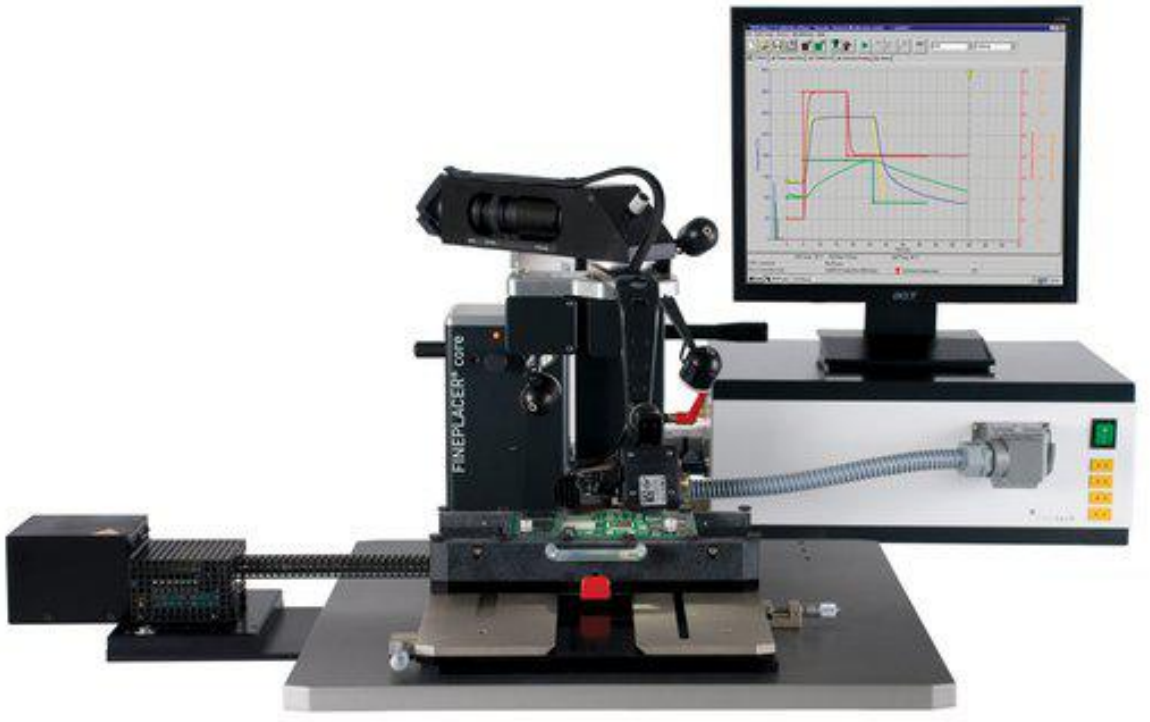
finetech

advanced rework

# FINEPLACER® core

**One for everything**




FINEPLACER® core

The FINEPLACER® core is an all- round hot air rework station for electronic components and assemblies. The complete rework cycle, including desoldering and soldering the component, residual solder removal and reballing, can be performed on the same compact rework system. The spectrum of compatible surface-mount devices ranges from very small (01005) to large components (BGA).

The Bottom Heating Module has been optimized for small PCB of mobile and compact devices (mobile phones, navigation devices, micro PCs, etc.) and medical technology products (i.e. hearing aids).

A pre- installed profile library and an intuitive visual user experience enables new operators to pick up work immediately. Numerous professional features, such as digital top heater calibration, precision touchdown force control and live process observation, make the FINEPLACER® core a future- proof investment when the demands get tougher.

## Highlights*

- Components from 0.125 mm x 0,125 mm to 90 mm x 90 mm
- JEDEC/ IPC conform thermal management with top and bottom heating systems
- Automated pick- up and touch- down with force measuring
- Automated processes
- Process traceability with SmartIdent
- Intuitive user experience with SmartControl
- Compact machine design

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* depending on configuration/ application, (1) standard value, other values on request, (2) optional modules
Technical information are subject to change without prior notice.

printed: 27.04.2016

## Features

- Hot gas rework station
- Automated soldering processes
- Compact and robust design
- Vision alignment system with fixed beam splitter
- Intelligent thermal management
- Real time process observation camera
- Digital top heater calibration
- Manual precision Z- travel range of the reflow arm

## Benefits

- Even and reproducible heat distribution
- User independent process operation
- The whole rework cycle within one cost- effective system solution
- Reproducible placement accuracy
- Coordinated control of all process parameters: temperature, flow, time, process environment
- Immediate visual feedback reduces process development time
- Quick machine setup time
- Safe handling of sensitive components

## Processes

- Component removal / De- soldering
- Site cleaning
- Re- balling
- Paste printing (component, PCB)
- Paste dipping
- Dispensing
- Fluxing
- Soldering

## Applications

- Soldering of:
  - BGA, µBGA/ CSP, QFN, DFN, PoP, QFP, PGA, SON
  - Small passives down to 01005
  - RF shields, RF frames
  - Connectors, sockets
  - Sub assemblies, daughter boards
- Pin in Paste (PiP)
- Trough Hole Reflow (THR)
- Reworkable underfill, conformal coating

## Technical Specifications

| | |
|---|---|
| Placement accuracy: | 25 µm |
| Field of view (min)[1]: | 12 mm x 7.5 mm |
| Field of view (max)[1]: | 66 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]: | 350 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 Nl/ min - 70 Nl/ min |
| **Board Heating:** | |
| Power: | 900 W |
| Gas temperature (max): | 360°C |
| Flow range: | 10 Nl/ min - 70 Nl/ min |
| Heated area (max): | 100 mm x 100 mm |

## Modules & Options

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

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