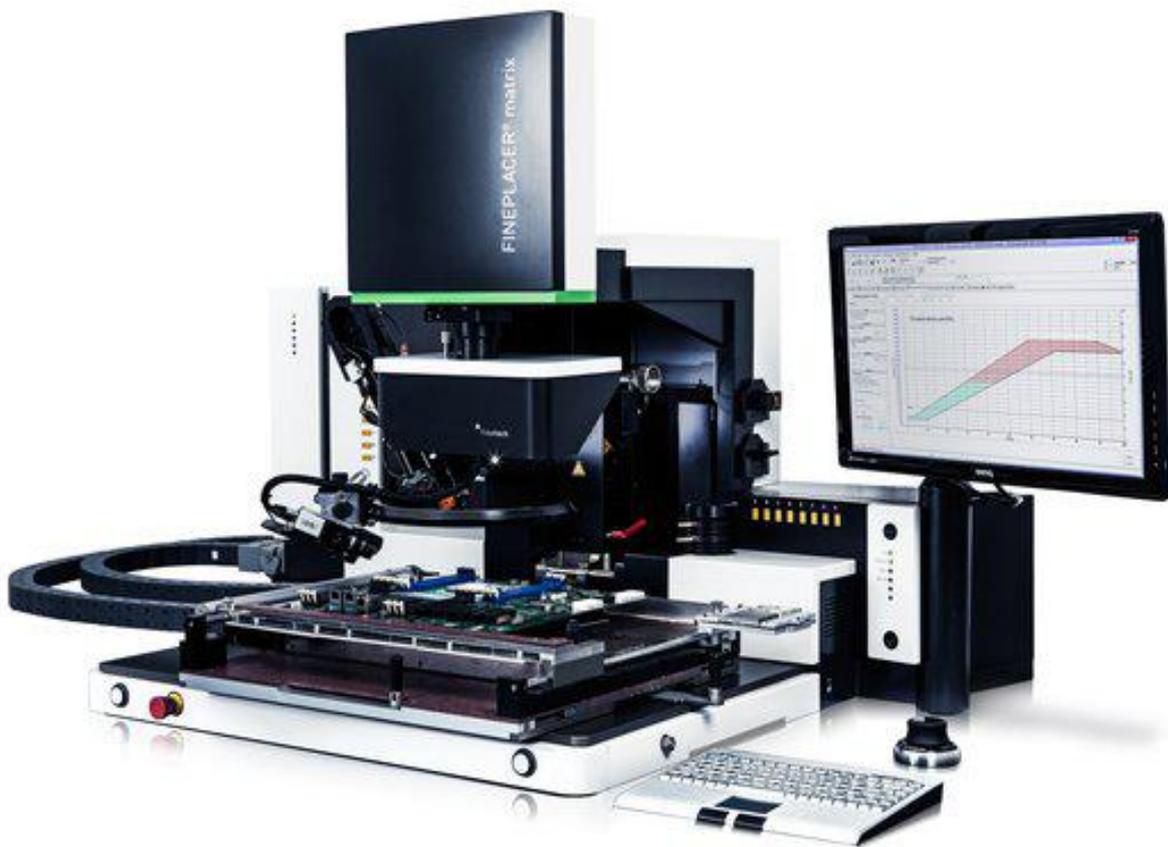


FINEPLACER® matrix rs
Future in Advanced Rework



FINEPLACER® matrix rs

The FINEPLACER® matrix rs is a semi- automatic rework station representing the latest development from Finetech, encompassing the “Built to be Best” philosophy.

With a high level of process modularity, the system supports the complete rework cycle in a platform ergonomically designed to provide a state- of- the- art technical solution, low maintenance and easy service access.

Open application architecture ensures compatibility with future technologies as users transition from R&D into OEM production.

Highlights*

- Industry- leading thermal management
- Components from 0.125 mm x 0.125 mm to 100 mm x 100 mm
- Board sizes up to 460 mm x 390 mm
- Automated residual solder removal, motorized dispensing
- Automated top heater calibration
- Closed loop force control
- Real time contrast optimization with LED lighting
- Fast conversion from hot gas rework station to die bonder
- Placement accuracy better than 10 µm

Features

- Automated processes
- Vision alignment system with fixed beam splitter
- Integrated Process Management (IPM)
- Real time process observation camera
- Adaptive process library
- Process transfer from system to system

Benefits

- Hands- off component placement, user independent process operation
- Outstanding placement accuracy and instant operation without adjustments
- Synchronized control of all process related parameters: force, temperature, time, flow, power, process environment and illumination
- Immediate visual feedback reduces process development time
- Fast and easy process development, documentation and image/ video capturing
- Identical results on different machines allow central profile development, administration and distribution

Processes

- Component removal
- Site cleaning
- Re- balling (array, single)
- Paste printing (component, PCB)
- Paste dipping
- Paste dispensing
- Fluxing
- Soldering
- Desoldering

Applications

- Soldering of:
 - BGA, CSP, QFN, DFN, PoP, QFP, PGA, SON
 - Small passives down to 01005
 - RF shields, RF frames
 - Connectors, sockets
 - Sub assemblies, daughter boards
 - Flipchip (C4)
- Pin in Paste (PiP)
- Through Hole Reflow (THR)
- Reworkable underfill, conformal coating
- Single ball rework
- Can be prepared for micro assembly applications

Technical Specifications

Placement accuracy:	10 μ m
Field of view (min) ¹ :	3.5 mm x 2.6 mm
Field of view (max) ¹ :	43 mm x 32 mm
Component size (min) ¹ :	0.125 mm x 0.125 mm
Component size (max) ¹ :	100 mm x 100 mm
Theta fine travel:	$\pm 2^\circ$
Thermocouples*:	8
Top Heating²:	
Power:	900 W
Temperature ramp rate:	1 K/ s - 50 K/ s
Flow range:	10 NI/ min - 70 NI/ min
Bottom Heating²:	
Power:	4200 W (12 zones)
Heated area (max):	450 mm x 300 mm
Flow range:	192 NI/ min

Modules & Options

- Board Printing Tools
- Bottom Heating Module
- Component Presentation
- Direct Component Printing Module (DCP)
- Dispenser Module
- Flux Transfer Module
- HOTBEAM
- MiniOven 04
- Multi- Tray Support
- PCB Support
- Process Gas Switching
- Process Start Sensor
- Process Video Module
- Reballing Module
- Solder Removal Module
- Split Field Optics
- Table Motorization (NEW)
- Top Heating Module