Convection Rework HCT-1000 System



The HCT-1000 is a fully Programmable Handheld Convection Tool offering fast and easy removal and placement of SMT components.

The HCT-1000 stands out as a versatile convection rework tool. It can be used on its own or as part of the MRS-1100A Modular Rework System for more complex applications.

The system comes equipped 5 mm diameter nozzle and nozzle adapter. In addition, a wide range of nozzles are available.



System Specifications - HCT-1000			
Input Line Voltage	100 - 240 VAC, 50/60 Hz		
Rated Power	600 W		
Surce Temperature	Up to 450 °C (840 °F)		
Heating Method	Convection		
Airflow	5 - 25 l/min		
Noise Level	< 55 dBA at maximum airflow		
Surface resistivity	10 ⁷ - 10 ¹¹ Ohm		
Vacuum Pump for Pick-Up Components	381 mm Hg (15" Hg)		
Display	LCD, 20 X 4 display segments		
Operational Modes	Setup, Run, Manual, Active Setup		
Storable Solder Profiles	50		
Size W x D x H	178 x 229 x 152 mm (7" x 9" x 6")		
Weight	5.4 kg (12 lb)		
Certification/Marking	TUV, CE		

Part No.	Description		
HCT-1000	Programmable Hand-Held Convection Tool		
Includes parts listed below			
HCT-PS1000	HCT-1000 Power Supply		
HCT-HV1	Handpiece with integral vacuum, cord & connector		
HCTA-VC-KIT	Vacuum Cup kit, one of each *(see Accessories)		
HCTA-TH1	Handpiece Tool Holder		
HNA-1	Nozzle Adapter		
HCTA-NW1	Nozzle Wrench		
AC-TCK-36-36	Thermocouple, Ø 0,13 mm (36 AWG), pack of 2		
HCTA-CC	Communication cable, length 1.22 m (4 ft)		
HN-J0005	Nozzle, ø 5 mm		

Accessories

HCT-FS2 1 Footswitch, Dual, HCT-1000

HCT-HTRASSY Heater Assembly

AC-TCK-40-36 Thermocouple, Ø 0,08 mm (AWG 40) pack of 2

HCTA-VC50-5 * Vacuum Cup, 3/16" (Ø 5 mm), pack of 5

HCTA-VC64-5 * Vacuum Cup, 1/4" (Ø 6.4 mm), pack of 5

HCTA-VC80-5 * Vacuum Cup, 5/16" (Ø 8 mm), pack of 5

HCTA-VC11-5 * Vacuum Cup, 7/16" (Ø 11 mm), pack of 5

Key Features & Benefits

- Integrated vacuum pickup for easy component removal
- Profile creation for operator repeatability and storage for up to 50 userdefined profiles
- Manual mode for quick setup
- External thermocouple for process setup and verification
- Handpiece controls for heater and vacuum
- Programmable, digitally-controlled airflow for repeatable results
- Multiple modes of operation: manual, 4-zone heating (with the MRS-1100A System)
- The HCT-1000 is connected to the PCT-1000 via a cable when used as part of the MRS System
- May be used with ATH-1100A Adjustable Tool Holder



Convection Rework HCT-1000 Systems

HN Series Nozzles

A series of 14 nozzles are available for use with the MRS-1000/HCT-1000. The nozzles fit applications reworking components of all sizes from (including, but not limited to) BGAs, QFPs, LGAs, PLCC, and SOIC. A custom nozzle program is also available.

Nozzle Measurement and Selection

HN-BXXYY

XX

.YY -

The nozzle part number (the digits after the "B") represents the size of the component. Two millimeters have been added to each side of the internal nozzle dimension to allow for component access.

Part Number		Component Size	Components
HN-B0707	1	7 X 7 mm	CSP, LGA44
HN-B1010	1	10 X 10 mm	CSP, LGA178, LCC28
HN-B1414	1	14 X 14 mm	CSP, QFP, TQFP100
HN-B1408	2	14 X 8 mm,	CSP, SOIC24M
HN-B1515	3	15 X 15 mm	BGA
HN-B1818	3	18 X 18 mm	PLC44, CSP, TQFP100, BGA
HN-B2525	3	25 x 25 mm	BGA, PLCC68
HN-B1809	4	18.2 X 8.5 mm	SOLJ28, SOIC28M, TSOP32
HN-B2519	4	24.5 X 18.5 mm	QFP100, QFP80
HN-B2727	5	27 X 27 mm	BGA
HN-B3232	5	32 X 32 mm	BGA
HN-B3535	5	35 X 35 mm	BGA
HN-B4040	5	40 X 40 mm	BGA
HN-J0005	6	Small to large size	DISCRETE

Nozzle Accessories

METCAL

HNA-1 Nozzle Carrier	7
HCT-NC Nozzle Adapter	8
HCTA-NW1 Nozzle Wrench	9

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