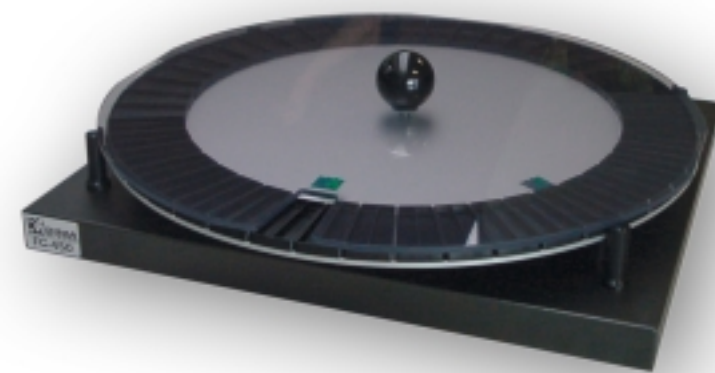


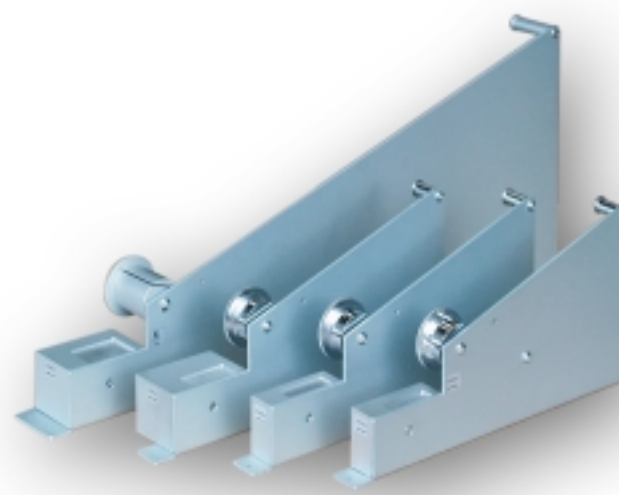
PCB holders

The PCB holder is designed to assist the operator in placing SMT components. The circuit board firmly snaps into the PCB holder allowing the user to place several PCB's side by side. The triangular arm rest allows you to rest your whole arm when placing a component. This not only makes accurate placing of components possible but also covers the part of the PCB you are not working on so that you can not damage the dispensed pattern with your clothes.



Carousel

Due to the unique design of the carousel it has the ability to carry up to 90 different component values incorporating dual and single trays. The carousel is constructed of a high quality aluminium with an integral conductive clear PVC cover protecting and securing the components allowing trouble free placement.

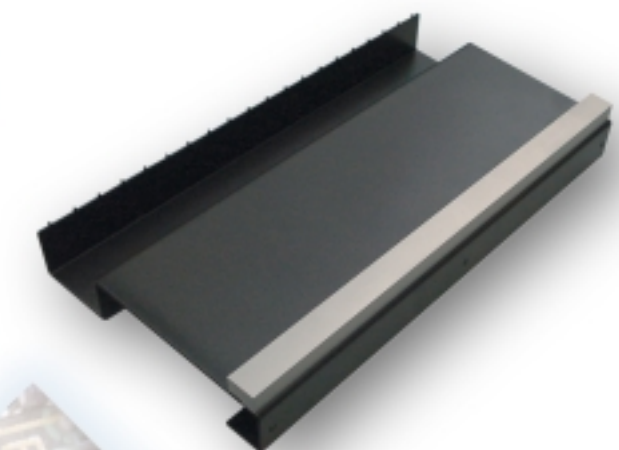


Tape-feeders

Tape-feeders are available for 7 and 14 inch reels. Depending on the size of the components several components can be picked up before you have to advance the tape. Pulling the top tape with the transport wheel advances the tape. Feeders are available for several different widths of tape.

