

# PANTERA-X Pick + Place

Highly flexible SMD placement system for small and medium enterprises

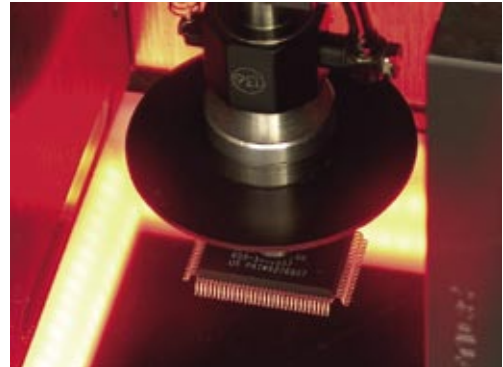


# SMD placement machine for flexible production

- Feeder capacity 115 x 8 mm
- Intelligent tape feeder 8 to 56 mm
- Placement speed 4'500 cph
- Easy graphical operating software
- Integrated dispensing system
- Feeder setup with bar code reader
- Optical alignment „on the fly“
- Vision system for component inspection
- Absolute linear measuring systems

Fast product changeover and small series characterize modern SMD production. That's why a short changeover time is the most important feature. Therefore, large feeder capacity, automatic feeder identification and easy operating software are important characteristics of a high-flexible placement machine.

The placement system PANTERA-X ideally meets the standards of a high-mix / low-volume production. The application range is large and the placement is fast and reliable. The PANTERA series feature an ideal price/performance ratio for SME (Small and Medium Enterprises).



All components are measured by an universal optical system and placed precisely.

PANTERA-X: Laser and top-down vision.

PANTERA-XV: Additional with bottom-up vision.



The variety of feeders opens a large application spectrum and provides flexibility. Tape reels, single tape segments, bars and pallets of each size can be used for component feeding. The component height can be up to 15 mm.



The combination of the placement system with a dispenser saves costs and place for additional machines. PANTERA-X can be equipped with a time-pressure or a screw dispenser.

### Easy operation

The operating software Lightplacer is the key to flexibility. The powerful software is based on Windows with a graphical surface.

### High capacity

The large feeder capacity and the automatic identification of the intelligent feeders minimize change-over time and are a guarantee of quality. All tape feeders are electrically driven and feeding pitch is programmable.

### Time saving

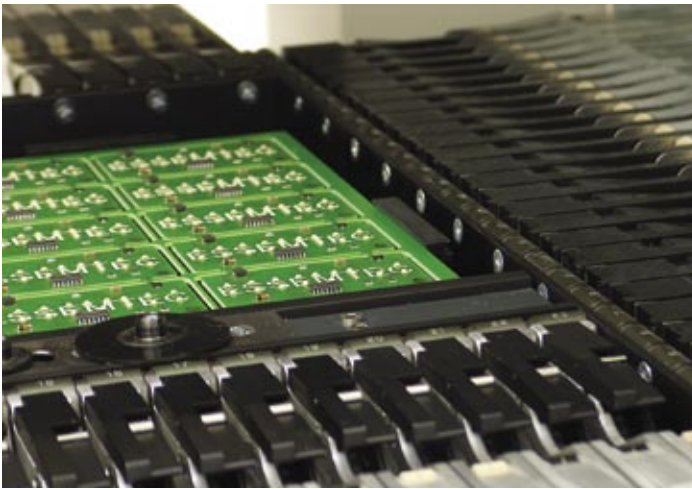
The PANTERA-X can be programmed off-line or on-line. Bar codes on feeders and components guarantee a flawless and fast feeder programming.

### Space saving

This pick&place fits in every production with a footprint of only 92X92 cm (36.2x36.2")



# Fast changeover



Feeder capacity for more than 115 components.



Universal magnetic PCB holder.

For a high-mix production changeover time is the most important cost factor. The PANTERA concept reduces changeover time and costs to a minimum. Off-line programming, in combination with intelligent feeders and large feeder capacity, facilitate an economical low-volume placement.

