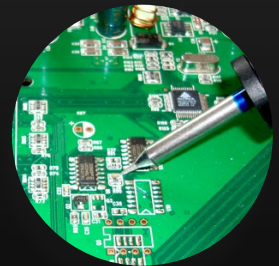
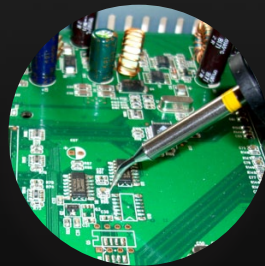




THERMALTRONICS



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TMT-R9800S

Precision Robot Soldering System



TMT-R9800S

ESD
FREE

LEAD
FREE

The Thermaltronics Robot System incorporates innovative design concepts and precision components to ensure accuracy. The combination of high precision hardware and intelligent software ensures precision soldering and low operator training costs.

- ▶ Six Axis Soldering/Dispensing Platform
- ▶ Full vision mapping & Fiducial Marks
- ▶ Laser Height Measurement
- ▶ Curie Heat Technology provides precise temp. control
- ▶ Flux & Solder Paste dispensing
- ▶ Fume extraction
- ▶ Desoldering (Optional)
- ▶ Nitrogen Protection (Optional)

TMT-R9800S FEATURES

1. Unlike typical Cartesian robots the Thermaltronics Robot, Model TMT-R9800S, is equipped with full vision, (eyes) to verify the procedure being undertaken and does not simply follow a pre-determined program. In this respect it has an observation mode, a verification mode and as a result – a decision making capability. (Basically a brain). This capability of collecting and utilizing data for production processing is one of the most important factors necessary to meet the requirements of Industry 4.0 standards.
2. Through the use of servo motors and precision ballscrews, the Thermaltronics Robotic system is able to accurately meet the requirements of high speed operation, repeatability and durability. The software is designed to transform system commands into functional operating procedures and with its 6-axis capability, 360° independent fixture rotation, solder tip and solder wire feeding operation from separate axis control, the applications extend beyond conventional soldering and dispensing operations.
3. Application programming is made simple by using full image-merging and mapping techniques.
4. Dynamic laser height measurement/adaptive control, ensures precision soldering repeatability.
5. A full vision mapping system with fiducial marks, provides for intelligent decision making during procedural operations



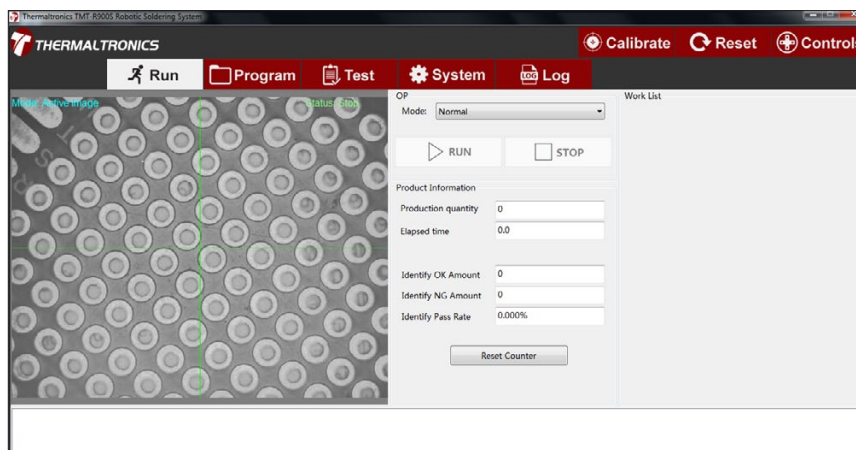
TMT-R9800S

Precision Robot Soldering System

TMT-R9800S SPECIFICATIONS

Input Line Voltage	TMT-R9800PS-1	100-110 VAC
	TMT-R9800PS-2	220-240 VAC
Servo Motor Axis	6 Axis	
Camera View	290mm x 200mm	
PCBA Size Max	200mm x 200mm with rotation	
Soldering Region Max	190mm x 170mm	
Dynamic Range of Shaft	X Axis	290mm Standard
	Y Axis	200mm Standard
	Z1, Z2 Axis	70mm
	R Axis	360°
Shaft Speed	X, Y & Z Axis	0.1 ~ 300 mm/sec
	R Axis	0.1 ~ 450°/sec
Positioning Repeatability	X, Y & Z Axis	±0.01 mm
	R Axis	±0.02°
Camera resolution	0.015mm	
Air Pressure	Max. 6 Bar/ 87 psi	
Solder wire diameter range	0.4 ~ 1.0 (mm) (Optional: 0.3mm - 2.0mm)	
Controller	Industrial Computer	
Operating System	Windows 10 Professional	
Soldering System	120 watts (40 watts RF output)	
Curie Heat Technology	320C ~ 475C (Tip cartridge pre-defined)	
Power Supply	100 ~ 240V AC	
Power Consumption	1 KVA	
Dimensions	800mm (H) x 702mm (D) x 620mm (W)	
Weight	125 KG	

SOFTWARE INTERFACE

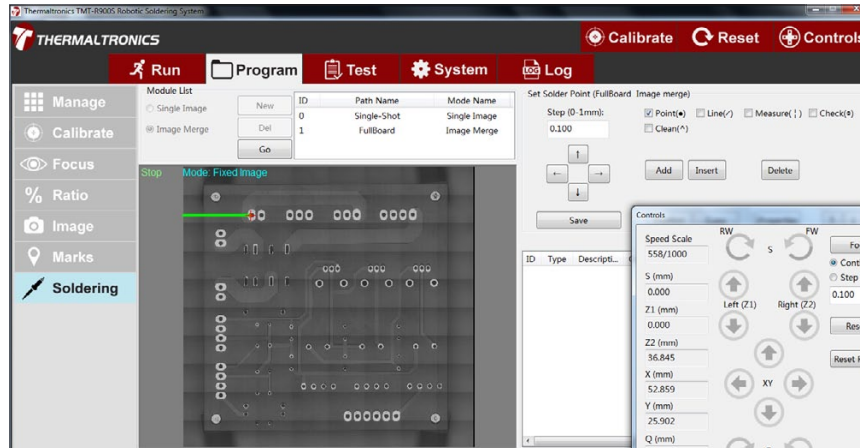




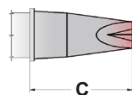
TMT-R9800S

Robot Soldering System

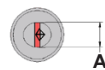
SOFTWARE INTERFACE



R SERIES TIP CARTRIDGES



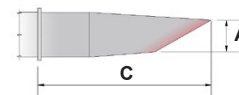
CHISEL W/GROOVE



CHISEL

Part Number	A		C	
	MM	IN.	MM	IN.
R7BCV020	2.00	0.08"	9.00	0.35"
R7BCV024	2.40	0.09"	9.00	0.35"
R7BCV030	3.00	0.12"	9.00	0.35"
R7DV010	1.00	0.04"	9.00	0.35"
R7DV013	1.30	0.05"	9.00	0.35"
R7DV016	1.60	0.06"	9.00	0.35"
R7DV020	2.00	0.08"	9.00	0.35"
R7DV024	2.40	0.09"	9.00	0.35"
R7DV030	3.00	0.12"	9.00	0.35"
R7DV040	4.00	0.16"	9.00	0.35"
R7DV050	5.00	0.20"	9.00	0.35"
R7FK010	1.00	0.04"	9.00	0.35"
R7FK013	1.30	0.05"	9.00	0.35"
R7FK016	1.60	0.06"	9.00	0.35"
R7FK020	2.00	0.08"	9.00	0.35"
R7FK024	2.40	0.09"	9.00	0.35"
R7LRF403C1	1.78	0.07"	15.00	0.59"

Part Number	A		C	
	MM	IN.	MM	IN.
R7D008	2.00	0.08"	9.00	0.35"
R7D010	2.40	0.09"	9.00	0.35"



BEVEL

Part Number	B		C	
	MM	IN.	MM	IN.
R7PC010	1.00	0.04"	10.00	0.39"
R7PC012	1.20	0.05"	10.00	0.39"
R7PC016	1.60	0.06"	10.00	0.39"

*Only commonly used tips are listed. For customized tips and specialty tips please inquire with your local distributor

6 = Temperature Sensitive 7 = Standard Applications 8 = High Performance

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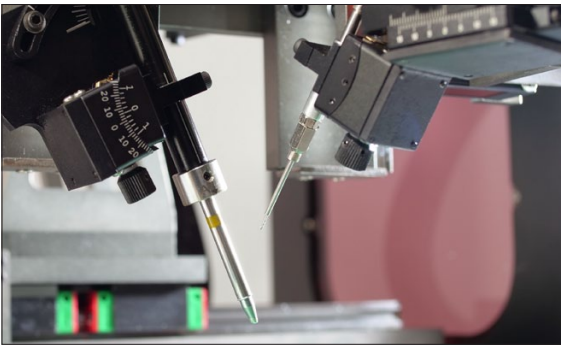
TMT-R9800S

Robot Soldering System

HARDWARE FEATURES

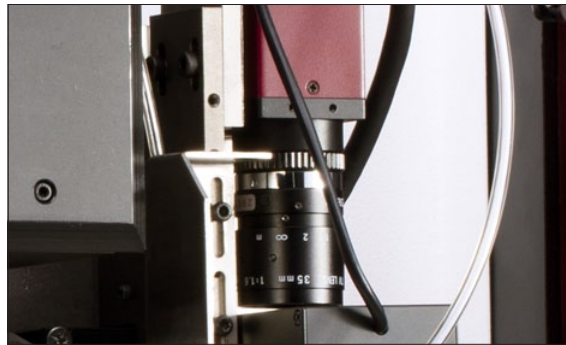
DUAL ARM SYSTEM

- ▶ Soldering Tip and Solder Wire Feeder are located on two different arms, this simulates the operator's soldering process.