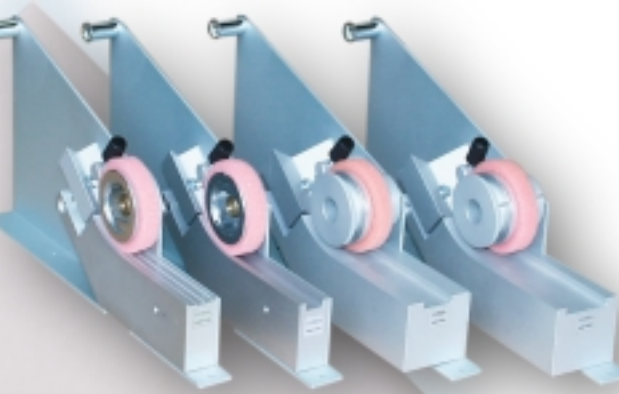
Base plate

The base-plate can hold 20 feeders (20 mm wide). Feeders snap into place and can be placed or removed without any tools. If the FB-200 is used in combination with a light guided PCB holder a bar with indicator LED's can be mounted on top of it.



Stick-feeders

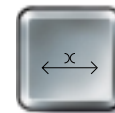
Stick feeders offer the components to the operator for easy pick up. The wheel of the stick feeder prevents the components from moving out of the stick. Rotating the wheel will advance components to the pick position. There is one stick feeder that can handle SOIC's from 6.2 to 15.2 mm high. For other components specific stick feeders are available.



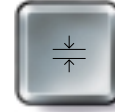
FINELINE

Specifications

FP-100/200/300/500/600/700



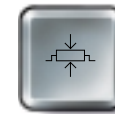
Dimensions
FP-100/200/300 Base l.w.h.= 500 x 760 x 300mm
FP-500/600/700 Base l.w.h.= 900 x 760 x 300mm



Board size-thickness
max. 280 x 220mm (FP-500/600/700)
min. 0.5mm - max. 3.0mm



Maximum Warpage
1mm up - 1mm down



Component Height
Top max. 20mm - bottom max. 25mm



Placement Accuracy
0402 up to QFP with 0.65 mm pitch



Placement Rate
up to 800 cph



Components
Chip, Melf, SOT, SOIC, TSOP, TNT, PLCC, QFP, BGA, LCC etc.



Control
Integrated solid state control with digital display for hot air pencil temperature



Feeder Characteristics
13 feeders of 8 or 12mm tapes or an equivalent of sticks feeders +max. 90 components in carousel



Camera
Colour CCD camera



Power-Air Requirement
110 / 220 Vac / 50 - 60Hz / 70 Watt
6 Bar / 85 PSI / 1,5 L-min



Operating Temperature
15 - 40 degree Celsius

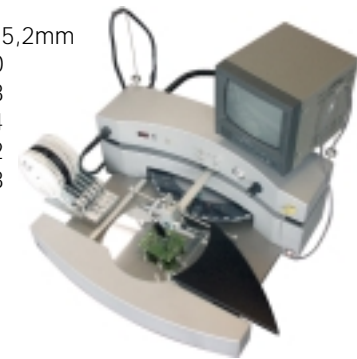


Noise Level
Noise emission during operation < 70 dB(A),



Weight
FP-100/200/300 20 kg without feeders
FP-500/600/700 25 kg without feeders

Article	Description
FA-1000	universal motor drive with foot pedal for Fineline series (not for FL-200)
FA-1100	Color Camera + monitor stand for FP series (no monitor included)
FL-2020	Expansionrail for FL-200
FL-2200	Ledbar with 20 LED's for FL-200
FL-2250	Ledbar upto 20 SMD Boxes for FL-200
FL-2400	Carousel motordrive with LED's for FL-200
FC-450	Carousel with 45 Cmos bins, cover Cmos PVC + Base
FB-200	Baseplate for 20 feeders 20 mm
FT-0807	Tapefeeder 8 mm 7" reel
FT-0814	Tapefeeder 8 mm 14" reel
FT-1207	Tapefeeder 12 mm 7" reel
FT-1214	Tapefeeder 12 mm 14" reel
FT-1607	Tapefeeder 16 mm 7" reel
FT-1614	Tapefeeder 16 mm 14" reel
FT-2414	Tapefeeder 24 mm 14" reel
FT-3214	Tapefeeder 32 mm 14" reel
FS-0100	Stick feeder SO-6,2/15,2mm
FS-2000	Stick feeder PLCC-20
FS-2800	Stick feeder PLCC-28
FS-4400	Stick feeder PLCC-44
FS-5200	Stick feeder PLCC-52
FS-6800	Stick feeder PLCC-68



