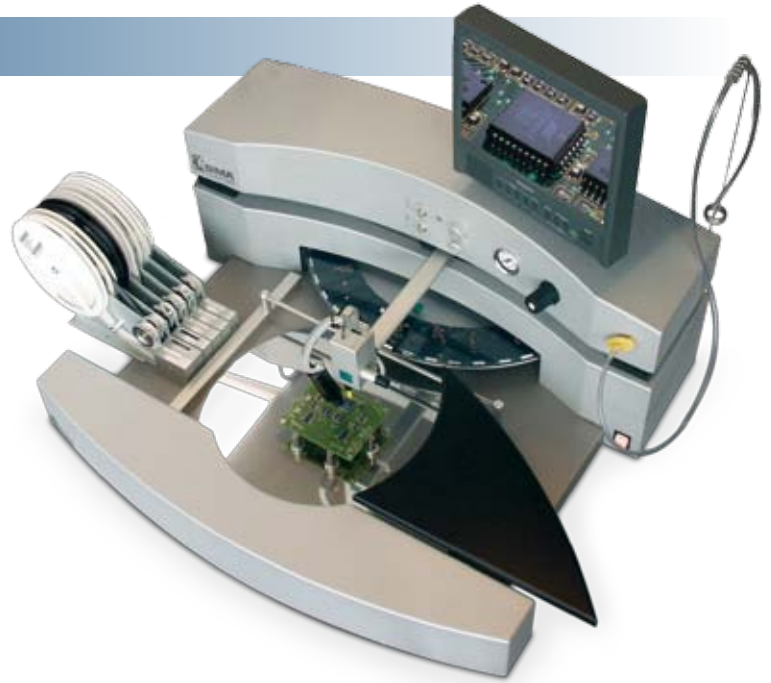


Fineplacer - Manual Pick and Place

Fineplacer FP-200 / FP-600

Fineplacer is a manual Pick and Place machine, that combines ease of use, ergonomics and price performance. In the Fineplacer range you can choose for a system in which everything is integrated into one unit (FP-600) or for a modular system which can be build and configured with various options to a system of your own personal preferences (FP-200).

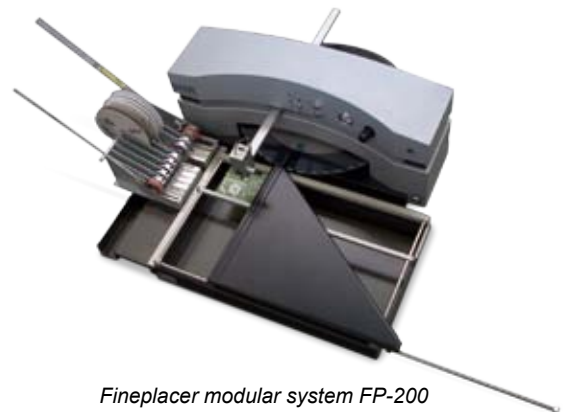
This manual Pick and Place machine has an integrated dispensing unit, allowing you to dispense solder cream, SMD adhesive, solder-mask and several other products. A digital timer combined with precision air pressure regulation, guarantees an exact and repeatable dot size. For liquids with a low viscosity 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.



Fineplacer all-in-one system FP-600

Main Features

- All in one box system or flexible modular system
- Extreme light movement because of the Easyglide guiding system
- No problems when picking round or small components thanks to the Sensatip® pick and place head
- PCB can be rotated for easy assembling (all-in-one system)
- Integrated dispenser for solder paste
- Digital solid state control
- Large arm rest
- Ergonomic design



Fineplacer modular system FP-200

Applications



Detailed information

Fineplacer complete systems

A manual pick and place system that combines all features of today's manual pick and place machine in one system. 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 degrees. 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. An integrated carousel for up to 90 components and base for 13 feeders are included in this complete system.



