



FR-811

ADVANCED SMD HOT AIR REWORK SYSTEM



The **HAKKO FR-811 SMD Hot Air Rework System** is an advanced SMD rework station with vacuum pickup and a multitude of features for every need. When integrated with a bottom heater, board fixture and vision system, the FR-811 is a complete SMD rework system and the ideal choice for bottom terminated components. For complete set please see FR811-SET.



FEATURES & BENEFITS

- Stand-alone holder with safety shield
- Graphic Display
- Dual Thermocouple Inputs
- 6 Stage Program Profiles
- 50 Profile Flash Memory Storage
- Hot Air Handpiece with Vacuum
- Auto Cool Down Handpiece Holder
- USB Port for PC Software Integration



SPECIFICATIONS For Part No. FR811-04

Nozzle Series	N51 Series see page 78 & existing HAKKO Hot Air Nozzles see page 79 (Nozzles Sold Separately)
Power Consumption	820 W
Heater Power Consumption	790 W
Airflow Capacity¹	Setting 1-100% (115 L/min Max)
Vacuum Function	Yes
Temperature Range²	120 °F - 1120 °F / 50 °C - 600 °C
Thermocouple Inputs	2 - Type K
External Connections	1 - USB-A and 1 - USB mini B
Operating Modes	Manual or automatic
Memory	50 Profiles (6 stage + preheater profiles)
Process Control	Password lockout
Auto Power Off Safety	Yes
Auto Cooling Safety	Yes
Dimensions (W x H x D)	6.3 x 5.7 x 8.7 in. / 160 x 145 x 220 mm
ESD-Safe	Yes



Integrated vacuum pickup with visual reflow indicator that safely lifts the component off the PCB at the right time.



Two thermocouple inputs for integrated closed-loop process control.

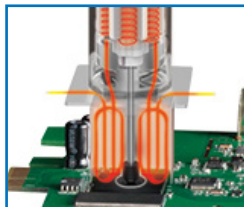


USB to PC interface to allow for PC communication with the system.



USB port for flash drive storage of rework profiles.

N51 Nozzle design to optimize heating and mitigate adjacent reflow, even on densely populated PCBs.



¹ Airflow capacity is rated as free flowing. Restrictions created by various nozzles may reduce the maximum airflow capacity.

² Under certain airflow and temperature setting conditions, the station may not attain the maximum allowable temperature selection.