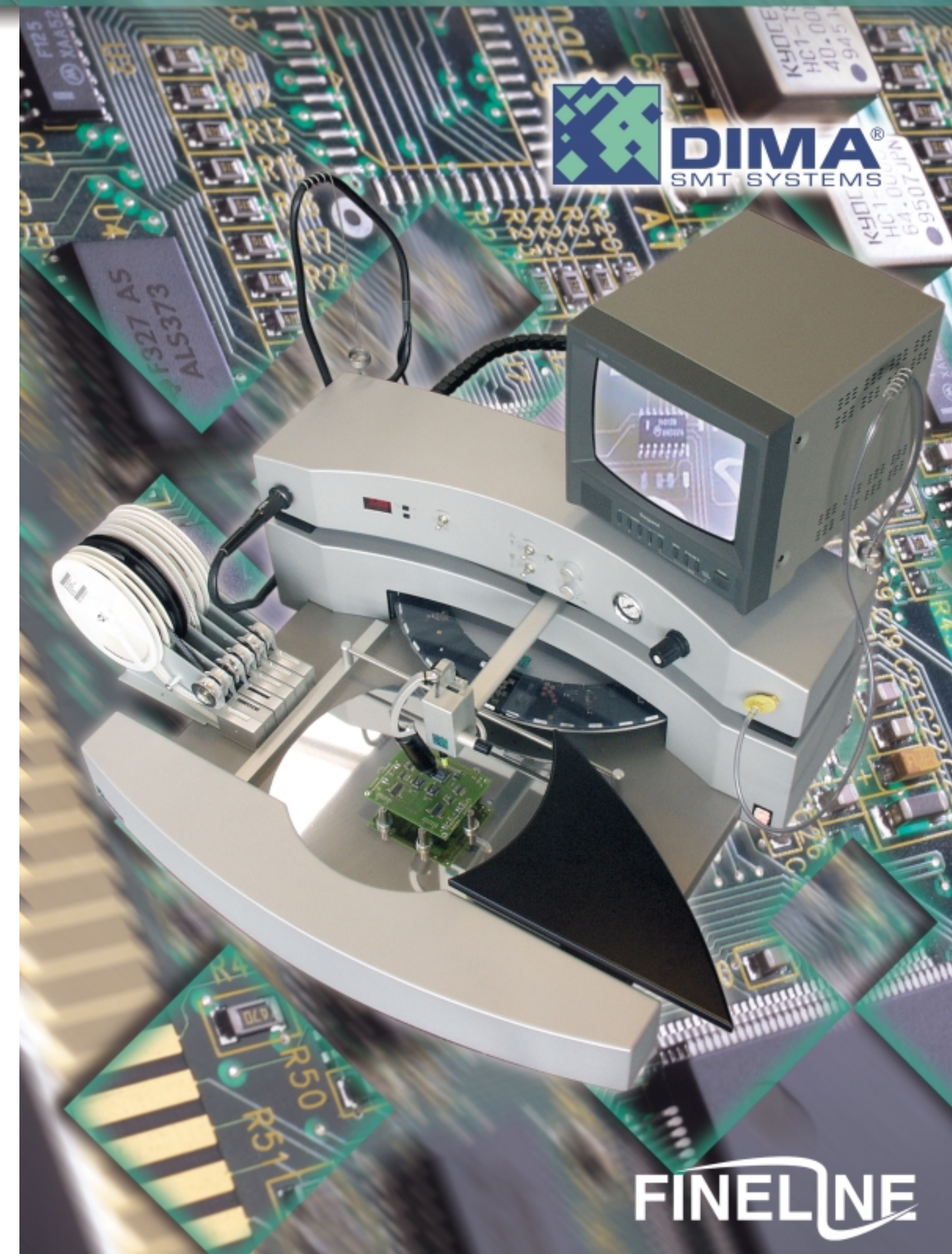
Article	Description
FP-100	modular Fineline pick & place
FP-200	modular Fineline pick & place with dispense
FP-300	modular Fineline pick & place disp. + hot air
FP-500	complete Fineline pick & place
FP-600	complete Fineline pick & place with dispense
FP-700	complete Fineline pick & place disp. + hot air
FM-150	PCB holder 330 x 145 mm
FM-200	PCB holder 330 x 240 mm
FM-210	PCB holder 330 x 240 mm for left handed
FM-400	PCB holder 530 X 330 mm
FM-0150	Extra bar for FM-150 / FM-200
FM-0400	Extra bar for FM-400
FL-200	Light guided PCB holder



