

SURFACE-MOUNT / SMT PRODUCTS

Equipped with Auto Profile Mode. Handles BGAs, CSPs and all SMDs using the preheater.

HOT-AIR REWORK STATIONS
XFC-300/301



- AUTO PROFILE**
Can be set to the desired profile without a test
- ACCURATE TEMPERATURE CONTROL**
With PID control
- HAND OPERATION**
Heater and vacuum switches on the handpiece

- VARIOUS PROFILES AVAILABLE**
Up to 19 profiles, each with 5 zones
- ON/OFF INTERFACE**
Controls external preheater
- FORCED COOL-DOWN**
On all zones with cool key

●Either Auto profile or Repeat Profile function (PAT). ●5 zone profiles available: **PREHEAT 1, PREHEAT 2, PREHEAT 3, REFLOW**, and **COOL**. ●Up to 19 profiles* can be saved for each of the 5 zones. ●One profile can be registered for HAND Mode. ●Accurate PID temperature control. ●Heater and Vacuum switches located on the handpiece for easy control. ●ON/OFF interface with Preheater (connection cable optional). ●Keypad Lock and Offset functions. ●Instant cool down on all zones by pressing the COOL key.

*separate profiles with specific temperature and time settings can be pre-programmed for each of the 5 Zones



XFC-301

Nozzles sold separately.



XFC-300

Nozzles sold separately.

An economic solution with maximum heat capacity. Handles BGAs, CSPs and all SMDs.

HOT-AIR REWORK STATION
XFC-210



Nozzles sold separately.

ACCURATE TEMPERATURE CONTROL
With P temperature control

ON/OFF INTERFACE
Controls external preheater

HAND OPERATION
Heater and vacuum switches on the handpiece

FORCED COOL-DOWN
On all zones with cool key

VARIOUS PROFILES AVAILABLE
Up to 19 profiles, each with 5 zones

●5 zone profiles available: **PREHEAT 1, PREHEAT 2, PREHEAT 3, REFLOW**, and **COOL**. ●Up to 19 profiles* can be saved for each of the 5 zones. One profile can be registered for HAND Mode. ●Accurate P temperature control. ●Heater and Vacuum switches located on the handpiece for easy control. ●ON/OFF interface with Preheater (connection cable optional). ●Keypad Lock and Offset functions. ●Instant cool down on all zones by pressing the COOL key.

*individual profiles with specific temperature and time settings can be pre-programmed for each of the 5 Zones

Auto Cool-Down function to protect the heater. Handles QFPs, PLCCs, SOLs.

HOT-AIR REWORK STATION
XFC-110



Nozzles sold separately.

TEMPERATURE CONTROL
With ON/OFF control

DIGITAL DISPLAY
Easy temperature control

VACUUM PICK-UP
Highly accurate

FLOW METER
Easy air-flow control

AUTO COOL-DOWN
Protects the heater

●Temperature management using ON-OFF control. ●Digital temperature display for easy temperature management. ●Vacuum pickup function, Flow meter for easy airflow management. ●Auto Cool Down function to protect heater.

XFC series FEATURES TABLE

FUNCTION	XFC-301	XFC-300	XFC-210	XFC-110
Auto-lift*	✓	—	—	—
5-zone Profiles	✓	✓	✓	—
Auto Profile Mode	✓	✓	—	—
Normal Profile Mode	✓	✓	✓	—
Hand Mode	✓	✓	✓	✓
Saving of Profile Mode and Hand Mode	✓	✓	✓	—
PID Control	✓	✓	P control	—
ON/OFF and Vacuum Control on Handpiece	✓	✓	✓	—
Interface to Control Preheater	✓	✓	✓	—
Keypad Lock, Offset	✓	✓	✓	—
Forced Cool-down	✓	✓	✓	✓
Vacuum Pick-up	✓	✓	✓	✓
Digital Display	✓	✓	✓	✓
Flow Meter	✓	✓	✓	✓
Auto Cool-down	—	—	✓	✓
Ergonomic Handpiece	✓	✓	✓	✓

*Handpiece with removed SMD can be lifted automatically after the reflow process is finished.

