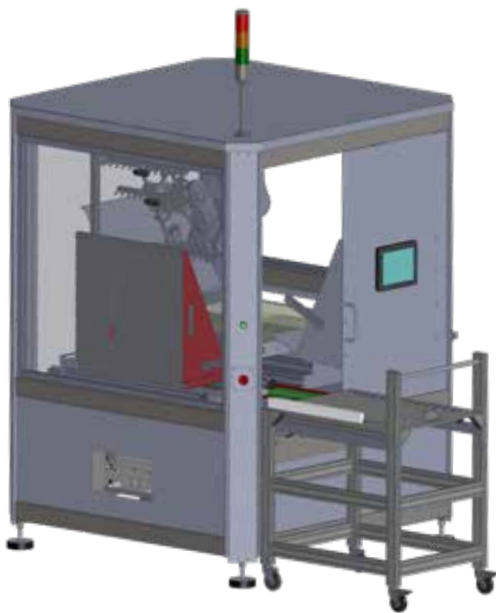


## Millennium V3



**The Millennium V3 Loader / Unloader** line has been developed to be used in mid-sized and high end PCB shops where the PCBs are very sensitive to human manipulation. **The Millenniums** are equipped with a 6 axis robot arm capable to move at high speed with extremely high accuracy. These loaders are equipped with automatic adjustment of the suction gripper to avoid human intervention.

**The Millennium Unloader** will measure all panels when entering the unloader conveyor and the suction cup gripper will be adjusted to the panel size, on the fly, avoiding the need of manual intervention. Moreover the unique alignment system installed in the Millenniums 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.

**All Millenniums** can operate with or without plastic interleaf by the activation of the function. In addition to this the Millennium Unloader is equipped with a buffer station used to temporarily store panels when the operator is exchanging the L-rack. This offers the possibility to run the horizontal lines without the need to stop when an L-rack is full.

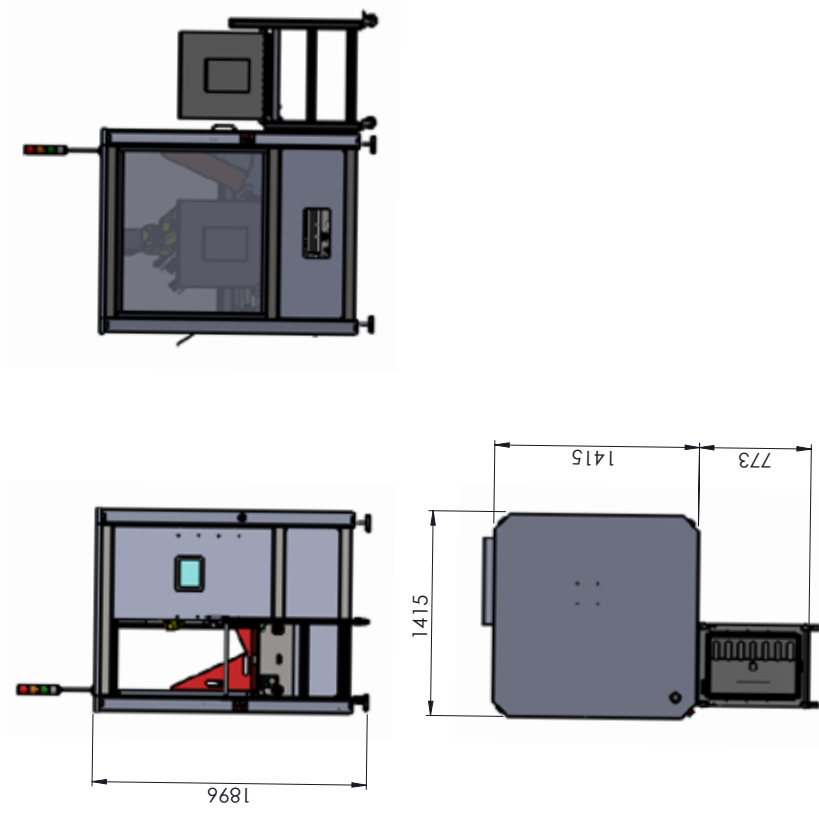
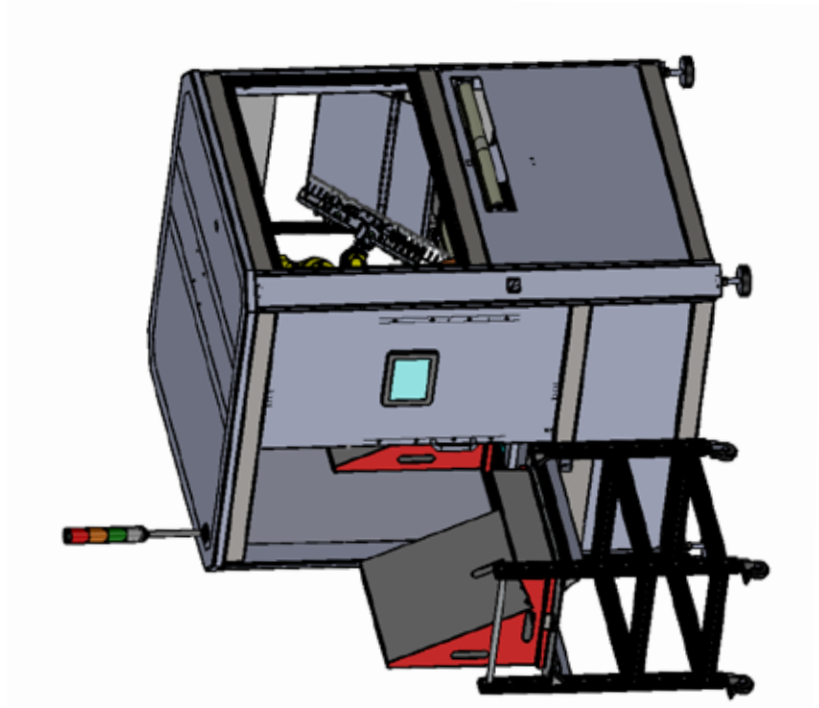
	Length	Width	Thickness	Weight	Line speed range	
Max. Panel Size	620mm	530mm	3,2 mm	3 Kg	Panel / min	6
Min. Panel Size	460mm	350mm	50 µm	0,1 Kg	Max m / min	5
					Min m/min	0,2

Youtube channel

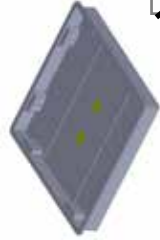


## Millennium V3

Main features	Unloader	Loader	Buffer
CCD Camera for alignment	✓	N	✓
Double sheet detector	N	0	0
Plastic Interleaf	✓	✓	✓
6 Axis Robot	✓	✓	✓
PLC (Control)	✓	✓	✓
Servo motor on Conveyor	0	0	0
Frequency Converter	✓	✓	✓
Venturi system	✓	✓	✓
Panel Centering device	0	0	0
Decentering device	N	0	0
Horizontal boxes	0	0	0



**Max 460 X610**



The main concept behind **the Millenniums** is to load and unload constantly any horizontal line with any kind of panel size or thickness without the need to stop between jobs.

**The Millennium 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 identify the height of each panel and will adjust the suction cups accordingly. In addition to this, the loader can be equipped with a touchless automatic centering or decentering device.