

BL-PVL-480

PV LAMINATION MACHINE

BallastCo
Lab. Equipment

PV Lamination Machine



The PV Lamination Machine is an industrial equipment used in solar panel manufacturing to bond glass, EVA (Ethylene Vinyl Acetate), solar cells, and backsheet layers into a single module using vacuum, heat, and pressure.

The machine delivers reliable and repeatable PV module lamination through its advanced heating system, strong vacuum infrastructure, and PLC-based control system, all working together to ensure consistent thermal uniformity.

It supports automatic operation and can be fully controlled through a touchscreen interface. The PID-based temperature control ensures even heat distribution across the working area, allowing the EVA encapsulant to cure properly.

The large lamination area accommodates solar panels of various sizes, and the machine is compatible with standard glass-backsheet modules, glass-glass modules, and a range of composite materials.

Short lamination cycles and stable process control make it a practical choice for high-volume industrial production lines.

Benefits & Features

- High-Quality Vacuum System
- Fast & Simple to Install
- Long Lifetime
- Low Noise Level and Low Maintenance Requirements
- BallastCo Customer Support
- 1 Year Warranty
- Compact Solution Suitable for Laboratory Environments

Technical Specifications

Model	BL-PVL-480
Application	Used as solar panel manufacturing equipment. Designed for laminating glass, EVA (Ethylene Vinyl Acetate Sheet), solar cells, and backsheet layers.
Lamination area	480 mm x 480 mm (The lamination area dimensions can be customized upon customer request.)
Working Principle	Automatic
Control System	PLC
HMI	Touchscreen
Temperature Range	0 °C - 200 °C
Temperature Control	PID Smart Temperature Control
Heating Time	20 min
Heating Method	Resistance Heating
Lamination Time	15 min
Limit Vacuum	70-90 Pa
Pump Power	2,7 kW
Pump Supply Voltage	380 V
Pump Frequency	50 Hz

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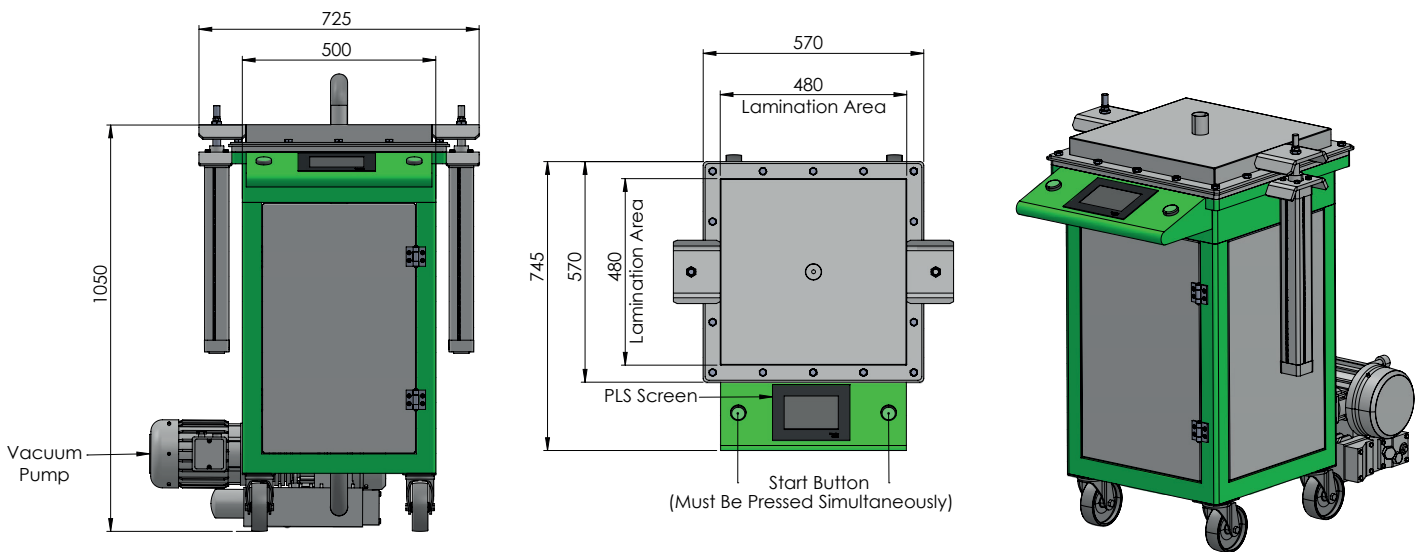
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Lid Movement	Pneumatic
Machine Dimensions	1050 x 725 x 745 mm (HxLxW)
Machine Weight	161 kg
Pump Weight	82 kg
Membrane Material	Silicone
Compatible Glass Types	Tempered Glass Panels, Standard Glass Panels

Technical Drawings

BL-PVL-480 Technical Drawings



Note: All dimensions are in mm.