DIMA SMT Systems NL B.V.
Beukelsdijk 2
5753 PA Deurne
The Netherlands
Tel: +31 493 352 752
Fax: +31 493 352 750
Email: sales@dimasmt.com
www.dimasmt.com

Your Agent

Specifications are subject to change without prior notice.



The Fineline

Due to Dima's continuing development in SMT the Fineline range has been developed for state of the art placement of SMT components. Ease of use, ergonomics and price performance were the main criteria when developing the new Fineline range. In the Fineline range of pick and place units you can choose between a system where every thing is integrated into one unit (FP-500/600/700) or a modular system where various options can be combined with the pick and place module of your choice (FP-100/200/300).

Carousel

Due to the unique design of the carousel it has the ability to carry up to 90 different component values incorporating dual and single trays. The carousel is constructed of a high quality aluminium with an integral conductive clear PVC cover protecting and securing the components allowing trouble free placement.

Sensatip™ pick & place head

The Sensatip™ pick and place head movement is extremely light and its ergonomic design ensures relaxed placing of components without having to force your hand in to an uncomfortable position. Vacuum is automatically switched on and off by touching the component with the nozzle. Pick and place nozzles can easily be changed without tools and components can be rotated over 360 degree.

PCB Holder

To enable a quick changeover, the pcb is supported by a series of magnetic blocks. This allows strategic positioning, especially useful when placing double sided pcb. The PCB can rotate over 360 degree. This allows you to support even very strange shapes of boards and to rotate them in every angle which can be very profitable for repairs or difficult dispensing jobs.

Camera

The optional camera helps with inspecting and placing components.

Tape & stick feeders

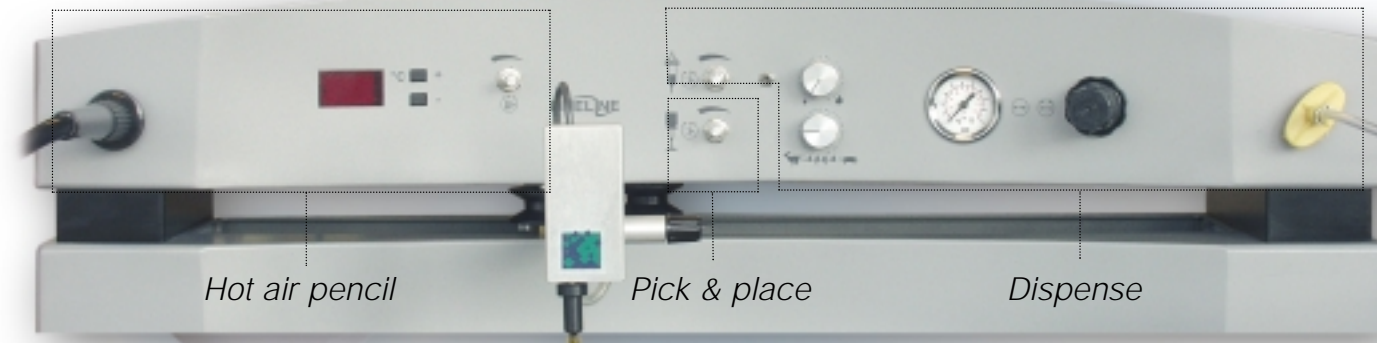
An integrated base for feeders allows you to place up to 13 feeders in your Fineline.

arm rest

The triangular arm rest allows you to rest your whole arm when placing a component. This not only makes accurate placing of components possible but also covers the part of the PCB you are not working on so that you can not damage the dispensed pattern with your clothes.

