

Split Type Automatic Hot Press 400X600Mm Platen 12Kw Dual Zone Heating Pid Programmable Control

Item Number: XP42



Introduction

Professional-grade split-type automatic hot press with large 400x600mm platen, 12kW dual-zone heating, and PID programmable temperature/pressure control. Includes water cooling for fast cycle times. Ideal for battery electrode laminating, composite panel forming, and wide film pressing.

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Application	Description	Key Benefit
Polymer Film Lamination	Hot pressing of wide-format polymer films and sheets, including PTFE, PE, and PVDF	Uniform pressure and temperature across 400x600mm area ensures defect-free bonding
Composite Plate Manufacturing	Fabrication of carbon fiber, glass fiber reinforced composite panels	Precise control of curing profiles enhances mechanical properties and repeatability
Battery Electrode Processing	Laminating and calendaring of lithium-ion battery electrodes	Even compaction improves electrical performance and longevity
Automotive Interior Components	Forming of lightweight interior panels, such as door trims and dashboard parts	Scalable production with consistent quality for material development
Multi-Cavity Rubber Vulcanization	Simultaneous pressing of multiple rubber parts or silicone sheets	High throughput with dual-zone heating ensuring all cavities cure evenly
Semiconductor Encapsulation	Laminating of encapsulation films and thermal interface materials for electronics	Programmable multi-stage pressing eliminates voids and ensures reliability

Parameter	Specification	Remarks
Model	XP42	Split-type automatic hot press
Structure Type	Split-type	Press frame and control cabinet separated
Maximum Working Pressure	0 - 20 T (metric tons)	Supports PID auto-control and pressure holding
Platen Size	400 × 600 mm	Wide dual platens
Daylight	220 mm	Accommodates thicker molds or samples
Stroke	60 mm (or as per actual hydraulic cylinder)	
Working Temperature Range	0 - 300 °C	Supports up to 300°C
Heating Power	12 kW (2 × 6000 W)	Upper and lower platens independently controlled
Temperature/Pressure Control	PID programmable controller	7-inch industrial touchscreen, multi-segment programming
Platen Cooling Method	Recirculating water cooling	Optional dedicated chiller recommended for faster cooling
Power Supply	AC 380V-400V 50Hz three-phase (recommended) / AC 220V 50Hz (requires high-current supply)	Confirm laboratory power conditions with sales before purchase
Overall Dimensions (approx.)	1100 × 550 × 1300 mm	Reference, may vary depending on separated placement