

LEAD  
FREEESD  
SAFE

RoHS

- Analog type of HAKKO FX-951
- Lock key enables temperature control even on this analog type unit
- Supports the N<sub>2</sub> system.

## Specifications

**Model No.** FX950

**Power consumption** 75W

**Temperature range** 200-450°C

**Temperature stability** ±5°C at idle temperature

- Station

**Output voltage** 24V

**Dimensions** 80(W)×118(H)×138(D)mm

**Weight** 1.2kg

- Soldering Iron

**Power consumption** 70W (24V)

**Tip to ground resistance** <2Ω

**Tip to ground potential** <2mV

**Heating element** Composit heater

**Length of cord** 1.2m

**Total length** 188mm (with 2.4D tip)

**Weight** 30g (with 2.4D tip)

\* Length and weight (w/o cord)

## Packing List

Model No.	Packing List
No.FX950	Soldering Station(FX-950), Soldering Iron(FM-2028), Lock Key, Heat-Resistant Pad, Iron Holder (FH-101, with cleaning sponge), Instruction Manual

**Note:** A soldering tip is not included in this product. The tips of desired shape should be purchased separately.

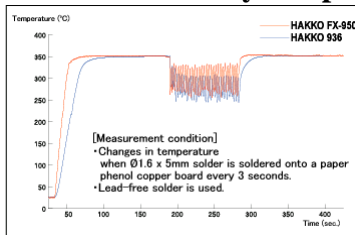
## Features

### Compact High-Power Analog-Type Lead-Free Soldering Iron (Compatible with T15 Series Soldering Tips)

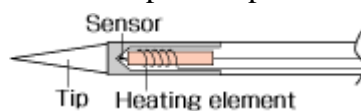
#### ■ Excellent Thermal Recovery

The excellent thermal recovery allows setting lower preset temperatures. It is also useful for lead-free soldering which requires higher melting temperatures.

### Thermal Recovery Graph (Comparison of HAKKO products)



#### • Composite tip



The composite tip is a ceramic soldering tip with integrated heating element and sensor. Despite its highly compact design, the tip offers superior thermal responsivity and greatly improved thermal recovery.

#### ■ Uses lock-type Sleeve Assembly soldering iron.



### HAKKO FM-2028

-Click sound ensures easy and secure tip insertions.

-Four-color lineup of sleeves allows you to distinguish the various tips easily.

### ❖ 85 Variations of Tips



85 variations of HAKKO tips are available for various types of soldering from IC modifications to soldering of power sections.

### T15 Series for EU

### ❖ Temperature control function using a lock key



- The lock key can lock the present temperature.
- Digital offset makes temperature correction easy.

### ❖ Compact Design



The compact design is well-suited to cell production.

80mm (W) × 118mm (H) × 138mm (D)

Smart design for optimized work.

- ❖ Soldering iron holder can be set to any angle safely.
- ❖ LED lamp to indicate errors
- ❖ Optional functions

Equipped with sleep function\*: If optional Iron Holder (FH200-01 or FH200-02) and Connection Cable (B3253) are connected, sleep function can be used.



\* Sleep function: When the handpiece is placed on the Iron Holder (FH200-01/FH200-02), the sleep function operates and decreases the unused tip temperature up to approximately 200°C, preventing the tip from being oxidized. In addition, this function can relieve the loads applied to the tip due to the high-temperature settings required for lead-free soldering.





- Combination of optional handpiece (such as FM-2026) allows use of N<sub>2</sub> system.



N<sub>2</sub> system enhances solderability by Preventing Oxidation and Preheating Effect, featuring space-saving design.