Fineline pick & place 500

The FP-500 is a manual pick and place system that combines all features of today's manual pick and place systems in one system. The FP-500 is equipped with the DIMA *Easyglide™* X, Y guiding system that allows exact positioning of the pick and place head. The *Sensatip™* pick and place head ensures that even difficult components can be picked just by touching the component. The unit is equipped with a rotating PCB holder, a large arm rest, a carousel, a carousel cover and an adaptor for tape or stick feeders.



Fineline pick & place 700

The FP-700 can pick and place, dispense and do hot air soldering. This unit has all the features of the above mentioned models but is also equipped with a digital controlled hot air pencil. The hot air pencil is a very convenient tool for soldering prototype PCB's and for removing or soldering single components for repair purposes.

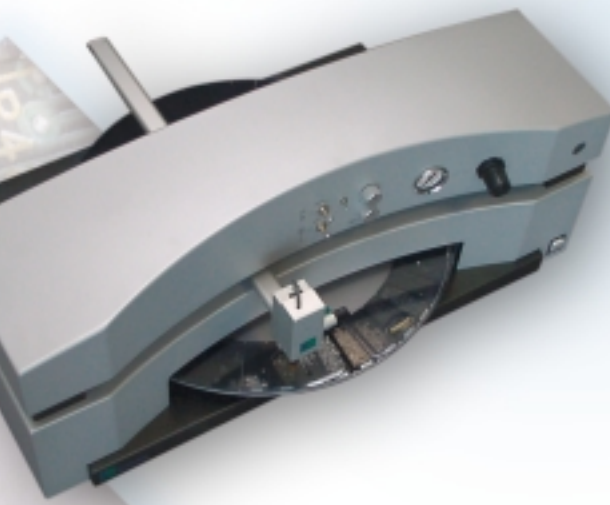


Photo
FP-200

Fineline pick & place 600

The FP-600 can pick and place and dispense. The unit has all features of the FP-500 but is also equipped with a dispense unit. The dispensing unit allows you to dispense solder cream, SMD adhesive, solder-mask and several other products. A digital timer combined with precision air pressure regulation, guarantees an exact and repeatable dot size. For liquids with a low viscosity the dispensing unit is equipped with a barrel vacuum that avoids leaking of dispensing fluid. The dispenser is equipped with an automatic repeat function that avoids having to press the foot pedal for every dot.

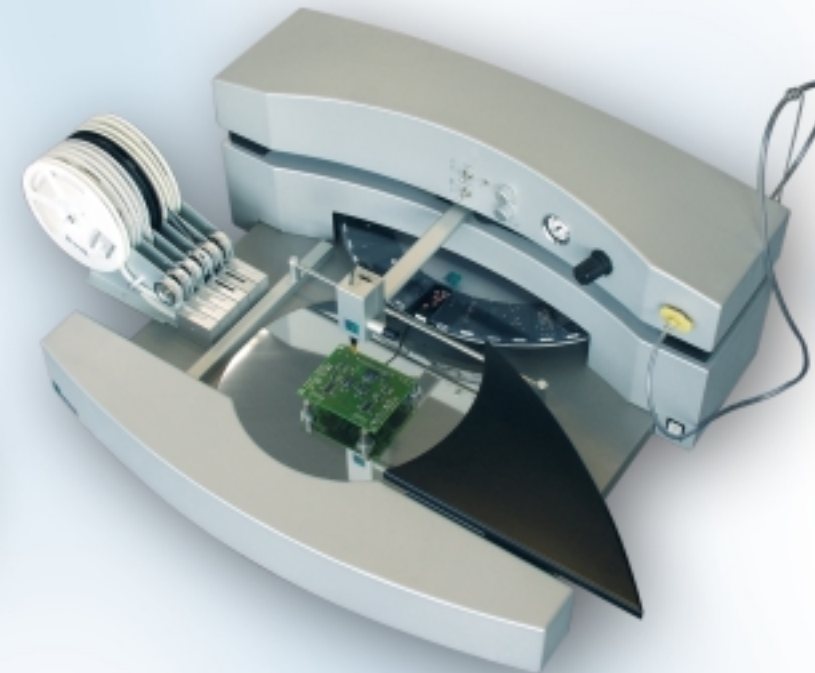


Photo
FP-600 with optional feeders.

