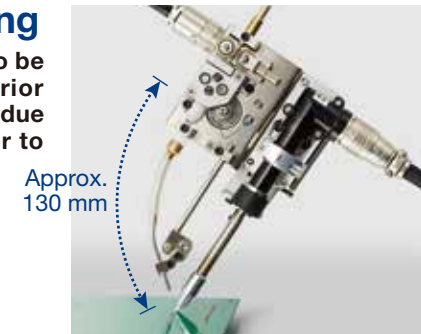


## Solder Feed Unit FU-500

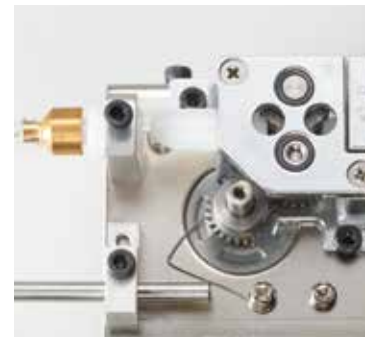
### Accurate solder feeding

The solder feed unit is designed to be set beside the iron part for superior repeat accuracy of solder feeding due to the short distance from feeder to tip.



### Countermeasure for solder ball splash

Countermeasure for solder ball and flux splash is equipped as standard.



### Solder feed error detection

Solder clogging and run-out can be detected with an optical sensor for solder movement.



### Solder diameter supported from 0.3 mm

Use of DIA 0.3 mm solder wire makes micro soldering possible.

### Easy adjustment of solder feeding position

Solder feeding position, which is a critical point for auto-soldering, can be easily adjusted by turning the screw.



### 2 types of feeder units

Select the one according to your robotic system



Straight type



L type



# A U T O - S O L D E R I N G

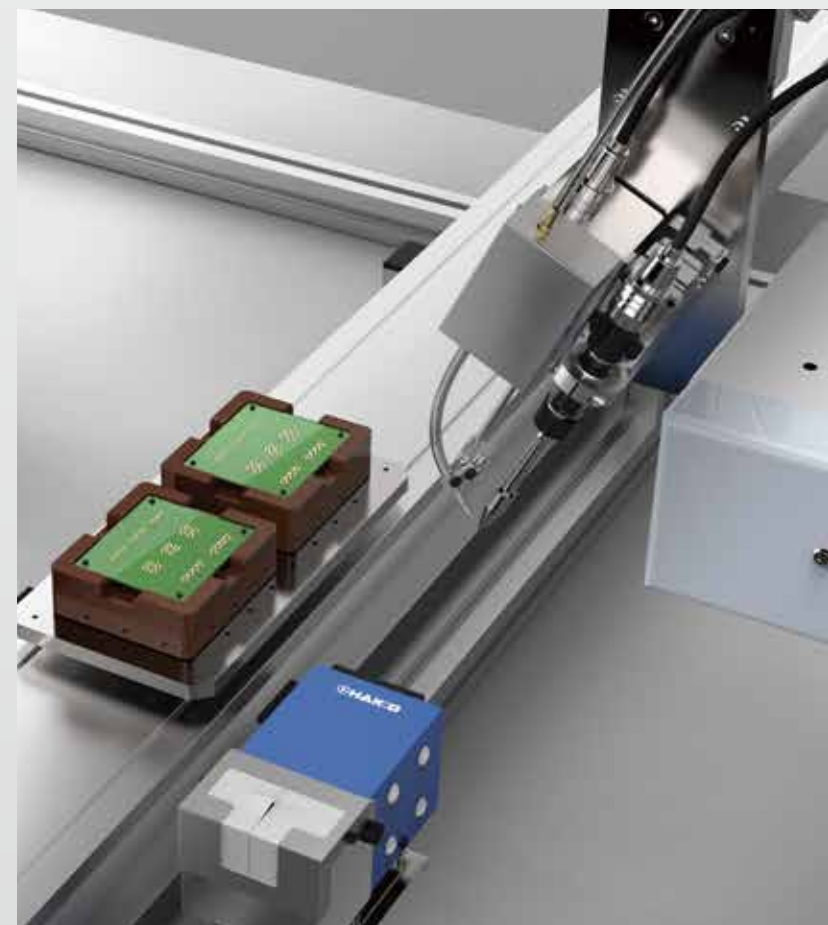


Image of auto-soldering unit in use

## Soldering Iron Unit FU-601 (140 W / 300 W)

### 300 W power for better soldering quality and productivity

300 W power can be the solution for issues such as "insufficient solder wetting due to lack of heat" and "insufficient through-hole fill". It can also shorten soldering time on what requires long heating time.