163(W)×280(H)×138(D)mm

\*Reference dimensions

Name	Figure	Remarks
1 Station  <a href="#">HAKKO FX-950</a>		With Iron holder, Control card, Heat resistant pad and Power cord  (Not necessary to purchase this unit if you have it.)
2 N <sub>2</sub> Soldering Iron  <a href="#">HAKKO FM-2026</a>	 Tip and nozzle assemblies are optional parts.	With Nitrogen guard(B2998)  No nitrogen guard for the iron holder of FX-950
3 Soldering Tip & Nozzle Assembly	 <a href="#">T13 Series</a>	Select the soldering tip appropriate for work.
4 N <sub>2</sub> Generator  <a href="#">HAKKO FX-780</a>		With Racks for Station Air tube Outer diameter: 6mm It can be placed perpendicularly or horizontally.

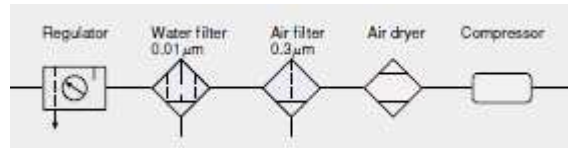


[HAKKO  
FX-791](#)

5 N<sub>2</sub> Flow  
Meter



6 The  
others



\* The others are not  
provided by HAKKO








Air tube Outer diameter: 6mm

Used in combination with a smoke absorber  
Can be used in combination with the [HAKKO 490](#) smoke cleaner



[HAKKO 490](#)

## Replacement Parts

Part No.	Name	Specifications
 FH101-02	Iron holder	
 FM2028-01	Soldering iron FM-2028	70W (24V)
 B2300	Heating resistant pad	
 B3308	Lock key	
 B3216	Sleeve assembly	yellow
 A1536	Cleaning sponge	green
 FM2028-03	Connector assembly	



B3220 Connector cover

Option

	Part No.	Name	Specifications
	FH200-02	Iron holder	w/ power-save function
	FH200-01	Iron holder	w/ power-save function
	FM2028-02	Soldering iron FM-2028	70W (24V)
	B3253	Connecting cable	
	A1519	Cleaning sponge	yellow
	B3217	Sleeve assembly	orange
	B3218	Sleeve assembly	blue
	B3219	Sleeve assembly	green
	599B-01	HAKKO 599B tip cleaner	
	B2756	Tip tray	

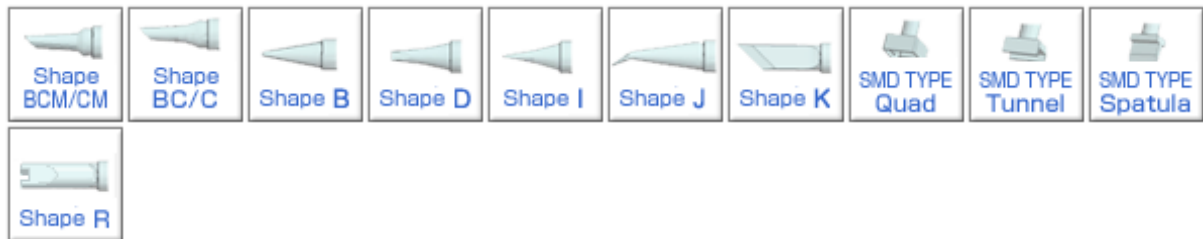
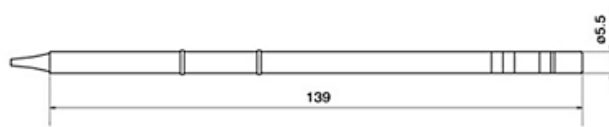
■ Equipped with sleep function

\* Sleep function: If an optional Iron holder (No.FH200-01 or FH200-02) is connected to the FX-950 station via a Connection cable (No.B3253), and the FM-2028 iron is placed on the Iron holder, the sleep function will operate after 6 minutes and the tip temperature will be reduced to below 200°C (400°F). This function relieves the load applied to the tip and prevents the tip from being oxidized.

