

Setup option

The following options are required for initial set-up. Select them according to solder wire diameter.

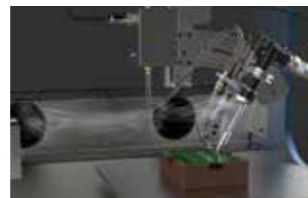


Solder feed pulley unit	Solder feed guide set	Fluoroplastic tubes (10 tubes are included.)
For Ø0.3 mm BX1000 For Ø0.5 mm BX1001 For Ø0.6 mm BX1002 For Ø0.8 mm BX1003 For Ø1 mm BX1004 For Ø1.2 mm BX1005 For Ø1.6 mm BX1006	For Ø0.3 mm BX1046 For Ø0.5 to 1 mm BX1047 For Ø1.2 to 1.6 mm BX1048	For Ø0.3 mm BX1010 For Ø0.5 to 0.6 mm BX1011 For Ø0.8 mm BX1012 For Ø1 mm BX1013 For Ø1.2 mm BX1014 For Ø1.6 mm BX1015

Option

Smoke absorption system

A large amount of flux smoke is attached to the robot movable part and the periphery before flux smoke rises upward and is exhausted. Providing the absorption nozzle on the lower part with the same height as the work table can absorb smoke before smoke flows upward. Furthermore, since the nozzle also covers the width of the robot in horizontal direction, the nozzle absorbs smoke properly even if the handpiece moves horizontally. Thus, flux smoke amount adhering to the movable part, etc. becomes low, reducing the number of maintenance sessions and leading to increased productivity. Using the absorption nozzle together with the FA-431 as a set allows you to build the smoke absorption system easily without performing facility work.



Smoke absorption nozzle for HU-200 No. BX1059

Equipped with 2 adaptors (for connection of FA-431), 2 ducts (Ø75 mm), an absorption nozzle and 4 duct bands



Smoke goes up without the absorption nozzle.



Smoke absorber air purifying type Model No. FA-431

* Duct and nozzle are optional.
* For further details such as specifications, see the website.

Specifications

Table-top type robot

Model No.	HU-200
Power consumption	300 W ^{*1}
Movable range (stroke)	X axis: 400 mm Y axis: 300 mm Z axis: 200 mm θ axis: ±200 degrees
Payload capacity	Y axis: 20 kg (jig table)
Speed	X/Y/Z axis: 1 to 800 mm/sec., θ axis: 1 to 800 degrees/sec.
Repeatable position accuracy	X/Y/Z axis: ±0.01 mm, θ axis: ±0.01 degrees
Drive system (motor type)	X/Y/Z/θ axis: Servo motor, Solder feed: Stepping motor
Noise level	56 dB
Position teaching	Remote teaching (JOG)/ Numeric entry (MDI)
Teaching style	Direct teaching by joystick Offline teaching by tablet PC
Soldering tip	TX1: 140W ^{*2} , TX2: 300W ^{*2}
Air	Not required
External input/output	Input: 20 Output: 12 (NPN) (2 places for cleaner)
Operating environment	Ambient temperature range: 0 to 40°C (without condensation or freezing) Ambient humidity range: 85% or less RH (without condensation or freezing) There shall be no corrosive or combustible gas. There shall be no exceedingly dusty.
External interface	USB × 4 (including one port for PC)
Dimensions	600 (W) x 910 (H) x 650 (D) mm
Weight	50 kg

Solder feed setting range

Number of solder feed programs	250 conditions (max.)
Solder feed length	0.1 to 99.9 mm
Solder feed speed	0.1 to 99.9 mm/sec.
Solder back feed length	0 to 20.0 mm
Solder back feed speed	0 to 99.9 mm
Heating time	0.1 to 9.9 sec.

* The above values show the values for primary soldering.
* For the secondary and tertiary soldering, all items can be set from 0. Unless the secondary feed speed is input, the setting operation will be cancelled. If setting "0" or "blank" to any item, the following steps can be skipped.

^{*1} For the power supply and power consumption for soldering iron unit FU-601, see the website.
^{*2} For the soldering tip type and size, see the website.

CA00519QbYa005 2024.05



HAKKO CORPORATION

OVERSEAS AFFILIATES

U.S.A.
AMERICAN HAKKO PRODUCTS, INC.
28920 AVENUE WILLIAMS VALENCIA, CA 91355, U.S.A.
TEL: (661) 294-0090 FAX: (661) 294-0096
Toll Free (800)88-HAKKO
https://www.HakkoUSA.com
E-mail:Support@HakkoUSA.com

HEAD OFFICE

4-5, SHIOKUSA 2-CHOME, NANIWA-KU, OSAKA, 556-0024 JAPAN
TEL:+81-6-6561-3225 FAX:+81-6-6561-8466
https://www.hakko.com E-mail:sales@hakko.com

HONG KONG
HAKKO DEVELOPMENT CO., LTD.
ROOM 1504, EASTERN HARBOUR CENTRE,
28 HOI CHAK STREET, QUARRY BAY, HONG KONG.
TEL: 2811-5588 FAX: 2590-0217
https://www.hakko.com.cn
E-mail:info@hakko.com.hk

SINGAPORE
HAKKO PRODUCTS PTE LTD
1, GENTING LINK #02-04
PERFECT ONE, SINGAPORE 349518
TEL: 6748-2277 FAX: 6744-0033
https://www.hakko.com.sg
E-mail:sales@hakko.com.sg

Please access the web address below for other distributors.
<https://www.hakko.com>

Specifications and design are subject to change without notice. Copyright HAKKO Corporation. All right reserved.