Test was conducted on PWB with very high heat capacity. Soldering with 300 W was 4 times faster than 140 W on the same condition.

For further details, please scan here.



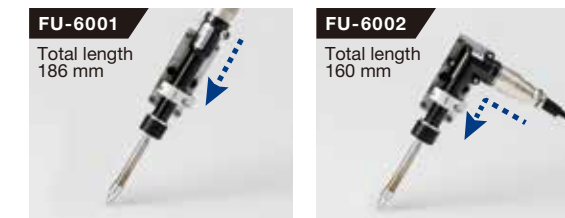
### High performance composite tip

FU-601 accepts 2 types of tips, TX1 series for 140 W and TX2 series for 300 W. Refer to the optional tips.▶



### 2 types of soldering irons

There are 2 types of soldering irons to choose from. One is straight type and another is L-shaped type.



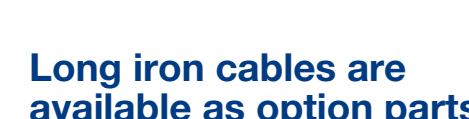
### N<sub>2</sub> adapter assembly

Soldering with N<sub>2</sub> is possible with the adaptor. The use of N<sub>2</sub> improves solderability.

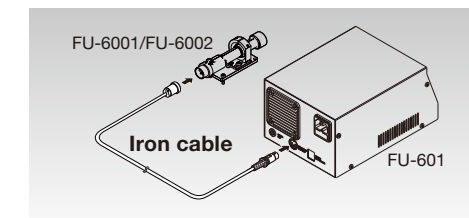
#### Adapter assembly



#### Nozzle assembly



### Long iron cables are available as option parts



### Quick and easy tip replacement by the tip adjustment jig unit

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



Prepare a new handpiece.

Perform positioning beforehand using the included jig.

Replace the handpieces.