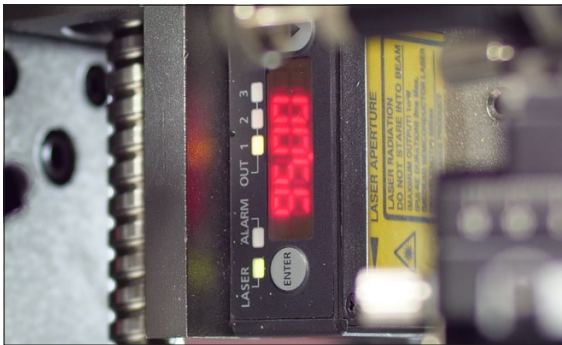
VISION SYSTEM

- ▶ High resolution Camera for image recognition, scanning & fiducial marks.
- ▶ Programming is done on the image.



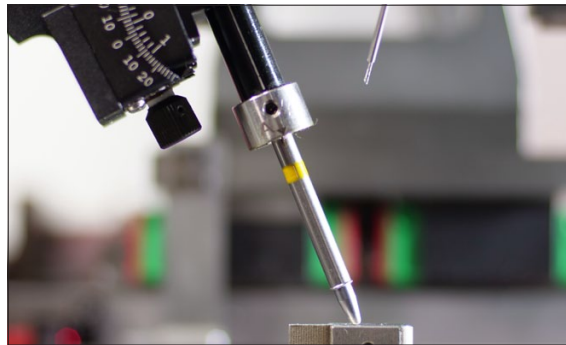
LASER HEIGHT MEASUREMENT

- ▶ Real time laser measurement eliminates height variance in soldering
- ▶ Check for missing parts & board warpage



SOLDER TIP CALIBRATION

- ▶ Easy to use tip calibration
- ▶ Maintain high accuracy & repeatability during soldering processes



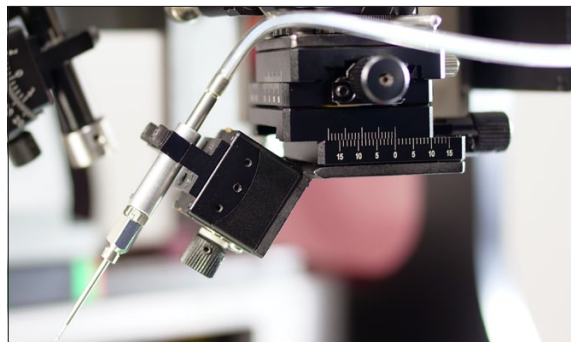
TIP CLEANING SYSTEM

- ▶ Two types of cleaning: air blower & brass brush
- ▶ Solder tip can move separately from the solder wire feeder



FINE TUNING

- ▶ Fine tuning system for solder tip and solder wire feeder
- ▶ Fast and accurate system setup





TMT-R9900S

Inline Robot Soldering System



TMT-R9900S

**ESD
FREE**

**LEAD
FREE**

The Thermaltronics Robot System incorporates innovative design concepts and precision components to ensure accuracy. The combination of high precision hardware and intelligent software ensures precision soldering and low operator training costs.

- ▶ 8-Axis Soldering/Dispensing Platform
- ▶ Full vision mapping & Fiducial Marks
- ▶ Laser Height Measurement
- ▶ Curie Heat Technology provides precise temp. control
- ▶ Dynamic Compensation for board variance
- ▶ Fume extraction
- ▶ Flux & Solder Paste Dispensing (Optional)
- ▶ PCB Loader w/Preheater (Optional)
- ▶ Nitrogen Protection (Optional)

TMT-R9900S SPECIFICATIONS

Input Line Voltage	TMT-R9900PS-2	220-240 VAC
Servo Motor Axis	8 Axes	
Camera View	450mm x 550mm	
PCBA Size Max	450mm x 550mm	
Soldering Region Max	450mm x 450mm with rotation	
Dynamic Range of Shaft	X Axis	550mm Standard
	Y Axis	800mm Standard
	Z1, Z2 Axis	150mm
	Q Axis	360°
Shaft Speed	X, Y Axis	0.1 ~ 1200 mm/sec
	Z Axis	0.1 ~ 800 mm/sec
	Q Axis	0.1 ~ 360°/sec
Position Repeatability	X, Y & Z Axis	±0.01 mm
	Q Axis	±0.02°
Rotation Platform	Repeatability	sec ±5 (0.001°)
	Accuracy	sec ±10 (0.002°)
	Concentricity	mm ±0.01
Camera	Resolution	0.015mm
Air Pressure	Max. 8 Bar / 120 psi	
Solder wire diameter range	0.4 ~ 1.0 (mm) (Optional: 0.3mm - 2.0mm)	
Controller	Industrial Computer w/Proprietary Software	
Curie Heat Technology	250C ~ 500C (Tip cartridge pre-defined)	
Dimensions	1600mm (H) x 1452mm (D) x 1000mm (W)	
Weight	750 KG	



TMT-R8000S

Standard Robot Soldering System

TMT-R8000S

**ESD
FREE**

**LEAD
FREE**

The Thermaltronics Robot System incorporates innovative design concepts and precision components to ensure accuracy. The combination of high precision hardware and intelligent software ensures precision soldering and low operator training costs.

- ▶ 6-Axis Soldering/Dispensing Platform
- ▶ Full vision mapping & Fiducial Marks
- ▶ Laser Height Measurement
- ▶ Curie Heat Technology provides precise temp. control
- ▶ Dynamic Compensation for board variance
- ▶ Fume extraction Kit
- ▶ Flux & Solder Paste dispensing (Optional)
- ▶ Nitrogen Protection (Optional)



TMT-R8000S SPECIFICATIONS

Input Line Voltage	TMT-R8000PS	100-240 VAC
Servo Motor Axis	6 Axes	
Camera View	400mm x 300mm	
PCBA Size Max	300mm x 300mm	
Soldering Region Max	300mm x 300mm	
Dynamic Range of Shaft	X Axis	400mm Standard
	Y Axis	300mm Standard
	Z1, Z2 Axis	100mm, 20mm
	R Axis	330°
Shaft Speed	X, Y Axis	0.1 ~ 300 mm/sec
	Z Axis	0.1 ~ 300 mm/sec
	R Axis	0.1 ~ 360°/sec
Positioning Repeatability	X, Y & Z Axis	±0.02 mm
	R Axis	±0.03°
Camera	Resolution	0.015mm
Air Pressure	Max. 6 Bar/ 87 psi	
Solder wire diameter range	0.4 ~ 1.0 (mm) (Optional: 0.3mm - 2.0mm)	
Controller	Industrial Computer w/Custom Software	
Ports and connectors	RJ45, USB, COM	
Operating System	Windows 10 Professional	
Soldering System	120 watts (40 watts RF output)	
Curie Heat Technology	250C ~ 500C (Tip cartridge pre-defined)	
Dimensions	840mm (H) x 690mm (D) x 660mm (W)	
Weight	100 KG	



TMT-9000S

Soldering & Rework Station

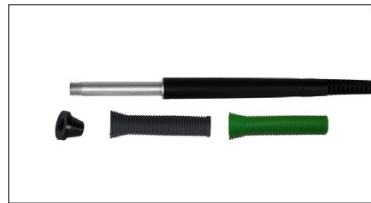
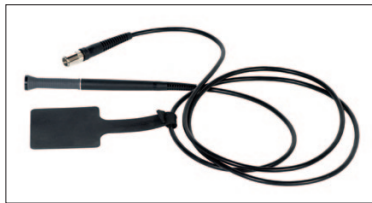


TMT-9000S

ESD SAFE LEAD FREE

The TMT-9000S is based on Curie Heat Technology which responds to the thermal demands of each solder joint by adjusting the power instantaneously, thereby meeting the exact requirements of the substrate component and solder material.

- ▶ High thermal recovery & performance.
- ▶ 13.56MHz power supply with built-in LCD display.
- ▶ Dual switchable soldering ports.
- ▶ No calibration or operator training required.
- ▶ No additional coil assembly costs.



TMT-9000S SPECIFICATIONS

Input Line Voltage:	TMT-9000PS-1	100-110 VAC
	TMT-9000PS-2	220-240 VAC
Surface Resistivity:	10 ⁵ - 10 ⁹ Ω/sq	
Tip to Ground Potential:	<2 mV	
Tip to Ground Resistance:	<2 Ohms	
Idle temperature Stability:	+/- 1.1 °C (2 °F)	
Max Enclosure Temperature:	50 °C (122 °F)	
Fuse:	TMT-9000PS-1	250V 1A "Slo-Blo"
	TMT-9000PS-2	250V 0.5A "Slo-Blo"
Output Power (Maximum):	40 Watts	
Output Frequency:	13.56 MHz	
Size (W x H x D):	212mm x 118mm x 132mm	
Weight:	3.47 KG	
LCD display:	60mm x 16mm	
Input Line Frequency:	50/60 Hz	

PACKING LIST

TMT-9000PS	Power Supply
SHH-1	Soldering Handpiece Holder
SHP-1	Soldering Handpiece
RMP-1	Tip Removal Pad
SG-1-GR	Handpiece Grip Green
SG-1-GY	Handpiece Grip Gray
BC-1	Brass Curls
SPG-1	Sulphide Free Sponge
M7CH176	Soldering tip cartridge