Fineplacer FP-600 with optional camera and monitor

Dispense unit

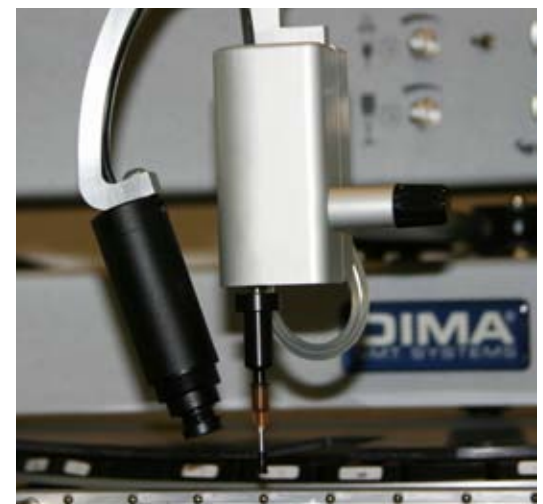
The dispensing unit allows you to dispense solder cream, SMD adhesive, solder-mask and several other products. A digital timer combined with precision air pressure regulation, guarantees an exact and repeatable dot size. For liquids with a low viscosity the dispensing unit is equipped with a barrel vacuum 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.

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 degrees.

Easyglide™

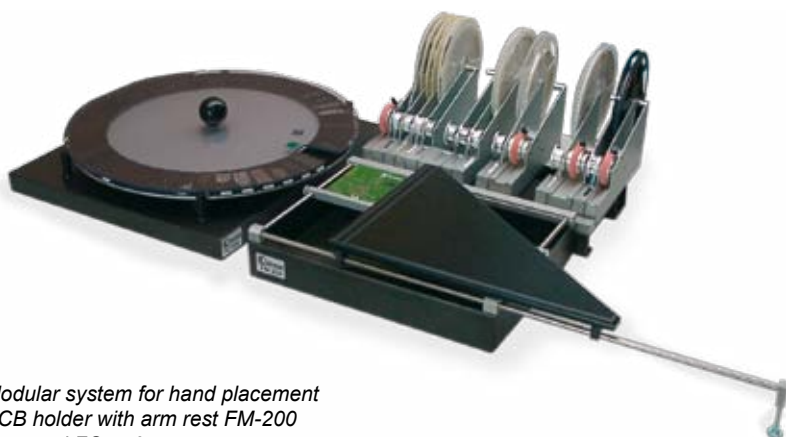
Each Fineplacer is equipped with the DIMA Easyglide™ XY-guiding system that allows exact positioning of the pick and place head.



Sensatip head with optional camera installed

Camera

The optional camera helps with inspecting and placing components.



*Modular system for hand placement
PCB holder with arm rest FM-200
Carousel FC-450
Base plate FB-200 with additional feeders*

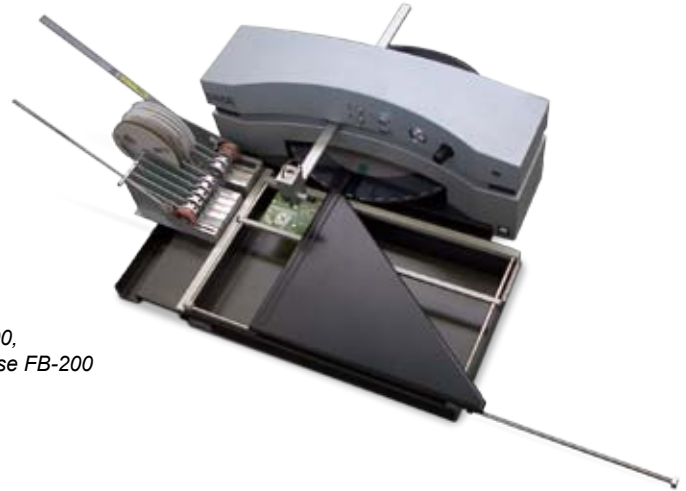


Detail of carousel with cover

Detailed information

Fineplacer modular systems

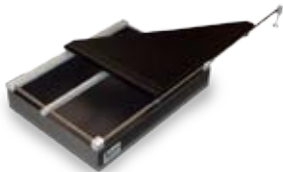
In the range of modular systems the base module Fineplacer FP-200 has to be combined with at least a PCB holder. Depending on the application an extra carousel or a base plate for tape or stick feeders can be added. Technically the modular system is the same as the complete system Fineplacer.



Combination of a Fineplacer FP-200, a PCB holder FM-200, a feeder base FB-200 and tape and stick feeders.



Fineplacer FP-200



PCB holder FM-200 (including arm rest)



Base plate FB-200



Carousel FC-450



Stick feeder FS-xxxx



Tape feeders FT-xxxx



Tape strip feeder FT-0801

Combinations

See picture above. Where the feeder base is located you also can place a base plate with carousel. This is a modular system that allows you to start with a basic configuration. The modular system allows you to replace or add options for you, to upgrade it to a more advanced system. See the list of options for your own configuration below.

