

Solid-State Battery Research Laboratory Hydraulic Hot Press Machine

Item Number: ZY01



Introduction

Compact laboratory hydraulic hot press with independent dual-platen heating up to 300°C, programmable temperature-pressure profiles, active water cooling, and automated pressure maintenance, providing repeatable thermal pressing for solid-state battery research, electrode lamination, and polymer electrolyte preparation in university and industrial labs.

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Parameter	Specification
Model	ZY01
Working Temperature Range	0°C to 300°C
Heating Method	Dual platen independent heating by embedded heaters
Heating Power	1600 W
Platen Dimension	200 mm × 200 mm
Platen Opening Distance	50 mm
Working Pressure Range	0 to 15 Tons (15T)
Pressure Control Accuracy	±0.1 Tons
Pressure Maintenance & Compensation	Automated real-time pressure replenishment and stabilization
Platen Cooling Method	Fast cooling platen with circulating water chiller
Power Supply	AC 220V / 50Hz
Controller	Temperature & pressure programmable touch screen controller
Setup Dimension	260 mm × 347 mm × 422 mm
Weight	130 kg

Experimental Module	Research Objective
Composite Membrane Synthesis	Heat-pressing of polymer-ceramic composite films for ionic conductivity studies.
Pouch Cell Assembly Preparation	Moderate pressure and temperature bonding of multi-layer cell stacks.
Pellet Pressing & Sintering Prep	Compaction of active materials or solid electrolyte powders prior to thermal treatment.