CERTIFICATION MARKS



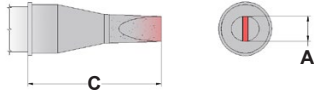
*Tested & certified by TUV-SUD

THE THERMALTRONICS



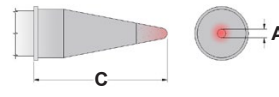
TMT-9000S

M Series Tip Cartridges



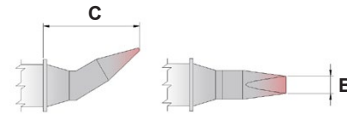
CHISEL

Part Number	A		C	
	MM	IN.	MM	IN.
M7CH012	1.20	0.05"	13.00	0.51"
M7CH016	1.60	0.06"	13.00	0.51"
M7CH024	2.40	0.09"	13.00	0.51"
M7CH030	3.00	0.12"	11.00	0.43"
M7CH038	3.80	0.15"	22.00	0.87"
M7CH052	5.20	0.20"	12.00	0.47"
M7CH175	2.50	0.10"	10.00	0.39"
M7CH176	1.78	0.07"	10.00	0.39"
M7CH177	1.50	0.06"	10.00	0.39"
M7CH178	1.00	0.04"	9.00	0.35"
M7CH179	1.00	0.04"	6.40	0.25"
M7CH180	3.00	0.12"	8.90	0.35"
M7CH181	3.00	0.12"	5.20	0.20"
M7CH250	5.00	0.20"	7.50	0.30"
M7CP200	2.50	0.10"	6.40	0.25"
M7CP201	1.80	0.07"	6.40	0.25"
M7CP202	1.50	0.06"	6.40	0.25"
M7LC650	5.00	0.20"	11.40	0.45"
M7LR403	1.78	0.07"	15.00	0.59"



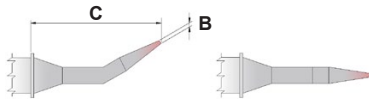
CONICAL

Part Number	A		C	
	MM	IN.	MM	IN.
M7C300	0.40	0.016"	14.00	0.55"
M7C301	0.50	0.02"	5.00	0.20"
M7CP302	0.40	0.016"	8.90	0.35"
M7CP303	1.00	0.04"	7.40	0.29"
M7CS150	0.40	0.016"	13.00	0.51"
M7CS151	1.00	0.04"	13.40	0.53"
M7CS152	0.40	0.016"	8.50	0.33"
M7CS154	1.00	0.04"	16.40	0.65"
M7CS155	0.50	0.02"	15.40	0.61"
M7MF375	0.25	0.01"	13.40	0.53"



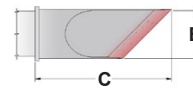
CHISEL BENT

Part Number	B		C	
	MM	IN.	MM	IN.
M7CB225	1.78	0.07"	10.00	0.39"
M7CB226	1.50	0.06"	12.00	0.47"



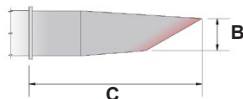
CONICAL BENT

Part Number	B		C	
	MM	IN.	MM	IN.
M7B325	0.40	0.016"	16.00	0.63"
M7BS375	0.25	0.01"	13.00	0.51"
M7MD575	0.51	0.02"	15.40	0.61"
M7SB275	0.40	0.016"	8.40	0.33"
M7SB276	0.50	0.02"	14.00	0.55"



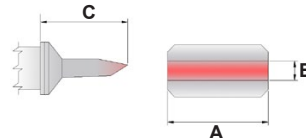
KNIFE

Part Number	B		C	
	MM	IN.	MM	IN.
M7DS526	4.83	0.19"	16.00	0.63"
M7K047	4.70	0.19"	13.00	0.51"
M7K100	4.83	0.19"	16.40	0.65"



BEVEL / HOOF

Part Number	B		C	
	MM	IN.	MM	IN.
M7BV010	1.00	0.04"	13.40	0.53"
M7BV030	3.00	0.12"	13.00	0.51"
M7BV350	1.78	0.07"	14.00	0.55"
M7BS602	1.80	0.07"	6.40	0.25"
M7DS525	3.30	0.13"	17.90	0.70"
M7DS529	1.52	0.06"	16.40	0.65"
M7LR400	1.00	0.04"	14.60	0.57"
M7LR401	3.05	0.12"	16.40	0.65"
M7WV020	2.00	0.08"	13.00	0.51"
M7WV031	3.10	0.12"	16.40	0.65"
M7WV300	3.00	0.12"	14.50	0.57"



BLADE

Part Number	A		B		C	
	MM	IN.	MM	IN.	MM	IN.
M7LB124	5.00	0.20"	2.00	0.08"	9.00	0.35"
M7LB125	10.41	0.41"	2.00	0.08"	9.00	0.35"
M7LB126	15.75	0.62"	2.00	0.08"	9.00	0.35"
M7LB127	22.10	0.87"	2.00	0.08"	9.00	0.35"
M7LB128	30.00	1.18"	2.00	0.08"	9.00	0.35"



POWER PLUS

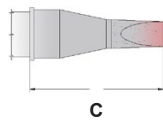
M Series Power Plus

POWER PLUS TIPS

M Series - Power Plus tips are designed with a larger copper mass and extra plating. These design changes have helped increase soldering performance as well as tip life. Users of the TMT-9000S can now experience significant performance gains while soldering heavy duty jobs without increasing the tip temperature.

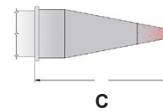
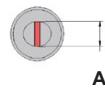


Power Plus - High Performance, Longer Tip Life



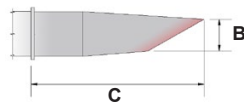
CHISEL

Part Number	A		C	
	MM	IN.	MM	IN.
M7CH032H	3.20	0.13"	10.00	0.39"
M7CH060H	6.00	0.24"	5.00	0.20"
M7CH080H	8.00	0.31"	5.00	0.20"
M7CH175H	2.50	0.10"	10.30	0.41"
M7CH176H	1.78	0.07"	10.30	0.41"
M7CH177H	1.50	0.059"	10.30	0.41"
M7CH178H	1.00	0.04"	11.40	0.45"
M7CH250H	5.00	0.20"	14.00	0.55"



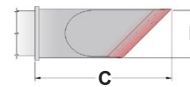
CONICAL

Part Number	A		C	
	MM	IN.	MM	IN.
M7C300H	0.40	0.016"	19.00	0.75"
M7CP303H	1.00	0.04"	14.40	0.57"
M7CS152H	0.51	0.02"	11.80	0.46"
M7CS151H	1.00	0.04"	15.40	0.61"
M7CS014H	1.40	0.055"	15.40	0.61"
M7MF375H	0.25	0.01"	13.60	0.54"



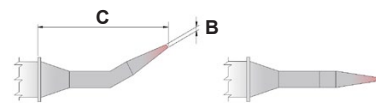
BEVEL / HOOF

Part Number	B		C	
	MM	IN.	MM	IN.
M7DS023H	3.10	0.12"	18.20	0.72"
M7BV010H	1.10	0.04"	13.40	0.53"
M7BV020H	2.00	0.08"	17.00	0.67"
M7BV030H	3.00	0.12"	13.00	0.51"
M7BV040H	4.00	0.16"	17.00	0.67"
M7BV050H	5.00	0.20"	15.00	0.59"
M7BV060H	6.00	0.24"	15.00	0.59"
M7BVF010H	1.00	0.04"	15.00	0.59"
M7BVF020H	2.00	0.08"	17.00	0.67"
M7BVF030H	3.00	0.12"	17.00	0.67"
M7BVF050H	5.00	0.20"	15.00	0.59"
M7BVF060H	6.00	0.24"	15.00	0.59"



KNIFE

Part Number	B		C	
	MM	IN.	MM	IN.
M7K100H	4.50	0.18"	16.65	0.66"
M7DS035H	3.50	0.14"	16.00	0.63"
M7DS526H	4.50	0.18"	16.65	0.66"



CONICAL BENT

Part Number	B		C	
	MM	IN.	MM	IN.
M7B325H	0.40	0.02"	15.00	0.59"
M7SB275H	0.50	0.02"	11.80	0.46"
M7SB276H	0.50	0.02"	13.60	0.54"

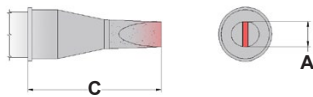


MICRO FINE

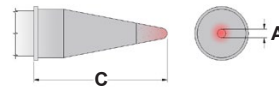
M Series Micro Fine

MICRO FINE TIPS

M Series - Micro Fine tips are designed for precision soldering of very small components. The Micro Fine tips geometries range from 0.1mm to 1.0mm and enable operators to solder dense boards and micro-components with high precision.



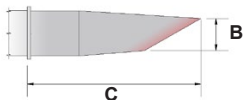
CHISEL



CONICAL

Part Number	A		C	
	MM	IN.	MM	IN.
M7CH004	0.40	0.016"	13.00	0.51"
M7CH006	0.60	0.024"	13.00	0.51"
M7CH008	0.80	0.031"	13.00	0.51"

Part Number	A		C	
	MM	IN.	MM	IN.
M7C001	0.10	0.004"	13.00	0.51"
M7C002	0.20	0.008"	13.00	0.51"
M7C004	0.40	0.016"	13.00	0.51"



BEVEL / HOOF

Part Number	B		C	
	MM	IN.	MM	IN.
M7BV007	0.70	0.028"	13.00	0.51"

Micro Fine - Also available for TMT-2000S and K, P & S Series



Part Number	A		C	
	MM	IN.	MM	IN.
K75C001	0.10	0.004"	13.00	0.51"
K75C002	0.20	0.008"	13.00	0.51"
K75C004	0.40	0.016"	13.00	0.51"
K75CH006	0.60	0.024"	13.00	0.51"
K75CH008	0.80	0.031"	13.00	0.51"

Part Number	B		C	
	MM	IN.	MM	IN.
K75BV007	0.70	0.028"	13.00	0.51"



TMT-5000S

Soldering Station

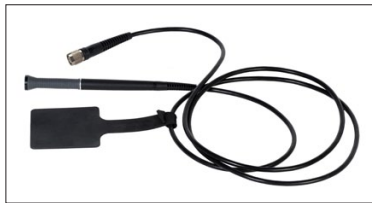


TMT-5000S

ESD SAFE **LEAD FREE**

The TMT-5000S is based on Curie Heat Technology which responds to the thermal demands of each solder joint by adjusting the power instantaneously, thereby meeting the exact requirements of the substrate component and solder material.

