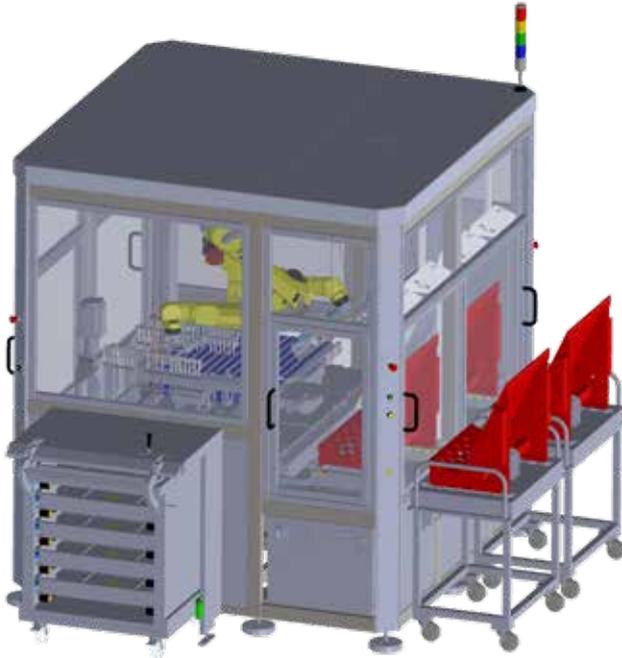


Millennium V4 TRIO



The Millennium V4 TRIO Loader / Unloader line has been developed to be used in high end PCB shops where the PCBs are very sensitive to human manipulation.

The Millenniums V4 TRIO are equipped with two heavy duty 6 axis robot arms capable of moving heavy panels at high speed with extremely high accuracy. By the use of two robotic arms the Millennium V4 TRIO can operate at high speeds, achieving a rate of 12 panels/min or 6 panels/min with plastic interleaf insertion. The Millennium TRIO series is equipped, in the standard version, with 3 loading or unloading stations, two L-Racks and one horizontal box with automatic exchange of 5 boxes, and has a non stop function, capable of changing from loading station nº1 to loading station nº2 or horizontal box without stopping production. This series of loaders is equipped with automatic adjustment of the suction gripper to avoid human intervention.

	Length	Width	Thickness	Weight	Line speed range	
Max. Panel Size	615mm	615mm	5 mm	3 Kg	Panel / min	12
Min. Panel Size	530mm	450mm	25 µm	0,1 Kg	Max m / min	6
					Min m/min	0,2

the fly avoiding the need of manual intervention. Moreover the unique alignment system installed in the Millenniums V4 TRIO will detect the panels located on the conveyor and will precisely pick up the panels without the need of any mechanical centering device. This will eliminate all friction between the conveyor rollers and the PCB (contact-free alignment system).

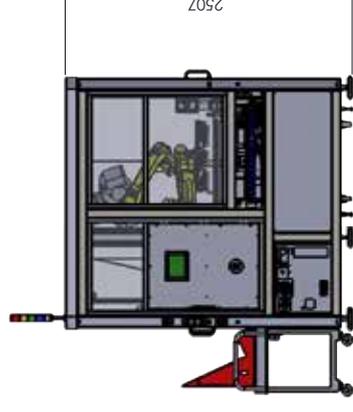
The Millennium V4 TRIO Unloader will measure all panels when entering the conveyor belt and the suction cup grippers will adjust to the panel size on

Youtube channel



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Main features	Unloader	Loader
CCD Camera for Alignment	✓	N
Double sheet detector	N	O
Plastic Interleaf	✓	✓
6 Axis Robot Heavy Duty	✓	✓
PLC (Control)	✓	✓
Touch Screen	✓	✓
Conveyor with Servo motor	✓	✓
Automatic Suction Cup Adjustment	O	O
Venturi system	✓	✓
Centering Device	✓	✓
ESD antistatic	O	O
Arm with Extra Suction cup Vacuum power	O	O
Decentering Device	N	✓
Automatic Exchange of Boxes (5 Boxes)	✓	✓
Panel Height Automatic Identification	N	O



All **Millenniums V4 TRIO** can operate with or without plastic interleaves by the activation of the function. Additionally the Millennium V4 Unloader is equipped with a station used to place plastic interleaves.

The main concept behind the **Millenniums V4 DUAL** is to Load and Unload constantly any horizontal line and any kind of panel with a thickness ranging from 25 micron up to 5mm and a weight of 7,5kg at a rate of 12 panels per minute.

The **Millennium V4 TRIO Loader** can be equipped with an automatic panel size recognition system, the L-rack can be loaded with different panel sizes and the system will automatically identify one by one the size of each panel, adjusting automatically the suction cups to the panel size. Furthermore, the loader can be equipped with a touchless automatic centering or decentering device. The standard configuration of a **Millennium V4 TRIO** includes 2 L-rack stations (for inner and outer layers) and a horizontal box (for flexible or extra thin inner layers) with automatic exchange of boxes.

