



FINEPLACER® core^{plus} BGA rework station

The perfect blend of performance and cost for Rework



FINEPLACER® core^{plus}

The FINEPLACER® core^{plus} is a dedicated rework system that offers a level of professionalism that exceeds its attractive price. The system offers Finetech's long proven rework technology for a wide spectrum of SMD components, ranging in size from 01005 to 90 mm x 90 mm.

This table top rework station integrates the complete rework cycle into one efficient design. Users have precise temperature and gas flow control of convection top and bottom heating. Additionally, non-contact site cleaning allows braid-free board preparation.

The FINEPLACER® core^{plus} meets the needs of single system, high mix rework, or multiple system production environments where process portability and reproducibility is crucial. The machine can support PCB sizes up to 460 mm x 310 mm.

Highlights*

- Component sizes from 0.125 mm x 0.125 mm up to 90 mm x 90 mm
- Split Field Optic "Mirage" option is specially suited for large area BGA alignment.
- Proven thermal management technology using convection top and bottom heating
- Automated pick and place with force measurement
- Gesture-based operating interface
- Real time process observation camera
- Compact, integrated machine design
- Cost efficient soldering tools, compatible with all FINEPLACER® rework stations

Features

1. Automated soldering processes
2. Patented vision alignment system with fixed beam splitter
3. Component Profile Library for Tin/Lead and Lead Free applications
4. Intelligent thermal management via Windows based software

Benefits

1. User independent process operation
2. Fixed prism needs no regular calibration
3. The complete rework cycle within one cost-effective system solution
4. Reproducible placement accuracy
5. Coordinated control of all process parameters: temperature, gas flow, soak time, process environment
6. Immediate visual feedback reduces process development time
7. Repeatable profiles from machine to machine

Processes

- Component removal
- Site cleaning
- Re-balling (array)
- Paste printing (component, PCB)
- Paste dipping
- Fluxing
- Re-soldering
- Profile Library by alloy and SMT component type

Applications

- Rework of:
 - BGA, μ BGA/CSP, QFN, PoP, QFP, PGA
 - Small passives down to 0201
 - RF shields, RF frames
 - Connectors, sockets
 - Sub assemblies, daughter boards
- Through hole technology pin in paste
- Reworkable underfill, conformal coating

Technical Specifications

Placement accuracy:	25 μ m
Field of view (min) ¹ :	12.1 mm x 7.6 mm
Field of view (max) ¹ :	65 mm x 45 mm
Component size (min) ¹ :	0.25 mm x 0.25 mm
Component size (max) ¹ :	60 mm x 60 mm
Board size (max) ² :	400 mm x 310 mm
Board thickness (max):	6 mm
Thermocouples:	4

Top Heating:

Power:	900 W
Gas temperature (max):	380°C
Temperature ramp rate:	1 K/s – 50 K/s
Flow range:	10 NI/min – 70 NI/min

Board Heating:

Power:	1600 W
Gas temperature (max):	360°C
Flow range:	32 NI/min - 160 NI/min
Heated area (max):	280 mm x 250 mm

Modules & Options

- Board Printing Tools
- Dispenser Module
- MINIOVEN 04
- Process Gas Switching
- Process Video Module
- Solder Removal Module
- Target Finder
- Zoom Optics
- Direct Component Printing Module
- HOTBEAM
- PCB Support
- Process Start Sensor
- Reballing Module
- Split Field Optics
- Tray Support