- ▶ Curie Heat Technology operating at 13.56MHz.
- ▶ Features our unique T Series line of tip cartridges.
- ▶ No calibration or operator training required.
- ▶ No additional coil assembly costs.



TMT-5000S SPECIFICATIONS

Input Line Voltage:	TMT-5000PS-1	100-110 VAC, 52W
	TMT-5000PS-2	220-240 VAC, 52W
Surface Resistivity:	10 ⁵ - 10 ⁹ Ω/sq	
Tip to Ground Potential:	<2 mV	
Tip to Ground Resistance:	<2 Ohms DC	
Idle temperature Stability:	+/- 1.1 °C (2 °F)	
Max Enclosure Temperature:	50 °C (122 °F)	
Fuse:	TMT-5000PS-1	250V 1A "Slo-Blo"
	TMT-5000PS-2	250V 0.5A "Slo-Blo"
Output Power (Maximum):	30 Watts	
Output Frequency:	13.56 MHz	
Size (W x H x D):	112mm x 205mm x 117mm	
Weight:	2.58 KG	
Input Line Frequency:	50/60 Hz	

PACKING LIST

TMT-5000PS	Power Supply
SHH-2	Soldering Handpiece Holder
SHP-T	Soldering Handpiece
RMP-1	Tip Removal Pad
SG-1-GR	Handpiece Grip Green
SG-1-BK	Handpiece Grip Black
BC-1	Brass Curls
SPG-1	Sulphide Free Sponge
CC-1	Connection Cable

CERTIFICATION MARKS



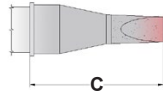
*Tested & certified by TUV-SUD

Thermaltronics

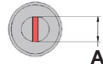


TMT-5000S

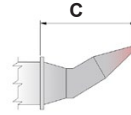
T Series Tip Cartridges



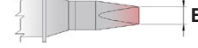
CHISEL



A



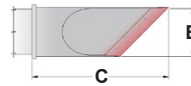
CHISEL BENT



B

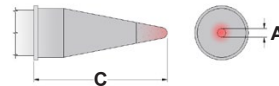
Part Number	A		C	
	MM	IN.	MM	IN.
T70CH012	1.20	0.05"	13.00	0.51"
T70CH016	1.60	0.06"	13.00	0.51"
T70CH024	2.40	0.09"	13.00	0.51"
T70CH030	3.00	0.12"	11.00	0.43"
T70CH032	3.20	0.13"	8.00	0.31"
T70CH052	5.20	0.20"	12.00	0.47"
TM70CH038	3.80	0.15"	22.00	0.87"
TM70CH175	2.50	0.10"	10.00	0.39"
TM70CH176	1.78	0.07"	10.00	0.39"
TM70CH177	1.50	0.06"	10.00	0.39"
TM70CH178	1.00	0.04"	9.00	0.35"
TM70CH179	1.00	0.04"	6.40	0.25"
TM70CH180	3.00	0.12"	8.90	0.35"
TM70CH181	3.00	0.12"	5.20	0.20"
TM70CH250	5.00	0.20"	7.50	0.30"
TM70CP200	2.50	0.10"	6.40	0.25"
TM70CP201	1.80	0.07"	6.40	0.25"
TM70CP202	1.50	0.06"	6.40	0.25"
TM70LC650	5.00	0.20"	11.40	0.45"
TM70LR403	1.78	0.07"	15.00	0.59"

Part Number	B		C	
	MM	IN.	MM	IN.
TM70CB225	1.78	0.07"	10.00	0.39"
TM70CB226	1.50	0.06"	12.00	0.47"

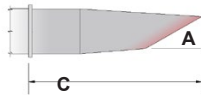


KNIFE

Part Number	B		C	
	MM	IN.	MM	IN.
T70K047	4.70	0.19"	13.00	0.51"
TM70DS526	4.83	0.19"	16.00	0.63"
TM70K100	4.83	0.19"	16.40	0.65"



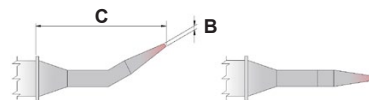
CONICAL



BEVEL / HOOF

Part Number	A		C	
	MM	IN.	MM	IN.
T70BV010	1.00	0.04"	13.40	0.53"
T70BV030	3.30	0.13"	13.00	0.51"
T70WV020	2.00	0.08"	13.00	0.51"
T70WV031	3.10	0.12"	16.40	0.65"
TM70BV350	1.78	0.07"	14.00	0.55"
TM70BS602	1.80	0.07"	6.40	0.25"
TM70DS525	3.30	0.13"	17.90	0.70"
TM70DS529	1.52	0.06"	16.40	0.65"
TM70LR400	1.00	0.04"	14.60	0.57"
TM70LR401	3.05	0.12"	16.40	0.65"
TM70WV300	3.00	0.12"	14.50	0.57"

Part Number	A		C	
	MM	IN.	MM	IN.
T70C004	0.40	0.016"	10.40	0.41"
T70C010	1.00	0.04"	13.00	0.51"
TM70C300	0.40	0.016"	14.00	0.55"
TM70C301	0.50	0.02"	5.00	0.20"
TM70CP302	0.40	0.016"	8.90	0.35"
TM70CP303	1.00	0.04"	7.40	0.29"
TM70CS150	0.40	0.016"	13.00	0.51"
TM70CS151	1.00	0.04"	13.40	0.53"
TM70CS152	0.40	0.016"	8.50	0.33"
TM70CS154	1.00	0.04"	16.40	0.65"
TM70CS155	0.50	0.02"	15.40	0.61"
TM70MF375	0.25	0.01"	13.40	0.53"



CONICAL BENT

Part Number	B		C	
	MM	IN.	MM	IN.
TM70B325	0.40	0.016"	16.00	0.63"
TM70BS375	0.25	0.01"	13.00	0.51"
TM70MD575	0.51	0.02"	15.40	0.61"
TM70SB275	0.40	0.016"	8.40	0.33"
TM70SB276	0.50	0.02"	14.00	0.55"



TMT-2200S

Dual Channel Soldering & Rework Station



TMT-2200S

**ESD
FREE** **LEAD
FREE**

The TMT-2200S is based on Curie Heat Technology which responds to the thermal demands of each solder joint by adjusting the power instantaneously, thereby meeting the exact requirements of the substrate component and solder material.

- ▶ Dual ports with simultaneous heat up.
- ▶ High thermal recovery & performance.
- ▶ 470KHz power supply with built-in LCD display.
- ▶ No calibration or operator training required.
- ▶ No additional coil assembly costs.

SYSTEM CONFIGURATIONS

Model Number	Handpiece	Tip Cartridge
TMT-2200S-2KM	SHP-KM	K Series
TMT-2200S-2PM	SHP-PM	P Series
TMT-2200S-2SM	SHP-SM	S Series
TMT-2200S-KD	SHP-KD	KD Series ¹

¹*KD Series Dual Heater Power Tips draw power from both soldering ports simultaneously into one power tip. For use in heavy ground plane applications.

TMT-2200S SPECIFICATIONS

Input Line Voltage:	TMT-2200PS	100-240 VAC
Surface Resistivity:		10 ⁵ - 10 ⁹ Ω/sq
Tip to Ground Potential:		<2 mV
Tip to Ground Resistance:		<2 Ohms DC
Idle temperature Stability:		+/- 1.1 °C (2 °F)
Max Enclosure Temperature:		50 °C (122 °F)
Fuse:	TMT-2200PS	250V 2A "Slo-Blo"
Output Power (Maximum):		110 Watts (Max)
Output Frequency:		470 KHz
Size (W x H x D):		126mm x 230mm x 148mm
Weight:		2.6 KG
LCD display:		60mm x 16mm
Input Line Frequency:		50-60 Hz

PACKING LIST

TMT-2200PS	Power Supply
2x SHH-5	Soldering Handpiece Holder
2x SHP-KM	Soldering Handpiece
2x RMP-1	Tip Removal Pad
2x BC-1	Brass Curls
2x SPG-1	Sulphide Free Sponge

*Packing List configuration is based on the TMT-2200S-KM

CERTIFICATION MARKS



*Tested & certified by TUV-SUD

HERMALTRONICS



TMT-2200S

Dual Channel Soldering & Rework Station



TMT-2200S

ESD FREE **LEAD FREE**

KD Series Dual Heater Power Tips draw power from both soldering ports simultaneously into one power tip.

- ▶ For use in heavy ground plane applications.
- ▶ Large copper mass for increased stored energy
- ▶ Dual Heaters
- ▶ High thermal recovery & performance.

TMT-2200S-KD PACKING LIST

Part Number	Description	Part Number	Description
TMT-2200PS	Power Supply	RMP-1	Tip Removal Pad
SHH-KD	Soldering Handpiece Holder	BC-1	Brass Curls
SHP-KD	Soldering Handpiece	SPG-1	Sulphide Free Sponge

KD SERIES TIP CARTRIDGES



CHISEL

BLADE

Part Number	A		C	
	MM	IN.	MM	IN.
KD75CH018	1.80	0.07"	16.80	0.66"
KD75CH025	2.50	0.10"	16.80	0.66"
KD75CH030	3.00	0.12"	15.60	0.61"
KD75CH032	3.20	0.13"	15.90	0.63"
KD75CH040	4.00	0.16"	12.60	0.50"
KD75CH050	5.00	0.20"	17.00	0.67"
KD75CH060	6.00	0.24"	13.50	0.53"
KD75CH080	8.00	0.31"	13.50	0.53"
KD75CH155	15.50	0.61"	15.00	0.59"
KD75CHU080	8.00	0.31"	13.50	0.53"
KD75GV055	5.50	0.22"	16.00	0.63"
KD75GV069	6.90	0.27"	16.00	0.63"
KD75GV070	7.00	0.28"	13.10	0.52"
KD75GV079	7.90	0.31"	15.20	0.60"
KD75WV080	8.00	0.31"	13.50	0.53"

Part Number	A		C	
	MM	IN.	MM	IN.
KD75LB075	2.00	0.08"	13.50	0.53"
KD75LB124	2.40	0.09"	15.50	0.61"
KD75LB125	2.40	0.09"	15.50	0.61"

ROUND CONNECTOR

Part Number	B		C	
	MM	IN.	MM	IN.
KD75RC075	1.00	0.04"	14.00	0.55"
KD75RC085	1.20	0.05"	15.50	0.61"
KD75RC104	1.60	0.06"	24.50	0.97"
KD75RC104A	1.60	0.06"	24.50	0.97"
KD75RC122	1.60	0.06"	12.50	0.49"
KD75RC127	1.60	0.06"	10.00	0.39"
KD75RC140	1.60	0.06"	19.50	0.77"

65 = Temperature Sensitive 75 = Standard Applications 80 = High Performance



TMT-2000S

Soldering Station



TMT-2000S

ESD SAFE LEAD FREE

The TMT-2000S is based on Curie Heat Technology which responds to the thermal demands of each solder joint by adjusting the power instantaneously, thereby meeting the exact requirements of the substrate component and solder material.