### 6 preset temperatures function

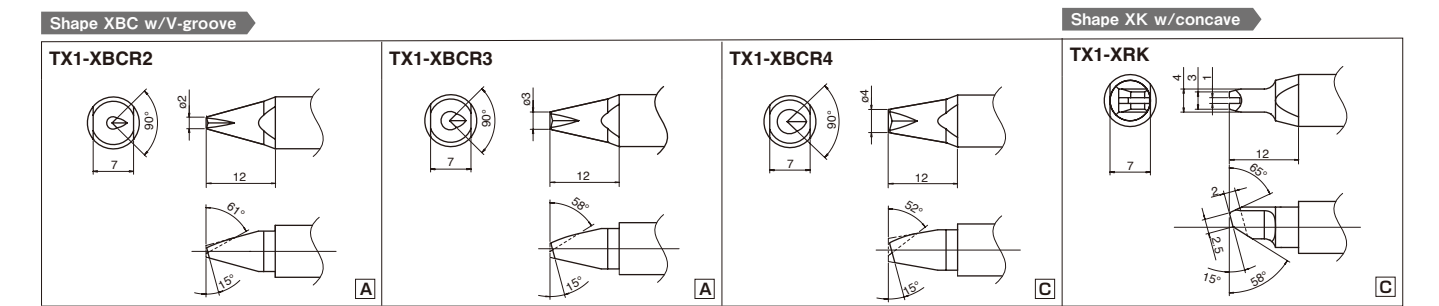
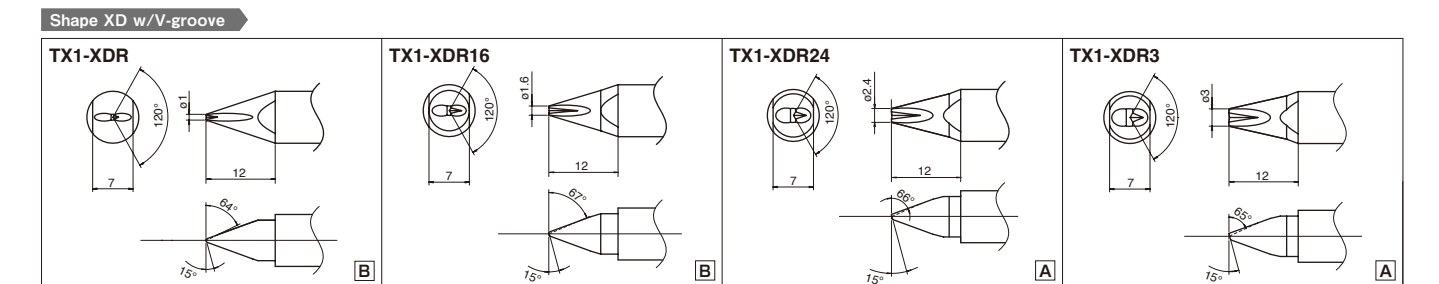
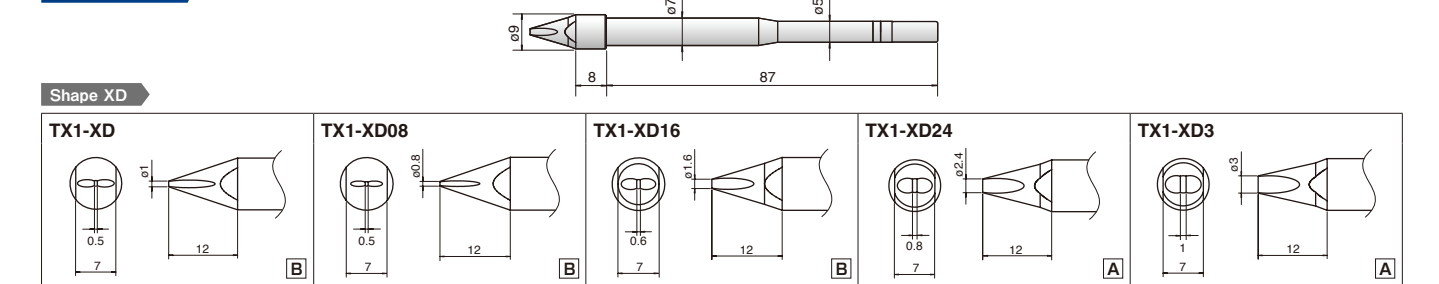
Tip temperature can be preset up to 6 preset temperatures can be called for each soldering program. Call higher temperature for where it requires more heat and call lower temperature where it requires less heat.



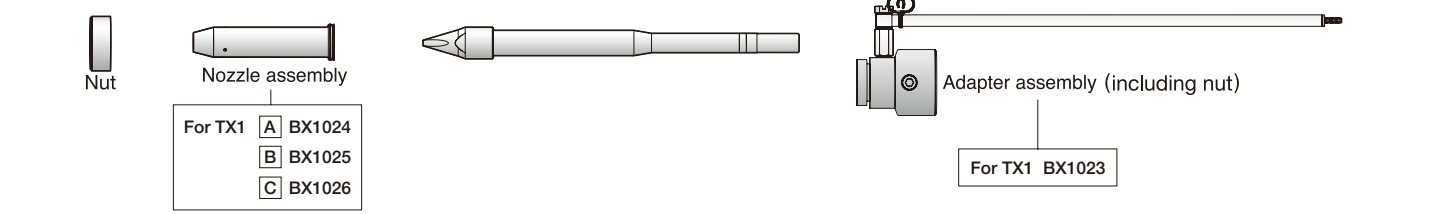
## Optional Tips

### N<sub>2</sub> TX1 series

For 140 W



• Adapter assembly and Nozzle assembly are required to perform N<sub>2</sub> soldering.



## Slide Units and Tip Cleaner

### CX1000

#### Slide unit

This unit can give vertical movement to a soldering iron part.



### CX1001

#### Slide unit (for drag soldering)

This unit can absorb height variations during drag soldering.