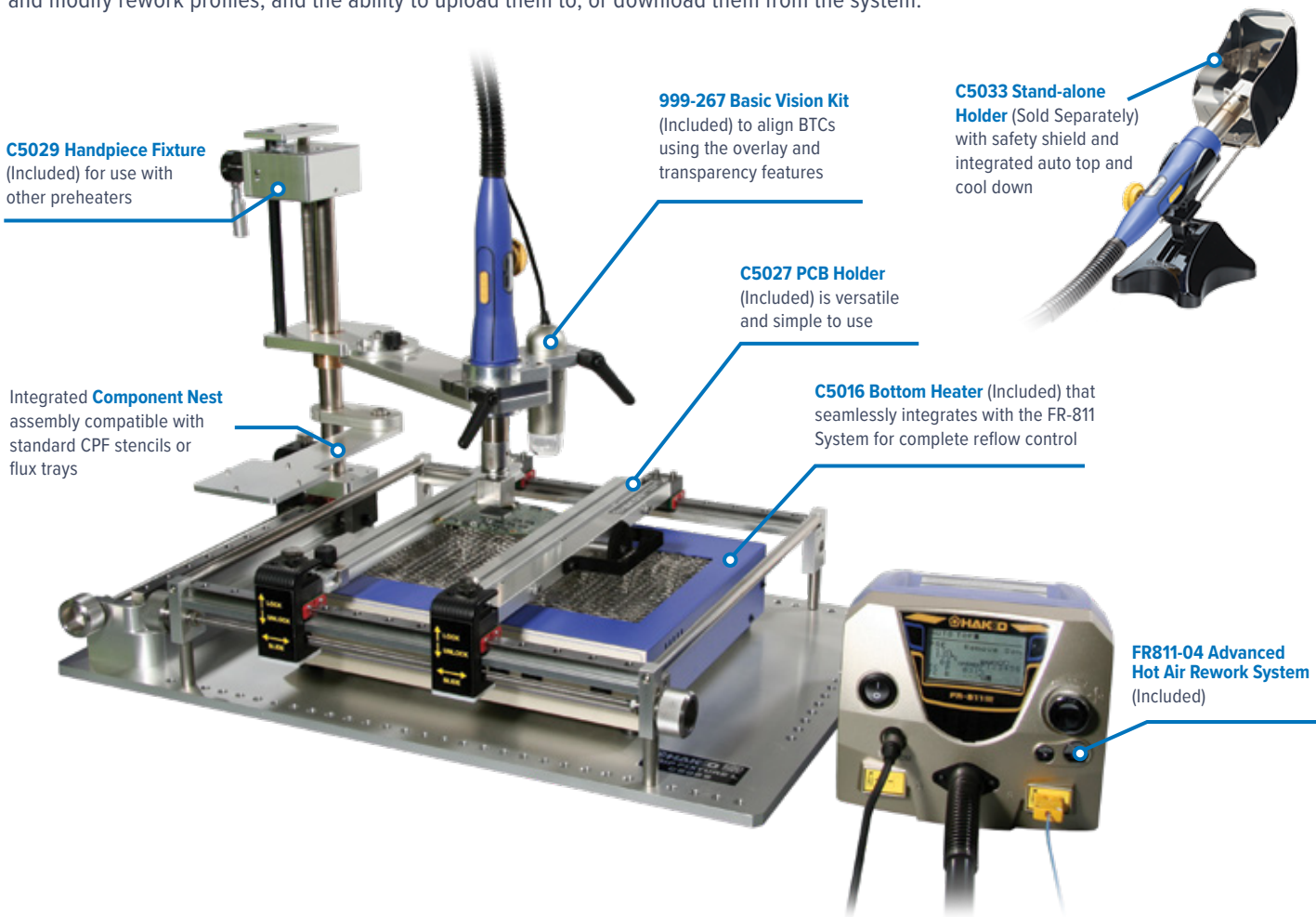


FR-811 Set

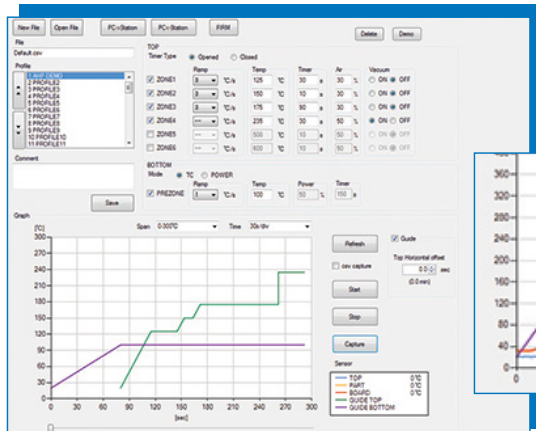
COMPLETE SMD HOT AIR REWORK SYSTEM

The **HAKKO FR-811 SMD Hot Air Rework System** is an affordable and easy to use system that simplifies the hot air rework of SMD components, including BTCs such as QFN/DFN and BGA using up to six stages for a rework profile, and includes a board only preheating stage to allow for proper reflow at lower top heater temperatures. One thermocouple input provides closed-loop top heat control based on part temperature while the other input provides closed-loop bottom heat control based on PCB temperature.

Included with the HAKKO FR-811 is communication software that allows for PC programming of the system, enabling the user to create and modify rework profiles, and the ability to upload them to, or download them from the system.



REWORK



Easy to use software for profile creation and monitoring

