THE VERTICAL LOADER / UNLOADER.

TECHNO SYSTEM

Secuence of Jirafo Loader

• Waiting for a PCB board.

• Boards are stacked in a semi-vertical position (an appropriate solution for circuits ranging from inner-layers of 0.10 mm. thickness to drilled boards of 4.00 mm.).

• Circuits can be transported from one process line to another without manual intervention. Problems due to weight and sliding are avoided since the boards are permanently stacked at an angle of 75º, and don´t need to be changed of trolley.

• Our Jirafo is supplied with one trolley. Panels are always stacked at an angle of 75º.

• Unused trolleys fit into each other minimising storage space (10 trolleys can be stored in 1.7 m2). See Picture

• All the trolleys work at the same height, independently of the height of the process line being loaded or unloaded by the Jirafo. The conveyor belt of the Jirafo adjusts to the height of the line.

• The Jirafo Loader can handle boards of thickness ranging between 0,1 and 4 mm. The loading is carried out by means of 8 suction pads. The four upper suction pads can be easily adjusted to the size of the board. See picture

• Circuits are handled with great care by the Jirafo Unloader. It can be placed at the exit of horizontal black-oxide lines; one of the most delicate unloading locations due to the ease with which the boards can be scratched.

• The Jirafo Loader can be controlled by the machine it feeds. Upon request (an electric signal) the Jirafo delivers a board, as is the case of automatic Dry Film Laminators or an automatic Screen Printing machine.

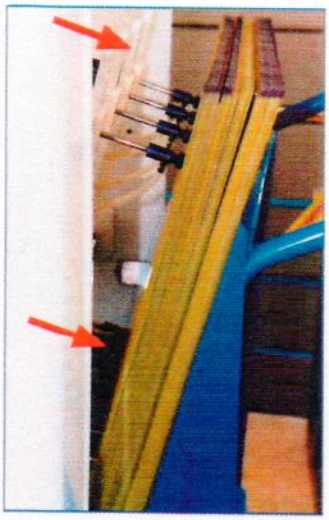
• The Jirafo has a board counter that allows the operator to know at any time how many boards have been loaded or unloaded.

• The Jirafo warns the operator about its present status: Stand-by, Running, Warning.

• The Jirafo can be controlled remotely either by cable or by radio. See Picture

• This is especially advantageous when an operator is working in a yellow room and a Jirafo is feeding boards from the outside. He won't need to be entering and leaving the room continuously.

• Arms up to get a PCB board.



• 8 suction pads extended and vacuum is activated.

• Retraction of the lower suction pads.

• Retraction of the upper suction pads.

• Arms down place the PCB board on the conveyor.

• PCB board exits the Jirafo conveyor.

• PCB board entry.

• PCB board ready to be unloaded.

• PCB board unloading.

• Placing the PCB board.

Secuence of Jirafo Unloader

• The Jirafo can inform about its status via radio up to a distance of a 100 m. The beeper receiving the signal indicates the operator whether the Jirafo is running, in stand-by or stopped. The Jirafo can be equipped with the radio after purchase.

• Before all the boards on the trolley have been loaded, the Jirafo will warn the operator that the trolley must transmitter soon be unloaded or replaced by an empty one.

• The Jirafo Loader can load up to 14 panels per minute. The Jirafo Loader warns the operator when there are only 10 boards left on the trolley, allowing enough time for him to prepare a new loaded trolley.

• The Jirafo takes up very little space. Only 1,3 m. from the conveyor belt to the end of the trolley when fully loaded. The control panel, of easy access and good visibility, makes the Jirafo easy to use and adjust.

• The Jirafo is a simple and highly efficient machine that enhances production rates and minimises the number of defective panels due to handling.

• The Jirafo Unloader can unload up to 16 panels per minute.

• The Jirafo guarantees that no sliding or scratching occurs when handling PCB; because once on a trolley thus can be transported safely from one line to another.

• The Jirafo is prepared to work in any kind of environment: wet process or corrosive conditions, clean environments, etc.

• The Jirafo Buffer is an all-in-one Loader and Unloader. It is usually placed after a Hipo (Diverter). This way we are able to exit boards (working as a Jirafo Unloader) from the line in case of failure of a machine on the line and restitute them (working as a Jirafo Loader) when the problem has been solved. See Picture

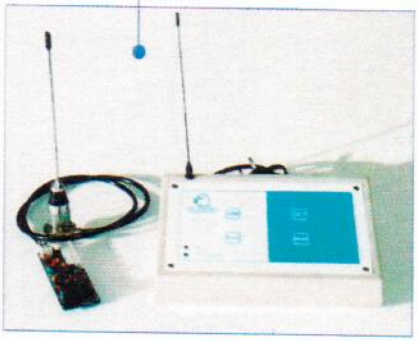
• Placing the PCB board on the trolley

• Stacking the PCB board.

• Puching device contraction.

a. A very simple setting for upper suction pads.

b. Remote Control as an option.

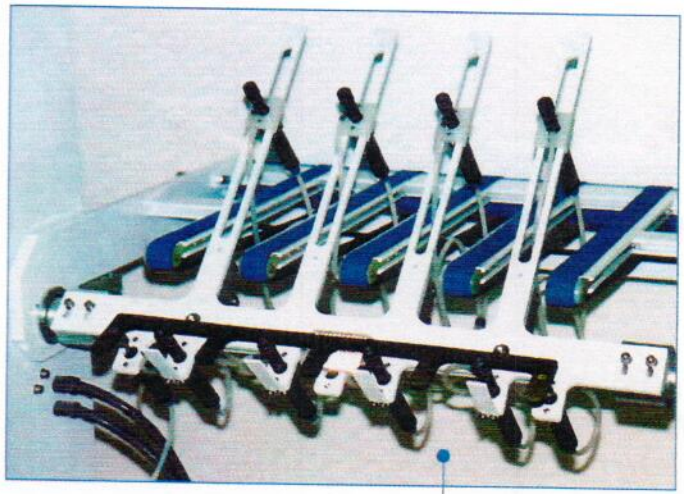


c. Trolley with security system. Top weight 120 Kg.

d. Centering Device and splitting device as an option.

e. Very good stacking system.

f. Arms HD prepared for heavy panels.



g. Arms for Jirafo Buffer (Loader/Unloader)