SPECIFICATIONS

Model	XFC-301	XFC-300	XFC-210	XFC-110
Voltage	220–240 V AC 50/ 60 Hz		220 V, 230 V, 240 V AC 50/ 60 Hz	
Power Consumption	400–460 W		470 W	
Power Cord Length	1.5 m (3 core cord) Inlet type			
Temperature Setting Range	50–550°C			150–550°C
Insulation Resistance	Over 10 MΩ (500 V DC)			

Control Unit

Model	XFC-301	XFC-300	XFC-210	XFC-110
Output Voltage	220–240 V AC		220 V, 230 V, 240 V AC	
Air-flow Meter	Equipped			
Air-flow Volume	5–25L /min		5–23L /min	5–25L /min
Auto-lift Function	Included	-		
Modes	3 (Profile-Normal, Profile-Auto, Hand)		3 (Profile-Flat, Profile-Slope, Hand)	1 (Hand)
Temperature Profiles	5 Zones (Temperature and Time)			—
Profile Memory	(Auto, Normal)×19, HAND×1		(Flat,Slope)×19, HAND×1	—
Dimensions	200 (W) ×230 (H) ×265 (D) mm		182 (W) ×179 (H)× 263 (D) mm	
Weight	7.6 kg (w/o cord)		8.4 kg (w/o cord)	7.8 kg (w/o cord)
Accessory	Connection Cable with Preheater, Handpiece Holder, XVCW-SET			Handpiece Holder, XVCW-SET

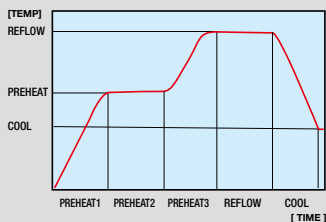
Handpiece Unit

Model	XFC-301	XFC-300	XFC-210	XFC-110
Voltage	220-240 V AC		220 V, 230 V, 240 V AC	
Power Consumption	370-430 W		400 W	
Heater	Nichrome Heater			
Hose Length between Handpiece and Control Unit	1 m			
Vacuum Pickup	Integrated into Handpiece			
Length	220 mm (w/o cord)			
Weight	180 g (w/o nozzle, cord)			

MODES

NORMAL	Create your own profiles for the 5 zones.
AUTO	Can be set to the desired profile without a test. (PAT.) XFC-301/300 only
HAND	Configure temperature settings for manual rework.

XFC-301/300 AUTO PROFILE EXAMPLE



REPLACEMENT PARTS / OPTIONS

Heater	Vacuum Cup ø6 mm
XFC-100H	XVCW-6
XFC Heater Pipe	Vacuum Cup ø8 mm
XFC-100HP	XVCW-8
Vacuum Cup Set	Vacuum Cup ø10 mm
XVCW-SET	XVCW-10

Vacuum Cup



XFC Series Optional Nozzles (PAT.)

XNSG series (for SO, SOL)

P / N	A		D		Applicable Package
	inch	mm	inch	mm	
XNSG 4.4 × 10	0.394	10	0.189	4.8	SO16
XNSG 5.6 × 13	0.591	15	0.224	5.7	SSOP8T
XNSG 7.6 × 15	0.630	16	0.283	8.2	SOL20/26, TSOP20/24
XNSG 7.6 × 18	0.748	19	0.283	8.2	TSOP24
XNSG 7.6 × 12.7	0.472	12	0.283	8.2	SOL20, TSOP28
XNSG 19 × 8	0.315	8	0.748	19.0	TSOP32
XNSG 8.6 × 18	0.748	19	0.343	8.7	TSOP28/32
XNSG 18.5 × 12	0.591	15	0.728	19.5	TSOP40/48
XNSG 13 × 28	1.142	29	0.531	13.5	PSOP44
XNSG 4.4 × 5	0.197	5	0.189	4.8	S08

XNSG series (for SOJ)

P / N	A		D		Applicable Package
	inch	mm	inch	mm	
XNSG 15 × 8.2	0.591	15	0.323	8.2	SOJ20

XNPG series (for PLCC)

P / N	A		B		C		D		Applicable Package
	inch	mm	inch	mm	inch	mm	inch	mm	
XNPG 7.3×12.5	0.272	6.9	0.354	9	0.272	6.9	0.551	14	PLCC 7.3 X 12.5
XNPG 11.5×11.5	0.394	10	0.512	13	0.394	10	0.512	13	PLCC 28
XNPG 11.5×14	0.591	15	0.591	15	0.394	10	0.512	13	PLCC 11.5 X 14
XNPG 17.5×17.5	0.591	15	0.728	18.5	0.591	15	0.728	18.5	PLCC 44
XNPG 20 × 20	0.748	19	0.827	21	0.748	19	0.827	21	PLCC 52
XNPG 25 × 25	0.945	24	1.024	26	0.945	24	1.024	26	PLCC 68
XNPG 30 × 30	1.142	29	1.220	31	1.142	29	1.220	31	PLCC 84

Custom nozzles are available. Please contact a **goot** distributor.

