

TECHNICAL DATA SHEET

PressPro™ Manual Electric Heating Hot Press Machine

Manual pressurization · electric heating mold up to 500°C · programmable 30-stage temperature control · 7-inch touch LCD



PressPro™ EPHBM series manual electric heating hot press — main machine with 7-inch touch LCD temperature controller. Image shown for reference. Dimensions and configuration vary by model.

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ACS MATERIAL, LLC

959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone +1 (866) 227-0656

Fax +1 (781) 518-0284

contact@acsmaterial.com

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SECTION I

Product Overview

The PressPro™ Manual Electric Heating Hot Press Machine (EPHBM series) is composed of three parts: a manual hot press machine, a temperature controller, and a set of hot press mold (an electric version of the hot press is also available). It is particularly suitable for hot press experiments on various powder samples, chemical raw materials, and other materials, allowing for the fixation of sample shapes and sizes. Manual pressurization / manual gradual pressurization is combined with an electric heating mold (up to 500°C) under programmable 30-stage temperature control. The series includes four models with maximum press capacities up to 24 T. The mold shape and specifications can be customized.

SECTION II

Core Advantages

- **Manual pressurization** — manual pressurization / manual gradual pressurization, manual depressurization
- **Electric heating mold** — heating from room temperature to 300°C / 0.1°C or 500°C / 0.1°C, depending on the model. The heating core is aluminum for the 300°C models and copper for the 500°C models
- **Programmable 30-stage temperature control** — automatic heating – curve heating – rate heating – automatic holding – natural cooling; temperature hold time unlimited seconds, configurable per stage
- **7-inch touch LCD screen** — pressure display – temperature control system – data management system (USB upgradeable) on a 7-inch touch LCD screen; remote control optional, not included
- **Real-time sample pressure conversion** — automatic calculation of the sample pressure (MPa)
- **High-temperature safety configuration** — when mold temperature exceeds 50°C, the temperature controller automatically signals “Caution: Hot Surface”; high-temperature protective cover optional

SECTION III

Specifications

Technical data

Specifications	
Brand	PressPro™ by ACS Material
Models (SKU)	EPHBMA01 · EPHBMAG1 · EPHBMB01 · EPHBMBG1
Series	EPHBM – Manual Electric Heating Hot Press Machine
Available Maximum Capacities	15 / 24 T
Pressurization Method	Manual pressurization / manual gradual pressurization, manual depressurization
Heating	Electric heating mold; room temperature to 300°C or 500°C, depending on model.
Control Interface	7-inch touch LCD screen (remote control optional, not included); pressure display – temperature control system – data management system (USB upgradeable)
Configuration	Main machine + temperature controller + 1 set of hot press molds

Specifications				
Parameter	EPHBMA01	EPHBMA01	EPHBMB01	EPHBMBG1
Model	EPHBMA01	EPHBMA01	EPHBMB01	EPHBMBG1
Pressure Range	0-15T/0.01t (30MPa)		0-24T/0.01t (34MPa)	
Piston Diameter	Ø80mm		Ø95mm	
Workspace	W 80 × 150 mm		W 112 × 160 mm	
Max Piston Stroke	<30mm (Warning! Please do not exceed the cylinder’s rising height.)			
Pressurization Method	Manual pressurization / manual gradual pressurization, manual depressurization			
Control Interface	7-inch touch LCD screen (remote control optional, not included); pressure display - temperature control system – data management system (USB upgradeable)			
Sample Pressure Conversion	Real-time automatic calculation of sample pressure (MPa)			
Temperature Control System	Programmable 30-stage – automatic heating – curve heating – rate heating – automatic holding – natural cooling			
Temperature Hold Time	Unlimited seconds, configurable per stage			
High-temperature Safety Configuration	When mold temperature exceeds 50°C, temperature controller automatically signals “Caution: Hot Surface”; high-temperature protective cover optional			
Insulation Method	Imported thermal insulation plate; an optional stainless-steel water-cooled insulation plate is available for temperatures above 300°C.			
Power Supply	220 V (50 Hz / 60 Hz) with leakage protector			
Maximum Power	600 W (500 W + 100 W)			
Hot Press Mold Specifications	Choose 1 set between Ø3- Ø20mm		Choose 1 set between Ø21- Ø40mm	
Heating Temperature	Room temperature to 300°C / 0.1°C	Room temperature to 500°C / 0.1°C	Room temperature to 300°C / 0.1°C	Room temperature to 500°C / 0.1°C
Heating Core Material	Aluminum	Copper	Aluminum	Copper
Overall Dimensions	Main unit: 245×180×420mm (excluding temperature controller)		Main unit: 305×195×425mm (excluding temperature controller)	
Approx. Weight	~45kg		~68kg	

Scope of delivery

— Standard configuration: EPHBM series main machine + temperature controller + 1 set of hot press molds

— Optional, not included: pressure gauge, water chiller; hot pressing molds can be customized upon requirements

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

SECTION IV

Applications

Particularly suitable for hot press experiments on various powder samples, chemical raw materials, and other materials, allowing for the fixation of sample shapes and sizes. Confirm the selected model and selected mold against your sample dimensions, required press capacity, heating temperature and application requirements before ordering.

Product value: four models with maximum press capacities up to 24 T, electric heating molds up to 500°C, and programmable 30-stage temperature control with automatic heating - curve heating - rate heating - automatic holding - natural cooling.

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