\*The sleep function starting time cannot be changed. (Fixed at 6 minutes)



## T15 széria

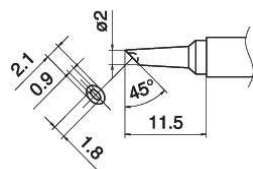


### Shape BCM/CM

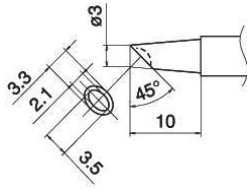
This type differs from Shape BC by the addition of a hollow to its cut face, providing high solder retention capability.

It is used for drag soldering and correction of bridging.

\* Shape BCM/CM are not available for sale or use in the U.S.A.



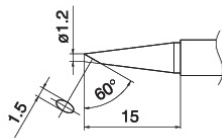
T15-BCM2 Shape-2BC Bevel with indent



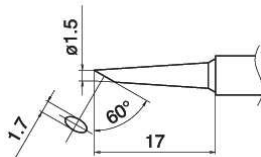
T15-BCM3 Shape-3BC Bevel with indent

## Shape BC/C

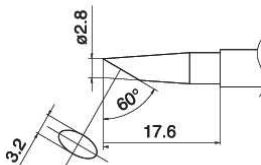
This type has a shape like a cone or column cut at a slant, which allows users to select the cut surface size depending on the workpiece. It is used for drag soldering and pre-tinning of lead wires.



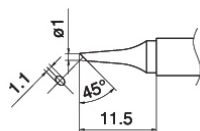
T15-BC12 Shape-1.2BC



- T15-BC15 Shape-1.5BC

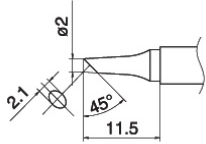


- T15-BC28 Shape-2.8BC

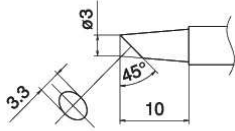


- T15-BC1 Shape-1BC

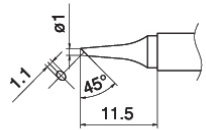




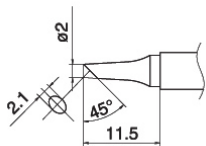
- T15-BC2 Shape-2BC



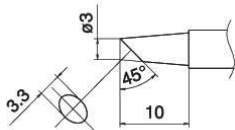
- T15-BC3 Shape-3BC



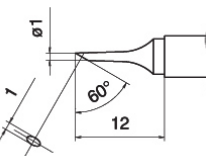
- T15-BCF1 Shape-1BC  
Tinned cut surface only



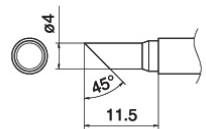
- T15-BCF2 Shape-2BC  
Tinned cut surface only



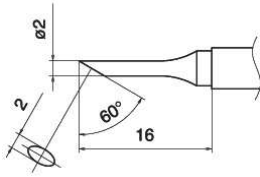
- T15-BCF3 Shape-3BC  
Tinned cut surface only



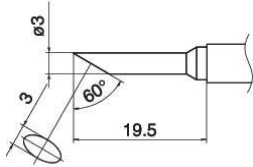
- T15-C1 Shape-1C



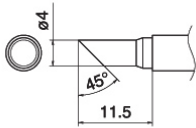
- T15-C4 Shape-4C



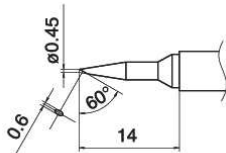
- T15-CF2 Shape-2C



- T15-CF3 Shape-3C



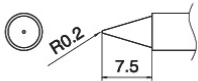
- T15-CF4 Shape-4C  
Tinned cut surface only



- T15-SBC04 Shape-0.4SBC

## Shape B

All-round type which can be used from any direction and is easy to hold at any position.  
Possible to solder any surface from small to large.