### CX1003

#### A brush-type cleaner as standard

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



### CX1002

#### Temperature probe

Temperature probe can make it easy to measure the temperature of tip used in an auto-soldering system.

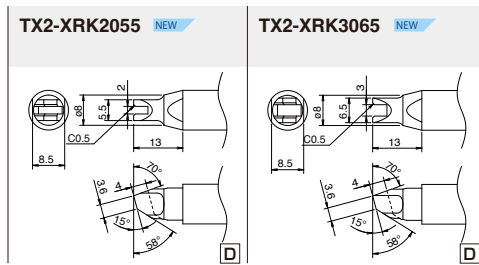
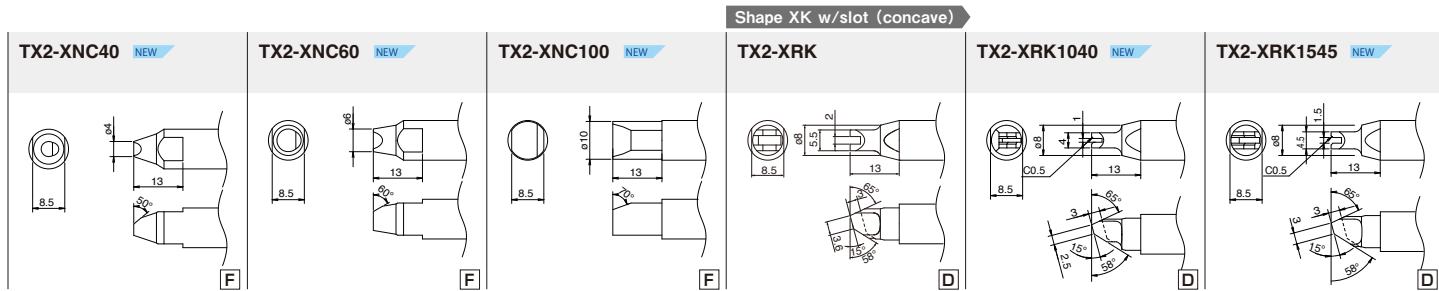
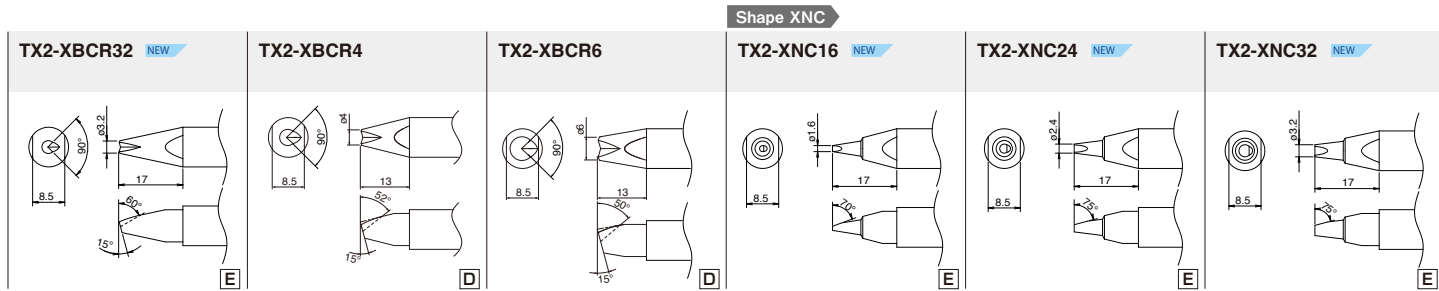
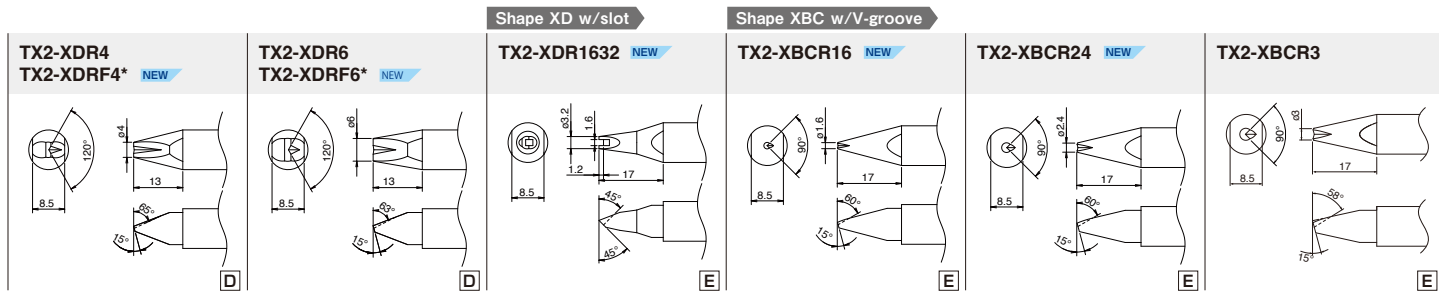
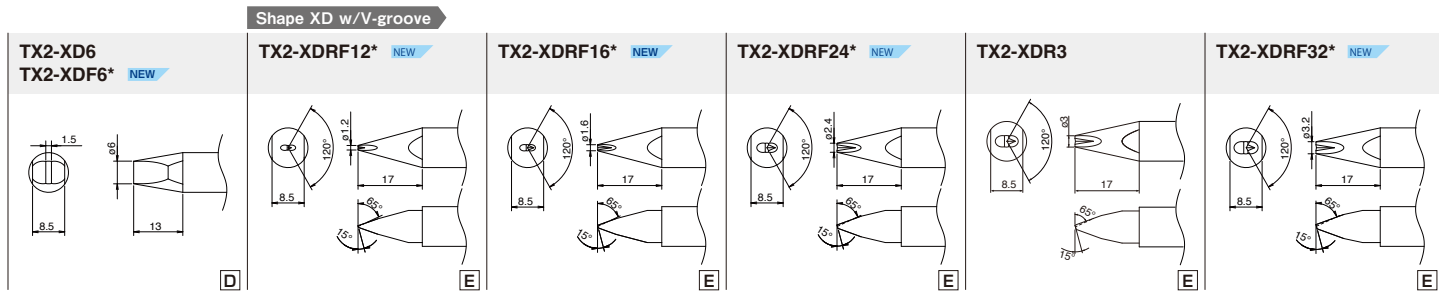
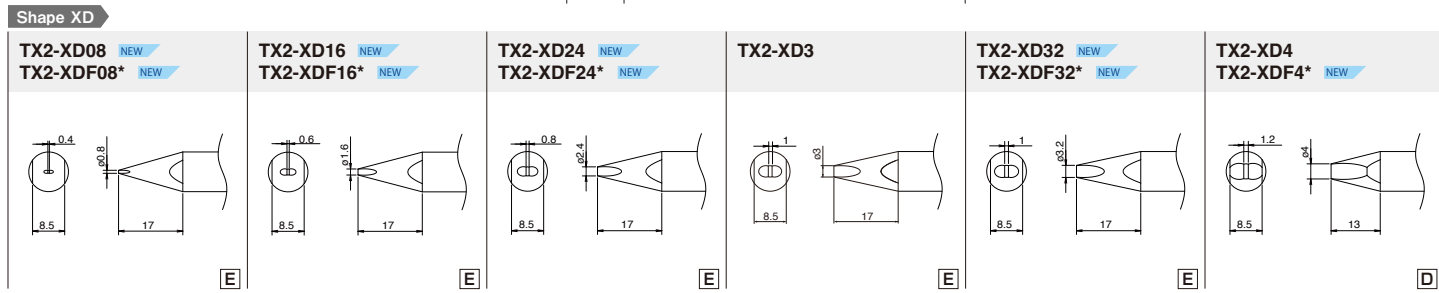
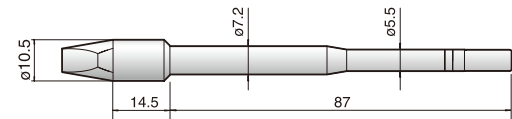




