Laboratory Hydraulic Hot Press For Solid-State Battery And Polymer Electrolyte Research

Item Number: ZY06

Introduction

Compact benchtop hydraulic hot press for solid-state battery and polymer electrolyte research with dual-zone heating, automatic pressure compensation, and active cooling system, ensuring uniform temperature up to 300°C and stable load for extended tests with CE certification and safety features.

Learn More

Parameter	Specification
Model	ZY06
Platen Working Temperature	0 – 300°C
Heating Power	2 × 2500 W
Platen Dimensions	400 × 400 mm
Working Pressure Range	0 – 30 T (Tonnes)
Pressure Control Accuracy	±0.5% Full Scale (F.S.)
Pressure Holding & Replenishing	Automatic pressure holding with micro-pump compensation
Platen Cooling Method	Circulating water chilling
Power Supply	220–230V / 50Hz
Certification	CE
Equipment Installation Dimensions	550 × 520 × 460 mm
Weight	380 kg

Experimental Module	Target Laboratory	Description
Solid-State Electrolyte Processing	Energy & Materials Laboratories	Thermo-compression of ceramic-polymer composite membranes to reduce interface resistance.
Membrane Electrode Assembly (MEA)	Fuel Cell & Battery Research	Lamination of proton exchange membranes and catalyst layers under precise thermal and pressure profiles.
Polymer & Composite Consolidation	Polymer Engineering Departments	Molding, curing, and laminating of thermoplastic matrix sheets and carbon-fiber prepregs.
Pharmaceutical Compaction	Biomedical & Pharmaceutical Labs	Consolidation of powder formulations and polymeric drug-delivery matrices at controlled temperatures.