**Replacement Tips and Nozzles**

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**T30 series**
- T30-06H Shape-6H
- T30-D1 Shape-1D
- T30-I Shape-I
- T30-J Shape-J
- T30-KU Shape-KU
- T30-KN Shape-KN

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**T16 series**
- For Model FM-2022

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**CHIP**
- T16-1001 Chip L
- T16-1000 Chip 0,5C
- T16-1005 Chip 1L, T16-1004 Chip 2L, T16-1013 Chip 3L

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**SOP**
- T16-1005 SOP 6L
- T16-1007 SOP 10L
- T16-1008 SOP 13L
- T16-1009 SOP 16L

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**T9 series**
- For Model FM-2023

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**CHIP**
- T9-01 Chip 1
- T9-01 Chip 1L, T9-02 Chip 2L

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**N3 series**
- For Model FM-2024

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**N3-06 Nozzle ø0.6**
- N3-08 Nozzle ø0.8
- N3-10 Nozzle ø1.0
- N3-13 Nozzle ø1.3
- N3-15 Nozzle ø1.6

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**N3-20 Nozzle ø2.0**
- N3-23 Nozzle ø2.3
- N3-26 Nozzle ø2.6 Long

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A single station plays multiple roles: Soldering, desoldering and SMD rework. This station with 2 connection ports allows users to use it more comfortably.

## Two connection ports
Two soldering irons can be connected at the same time, which allows users to select and use the appropriate one without having to connect them alternately.

## Powerful thermal recovery
The composite tip provides powerful thermal recovery and stable temperature accuracy.

### Thermal Recovery Graph

![Thermal Recovery Graph](image)

## Sleep function
After the iron is inserted into the iron holder, the sleep function activates for a user-selectable time (0 to 29 min.) and the tip temperature will decrease to approximately 200°C.

## Auto power shut-off function
When 30 minutes have elapsed after inserting the iron into the iron holder, the auto power shut-off function activates and stops to supply power to the heating element.

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**HAKKO FM-203**

Esd safe

**HAKKO FM-2027**

Soldering Iron
- Lightweight grip provides fatigueless work even for extended jobs.

**HAKKO FM-2032**

Micro Soldering Iron
- Ideal for micro-soldering applications under a microscope

**N2 system**

- Example setup
  - FM-2026 N2 soldering iron
  - FX-780 N2 generator
  - FX-791 N2 station
  - (N2 airflow meter)
  - For further details, refer to HAKKO web site.

**SMD rework**

**HAKKO FM-2021**

Parallel Remover
- Unique parallel movement of tips allows easy grip and release and applies heat optimally.
- Can be used for chips and flat packages up to 25mm in size.

**HAKKO FM-2033**

Mini Parallel Remover
- Direct heating reduces damage to neighboring sensitive components compared to hot air systems.
- Standard or reverse tweezers action can be selected with a switch lever.

**HAKKO FM-2024**

Desoldering Tool
- Easy maintenance
  - Uses disposable paper filters. Allows paper and solder to be disposed of separately.
  - Quick nozzle replacement. Nozzle can be replaced safely with the provided nozzle remover.
- Safe design
  - Equipped with a nozzle lock function. Inserting a nozzle into the grip automatically locks it in place and prevents the nozzle cartridge from being pulled out suddenly.
  - Selectable grip
    - Detachable handle allows two-way use: guillotine or straight type.

**DCB (Desoldering Control Box)**
- Before using the FM-2024 unit, connect it to the desoldering control box and compressor.
- Example setup

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**Combination examples of handpieces which can be connected.**

- Since all handpieces cannot be connected to each connector port, refer to the following table.

<table>
<thead>
<tr>
<th>Handpiece</th>
<th>Channel D connector</th>
<th>Channel G connector</th>
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<tbody>
<tr>
<td>FM-2027</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>FM-2022</td>
<td>○</td>
<td>X</td>
</tr>
<tr>
<td>FM-2023</td>
<td>○</td>
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<td>○</td>
<td>○</td>
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<tr>
<td>FM-2026</td>
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<td>○</td>
</tr>
<tr>
<td>FM-2032</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

- If the FM-3020 or the FM-3023 handpiece is connected to the channel D connector the other handpiece connected to the channel G connector can be used with it.
- At the same time, if either handpiece is used, the new used handpiece will be automatically subject to sleep mode.
- If both FM-3024 handpieces are connected to both channel connectors connected each of them to the desolder control box.
- If you generate N2 airflow meter must be connected before using the FM-3020.
- For further details, refer to the N2 system brochure.
## Replacement Tips

For HAKKO FM-2027

<table>
<thead>
<tr>
<th>Tip Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>T15-K</td>
<td>Shape-K</td>
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<tr>
<td>T15-KF</td>
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<td>T15-R20</td>
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<tr>
<td>T15-JS02</td>
<td>Shape-0.2JS</td>
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</tbody>
</table>

* These tips are offered on the sintering surface only.
* The tips marked with double asterisk (**) have a temperature accuracy of ±2°C. Others have a temperature accuracy of ±5°C.