

American Hakko Products, Inc.

# PRODUCT BULLETIN

**Bulletin No:** PB365

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**Available:** 6-9-2015

### **Product Description:**

HAKKO FR-400 Ultra Heavy Duty Desoldering Station and N60 Series Desoldering Nozzles

### Part No:

FR400-02, N60-01, N60-02, N60-03, N60-04, N60-05, N60-06, N60-07, N60-08, N60-09



# Specification:

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Model	FR-400
Part No.	FR400-02
Input Voltage	120 VAC 50/60 Hz
Power Consumption	320W
Temperature Range	350°C – 500°C (660°F – 940°F)
Temperature Stability	±5°C (±9°F) at idle
ESD Safe	Yes
Safety Approval	©MET)©

### **Contents:**

Part No.	Description	
	FR-400 UHD Desoldering Station	
FR4001-81	FR-4001 Gun-Style Handpiece	
FH400-82	Holder for FR-4001	
C5011	Maintenance Kit	
	Includes:	
	<ul> <li>B1087 – 1.0mm Cleaning Pin</li> </ul>	
	<ul> <li>B1215 – Heater Cleaning Pin</li> </ul>	
	<ul> <li>B1303 – 1.0mm Cleaning Drill</li> </ul>	
	B5082 – Nozzle Wrench	
	<ul><li>A5020 – Station Filter (x2)</li></ul>	
	<ul> <li>A5019 – Handpiece Filter (x4)</li> </ul>	
B2419	Power Cord	
	Instruction Manual	

Specifications continued on Page 2



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# Specifications (continued):

### Station

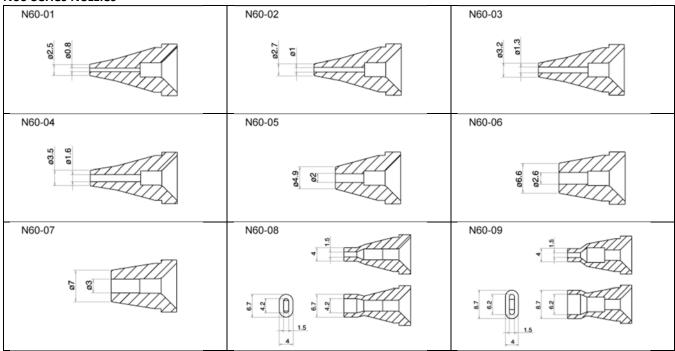
Output Voltage	29 V
Vacuum Generator	Pump – Double Cylinder
Vacuum Pressure (Max)	80 kPa / 600 mm Hg (24 in. Hg)
Suction Flow	15 L/min
Outer Dimension (W x H x D)	160 x 137 x 235 mm
	(6.3 x 5.4 x 9.3 in.)
Weight (w/o Cord)	5.7 kg (12.6 lb.)

#### Handpiece

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Model	FR-4001
Part No.	FR4001-81
Power Consumption	300W (29V)
Nozzle-to-Ground Resistance	< 2 ohms
Nozzle-to-Ground Potential	< 2 mV
Heater	Composite Ceramic Cartridge
Nozzles	N60 Series
Standard Nozzle (Included)	N60-02 (1.0mm / 0.04 in.)
Cord Length	1.2 m (4 ft.)
Total Length (w/o Cord) 1	183 mm (7.2 in.)
Weight (w/o Cord) 1	245 g (0.54 lb.)

<sup>&</sup>lt;sup>1</sup> As measured with N60-02 nozzle installed

## **N60 Series Nozzles**



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#### **Comments:**

The HAKKO FR-400 Ultra Heavy Duty (UHD) Desoldering Station is specially designed for the difficult rework of extremely large mass components such has high current inductor coils, heat sinks, large transformers, shields, and other connections where there is a significant amount of thermal inertia that must be overcome.

The station features a 300W heating element that has a top controlled temperature of 500°C (940°F) but the high mass of the heater and nozzles combined with the power and control of the composite ceramic heating cartridge allows for rework of some of the most challenging solder joints at only 400°C (750°F)... even without preheating!

The station also features various anti clogging features which help ensure instantaneous application of peak vacuum pressure to the solder joint, and prevent the premature release of the vacuum system before the solder has cleared the heater and is captured in the solder collection chamber.

The solder collection chamber is 3 times larger in capacity than other HAKKO desoldering stations and it can be cleaned and re-used, reducing the amount of environmental waste.

The station has a large, easy to read display that includes a vacuum indicator that lets you know if there are any restrictions building that will need to be cleaned out using the tools that are included in the maintenance kit that comes with the station.

For more information please visit us at www.HakkoUSA.com