

## Products

Desoldering / Rework/Desoldering tool

**HAKKO** **FR-410** **ESD SAFE**  
DESOLDERING TOOL



LEAD  
FREE

ESD  
SAFE

RoHS

Desoldering tool with built-in vacuum pump  
140 W high power enables perfect desoldering on multi-layer PWB  
New type nozzle can fit onto micro land patterns and narrow space  
Separate nozzle and heater ensure running cost advantage for you

Available in:

Japan North America EU  
Oceania Asia Other Countries

[> Contact Us](#)

[> Catalog](#)

[> Manuals / SDS /  
Engineering documents](#)

Features

[Packing List /  
Specifications](#)

[Soldering Tip /  
Nozzle](#)

[Replacement Parts /  
Option](#)

[Maintenance](#)

## Features

**140 W high powers enable perfect desoldering for the components on multi-layer PWB**

Increasing the power to 140 W from 50 W of our previous models (HAKKO 474 · 475), it can make it easy to desolder on multi-layer PWB which was never an easy job, and it can also shorten the process time.

**A wide selection of nozzle, with the addition of new types, is available for a variety of desoldering works.**

Applicable to even micro lands, components in a narrow space or flat type terminals on the PWB of downsized devices like mobile phone.

**Long type nozzle performs well in narrow space**

Slim and long nozzles can reach to target even in a narrow space

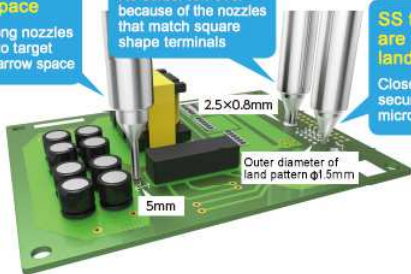
**Oval shape nozzles fit well with flat type terminals**

No solder left-over because of the nozzles that match square shape terminals



**SS type nozzles are for micro land patterns**

Close-fitting nozzles secure desoldering on micro land patterns



### Secure desoldering, valve function that suctions with high pressure

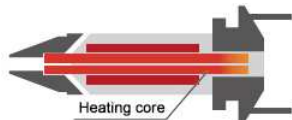
Suction starts 0.2 seconds after pulling the trigger for instance and high pressure suction to achieve complete desoldering.



### Reduction of solder clogging

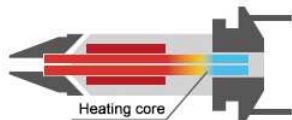
#### • Improvement in heating core

Heating ability for backside of heating core is increased to ensure suctioned solder be carried to filter pipe and avoid solder clogging.



#### HAKKO FR-410

No solder clogging due to higher temperature at the back side of heating core



#### Previous models

Solder clogs at the backside of heating core

\* Image

- **Featuring ACF (Anti Clogging Function)**

ACF (Anti Clogging Function) ensures suctioned solder be carried to filter pipe by keeping the pump running for a certain period of time (1 to 5 seconds) automatically after releasing trigger.

- **Improvement in maintainability**

- **Easy nozzle replacement**

The dedicated wrench allows safe, easy and smooth nozzle replacement.



- **Easy heater replacement**

Easy heater replacement by removing 3 screws on the part of heating core.



- **Larger filter and more transparency**

Filter size has been increased to protect the pump from contaminants, and transparent filter cover allows quick visual check of the filter condition.



- **Tool box**

FR-410 comes with a tool box that contains of maintenance tools to keep nozzles and heater in a good condition.



### Featuring a large LCD display

Very easy to see temperature on the large LCD display

Vacuum indicator to check clogging



Suction with no clogging



Suction with clogging