- ▶ Curie Heat Technology operating at 470KHz.
- ▶ Max flexibility, allows the use of K, P, S Series tips.
- ▶ Extremely compact, weighs just 1.3KG.
- ▶ No calibration or operator training required.
- ▶ No additional coil assembly costs.

SYSTEM CONFIGURATIONS

Model Number	Handpiece	Tip Cartridge	Connector	Workstand
TMT-2000S-K	SHP-K	K Series	3-Pin	SHH-4
TMT-2000S-PM	SHP-PM	P Series	8-Pin	Microswitch
TMT-2000S-SM	SHP-SM	S Series	8-Pin	Workstand
TMT-2000S-K (UPG)	SHP-K	K Series	3-Pin	SHH-5
TMT-2000S-PM (UPG)	SHP-PM	P Series	8-Pin	Sleep
TMT-2000S-SM (UPG)	SHP-SM	S Series	8-Pin	Workstand

TMT-2000S SPECIFICATIONS

Input Line Voltage:	TMT-2000PS	100-240 VAC, 55W
Surface Resistivity:		$10^5 - 10^9 \Omega/\text{sq}$
Tip to Ground Potential:		<2 mV
Tip to Ground Resistance:		<2 Ohms DC
Idle temperature Stability:		+/- 1.1 °C (2 °F)
Max Enclosure Temperature:		50 °C (122 °F)
Fuse:	TMT-2000PS	250V 1A "Slo-Blo"
Output Power (Maximum):		50 Watts
Output Frequency:		470 KHz
Size (W x H x D):		110mm x 155mm x 92mm
Weight:		1.30 KG
Input Line Frequency:		50/60 Hz

PACKING LIST

TMT-2000PS	Power Supply
SHH-4 ¹	Soldering Handpiece Holder
SHP-K	Soldering Handpiece
RMP-1	Tip Removal Pad
BC-1	Brass Curls
SPG-1	Sulphide Free Sponge
CC-1	Connection Cable

¹Optional Feature: SHH-5 sleep workstand

CERTIFICATION MARKS



*Tested & certified by TUV-SUD

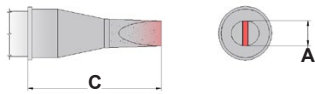
www.thermaltronics.com

THE THERMALTRONICS

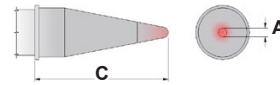


TMT-2000S

K, P & S Series Tip Cartridges



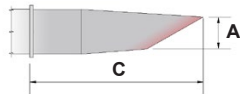
CHISEL



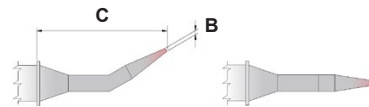
CONICAL

Part Number	A		C	
	MM	IN.	MM	IN.
K75CH010	1.00	0.04"	11.40	0.45"
K75CH015	1.50	0.059"	10.30	0.41"
K75CH016	1.78	0.07"	10.30	0.41"
K75CH018	1.78	0.07"	10.30	0.41"
K75CH025	2.50	0.10"	10.30	0.41"
K75CH032	3.20	0.13"	5.00	0.20"
K75CH060	6.00	0.24"	5.00	0.20"
K75CH080	8.00	0.31"	5.00	0.20"
P75CH012	1.20	0.05"	13.00	0.51"
P75CH016	1.60	0.06"	13.00	0.51"
P75CH024	2.40	0.09"	13.00	0.51"
P75CH032	3.20	0.13"	8.00	0.31"
P75CH052	5.20	0.20"	12.00	0.47"
S75CH010	1.00	0.04"	11.40	0.45"
S75CH015	1.50	0.059"	10.30	0.41"
S75CH016	1.78	0.07"	10.30	0.41"
S75CH018	1.78	0.07"	10.30	0.41"
S75CH025	2.50	0.10"	10.30	0.41"
S75CH032	3.20	0.13"	5.00	0.20"

Part Number	A		C	
	MM	IN.	MM	IN.
K75BV004	0.40	0.016"	19.00	0.75"
K75CP010	1.00	0.04"	14.40	0.57"
K75CS005	0.51	0.02"	11.80	0.46"
K75CS010	1.00	0.04"	15.40	0.61"
K75CS014	1.40	0.055"	15.40	0.61"
K75MF003	0.25	0.01"	13.60	0.54"
P75C004	0.40	0.016"	10.40	0.41"
P75C010	1.00	0.04"	13.00	0.51"
S75BV004	0.40	0.016"	19.00	0.75"
S75CP010	1.00	0.04"	14.40	0.57"
S75CS005	0.51	0.02"	11.80	0.46"
S75CS010	1.00	0.04"	15.40	0.61"
S75CS014	1.40	0.055"	15.40	0.61"
S75MF003	0.25	0.01"	13.60	0.54"



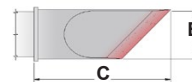
BEVEL / HOOF



CONICAL BENT

Part Number	A		C	
	MM	IN.	MM	IN.
K75BV011	1.10	0.04"	13.40	0.53"
K75BVF010	1.10	0.04"	13.40	0.53"
K75BV020	2.00	0.08"	17.00	0.67"
K75BVF020	2.00	0.08"	17.00	0.67"
K75BV030	3.30	0.13"	13.00	0.51"
K75BVF030	3.30	0.13"	13.00	0.51"
K75BV040	4.00	0.16"	17.00	0.67"
K75DS023	3.10	0.12"	18.20	0.72"
K75WV031	3.10	0.12"	16.40	0.65"
K75WV080	8.00	0.31"	11.00	0.43"
P75BV010	1.00	0.04"	13.40	0.53"
P75BV030	3.30	0.13"	13.00	0.51"
P75WV020	2.00	0.08"	13.00	0.51"
P75WV031	3.10	0.12"	16.40	0.65"
S75BV011	1.10	0.04"	13.40	0.53"
S75BV020	2.00	0.08"	17.00	0.67"
S75BV030	3.30	0.13"	13.00	0.51"
S75BV040	4.00	0.16"	17.00	0.67"
S75DS023	3.10	0.12"	18.20	0.72"
S75WV031	3.10	0.12"	16.40	0.65"
S75WV080	8.00	0.31"	11.00	0.43"

Part Number	B		C	
	MM	IN.	MM	IN.
K75SB005	0.51	0.02"	11.80	0.46"
K75SB005A	0.50	0.02"	13.60	0.54"
S75SB005	0.51	0.02"	11.80	0.46"
S75SB005A	0.50	0.02"	13.60	0.54"



KNIFE

Part Number	B		C	
	MM	IN.	MM	IN.
K75DS045	4.50	0.18"	16.65	0.66"
K75DS061	4.50	0.18"	16.65	0.66"
P75K047	4.70	0.19"	13.00	0.51"
S75DS045	4.50	0.18"	16.65	0.66"
S75DS061	4.50	0.18"	16.65	0.66"

*refer to page 4 for K series Micro Fine tips



DS-KIT

Desoldering Kit



DS-KIT

**ESD
SAFE** **LEAD
FREE**

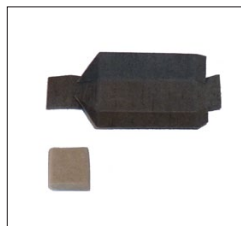
Thermaltronics DS-KIT desoldering kit uses shop air to create a powerful air vacuum to clean through-holes quickly and efficiently. Cleaning and maintenance is quick and easy with the use of replaceable filter wools (DS-FW-1) and chamber liners (DS-CL-1).

- ▶ Uses Thermaltronics DT Series Desoldering Tips.
- ▶ High thermal recovery & performance.
- ▶ Easy and simple maintenance.