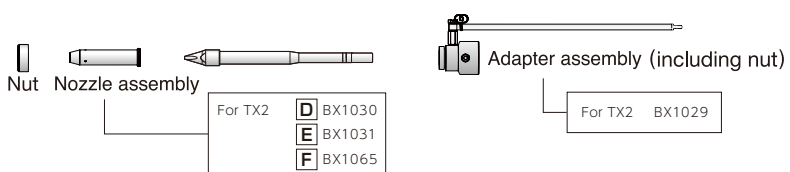
# Soldering TX2 series

For 300 W ※TX2 series tips are not compatible with FU-600, which is already discontinued.

Unit : mm



Adapter assembly and Nozzle assembly are required to perform N2 soldering.



\* Pretinning on one side only.

# FU-500

Solder feed unit



Main unit, Feeder unit (L or Straight type), Solder reel stand, Feeder cable, Tube units, Power cord, Instruction manual

### Specifications

Power consumption	35 W
Compatible solder diameters	0.3 mm, 0.5 mm, 0.6(0.65) mm, 0.8 mm, 1 mm, 1.2 mm, 1.6 mm
Dimensions	145 (W) × 100 (H) × 230 (D) mm
Weight	2.3 kg

### Setup option

The accessories are required for initial set-up, such as a solder feed pulley unit, solder-feed guide set and fluoroplastic tube are not included. They must be ordered separately and adapted to use with the soldering iron and solder wire diameter.



Solder feed pulley unit

Φ0.3mm	BX1000
Φ0.5mm	BX1001
Φ0.6mm	BX1002
Φ0.8mm	BX1003
Φ1mm	BX1004
Φ1.2mm	BX1005
Φ1.6mm	BX1006



Solder feed guide set

Φ0.3mm	BX1007
Φ0.5~1mm	BX1008
Φ1.2~1.6mm	BX1009



Fluoroplastic tube (set of 10)

Φ0.3mm	BX1010
Φ0.5~0.6mm	BX1011
Φ0.8mm	BX1012
Φ1mm	BX1013
Φ1.2mm	BX1014
Φ1.6mm	BX1015

### Replacement and optional parts

Part No.	Name / Specifications	Part No.	Name / Specifications
BX1016	Tube unit / Φ0.3 to 1 mm 1180 L	FU6001-01X	Soldering iron FU-6001
BX1038	Fluoroplastic tube / Φ0.3 to 1 mm 1180 L for tube unit	FU6002-01X	Soldering iron FU-6002
BX1017	Tube unit / Φ1.2 to 1.6 mm 1180 L	BX1027	Flux protector
BX1039	Fluoroplastic tube / Φ1.2 to 1.6 mm 1180 L for tube unit	BX1032	Iron cable 3 m / for FU-601
BX1041	Tube unit / Φ0.3 to 1 mm 780 L	BX1033	Iron cable 5 m / for FU-601
BX1060	Fluoroplastic tube / Φ0.3 to 1 mm 780 L for tube unit	BX1034	Iron cable 8 m / for FU-601
BX1042	Tube unit / Φ1.2 to 1.6 mm 780 L	BX1056	Connecting cable / for between FU-500 and FU-601
BX1061	Fluoroplastic tube / Φ1.2 to 1.6 mm 780 L for tube unit	CX5017	Tip adjustment jig unit / for soldering tip TX1 series
BX1018	Guide tube	CX5018	Tip adjustment jig unit / for soldering tip TX2 series
BX1019	Guide pipe / Φ0.3 mm	CX1000	Slide unit
BX1020	Guide pipe / Φ0.5 to 1 mm	CX1001	Slide unit / for drag soldering
BX1021	Guide pipe / Φ1.2 to 1.6 mm	CX1002	Temperature probe
BX1022	Grommet	CX1003	Tip cleaner
BX1035	Feeder cable 3 m / for FU-500	A1567	Cleaning brush B (metal brushes, qty 2)
BX1036	Feeder cable 5 m / for FU-500	BX1028	Spattering prevention sheet / for tip cleaner CX1003
BX1037	Feeder cable 8 m / for FU-500		

CA005530bYa002 2024.05

## HAKKO

HAKKO CORPORATION  
OVERSEAS AFFILIATES

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.hakko.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,  
29 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

Smart Way to build an Auto-Soldering System



HAKKO  
FU-500  
FU-601