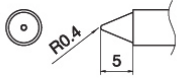
T15-B Shape-B



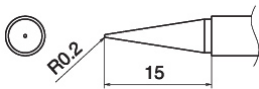
- T15-B2 Shape-0.5B



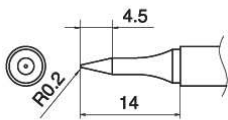
- T15-B3 Shape-0.7B



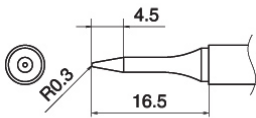
- T15-B4 Shape-0.4B



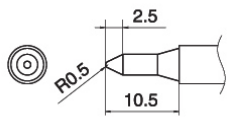
- T15-BLL Shape-BL Long



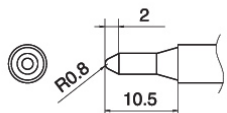
- T15-SB02 Shape-0.2SB



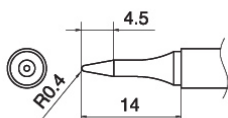
- T15-SB03 Shape-0.3SB



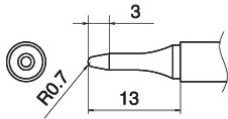
- T15-SB05 Shape-0.5SB



- T15-SB08 Shape-0.8SB



- T15-SBS04 Shape-0.4SBS

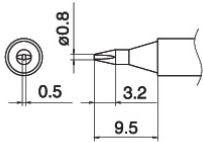


- T15-SBS07 Shape-0.7SBS

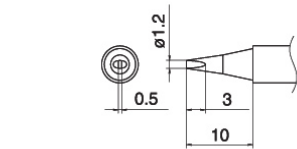
## Shape D

This type has a shape like a flat-blade screwdriver and is capable of soldering by applying the tip in 2 ways: line and face.

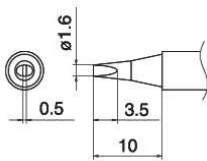
The width (size of tip) suitable for the workpiece can be selected, and it can be used for any soldering work.



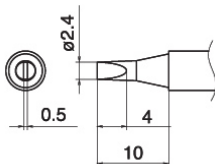
T15-D08 Shape-0.8D



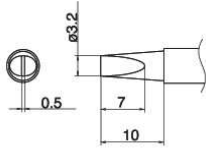
- T15-D12 Shape-1.2D



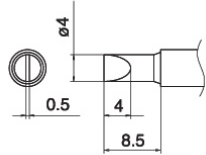
- T15-D16 Shape-1.6D



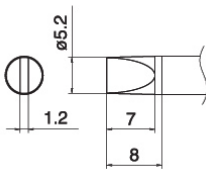
- T15-D24 Shape-2.4D



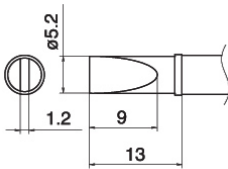
- T15-DL32 Shape-3.2D Long  
Just joined as standard tip.



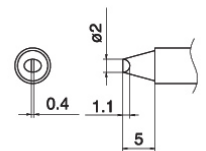
- T15-D4 Shape-4D



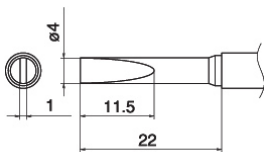
- T15-D52 Shape-5.2D



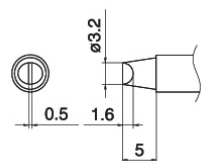
- T15-DL52 Shape-5.2D Long



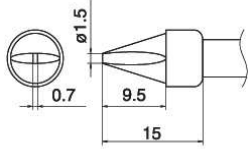
- T15-D2 Shape-2D



- T15-DL4 Shape-4D Long



- T15-D32 Shape-3.2D

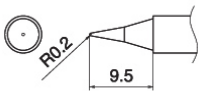


- T15-XD15 Shape-1.5XD

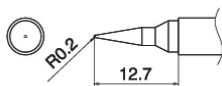
## Shape I

This type has a thin conical end and is an ultrafine tip which is best suited for soldering at narrow pitches, etc.

