even substrate temperature
- Simple to use, with very easy adjustment for the heating temperature
- Heating plate comes complete with a PCB board holder so there is no need to buy additional accessories
- Set and read temperatures digitally displayed for added process control

## WHP200 Components and Specifications:

### Power Unit

Dimensions (L x W x H) incl. pcb holder	7.6 x 7.6 x 3.3 inch (193 x 193 x 84 mm)
Dimensions Heating Zone (L x W)	4.72 x 2.36 inch (120 x 60 mm)
Voltage	120 V / 50/60 Hz
Power	Heat Zone 200 W, Medium Wave Infrared
Temperature Range	150°F – 750°F (50°C – 400°C)

# WHP1000

## DIRECT CONTACT PREHEATER

### THE WELLER ADVANTAGE:

The WHP1000 is a high power preheater that is suitable for contact preheating. Use it under a board holder, or simply place your work directly on the working surface. The WHP1000 is well suited for use with flat silicon cells as well as ceramic and glass printed circuit boards.



### FEATURES AND BENEFITS:

- Allows the temperature of the board's substrate material to be raised to the correct working temperature, ensuring perfect soldering operations without the risk of damage from thermal shock to the board
- Large 8.75 x 6.00 inch pre-heating area with even heat distribution
- Four heating elements allow electronic assemblies to be pre-heated in a variety of ways
- Digitally controlled electronics ensure precise temperature regulation and support special functions such as "Auto Off" and "Standby Temperature". Set and actual temperatures can be viewed on the digital display
- An insulated Type K thermocouple (optional) can be used to monitor the temperature at specific locations on the board (0.5mm, Order no. 0053119099), (0.1mm MTO, Order no. 0058755782)
- An integrated RS232 interface enables the device to be controlled externally from the Weller WHA3000P or WHA3000V
- RoHS Compliant - MIL-SPEC compliant

### WHP1000 Components and Specifications:

#### Power Unit

Dimensions	(W x L x H): 10.0 x 11.0 x 2.75 inches (254 x 280 x 70 mm)
Heating plate	6.0 x 8.75" (150 x 220 mm)
Power supply	120 V / 50/60 Hz
Power	850 W
Temperature range	150°F - 570°F (50°C - 300°C)
ESD Safe	Yes