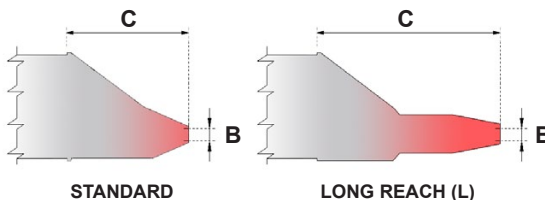
DESOLDERING KIT INCLUDES

	DS-KIT-1*	DS-KIT-2*	DS-KIT-3*
Desoldering Gun Airhose	DS-AH-1	DS-AH-1	DS-AH-1
Filter Wool (6 pairs) & Chamber Liner (15 pcs)	DS-CP-1	DS-CP-1	DS-CP-1
Desoldering Gun	DS-GUN-1	DS-GUN-2	DS-GUN-3
Desoldering Gun Handpiece Cable	DS-HPC-1	DS-HPC-2	DS-HPC-3
Cleaning Toolkit	DS-TCT-1	DS-TCT-1	DS-TCT-1
Cartridge Removal Pad	RMP-1	RMP-1	RMP-1
Desoldering Gun Workstand	SHH-3	SHH-3	SHH-3

*DS-KIT-1 for use on TMT-9000S, DS-KIT-2 for use on TMT-5000S, DS-KIT-3 for use on TMT-2000S



DESOLDERING TIPS



TMT-5000S

Part Number	B		C	
	MM	IN.	MM	IN.
T75DT003	0.80	0.03"	13.00	0.51"
T75DT003L	0.80	0.03"	18.00	0.71"
T75DT004	1.10	0.04"	13.00	0.51"
T75DT004L	1.10	0.04"	18.00	0.71"
T75DT005	1.35	0.05"	13.00	0.51"
T75DT005L	1.35	0.05"	18.00	0.71"
T75DT006	1.50	0.06"	13.00	0.51"
T75DT007	2.40	0.095"	13.00	0.51"

TMT-9000S

Part Number	B		C	
	MM	IN.	MM	IN.
M80DT003	0.80	0.03"	13.00	0.51"
M80DT003L	0.80	0.03"	18.00	0.71"
M80DT004	1.10	0.04"	13.00	0.51"
M80DT004L	1.10	0.04"	18.00	0.71"
M80DT005	1.35	0.05"	13.00	0.51"
M80DT005L	1.35	0.05"	18.00	0.71"
M80DT006	1.50	0.06"	13.00	0.51"
M80DT007	2.40	0.095"	13.00	0.51"

TMT-2000S

Part Number	B		C	
	MM	IN.	MM	IN.
K60DT003	0.80	0.03"	13.00	0.51"
K60DT003L	0.80	0.03"	18.00	0.71"
K60DT004	1.10	0.04"	13.00	0.51"
K60DT004L	1.10	0.04"	18.00	0.71"
K60DT005	1.35	0.05"	13.00	0.51"
K60DT005L	1.35	0.05"	18.00	0.71"
K60DT006	1.50	0.06"	13.00	0.51"
K60DT007	2.40	0.095"	13.00	0.51"

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THERMALTRONICS



TZ-KIT

Tweezers Kit



TZ-KIT

ESD SAFE LEAD FREE

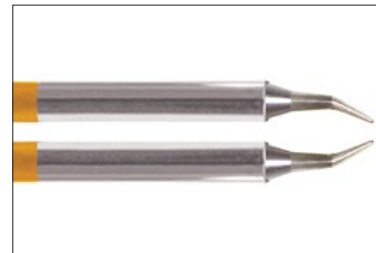
Thermaltronics TZ-KIT tweezers handpiece is ergonomically designed for reworking even the smallest components. Allows locking of both arms and adjustment of tips horizontally and vertically.

- ▶ Uses Thermaltronics TZ Series Tweezers Tips.
- ▶ Dual lockable arms.
- ▶ Adjustable alignment of tips in x-y directions.

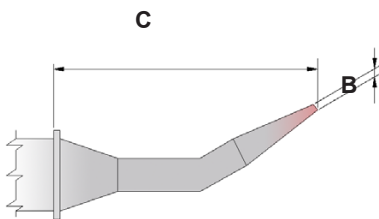
TWEEZERS KIT INCLUDES

	TZ-KIT-1*	TZ-KIT-2*	TZ-KIT-3*
Tweezers Handpiece	SHP-MTZ	SHP-TTZ	SHP-KTZ
Tweezers Workstand	SHH-MTZ	SHH-TTZ	SHH-KTZ

*TZ-KIT-1 for use on TMT-9000S, TZ-KIT-2 for use on TMT-5000S, TZ-KIT-3 for use on TMT-2000S



TWEEZERS TIPS



TMT-5000S

Part Number	B		C	
	MM	IN.	MM	IN.
T70TZ003	0.25	0.01"	13.40	0.53"
T70TZ004	0.40	0.016"	16.00	0.63"
T70TZ010	1.00	0.04"	13.40	0.53"
T70TZ010B	1.00	0.04"	9.00	0.35"
T70TZ015	1.50	0.06"	12.00	0.47"
T70TZ018	1.78	0.07"	15.00	0.59"
T70TZ018B	1.78	0.07"	10.00	0.39"
T70TZ025	4.83	0.19"	16.40	0.65"
T70TZ100	10.41	0.42"	9.00	0.35"
T70TZ160	15.75	0.62"	9.00	0.35"
T70TZ220	22.10	0.87"	9.00	0.35"

TMT-9000S

Part Number	B		C	
	MM	IN.	MM	IN.
M80TZ003	0.25	0.01"	13.40	0.53"
M80TZ004	0.40	0.016"	16.00	0.63"
M80TZ010	1.00	0.04"	13.40	0.53"
M80TZ010B	1.00	0.04"	9.00	0.35"
M80TZ015	1.50	0.06"	12.00	0.47"
M80TZ018	1.78	0.07"	15.00	0.59"
M80TZ018B	1.78	0.07"	10.00	0.39"
M80TZ025	4.83	0.19"	16.40	0.65"
M80TZ100	10.41	0.42"	9.00	0.35"
M80TZ160	15.75	0.62"	9.00	0.35"
M80TZ220	22.10	0.87"	9.00	0.35"

TMT-2000S

Part Number	B		C	
	MM	IN.	MM	IN.
K60TZ003	0.25	0.01"	13.40	0.53"
K60TZ004	0.40	0.016"	16.00	0.63"
K60TZ010	1.00	0.04"	13.40	0.53"
K60TZ010B	1.00	0.04"	9.00	0.35"
K60TZ015	1.50	0.06"	12.00	0.47"
K60TZ018	1.78	0.07"	15.00	0.59"
K60TZ018B	1.78	0.07"	10.00	0.39"
K60TZ025	4.83	0.19"	16.40	0.65"
K60TZ100	10.41	0.42"	9.00	0.35"
K60TZ160	15.75	0.62"	9.00	0.35"
K60TZ220	22.10	0.87"	9.00	0.35"



ACCESSORIES

Hot Air Pencil



TMT-HA100

ESD SAFE **LEAD FREE**

The TMT-HA100 hot air pencil is designed to remove and reflow small precision components, integrated circuits and other smaller devices.

- ▶ ESD safe design with integrated ground
- ▶ Specialized for work on precision components.
- ▶ Uses HAP Series Hot Air Pencil Nozzles
- ▶ High quality heating element ensures fast heat up and long heater life

TMT-HA100 SPECIFICATIONS

Input Line Voltage:	TMT-HA100-1	100-110 VAC
	TMT-HA100	220-240 VAC
Power:	200 Watts	
Temperature Range:	100 °C - 450 °C	
Pump:	Diaphragm Pump	
Airflow (Max):	10L / min	
Fuse:	TMT-HA100-1	250V 3A
	TMT-HA100	250V 1.5A
Size (W x H x D):	130mm x 215mm x 130mm	
Weight:	3.1 KG	

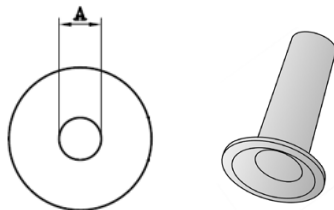
PACKING LIST

TMT-HA100	Hot Air Pencil
HAP-D15	Nozzle 1.5mm (0.06")
HAP-D20	Nozzle 2.0mm (0.08")
HAP-D25	Nozzle 2.5mm (0.10")
HAP-D30	Nozzle 3.0mm (0.12")
HAP-D35	Nozzle 3.5mm (0.14")
HAP-D40	Nozzle 4.0mm (0.16")
SHH-HAP	Workstand

CERTIFICATION MARKS



HAP NOZZLES - HOT AIR PENCIL



Part Number	Description	A	
		MM	IN.
HAP-D15	Nozzle 1.5mm (0.06")	1.50	0.06"
HAP-D20	Nozzle 2.0mm (0.08")	2.00	0.08"
HAP-D25	Nozzle 2.5mm (0.10")	2.50	0.10"
HAP-D30	Nozzle 3.0mm (0.12")	3.00	0.12"
HAP-D35	Nozzle 3.5mm (0.14")	3.50	0.14"
HAP-D40	Nozzle 4.0mm (0.16")	4.00	0.16"



ACCESSORIES

Hot Air Tools



TMT-HA050

ESD SAFE LEAD FREE

The TMT-HA050 hot air tool can be used for the removal of surface mount components such as SOIC, QFP, PLCC and other similar devices.

- ▶ Digital display shows temperature and air flow
- ▶ Light, portable, plug and use tool
- ▶ Uses HTN Series Hot Air Nozzles
- ▶ Convection heating allowing low pressure hot air to focus on the solder joints

TMT-HA050 SPECIFICATIONS

Input Line Voltage:	220-240 VAC
Power:	600 Watts
Temperature Range:	100 °C - 480 °C
Pump:	Turbine Motor
Airflow (Max):	30L / min
Fuse:	250V 3A
Size (W x H x D):	65mm x 265mm
Weight:	1 KG

PACKING LIST

TMT-HA050	Hot Air Tool
HTN-D30	Nozzle 3.0mm (0.12")
HTN-D50	Nozzle 5.0mm (0.20")
HTN-D80	Nozzle 8.0mm (0.31")
HTN-D100	Nozzle 10.0mm (0.39")
HA-HE050	Heating Element

CERTIFICATION MARK



TMT-HA200

ESD SAFE LEAD FREE

The TMT-HA200 hot air tool can be used for the removal and reflow of surface mount components such as SOIC, QFP PLCC and other similar devices.

- ▶ Large selection of high quality nozzles
- ▶ Adjustable, easy to use temp and air control knobs
- ▶ Uses HTN Series Hot Air Nozzles
- ▶ Auto sleep activated when hot air tool is placed in the holder.