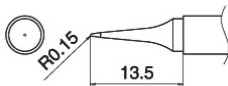
It is the best for soldering micro components such as 0603, etc. and for repairing high-density-mounting P.W.Bs. such as in cellular phones, etc.



T15-I Shape-I



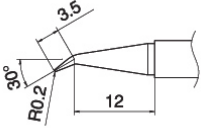
- T15-IL Shape-IL



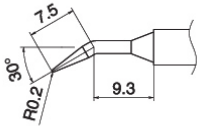
- T15-ILS Shape-ILS

### Shape J

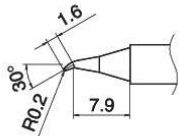
This type differs from Shape B and I by bending the tip end and is capable of soldering by applying the tip in 2 ways: face and point.  
 It is used for drag soldering and correction of bridging.



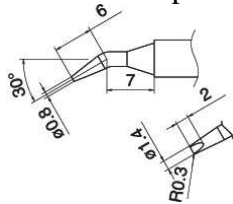
T15-J02 Shape-0.2J (Shape-0.2RSB)



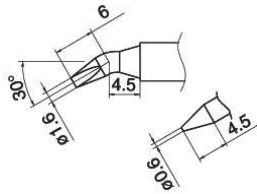
- T15-JL02 Shape-0.2JL (Shape-0.2RLB)



- T15-JS02 Shape-0.2JS (Shape-0.2RSSB)



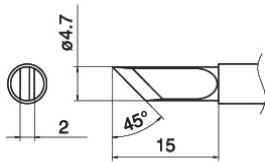
- T15-JD14 Shape-1.4JD



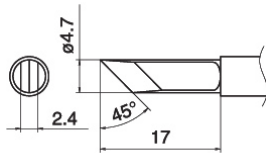
- T15-JD16 Shape-0.6JD

### Shape K

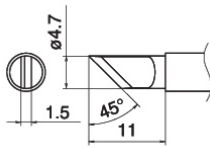
This type has a shape like a knife and is capable of soldering by applying the tip in 3 ways: line, face and point.  
 It is used for soldering at narrow pitches, correction of bridging and drag soldering.



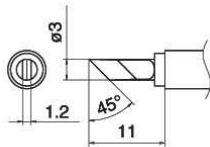
T15-K Shape-K



- T15-KF Shape-KF



- T15-KL Shape-KL  
For drag soldering for left-handed.

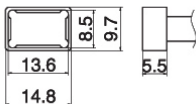


- T15-KU Shape-KU

## SMD Type : Shape Quad

This type is capable of heating plural pins or lead wires at once and is used for rework of SMDs.

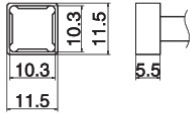
It is used for removal of QFP.



T15-1201 Quad

Size 13.6 x 8.5

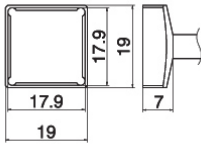




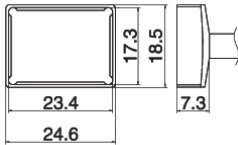
- T15-1202 Quad  
Size 10.3 x 10.3



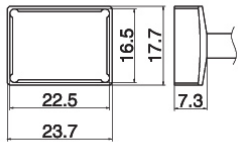
- T15-1203 Quad  
Size 12.8 x 12.8



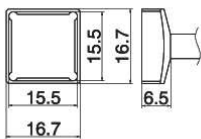
- T15-1204 Quad  
Size 17.9 x 17.9



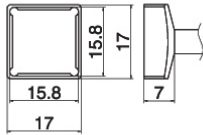
- T15-1205 Quad  
Size 23.4 x 17.3



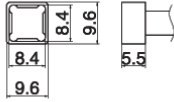
- T15-1206 Quad  
Size 22.5 x 16.5



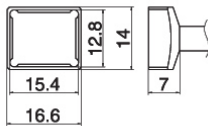
- T15-1207 Quad  
Size 15.5 x 15.5



- T15-1208 Quad  
Size 15.8 x 15.8



- T15-1209 Quad  
Size 8.4 x 8.4

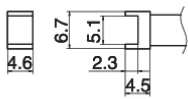


- T15-1210 Quad  
Size 15.4 x 12.8

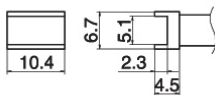
## SMD Type : Shape Tunnel

This type is capable of heating plural pins or lead wires at once and is used for rework of SMDs.