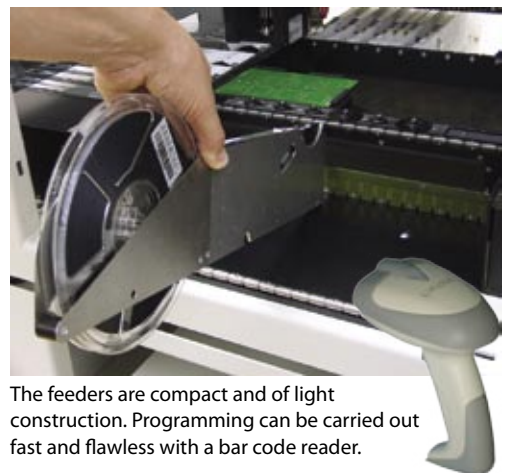
All feeders for belts and bars are intelligent. Their positions in the placement machine are recognized automatically. The feeders' status is shown in colours on the screen.

The PANTERA-X has a capacity for more than 115 components. That's why many standard components (e.g. resistors, capacities) permanently remain in the machine, only specific components must be updated.

Off-line programming allows during running production to prepare following orders without stopping the placement machine.



Time saving offline programming.

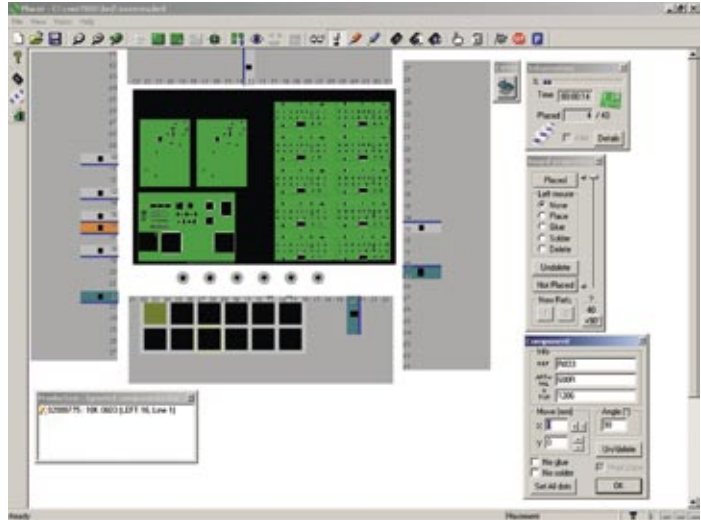


The feeders are compact and of light construction. Programming can be carried out fast and flawless with a bar code reader.

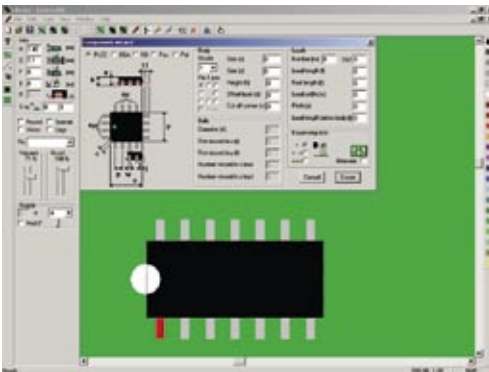
# Easy operation and programming



Unique "virtual view" function.



Lightplacer: clear and easy operation.



New components can fast and easily be drawn by the installed „wizard“.

Lightplacer is the powerful user interface of the PANTERA-X. All information is represented graphically. Complex placement data are shown understandable for everybody as virtual PCB.

The universal PAN-CAD interface converts data from layout programs (CAD) into placement files within seconds. The PANTERA-X is delivered with an extensive component library. Additional forms can fast and easily be drawn by the installed „wizard“.

Program changes are possible with one mouse click, for instance rotating, mirroring, moving and erasing of components. Multiple panels can be generated out of single PCB.

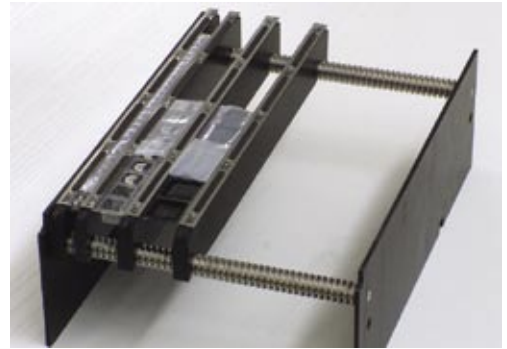
The unique „virtual-view function“ allows test and correction of a program without placing a component.

With the software Lightplacer the user always has control over the machine's status, the feeders and the components. The software is continuously updated and improved in cooperation with our customers.

