

Automatic Lab Hot Press | 5 Ton, 330X330Mm Platen, Programmable Temperature, Water Cooling

Item Number: XP61



Introduction

Automatic lab hot press with 5-ton force, 330x330mm heated platens, programmable PID temperature control, and integrated water cooling. Precise low-pressure application up to 4.5 Bar for delicate materials. Ideal for polymer film curing, lamination, composite molding, and battery research. CE certified.

[Learn More](#)

Application	Description	Key Benefit
Polymer Film Curing	Curing and thermal treatment of plastic films, rubber sheets, and polymer layers under controlled heat and pressure.	Uniform thickness and minimal defects across large-area films.
Lamination of Multi-layer Substrates	Bonding of flexible materials, paper, textiles, or composite layers using mild pressure and temperature.	Consistent adhesion without delamination or warping.
Composite Material Molding	Pre-preg layup and curing of fiber-reinforced composite sheets for aerospace and automotive research.	Precise temperature profiles ensure optimal resin flow and cure.
Gasket and Seal Vulcanization	Compression molding of rubber gaskets, o-rings, and sealing components with heat.	Even pressure reduces void formation and improves seal integrity.
Battery Research and Development	Hot pressing of battery electrodes, separators, and solid-state electrolyte films.	Gentle pressure preserves delicate structures while achieving intimate layer contact.
Thin Film Deposition and Lamination	Pressing of functional coatings, adhesive layers, or protective films onto substrates.	Programmable force prevents substrate breakage; uniform heating cures evenly.

Parameter	Specification	Notes / Safety Tips
Model	XP61	
Operation	Fully Automatic Hydraulic Control	
Max Force	0 - 5 Tons (0 - 50 kN)	Pressure precisely adjustable
Working Temperature	0 - 300 °C	
Temperature Control	Dual Platen Independent PID Programmable Controller	Supports multi-step program segments
Heating Power	4500 W	Rapid and stable heating
Platen Size	330 × 330 mm	Large-area hot press platens
Surface Pressure	0 - 4.5 Bar (0 - 0.45 MPa)	Suitable for medium/low-pressure lamination/curing
Piston Stroke	60 mm	Piston movement clearance
Opening Height	Adjustable / Customized configuration	Please confirm mold height compatibility with sales representative
Cooling Method	Circulating Water Cooling	Built-in flow channels; optional circulating chiller available
Power Supply	AC 220V, 50 Hz	Current approx. 20.5A, requires 32A single-phase circuit breaker
Certification	CE	