



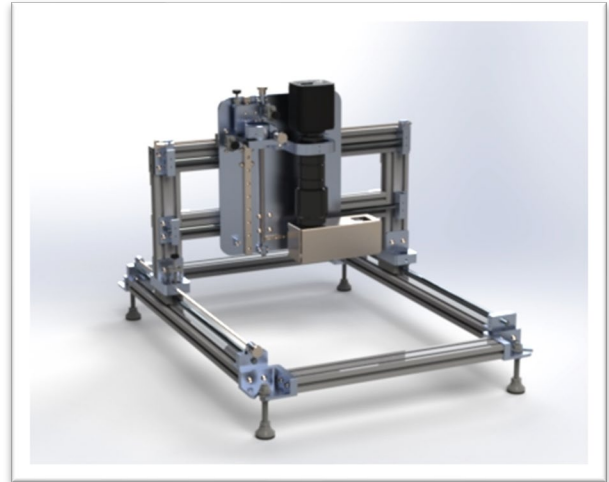
American Hakko Products, Inc.

PRODUCT BULLETIN

Bulletin No: PB445
Issue Date: 12-10-2019
Effective Date: 1-2-2020

Description/Title:
New HAKKO HJ4000 SMD Rework Fixture

Part No:
HJ4000
HJ4000-SET
(HJ4000-SET Includes 1pc FR811-04 and 1pc FR872-03)



Specification:

| | | |
|-------------------------------|-----------------|---|
| Part No. | | HJ4000 |
| Movement Range | X-Axis | 335 mm (13.9 in) |
| | Y-Axis | 447 mm (17.5 in) |
| | Z-Axis | 247 mm (9.7 in) |
| | Rotation | ±30° |
| Camera Type | | CMOS 1/2.5" |
| Resolution | | 5MP, 2592 x 1932 (Max) |
| Optical Interface | | C-Mount |
| Zoom | | 6X – Optical, 10X – Digital |
| Camera Output | | HDMI |
| Lighting | | Independently Dimmable LED White (Top) / Blue (Bottom) |
| Power Supplies | | 1 – 120VAC to 12VDC 2A (Camera) 1 – 120VAC to 24V 1.67A (Lighting) |
| Dimensions (L x W x H) | | 735 x 536 x 504 mm (28.9 x 21.1. x 19.8 in) |
| Weight | | 14.7 kg (32.4 lb) |
| ESD Safe | | Yes |

Comments:

The new HAKKO HJ4000 SMD Rework Fixture features a lightweight gantry and base frame that works with select HAKKO SMD Hot Air Rework Stations and IR Preheaters to provide a low-cost manual rework system. The gantry design is similar to that of a pick-and-place system that allows the PCB to remain stationary while the head assembly moves to accomplish X, Y, and rotational alignment using the integrated split-vision camera system. Not only can you remove SMD components but the

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integrated split-vision alignment capability of the HJ4000 allows you to accurately place SMD components as large as 45mm square down to 1mm square.

The rework fixture uses high-quality linear motion components to provide effortless smooth movement in the X, Y, and Z-axis for general positioning with quick-release brakes. Each axis, including Theta, also has a fine adjustment knob that allows you to perfect the alignment to within ± 100 microns. The Z-axis also includes a hard stop to limit the movement and prevent the nozzle from contacting the top surface of the PCB when it is lowered into position. This also allows for consistent positioning of the nozzle above the component for repeatable heating and process profile performance.

Real-time viewing of the alignment is accomplished using a high-resolution color camera, lens, and prism system. A high-quality macro video lens that is close-focusing provides up to a 6X optical zoom capability while the camera module features a 10X digital zoom capability. The underside of the component is illuminated with a white dimmable LED lighting while the target location on the PCB is illuminated with a blue dimmable LED lighting. Top and bottom lighting are independently adjusted to provide optimal contrast for the user between the two images.

For more information, please visit www.HakkoUSA.com, e-mail Support@HakkoUSA.com, or call 1-800-88-HAKKO (42556).