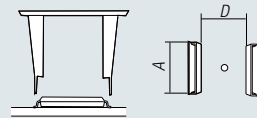
XNQG series (for QFP, BQFP)

P / N	A		B		C		D		Applicable Package
	inch	mm	inch	mm	inch	mm	inch	mm	
XNQG 12 × 12	0.472	12	0.551	14	0.472	12	0.551	14	QFP64, QFP48, QFP80, BQFP28
XNQG 14 × 14	0.591	15	0.677	17.2	0.591	15	0.677	17.2	SQFP100, TQF100
XNQG 14 × 20	0.591	15	0.665	16.9	0.827	21	0.906	23	SQFP12, QFP80, QFP100
XNQG 16 × 16	0.630	16	0.826	21	0.629	16	0.826	21	BQFP100T25, QFPT63
XNQG 17.5×17.5	0.591	15	0.728	18.5	0.591	15	0.728	18.5	BQFP84
XNQG 24 × 24	0.827	21	0.953	24.2	0.827	21	0.953	24.2	BQFP132, FQFP176
XNQG 28 × 28	1.142	29	1.220	31	1.142	29	1.220	31	QFP128, SQFP208
XNQG 32 × 32	1.220	31	1.315	33.4	1.220	31	1.315	33.4	BFP184T, FQFP408
XNQG 37 × 37	1.220	31	1.457	37	1.220	31	1.457	37	BQFP196
XNQG 40 × 40	1.535	39	1.654	42	1.535	39	1.654	42	BQFP244

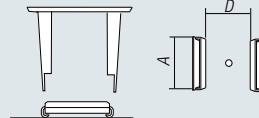
XNBG series (for BGA)

P / N	A		Applicable Package
	inch	mm	
XNBG 8 × 8	0.393	10	BGA16, BGA25
XNBG 12 × 12	0.551	14	BGA49, BGA64
XNBG 13 × 13	0.590	15	BGA49, BGA64
XNBG 15 × 15	0.669	17	BGA81, BGA100
XNBG 17 × 17	0.748	19	BGA121
XNBG 19 × 19	0.787	20	BGA144, BGA121
XNBG 23 × 23	0.984	25	BGA169
XNBG 27 × 27	1.142	29	BGA324, BGA225, BGA289
XNBG 35 × 35	1.457	37	BGA529, BGA484
XNBG 38 × 38	1.575	40	BGA576, BGA625
XNBG 40 × 40	1.654	42	BGA625, BGA676

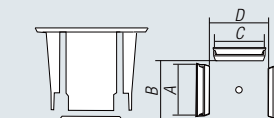
XNSG series SO, SOL



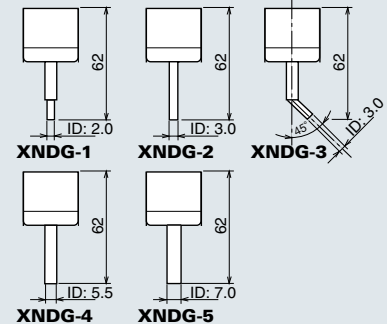
XNSG series SOJ



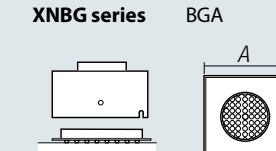
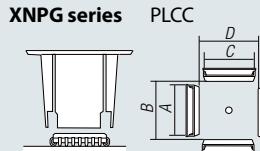
XNQG series QFP / BQFP



For Discrete Components



Vacuum pick-up cup for XFC-301/300/210/110



Fixes the XFC series handpiece securely.

HANDPIECE HOLDER XK-1

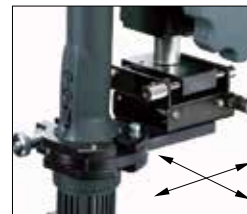


- Holder for XFC handpiece to attach to XPR-600/1000 preheater.

MODEL	XK-1
Dimensions	Holder : 330(L) x 110(W) x 160(H)mm Column : ø28 x 390 mm
Weight	Holder : 1.5 kg / Column: 480 g

Secure fixing and micro-adjustment of the XFC series handpiece.

HANDPIECE HOLDER XK-2



- Allows micro-adjustment of the XFC series handpiece while holding an SMD. Makes mounting work easy.

MODEL	XK-2
X direction adjustable range	20 mm
Y direction adjustable range	20 mm
Control knob pitch	0.8 mm per one complete turn
Dimensions	Holder : 330 (L) x 110 (W) x 196 (H) mm Column : ø28 x 390 mm
Weight	Holder : 1.8 kg / Column : 480 g

Smooth motion. Easy mounting and removing.

BOARD HOLDERS XU-1/XU-1S

MODEL	XU-1	XU-1S
Max. PCB size	305 mm x open side	
Dimensions	265 (W) × 36 (H) × 265 (D) mm	
Extended	400 (W) × 36 (H) × 265 (D) mm	
Weight	840 g	900 g



Heating up by the large air-output prevents damage to PCBs. Handles medium PCBs.

