



Design and manufacture equipment for wet surface treatment and handling systems since 1978

- ◎ Suitable for PCB's with any shape, drilling or routing
- ◎ Loading system without suction cups
- ◎ Designed for small, medium and large PCB's



**AUTOMATIC LOADER mod. "TK"**

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### TECHNICAL DATA :

Overall length	: 2000 mm
width	: 1330 mm
height	: 1800 mm
Minimum board size	: 110 mm x 50 mm
Maximum board size	: 650 mm x 500 mm
Maximum board weight	: 3 kg
Board thickness min/max	: from 0,8 mm to 4 mm
Conveyor height	: 900 mm
Operating width	: 640 mm
Adjustable conveyor speed	: from 0,5 to 3 mt/min.
Boards stack max. height	: 350 mm
Max. loading capacity	: 100 Kg
Weight	: 380 Kg
Compressed air	: 50 NI/min. (5 bar)
Max noise	: 70 db (A)
Electrical power	: 1 Kw (400 V - 3 Phases - 50 Hz)

### Features

Drilled and routed metal boards, as well as, small size boards can be very difficult to handle with loading equipment fitting suction cups. The loader mod. TK solves these problems thanks to its patented system with swinging knives. Different kinds of boards can be placed side by side without any problem of scratches due to sliding.

### Base machine description

Boards are stacked in semi-vertical position on a special support which fits inside the loader.

By pushing the start button the knife head unit is ready for the loading operation, whilst the board package is automatically advanced to the loading position.

The blades, fitted on a horizontal axis, come in contact with the top edge of the first board, move it to its tipping point to fall on a conveyor belt with variable speed.

Conveyor speed is adjustable in a flexible way according specific ratio considering board spacing, board length and requested speed. Also the cycle time and the space between two following boards are adjustable.

When the last board has left the loading container, a combined acoustic and light signal warns the operator.

Then the empty support can be replaced with a full one to start a new cycle.

This loader is specially designed to handle boards with shapes, cut lines, contouring, multiple drilling even on edges, which make usually difficult their automatic loading operation. As consequence of its structure this loader can also handle any other type of boards.



### As options, the following solutions can be considered:

#### **System to change speed range**

According customer request is possible to adjust loading speed defining a speed range during the manufacturing process. Customer can choose on request different range options. Max. speed 10 mt/min.

#### **Mechanical/Electronic thickness detector**

For TK model this device is strongly recommended to avoid overlapped panels loading. The thickness control can be selected for safety to 1,5 times the thickness to be loaded so that once the board incoming is thicker than the set-point alarm will be generated and conveyor turn back to the load-support. Alarm is visual-acoustic.

#### **30" (760 mm) working width version**

On request this loader is also available larger.

**POLA e MASSA s.r.l.**

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