

TECHNICAL DATA SHEET

PressPro™ Manual Dual Flat Heating Plate Hot Press Machine

Manual pressurization · dual flat heating plate up to 500°C · 30-stage programmable temperature control · 7-inch touch LCD



PressPro™ EPHBMC Series — Representative Configuration

The PressPro™ Manual Dual Flat Heating Plate Hot Press Machine (EPHBMC and EPHBMD series) covers nine models with maximum press capacities up to 30 T. Image shown for reference. Dimensions and configuration vary by model.

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SECTION I

Product Overview

The PressPro™ Manual Dual Flat Heating Plate Hot Press Machine (EPHBMC and EPHBMD series) uses hydraulic manual drive with a split structure: a manual hydraulic press, a 7-inch touch LCD temperature controller, and customizable hot pressing molds. The dual flat heating plates — with the upper plate suspended by a threaded rod and polished surface plates — combine manual pressurization with 30-stage programmable temperature control for high-temperature, high-pressure pressing of powder materials, plastic films, rubber products, asphalt, and other samples. The controller calculates the sample pressure (MPa) automatically in real time. It is ideal supporting equipment for spectroscopic qualitative analysis by engineers and technicians in universities, research institutes, and other engineering fields.

The EPHBMC series covers three models (EPHBMC00, EPHBMC01, EPHBMCG1) with maximum press capacities of 15 T and 24 T, 100×100mm heating plates, and heating up to 300°C or 500°C, depending on the model. The EPHBMD series covers six models (EPHBMD01 / 02 / 03 and EPHBMDG1 / G2 / G3) with a maximum press capacity of 30 T, heating plates of 180×180mm, 200×200mm or 300×300mm, and heating up to 300°C or 500°C, depending on the model. Die molds are optional and customizable, not included.

SECTION II

Core Advantages

- **Manual hydraulic drive** — manual pressurization / manual gradual pressurization, manual pressure relief; hydraulic cylinder drive with hands-on control of the pressing force
- **Dual flat heating plates** — heating and pressing on both the upper and the lower flat plates; polished surface plates
- **Up to 500°C heating, depending on the model** — heating from room temperature to 300°C or 500°C, depending on the model, with 0.1°C increments
- **Real-time sample pressure conversion** — automatic calculation of the sample pressure (MPa) in real time
- **Flexible configuration** — hot pressing molds optional and customizable (not included); air/water cooling chiller optional; two series and nine models for sample-size and tonnage selection
- **Split structure** — manual press + 7-inch touch LCD temperature controller; threaded rod suspended upper heating plate; spacious working area, easy maintenance
- **30-stage programmable temperature control** — 30-stage programmable temperature control with automatic heating, programmed heating profiles, controlled-rate heating, automatic temperature holding, and natural cooling; temperature hold time unlimited seconds, configurable per stage
- **7-inch touch LCD screen** — pressure display – temperature control system – data management system on a 7-inch touch LCD screen; remote control optional
- **High-temperature safety configuration** — when mold temperature exceeds 50°C, the temperature controller automatically signals “Caution: Hot Surface”; power supply with leakage protector

SECTION III

Specifications

Technical data

Specifications	
Brand	PressPro™ by ACS Material
Models (SKU)	EPHBMC00 · EPHBMC01 · EPHBMCG1 · EPHBMD01 · EPHBMD02 · EPHBMD03 · EPHBMDG1 · EPHBMDG2 · EPHBMDG3
Series	EPHBMC and EPHBMD – Manual Dual Flat Heating Plate Hot Press Machine
Available Maximum Capacities	15 / 24 / 30 T, depending on model
Pressurization Method	Manual pressurization / manual gradual pressurization, manual pressure relief

Control Interface	7-inch touch LCD screen (remote control optional); pressure display – temperature control system – data management system
Sample Pressure Conversion	Real-time automatic calculation of sample pressure (MPa)
Temperature Control System	30-stage programmable temperature control with automatic heating, programmed heating profiles, controlled-rate heating, automatic temperature holding, and natural cooling
Temperature Hold Time	Unlimited seconds, configurable per stage
Hot Pressing Plate Cooling Method	Natural cooling (air/water cooling chiller optional)
High-temperature Safety Configuration	When mold temperature exceeds 50°C, temperature controller automatically signals “Caution: Hot Surface”
Power Supply	220V (50Hz/60Hz) with leakage protector
Configuration	1 main machine + 1 temperature controller; pressure gauge and air/water cooled chiller optional, not included; hot pressing molds customizable according to requirements