PREHEATER XPR-600

- Cool PCBs with fan mode, reducing process time. ●Instant upgrade when combined with XFC series rework station. ●Sensor feedback temperature control. ●Digital display shows setting temperature. ●XU series (sold separately) can be fixed.



High-powered heater. Best for preheating multi-layered PCBs. Handles small multi-layered PCBs.

PREHEATER XPR-610

- Small preheater with a high-powered heater. ●Heating area can be changed to fit the PCB size. ●Comes with simple board holder. ●Accurate temperature control with PID control. ●Digital temperature display.



Large-capacity IR heater prevents damage to PCBs. Handles large multi-layered PCBs.

PREHEATER XPR-1000

- Large heating area quickly provides uniform heat on large multi-layered PCBs. ●PID control achieves precise temperature control for lead-free solder. ●Comes with anti-warping tool. ●Instant upgrade when combined with XFC series rework station.



SPECIFICATIONS

MODEL	XPR-600	XPR-610	XPR-1000
Voltage	110–120 V, 220–240 V AC 50/ 60 Hz		220 V, 240 V AC 50/ 60 Hz
Power Consumption	560–650 W, 530–630 W		2,100 W
Power Cord Length	1.5 m (3 core cord) Inlet type		3 m (3 core cord) w/o plug
Heater	Nichrome Heater		IR
Temperature Control System	ON-OFF Control	PID Control	
Temperature Setting Range	100–300°C	Room temperature–300°C	
Heating Area	58 x 58 mm	Min. 10 x 10 mm /Max. 58 x 58 mm	270 x 270 mm
Air Flow (Fan Performance)	0.23 m ³ /min	0.23 m ³ /min	—
Recommended Holder	XU-1/XU-1S	Mini PCB Holder Assy (included)	Board Holder (included)
Max. PCB size	305 mm x open side	150 mm x open side	424 x 460 mm (Max.)
Dimensions	266 (W) x 90 (H) x 413 (D) mm	180 (W) x 90 (H) x 256 (D) mm	508 (W) x 145 (H) x 610 (D) mm
Weight	5.1 kg	2.8 kg	16.6 kg

SURFACE-MOUNT / SMT PRODUCTS

For large packages, large boards, and multi-layered PCBs. Handles BGAs, CSPs, QFPs, and all SMDs.

SMT REWORK REPAIR SYSTEM GSR-302

RoHS



SYSTEM CONFIGURATION Nozzles sold separately.

ITEM	GSR-302
Preheater	XPR-1000
Hot-Air Rework Station	XFC-301
Handpiece Holder	XK-2
Board Holder	Included with XPR-1000

Handles BGAs, CSPs, QFPs, and all SMDs.

SMT REWORK REPAIR SYSTEM GSR-301/300

RoHS



SYSTEM CONFIGURATION Nozzles sold separately.

ITEM	GSR-301	GSR-300
Preheater	XPR-600	XPR-600
Hot-Air Rework Station	XFC-301	XFC-300
Handpiece Holder	XK-2	XK-2
Board Holder	XU-1	XU-1

For large packages, large boards, and multi-layered PCBs. Handles BGAs, CSPs, QFPs, and all SMDs.

SMT REWORK REPAIR SYSTEM GSR-212

RoHS



SYSTEM CONFIGURATION Nozzles sold separately.

ITEM	GSR-212
Preheater	XPR-1000
Hot-Air Rework Station	XFC-210
Handpiece Holder	XK-2
Board Holder	Included with XPR-1000

Handles BGAs, CSPs, QFPs, and all SMDs.

SMT REWORK REPAIR SYSTEM GSR-210

RoHS



SYSTEM CONFIGURATION Nozzles sold separately.

ITEM	GSR-210
Preheater	XPR-600
Hot-Air Rework Station	XFC-210
Handpiece Holder	XK-2
Board Holder	XU-1

Handles QFPs, SOLs, and discrete components.

SMT REWORK REPAIR SYSTEM GSR-110

RoHS



SYSTEM CONFIGURATION Nozzles sold separately.

ITEM	GSR-110
Preheater	XPR-600
Hot-Air Rework Station	XFC-110
Handpiece Holder	XK-1
Board Holder	XU-1

HOT-AIR REWORK STATIONS p.62**XFC-301****XFC-300****XFC-210****XFC-110****PREHEATERS** p.65**XPR-610****XPR-600****XPR-1000****HANDPIECE HOLDERS** p.64**XK-1****XK-2****BOARD HOLDERS** p.65**XU-1****XU-1S**