PCB holder

In the FM-200 you can adjust a movable bar so that it exactly fits your circuit board. Each PCB is held by separate spring loaded balls so that even if you place more small PCB's in a row, each PCB is held tight so that it does not move during dispensing or placement.

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.

Base plate

The base plate FB-200 can hold 20 feeders (20 mm wide). Feeders snap into place and can be placed or removed without any tools.

Carousel

Due to the unique design of the carousel FC-450 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 (ESD) clear PVC cover protecting against static electricity and securing the components allowing trouble free placement.

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 also a stick feeder that can handle SOIC's from 6.2 to 15.2mm high. For other components specific stick feeders are available.

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. Tape strip feeders FT-0801 allow you to handle short strips of SMT tape for small and large components.

Tape strip feeder

For small strips of SMD tape DIMA offers a tape strip feeder that can be adjusted to any width of tape. The feet of the tape strip feeder are magnetic for easy placement within the machine.

Fineplacer		
DIMA Article number	FP-200	FP-600
Type	Modular manual Pick and Place machine	Complete manual Pick and Place machine
Dimension (L x W x H)	500 x 760 x 300 mm	900 x 760 x 300 mm
Board thickness	min. 0.5 mm - max. 3.0 mm	min 0.5 mm - max. 3.0 mm
Board size	330 x 240 mm	280 x 220 mm
Maximum Warpage	1 mm up - 1 mm down	1 mm up - 1 mm down
Component Height	Top max. 20 mm Bottom max. 25 mm	Top max. 20 mm Bottom max. 25 mm
Placement Accuracy	0402 up to QFP with 0.65 mm pitch	0402 up to QFP with 0.65 mm pitch
Placement Rate	Up to 800 CPH	Up to 800 CPH
Components	Chip, Melf, SOT, SOIC, TSOP, TNT, PLCC, QFP, BGA, LCC, etc.	Chip, Melf, SOT, SOIC, TSOP, TNT, PLCC, QFP, BGA, LCC, etc.
Control	Integrated solid state control	Integrated solid state control
Feeder Characteristics	20 feeders of 8 or 12 mm tapes or an equivalent of stick feeders in base plate + max. 90 components in carousel.	13 feeders of 8 or 12 mm tapes or an equivalent of stick feeders + max. 90 components in carousel.
Camera	Optional colour CCD camera	Optional colour CCD camera
Power Requirement	110 / 220 Vac / 50-60 Hz / 70 Watt	110 / 220 Vac / 50-60 Hz / 70 Watt
Air Requirement	6 Bar / 85 PSI / 1.5 L/min	6 Bar / 85 PSI / 1.5 L/min
Operating Temperature	5 - 35° Celsius	5 - 35° Celsius
Noise Level	Noise emission during operation < 70 dB(A)	Noise emission during operation < 70 dB(A)
Weight	26 kg	37 kg

Modules

FP-200	Modular Fineplacer pick & place with dispense
FP-600	Complete Fineplacer pick & place with dispense
FM-200	PCB holder 330 x 240mm
FM-0150	Extra bar for FM-200
FB-200	Base plate for 20 feeders 20 mm
FC-450	Carousel with 45 Cmos bins, cover Cmos PVC + Base
FA-1000	Universal motor drive with foot pedal for carousel
FA-1100	Colour Camera and monitor stand for FP series (no monitor included)
FA-3015	Monitor for Fineplacer

Overview tape and stick feeders

FT-0801	Tape strip feeder
FT-0807	Tape feeder 8 mm 7" reel
FT-0814	Tape feeder 8 mm 14" reel
FT-1207	Tape feeder 12 mm 7" reel
FT-1214	Tape feeder 12 mm 14" reel
FT-1607	Tape feeder 16 mm 7" reel
FT-1614	Tape feeder 16 mm 14" reel
FT-2414	Tape feeder 24 mm 14" reel
FT-3214	Tape feeder 32 mm 14" reel
FS-0100	Stick feeder SO-6.2/15.2 mm
FS-2000	Stick feeder PLCC-20
FS-2800	Stick feeder PLCC-28
FS-4400	Stick feeder PLCC-44

For more detailed information, please contact our Sales Representatives. We are very willing to explain you the product application opportunities, all the available system configurations as well as our customized turn-key automation facilities. We are pleased to serve you with the best process technologies and going for the best system fit into your manufacturing processes. Your success is ours too!

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