TMT-HA200 SPECIFICATIONS

Input Line Voltage:	220-240 VAC
Power:	600 Watts
Temperature Range:	100 °C - 480 °C
Pump:	Turbine Fan
Airflow (Max):	35L / min
Fuse:	250V 3A
Size (W x H x D):	112mm x 205mm x 117mm
Weight:	2.40 KG

PACKING LIST

TMT-HA200	Hot Air Tool
HTN-D30	Nozzle 3.0mm (0.12")
HTN-D50	Nozzle 5.0mm (0.20")
HTN-D80	Nozzle 8.0mm (0.31")
HTN-D100	Nozzle 10.0mm (0.39")
HA-HE200	Heating Element

CERTIFICATION MARK





ACCESSORIES

Hot Air Tools



TMT-HA300

ESD SAFE LEAD FREE

The TMT-HA300 hot air tool uses a large diaphragm pump and can be used for the removal and reflow of surface mount components such as SOIC, QFP, PLCC and other similar devices.

- ▶ Digital display shows temperature and status.
- ▶ Airflow meter provides visual feedback of air flow.
- ▶ Adjustable, easy to use temp and air control knobs
- ▶ Uses HTN Series Hot Air Nozzles

TMT-HA300 SPECIFICATIONS

Input Line Voltage:	TMT-HA300-1	100-110 VAC
	TMT-HA300	220-240 VAC
Power:	500 Watts	
Temperature Range:	100 °C - 480 °C	
Pump:	Diaphragm Pump	
Airflow (Max):	23L / min	
Fuse:	TMT-HA300-1	250V 5A
	TMT-HA300	250V 3A
Size (W x H x D):	188mm x 127mm x 246mm	
Weight:	3.00 KG	

PACKING LIST

TMT-HA300	Hot Air Tool
HTN-D30	Nozzle 3.0mm (0.12")
HTN-D50	Nozzle 5.0mm (0.20")
HTN-D80	Nozzle 8.0mm (0.31")
HTN-D100	Nozzle 10.0mm (0.39")
HA-HE300	Heating Element

CERTIFICATION MARK



TMT-HA600

ESD SAFE LEAD FREE

The TMT-HA600 hot air tool uses a large diaphragm pump and a high power 1300W heater, designed to work on more difficult applications, in the removal and reflow of surface mount components.

- ▶ Fast heating and temperature recovery
- ▶ Simple controls allow easy adjustment.
- ▶ Uses HTN Series Hot Air Nozzles
- ▶ Digital display with easy-to-adjust temp and airflow

TMT-HA600 SPECIFICATIONS

Input Line Voltage:	TMT-HA600-1	100-110 VAC
	TMT-HA600-2	220-240 VAC
Power:	1300 Watts	
Temperature Range:	100 °C - 480 °C	
Pump:	Diaphragm Pump	
Airflow (Max):	23L / min	
Fuse:	TMT-HA600-1	250V 15A
	TMT-HA600-2	250V 8A
Size (W x H x D):	188mm x 127mm x 246mm	
Weight:	3.00 KG	

PACKING LIST

TMT-HA600	Hot Air Tool
HTN-D50	Nozzle 5.0mm (0.20")
HTN-D80	Nozzle 8.0mm (0.31")
HTN-D100	Nozzle 10.0mm (0.39")
HTN-D120	Nozzle 12.0mm (0.47")
HA-HE600	Heating Element

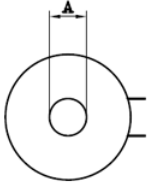
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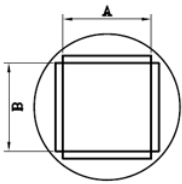
ACCESSORIES

HTN Series Hot Air Nozzles



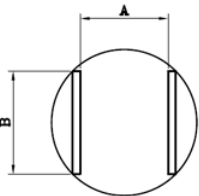
Nozzles - Standard

Part Number	Description	A	
		MM	IN.
HTN-D30	Nozzle 3.0mm	3.0	0.12"
HTN-D50	Nozzle 5.0mm	5.0	0.20"
HTN-D80	Nozzle 8.0mm	8.0	0.31"
HTN-D100	Nozzle 10.0mm	10.0	0.39"
HTN-D120	Nozzle 12.0mm	12.0	0.47"



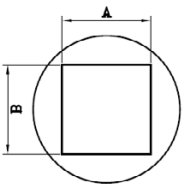
Nozzles - PLCC, BQFP, QFP

Part Number	Description	A		B	
		MM	IN.	MM	IN.
HTN-PL20	Nozzle 11.9mm x 11.9mm, PLCC-20	11.9	0.47"	11.9	0.47"
HTN-PL28	Nozzle 14.5mm x 14.5mm, PLCC-28	14.5	0.57"	14.5	0.57"
HTN-PL32	Nozzle 16.9mm x 14.3mm, PLCC-32	16.9	0.67"	14.3	0.56"
HTN-PL44	Nozzle 19.5mm x 19.5mm, PLCC-44	19.5	0.77"	19.5	0.77"
HTN-PL52	Nozzle 22.0mm x 22.0mm, PLCC-52	22.0	0.87"	22.0	0.87"
HTN-PL68	Nozzle 27.0mm x 27.2mm, PLCC-68	27.0	1.06"	27.2	1.07"
HTN-PL84	Nozzle 32.4mm x 32.4mm, PLCC-84	32.4	1.28"	32.4	1.28"
HTN-QF48	Nozzle 8.4mm x 8.4mm, QFP-48	8.4	0.33"	8.4	0.33"
HTN-QF44	Nozzle 13.4mm x 13.4mm, QFP-44	13.4	0.53"	13.4	0.53"
HTN-QF80	Nozzle 17.3mm x 17.3mm, QFP-52,80	17.3	0.68"	17.3	0.68"
HTN-QF100	Nozzle 23.4mm x 18.1mm, QFP-64,80,100	23.4	0.92"	18.1	0.71"
HTN-QF160	Nozzle 31.2mm x 31.2mm, QFP-120,128,144,160	31.2	1.23"	31.2	1.23"
HTN-BQ100	Nozzle 22.4mm x 22.4mm, BQFP-100	22.4	0.88"	22.4	0.88"
HTN-QF240	Nozzle 34.5mm x 34.5mm, QFP-240	34.5	1.36"	34.5	1.36"
HTN-BQ196	Nozzle 37.7mm x 37.7mm, BQFP-196	37.7	1.48"	37.7	1.48"
HTN-QF208	Nozzle 29.8mm x 29.8mm, QFP-208	29.8	1.17"	29.8	1.17"



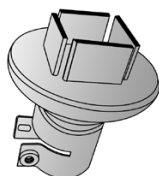
Nozzles - SOIC, TSOP

Part Number	Description	A		B	
		MM	IN.	MM	IN.
HTN-SC16	Nozzle 6.8mm x 10.2mm, SOIC 14, 16	6.8	0.27"	10.2	0.40"
HTN-SL16	Nozzle 10.6mm x 10.8mm, SOL 14, 16	10.6	0.42"	10.8	0.43"
HTN-SL20	Nozzle 10.6mm x 13.3mm, SOL 20, 20J	10.6	0.42"	13.3	0.52"
HTN-SL24	Nozzle 10.6mm x 15.9mm, SOL 24, 24J	10.6	0.42"	15.9	0.63"
HTN-SL28	Nozzle 10.6mm x 18.4mm, SOL 28	10.6	0.42"	18.4	0.72"
HTN-SL44	Nozzle 16.0mm x 27.9mm, SOL 44	16.0	0.63"	27.9	1.10"
HTN-SJ32	Nozzle 13.5mm x 20.6mm, SOJ 32	13.5	0.53"	20.6	0.81"
HTN-SJ40	Nozzle 13.5mm x 25.4mm, SOJ 40	13.5	0.53"	25.4	1.00"
HTN-TS24	Nozzle 17.0mm x 7.1mm, TSOP 20-24 PIN	17.0	0.67"	7.1	0.28"
HTN-TS32	Nozzle 21.0mm x 9.1mm, TSOP 28-32 PIN	21.0	0.83"	9.1	0.36"
HTN-TS40	Nozzle 21.0mm x 10.8, TSOP 40 PIN	21.0	0.83"	10.8	0.43"
HTN-TS48	Nozzle 21.0mm x 13.3mm, TSOP 48 PIN	21.0	0.83"	13.3	0.52"
HTN-TS24B	Nozzle 10.2mm x 18.4mm, TSOP 20-24 PIN	10.2	0.40"	18.4	0.72"
HTN-TS44	Nozzle 12.7mm x 19.8mm, TSOP 24-28/40-44 PIN	12.7	0.50"	19.8	0.78"



Nozzles - BGA

Part Number	Description	A		B	
		MM	IN.	MM	IN.
HTN-B1010	Nozzle 10.0mm x 10.0mm	10.0	0.39"	10.0	0.39"
HTN-B1313	Nozzle 13.0mm x 13.0mm	13.0	0.51"	13.0	0.51"
HTN-B1616	Nozzle 16.0mm x 16.0mm	16.0	0.63"	16.0	0.63"
HTN-B1919	Nozzle 19.0mm x 19.0mm	19.0	0.75"	19.0	0.75"
HTN-B2828	Nozzle 28.0mm x 28.0mm	28.0	1.10"	28.0	1.10"
HTN-B3030	Nozzle 30.0mm x 30.0mm	30.0	1.18"	30.0	1.18"
HTN-B3232	Nozzle 32.0mm x 32.0mm	32.0	1.26"	32.0	1.26"
HTN-B3636	Nozzle 36.0mm x 36.0mm	36.0	1.42"	36.0	1.42"
HTN-B3939	Nozzle 39.0mm x 39.0mm	39.0	1.54"	39.0	1.54"
HTN-B4141	Nozzle 41.0mm x 41.0mm	41.0	1.61"	41.0	1.61"
HTN-B4343	Nozzle 43.0mm x 43.0mm	43.0	1.69"	43.0	1.69"
HTN-B4545	Nozzle 45.0mm x 45.0mm	45.0	1.77"	45.0	1.77"





ACCESSORIES

Preheaters



TMT-PH200

ESD SAFE LEAD FREE

The TMT-PH200 infrared, board preheater is suitable for leaded and lead free, applications. A sensor controlled feedback loop system with digital display enables easy adjustment of temperature.