AUTO-SOLDERING ROBOHAKKO

Easy-to-operate 4-axis + 1 (feeder) control soldering robot system



HAKKO
HU-200

Easy-to-operate 4-axis + 1 (feeder) control soldering robot system

All-in-one soldering robot system into which the solder feed controller and the programming software are incorporated. All operations such as soldering conditions including solder feed amount and heating time can be controlled collectively by the tablet PC provided as standard equipment.

Time-reduced programming work and excellent operability

1 Collecting control from soldering conditions to robot control with the tablet PC provided as standard equipment

The tablet PC provided as standard equipment allows you to set all items, such as programming and soldering conditions, by the touch-panel operation on the same panel without connecting a teaching pendant or a PC.



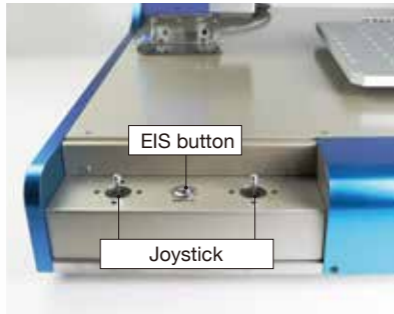
2 Pre-installed Easy Programming Software

An easy programming software (Easy Programming Software II) is preinstalled, which allows you to create a soldering program easily without expert knowledge about robots. This software also allows you to control the number of accumulated soldering points and work time. Thus, only setting the tip replacement timing allows the robot to undergo automatic stop.



3 Easy teaching by EPS (Easy Positioning System)

Teaching can be intuitively made using the joystick. The joystick use feeling such as speed and inching pitch can be easily changed. When performing delicate position adjustment, setting the mode to inching pitch allows you to operate the robot as finely as 0.01 mm unit at minimum. Using the EIS (Easy Input Switch) allows you to input the coordinate of robot and feed steps automatically, which can reduce the teaching time.



4 Convenient work origin and palletizing functions to shorten the teaching time

In the case of teaching with the same plural P.W.B.s arranged, programming is possible only by inputting the offset value from the original position. Soldering positions arranged at the same interval in the case of connectors, etc. can be soldered only by inputting the movement distance and number of soldering sessions after positioning at one section.



5 Prevents malfunctions by reading 2D codes

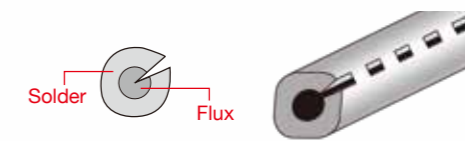
Reading the barcode and QR code attached on a P.W.B. using a barcode reader allows you to select operation channels automatically. This prevents malfunctions by a worker's mistake. * A barcode reader is optional.



Useful functions to stabilize the soldering quality

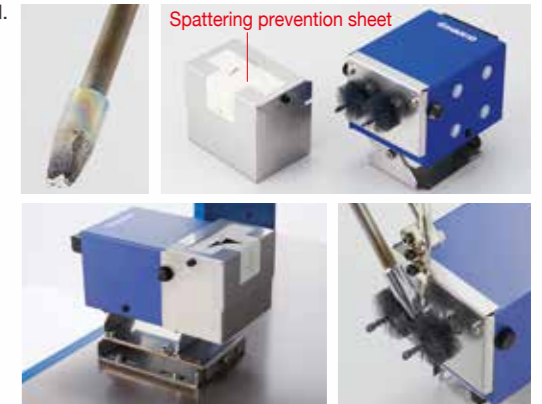
6 A feeder with solder balls and flux splash-prevention function provided as standard equipment

Cutting a V-groove on solder surface (as shown below) can prevent solder balls and flux from splashing.



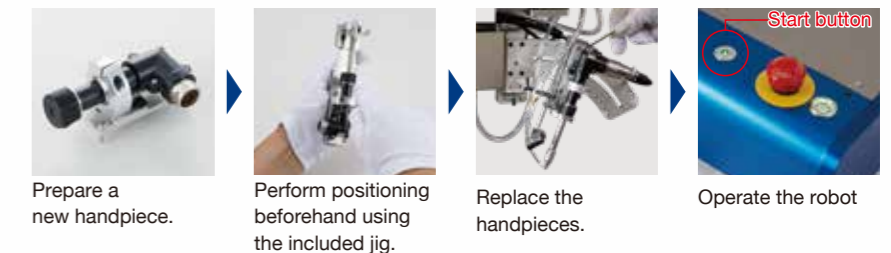
7 A brush-type cleaner provided as standard equipment

A brush-type tip cleaner is employed. This brush type cleaner can remove not only residual solder but also carbide generated from burned flux.



8 Quick and easy tip replacement by the tip position adjustment jig

If one more handpiece is prepared, another soldering tip can be mounted on the spare handpiece during operation of the robot.



Soldering work and efficiency improvement

9 Soldering quality and workability increased remarkably using 300 W high power

Using 300 W high power can improve the conventional failures "non-soldering due to insufficient heating" and "insufficient solder rising on through-hole back side". Work requiring long heating time can be shortened drastically. In the case of fine work, the tip for 140 W can be also used.