Fineline modular System

The range of modular systems has to be combined with at least a PCB holder. depending on the application an extra carousel or a base plate for tape or stick feeders can be added. Technically the modular system is the same as the complete Finelines. The FP-100 can pick & place, the FP-200 can pick & place and dispense and the FP-300 can pick & place, Dispense and has a hot air pencil.

Fineline Modular pick & place range

Continuous development in the range of modular components has created state of the art placement modules. Ease of use, ergonomics and price performance were the main criteria when developing the new Fineline modules. Modules can be combined to create a simple unit where components are placed using a vacuum pipette. Other combinations can be made with the manual pick and place units (FP-100 / 200 / 300) and with standard or light-guided PCB holders.

Placing Assistant - Light guided PCB holder

The Placing Assistant is a computer controlled PCB holder that turns a new operator into a skilled placement technician. Within a matter of minutes the new operator will be placing up to 800 components per hour, even with complex assembly routines. The work station extends to SMT the productivity and error elimination advantages of light-guided placement.

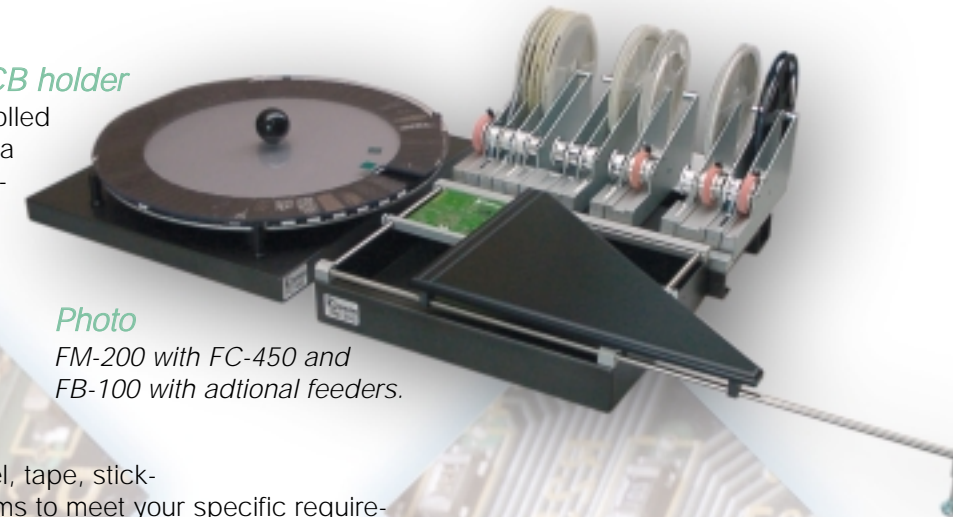


Photo
FM-200 with FC-450 and
FB-100 with additional feeders.

Operation

The PCB holder can be used with carousel, tape, stick-feeders and manual pick and place systems to meet your specific requirements. This system is designed to minimise errors while assembling Surface Mount Boards. After component locations are programmed the computer activates a LED bar indicating where to pick the component from. If selecting from a carousel it will automatically advance. A light spot indicates desired placement area on the board. The light source is located directly under the arm rest. The light spot moves automatically in the Y and the arm rest in the X direction. leaning on the arm rest has no influence on the accuracy of the light spot.



Photo
FL-200 with FP-200 and baseplate with
additional feeders optional feeders.

Light guidance

A small light spot guides the operator through each component placement. depending upon the part storage option you select, the system advances the carousel to the correct part bin, or illuminates the correct stick or tape-feeder.

Programming

To program the system several CAD converter's are available. If no CAD information is available the system can be programmed by teach in. The system remembers the movements and stores them into your computer.