- ▶ Adjustable, easy to use temperature control knob
- ▶ Digital display shows temperature
- ▶ Utilizes a quartz infrared heater
- ▶ Sensor control feedback loop to control temperature

TMT-PH200 SPECIFICATIONS

Input Line Voltage:	220-240 VAC
Power:	600 Watts
Temperature Range:	100 °C - 380 °C
Heating Area (W x L):	130mm x 130mm
Heating Method:	Infrared
Fuse:	250V 5A
Size (W x H x D):	220mm x 73mm x 250mm
Weight:	2.1 KG

PACKING LIST

TMT-PH200	IR Preheater
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CERTIFICATION MARK



TMT-PH300

ESD SAFE LEAD FREE

The TMT-PH300 uses advanced, intelligent, control technology to accurately regulate the temperature of the infrared board preheater. Three heating modes allow the system to manage both leaded and lead free applications.

- ▶ Microprocessor accurately regulates temperature
- ▶ Two external temperature sensor probes
- ▶ Professional board holder allows 3D adjustments
- ▶ Three heating modes to meet different requirements

TMT-PH300 SPECIFICATIONS

Input Line Voltage:	TMT-PH300-1	100-110 VAC, 1000 Watts
	TMT-PH300	220-240 VAC, 850 Watts
Temperature Range:		50°C - 400°C
Heating Area (W x L):		200mm x 250mm
Heating Method:		Infrared
Fuse:	TMT-PH300-1	250V 15A
	TMT-PH300	250V 8A
Size (W x H x D):		260mm x 90mm x 410mm
Weight:		3.8 KG

PACKING LIST

TMT-PH300	IR Preheater
PH-KTC-1	Thermocouples - 2 Pack

CERTIFICATION MARK



*Optional: For extra large applications please use the TMT-PH600 preheater.

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ACCESSORIES

Preheater, Fume Extraction



TMT-PH600

ESD SAFE LEAD FREE

The TMT-PH600 uses advanced, intelligent, control technology to accurately regulate the temperature of the infrared board preheater. Three heating modes allow the system to manage both leaded and lead free applications.

- ▶ Microprocessor accurately regulates temperature
- ▶ Two external temperature sensor probes
- ▶ Professional board holder allows 3D adjustments
- ▶ Three heating modes to meet different requirements

TMT-PH600 SPECIFICATIONS

Input Line Voltage:	TMT-PH600-1	100-110 VAC, 2000 Watts
	TMT-PH600-2	220-240 VAC, 1500 Watts
Temperature Range:	50°C - 400°C	
Heating Area (W x L):	310mm x 310mm	
Heating Method:	Infrared	
Fuse:	TMT-PH600-1	250V 16A
	TMT-PH600-2	250V 10A
Size (W x H x D):	520mm x 380mm x 100mm	
Weight:	9 KG	

PACKING LIST

TMT-PH600	IR Preheater
PH-KTC-1	Thermocouples - 2 Pack

CERTIFICATION MARK



TMT-FE100S

ESD SAFE LEAD FREE

The Thermaltronics TMT-FE100S fume extraction unit, takes up minimal benchtop space but is inclusive of a prefilter and a separate HEPA filter, to ensure operator safety. Fan speed can also be adjusted, based on the proximity of the soldering operation or the amount of fumes being generated.

- ▶ HEPA filtration ensuring operator safety
- ▶ Light & compact, takes up minimal benchtop space
- ▶ Adjustable, easy to use fan speed control

TMT-FE100S SPECIFICATIONS

Input Line Voltage:	TMT-FE100S-1	100-110 VAC
	TMT-FE100S-2	220-240 VAC
HEPA Efficiency:	FE-MF100	90% at 0.3 micron
	FE-MF199	99% at 0.3 micron (optional)
Fan Capacity:	5.0 m³ / min	
Air Flow:	50 CFM	
Fuse:	TMT-FE100S-1	250V 1.0A
	TMT-FE100S-2	250V 0.5A
Size (W x H x D):	166mm x 205mm x 142mm	
Weight:	2 KG	

PACKING LIST

TMT-FE100S	Fume Extraction System
FE-PF100	Pre-filter
FE-MF100	Main Filter

¹Optional Feature: FE-KIT-1 fume extraction kit

CERTIFICATION MARKS



*Tested & certified by TUV-SUD



ACCESSORIES

Auto Solder Feeder, Tip Tester



AF-KIT

ESD SAFE LEAD FREE

Thermaltronics AF-KIT auto solder feeder kit provides for single handed operation during soldering applications. The kit is provided as an accessory to existing Thermaltronics hand soldering tools.

- ▶ Adjustable speed, feed length
- ▶ Adjustable feed retraction
- ▶ Use of step motor allows precision control
- ▶ Increases efficiency

AUTO SOLDER FEEDER KIT INCLUDES

	AF-KIT-1*	AF-KIT-2*	AF-KIT-3*
Auto Feeder	TMT-AF100	TMT-AF100	TMT-AF100
Handpiece Holder	AF-HDL-1	AF-HDL-2	AF-HDL-3
Guide Pipe Assembly	AF-HPK-1	AF-HPK-2	AF-HPK-3
Auto Feeder Nozzle Pack	AF-NOZ-1	AF-NOZ-1	AF-NOZ-1
Auto Feeder Switch	AF-PEDAL-1	AF-PEDAL-1	AF-PEDAL-1
AC Power Adapter	AF-POWER-1	AF-POWER-1	AF-POWER-1

*AF-KIT-1 for use on TMT-9000S, AF-KIT-2 for use on TMT-5000S, AF-KIT-3 for use on TMT-2000S



TMT-ST10

LEAD FREE

The TMT-ST10 is a three-in-one tip tester, providing tip temperature measurement, tip to ground resistance and tip to ground AC voltage leakage. Test data can be easily saved to memory and exported for data analysis.

- ▶ Data save and export
- ▶ Lightweight and easy to use.
- ▶ Accurately test tip temperature
- ▶ Accurately test tip to ground resistance and tip to ground AC leakage.

TMT-ST10 SPECIFICATIONS

Voltage:	9V Battery
Temperature Precision:	±3°C / ±6°F
Temperature Sensor:	K Type Thermocouple
Voltage Measurement Range:	0 to 100mV (AC)
Resistance Range:	0 to 100Ω
Size (W x H x D):	85mm x 175mm x 48mm
Weight:	0.35 KG

PACKING LIST

TMT-ST10	Tip Tester
ST-GWIRE-1	Ground wire
ST-CABLE-X ¹	Mini USB Data Cable

¹ST-GWIRE-1 = EU Plug, ST-GWIRE-2 = US Plug, ST-GWIRE-3 = CN Plug



ACCESSORIES

Tip Cleaner, Tip Tinner, Flux Paste



TMT-ASTCIOO

**ESD
SAFE** **LEAD
FREE**

The TMT-ASTC automatic solder tip cleaner helps rework badly oxidized tips. Two high quality brass brushes, which revolve in opposite directions, aid in the removal of oxidation from the soldering tip.

- ▶ Removes tip oxidation
- ▶ Light & compact, takes up minimal benchtop space
- ▶ Easy to clean and maintain



TMT-TC-2

**LEAD
FREE**

The TMT-TC-2 Tip Tinner is a compressed tablet of pure tin and ammonia phosphate formulation in a metal container with lid. It has a self adhesive pad on the underside to allow it to be affixed on, or near the work station.

- ▶ Removes tip oxidation
- ▶ No-Clean compatible formulation
- ▶ Minimal residues
- ▶ Rapidly re-tins badly oxidised soldering iron tips.



TMT-FP-1

**LEAD
FREE**

Thermaltronics TMT-FP-1 Rosin flux paste is a petrolatum-based soldering paste containing rosin. It is designed for lead and lead-free electronics applications and does not contain Zinc Chloride or Ammonium Chloride.

- ▶ For Lead & Lead free applications
- ▶ RoHS Compliant
- ▶ Ideal for electronic soldering, repair & rework
- ▶ No Clean Flux
- ▶ Zinc Chloride & Ammonium Chloride Free



Introduction

With today's delicate and complex electronic assemblies, temperature accuracy is a consistent challenge. Component density, lead size and thermally sensitive components all combine to make process control demands, criteria which many systems fail to meet.

Thermaltronics CHT (Curie Heat Technology) is different, it responds to the thermal demands of each solder joint by adjusting the power instantaneously, thereby meeting the exact requirements of the substrate component and solder material.

The Thermaltronics Soldering Product range includes both 13.56 MHz Power Supplies and those which operate at 470KHz. The extended range of power supplies and associated accessories provide users with a wide choice of soldering solutions and ensure full compatibility with existing competitive products.

All Thermaltronics products are produced in accordance with ISO 9000 & ISO 14000 standards and meet either TUV, GS, CE or NRTL safety requirements. Strict quality control procedures are in place and product warranties are among the best in the industry.

The new range of soldering systems and cartridges, engineered by Thermaltronics, also incorporate further improvements in design which optimize power thresholds and provide increased performance and reliability. Advances in plating technology have also ensured reductions in the "cost of ownership" and extended tip life.

To aid in the selection of the correct temperature profile, Thermaltronics solder cartridges are color coded for easy identification. This unique feature has additional benefits in both inventory management and quality control.

Other features which have been verified through extensive testing include:

- √ Color coded tips which provide full process control
- √ Improved plating which extends service life and provides cost savings
- √ Gold plated connectors which improve connectivity and optimize power transmission
- √ Enhanced cartridge design which achieves faster point to point soldering
- √ Curie Heat technology which provides stable tip temperatures

SPEED – QUALITY – COST REDUCTION – INCREASED PRODUCTIVITY

THERMALTRONICS

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