EPHBMC series

Specifications			
Parameter	EPHBMC00	EPHBMC01	EPHBMC01
Pressure Range	0-15T/0.01t (30MPa)	0-24T/0.01t (34MPa)	0-24T/0.01t (34MPa)
Piston Diameter	Ø80mm	Ø95mm	Ø95mm
Max Piston Stroke	<30mm (Warning! Please do not exceed the cylinder's rising height.)		
Hot Pressing Plate Type	Dual flat plate heating and pressing, polished surface plate, easy positioning, upper plate suspended by threaded rod.		
Hot Pressing Plate Size	100×100mm (with chamfer)	100×100mm	100×100mm
Workspace	W 80×140mm	W 100×160mm	W 100×160mm
Heating Temperature	Room temperature to 300°C (0.1°C increments)	Room temperature to 300°C (0.1°C increments)	Room temperature to 500°C (0.1°C increments)
Insulation Method	Imported insulation plate	Imported insulation plate + stainless steel water-cooled insulation plate	Imported insulation plate + stainless steel water-cooled insulation plate
Maximum Power	1300W (600W×2+100W)	1300W (600W×2+100W)	1300W (600W×2+100W)
Overall Dimensions	260×210×700mm (not including temperature controller)	330×220×720mm (not including temperature controller)	330×220×720mm (not including temperature controller)
Approx. Weight	65kg	75kg	75kg

EPHBMD series

Specifications						
Parameter	EPHBMD01	EPHBMD02	EPHBMD03	EPHBMDG1	EPHBMDG2	EPHBMDG3
Pressure Range	0-30T/0.01t	0-30T/0.01t	0-30T/0.01t	0-30T/0.01t	0-30T/0.01t	0-30T/0.01t
Piston Diameter	–	–	–	–	–	–
Max Piston Stroke	<50mm (Warning! Please do not exceed the cylinder's rising height.)					
Hot Pressing Plate Type	Dual flat plate heating and pressing, polished surface plate, four-column bearing positioning, upper plate suspended by threaded rod.					
Hot Pressing Plate Size	180×180mm	200×200mm	300×300mm	180×180mm	200×200mm	300×300mm
Workspace	W 180×140mm	W 200×140mm	W 300×140mm	W 180×140mm	W 200×140mm	W 300×140mm
Heating Temperature	RT to 300°C (0.1°C increments)	RT to 300°C (0.1°C increments)	RT to 300°C (0.1°C increments)	RT to 500°C (0.1°C increments)	RT to 500°C (0.1°C increments)	RT to 500°C (0.1°C increments)
Insulation Method	Imported insulation plate + stainless steel water-cooled insulation plate. A water chiller is required when the temperature exceeds 300°C.					
Maximum Power	1900W	1900W	4200W	1900W	1900W	4200W
Overall Dimensions	405×260×720mm (not including temperature controller)	405×260×720mm (not including temperature controller)	520×270×180mm (not including temperature controller)	405×260×720mm (not including temperature controller)	405×260×720mm (not including temperature controller)	520×270×180mm (not including temperature controller)
Approx. Weight	180~195kg	180~195kg	310kg	180~195kg	180~195kg	310kg

Note: an optional 60 T configuration is available; availability and specifications must be confirmed at the time of quotation.

Scope of delivery

— **Standard configuration** — EPHBMC and EPHBMD series main machine + temperature controller

— **Optional, not included** — pressure gauge, air/water cooled chiller; hot pressing molds customizable according to requirements

Final accessories and scope of supply are confirmed in the quotation.

SECTION IV

Applications

Mainly used for high-temperature and high-pressure tests on various powder materials, plastic films, rubber products, asphalt, and other samples — ideal supporting equipment for spectroscopic qualitative analysis by engineers and technicians in universities, research institutes, and other engineering fields. The EPHBMD series extends the same platform to thermal tests on larger objects and samples.

Product value: nine models with maximum press capacities up to 30 T, dual flat heating plates up to 500°C, and 30-stage programmable temperature control with automatic heating and temperature holding. Confirm the selected model, heating temperature, plate size and mold against your sample dimensions and application requirements before ordering.

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