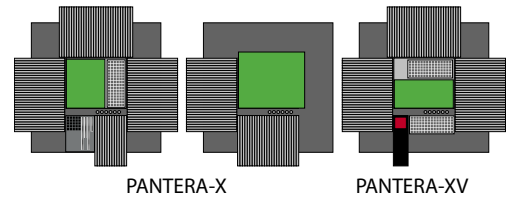


The internet based remote maintenance system facilitates short problem solving time and saves travelling expenses for experts. A basic license is included in all new machines.

# Great variety of feeders and components



For low-volume series rest-tape feeders are the ideal tool to process short belt segments.



Holders for pallets can be mounted everywhere in the placement area and in feeder places. The placement area is increased by omitting feeders right and behind.

A flexible production meets the needs of the customers. Therefore the PANTERA-X is open concerning feeders and components.

All free spaces, which are not occupied by PCB, belts or sticks can be used by pallets or rest-tape feeders. The software also accepts customer specific constructions as feeders.

For all belts and sticks standard feeders are available. Belts from 8 to 56 mm width can be processed. Components can be 15 mm high. For pallets and tape segments universal feeders are available.



By changing the adapter (black) the stick feeders can quickly be fitted to different component dimensions.

# High speed and accuracy



Top-down vision.



Laser alignment (Cyberoptics) fast and precisely measures all components on their way from feeder to placement location (on the fly).



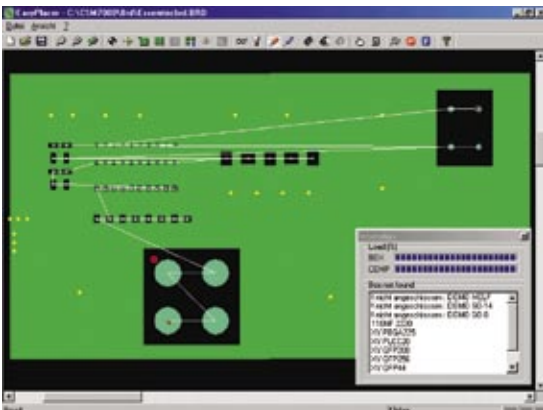
Bottom-up vision.

The PANTERA-XV is equipped with three optical systems, a laser alignment, a top-down and bottom-up vision. The combination of all parts facilitates the fast placement of discrete components and the precise placing of fine-pitch and BGA in a machine.

Top-down vision: Finds fiducial marks automatically. It can be used for teaching and controlling after dispensing and placement.

Bottom-up vision: Examines all expensive QFP and BGA before placement (only PANTERA-XV). It measures all component connections and tests dimensions and numbers.

# Dispenser for adhesives and solder paste



For dispensing no additional programming is necessary. The coordinates of the adhesive or solder paste points are stored in the component library.

The PANTERA-X can be delivered with a screw or time-pressure dispenser for metering adhesive spots or solder paste. The valve is mounted on the back of the placement head.

The combination of the placement system with a dispensing system saves costs and place of additional equipment.



Time-pressure dispenser.



Archimedean screw dispenser.

# Flexibility made in Switzerland



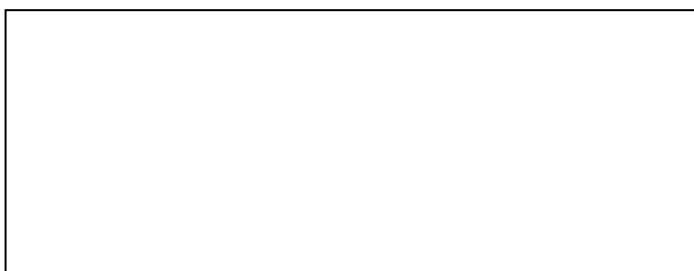
Essemtec AG in Aesch, Switzerland, is developing, building and distributing flexible production systems. Founded in 1991, the enterprise has become a world leading manufacturer of machines for electronics production.

Customer's investment is always protected: the compatibility of the products allows the expansion of an existing line capacity or performance at any time.

The machine's software and hardware are developments of Essemtec. Therefore, customer specific solutions can be realized in short time.



Essemtec delivers SMD turnkey lines complete with the process know how.



## Product range

- Dispenser
- Printer
- Pick+Place
- Reflow oven
- Wave soldering system
- Component storage system and software
- Handling system
- Turnkey lines
- Customer specific solutions
- SMT production planning software

## Your add-on values

- International financing solutions
- Investment protection
- Custom-tailored services
- Remote support system
- Local product specialists
- MyEssemtec.com intranet access
- Worldwide training centers



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