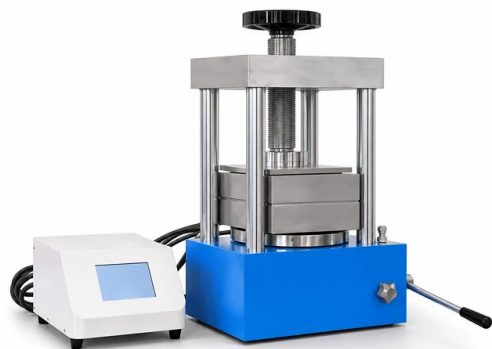


24 Ton 200X200Mm Integrated Heating Press For Laboratory Sample Preparation

Item Number: XP55



Introduction

Professional integrated heating press with 24 ton clamping force and 200x200mm heated platens, ideal for battery research, material testing, and sample preparation. Precision temperature control up to 300°C ensures reliable, consistent results.

[Learn More](#)

Application	Description	Key Benefit
Battery Electrode & Electrolyte Pressing	Consolidation of cathode/anode powders and formation of solid-state electrolyte pellets for lithium-ion and next-gen battery cells.	Uniform density distribution prevents hot spots and ensures consistent ionic conductivity across the pellet.
Polymer Film Embossing & Lamination	Thermal bonding of multi-layer polymer films, microfluidic chip sealing, and surface texturing for lab-on-a-chip devices.	Precise temperature and pressure control preserves delicate nanostructures without thermal degradation.
FTIR & XRF Pellet Preparation	Production of transparent KBr pellets for infrared spectroscopy and fused beads for X-ray fluorescence analysis.	Eliminates air inclusions and thickness variations, delivering reproducible spectral baselines.
Composite Material Development	Hot pressing of metal-matrix composites, ceramic-reinforced polymers, and carbon fiber pre-preg consolidation.	Maximizes fiber wet-out and void elimination under controlled heat and pressure profiles.
Pharmaceutical Tablet Pilot Production	Small-batch compression of powder blends into tablets for formulation trials and stability studies.	Full data logging of pressing parameters aids FDA/EMA documentation and scale-up studies.
Powder Metallurgy Sintering	Pre-compaction of metal and ceramic powders at elevated temperatures prior to final sintering.	Increases green density and reduces sintering shrinkage, improving net-shape accuracy.
Semiconductor Wafer Bonding	Thermal compression bonding of silicon wafers or chip-on-flex assemblies using controlled force and temperature.	Achieves uniform bond lines without voiding, critical for micro-electromechanical systems (MEMS) fabrication.

Parameter	XP55
Model	XP55
Press Capacity	0 – 24 tons
Platen Working Temperature	Ambient – 300 °C
Heating Power (Total)	1200 W (2 × 600 W)
Platen Dimensions	200 × 200 mm
Platen Cooling	Integrated water circulation
Temperature Control	Dual-zone PID with ±2 °C stability
Display & Control	4.3-inch touchscreen, programmable
Power Supply	220 V, 50 Hz, single-phase
Overall Dimensions (W × D × H)	950 × 260 × 525 mm
Net Weight	180 kg