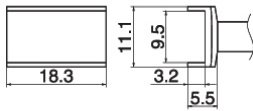
It is used for removal of SOP.



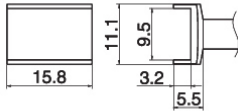
T15-1001 Tunnel  
Size 5.1 x 4.6



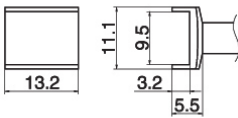
- T15-1002 Tunnel  
Size 5.1 x 10.4



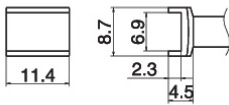
- T15-1003 Tunnel  
Size 9.5 x 18.3



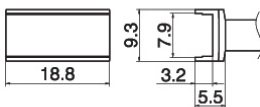
- T15-1004 Tunnel  
Size 9.5 x 15.8



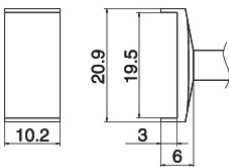
- T15-1005 Tunnel  
Size 9.5 x 13.2



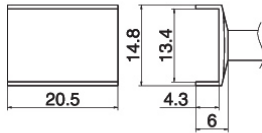
- T15-1006 Tunnel  
Size 6.9 x 11.4



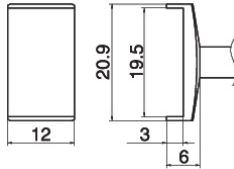
- T15-1007 Tunnel  
Size 7.9 x 18.8



- T15-1008 Tunnel  
Size 19.5 x 10.2



- T15-1009 Tunnel  
Size 13.4 x 20.5

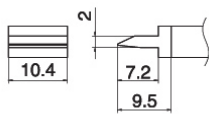


- T15-1010 Tunnel  
Size 19.5 x 12

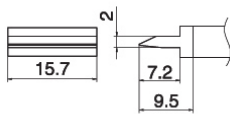
## SMD Type : Shape Spatula

This type is capable of heating plural pins or lead wires at once and is used for rework of SMDs.

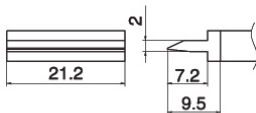
Soldering for thermal compression of flexible P.W.B., shield cases, connector, etc.



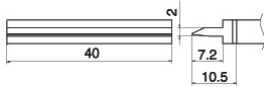
- T15-1401 Spatula  
Size 10.4



- T15-1402 Spatula  
Size 15.7



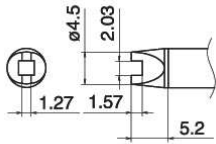
- T15-1403 Spatula  
Size 21.2



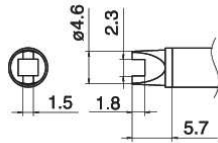
- T15-1406 Spatula  
Size 40

## Shape R

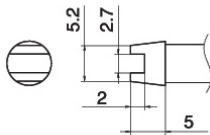
This type has a groove at the tip end.  
It is suitable for removing ICs.



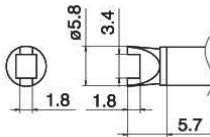
T15-R20 Shape-2.0R



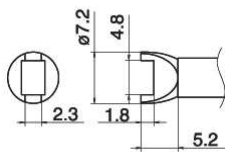
- T15-R23 Shape-2.3R



- T15-R27 Shape-2.7R



- T15-R34 Shape-3.4R



- T15-R48 Shape-4.8R

