

Automatic Laboratory Hot Press Machine With Heated Platens 200X200Mm Program Control Dual Heating Plates

Item Number: KT-ZD3



Introduction

Streamline your laboratory workflow with our high precision automatic hot press featuring dual heated plates customizable multi stage program control and safety protection ensuring consistent sample preparation and polymer film processing for advanced scientific research applications.

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Application	Description	Key Benefit
Solid-State Battery R&D	Densification of solid electrolyte materials and electrode sheets under controlled heat and high pressure.	Enhances ionic conductivity by minimizing boundary voids between active materials.
Advanced Technical Ceramics	Hot pressing and sintering of ceramic powders, carbides, and nitrides to form high-strength structural parts.	Achieves maximum theoretical density with low porosity for superior wear resistance.
Polymer Thin Film Synthesis	Melting and flat-pressing polymeric raw materials to fabricate uniform, high-quality optical and functional films.	Guarantees precise target thickness, surface smoothness, and structural homogeneity.
Spectroscopic Sample Prep	Compacting mineral ores, cement, and chemical samples into highly stable pellets for XRF and FTIR analysis.	Produces durable, crack-free analytical specimens with zero binder contamination.
Electronic Substrate Lamination	Precise thermo-compression bonding of multi-layer PCBs and copper-clad laminates.	Prevents delamination through reliable thermal distribution and stable, uniform pressure.
Pharmaceutical Compaction	Compressing powder active ingredients (APIs) and excipients under heat to study drug release and solubility.	Mimics industrial hot-melt extrusion and tableting profiles with micro-scale accuracy.

Technical Parameter	Specification (KT-ZD3-300)	Specification (KT-ZD3-500)	Specification (KT-ZD3-800)
Platen Dimensions	200 x 200 mm	200 x 200 mm	200 x 200 mm
Maximum Temperature	RT - 300°C	RT - 500°C	RT - 800°C
Heating Power	2.2 kW	3.4 kW	6.0 kW
Pressure Range	0.01 - 25 Tons	0.01 - 25 Tons	0.01 - 25 Tons
Pressure Resolution	0.01 Tons	0.01 Tons	0.01 Tons
Touchscreen Display	7-inch High-Resolution	7-inch High-Resolution	7-inch High-Resolution
Process Segments	Up to 18 steps	Up to 18 steps	Up to 18 steps
Working Space	210 x 65 mm	210 x 65 mm	210 x 65 mm
Chassis Dimensions	480 x 480 x 750 mm	480 x 480 x 750 mm	480 x 480 x 750 mm
Net Weight	200 kg	200 kg	200 kg
Package Dimensions	725 x 620 x 890 mm	725 x 620 x 890 mm	725 x 620 x 890 mm
Gross Weight	230 kg	230 kg	230 kg
Power Supply	220V / 110V (Customizable)	220V / 110V (Customizable)	220V / 110V (Customizable)

Technical Parameter	Specification (KT-ZD3-300)	Specification (KT-ZD3-500)	Specification (KT-ZD3-800)
Safety Protection	Acrylic Shield + Auto Cutoff	Acrylic Shield + Auto Cutoff	Acrylic Shield + Auto Cutoff
Cooling Method	Segmented Water-Cooling	Segmented Water-Cooling	Segmented Water-Cooling
Data Interfaces	USB Interface / PC Remote	USB Interface / PC Remote	USB Interface / PC Remote