

mounting

cutting

microscopy  
hardness  
testing

grinding  
polishing

metallography



HYDROPRESS HYDROPRESS  
METAPRESS METAPRESS



**Physical Test Solutions**

# HYDROPRESS® METAPRESS®

## HYDROPRESS®

### Programmable Mounting Press

HYDROPRESS is a microprocessor controlled hot compression mounting press available in two versions: HYDROPRESS 50 and HYDROPRESS 70. It has large LCD display and uses fully electrohydraulic pressure (no air required) with high and fast sample ejection capacity. HYDROPRESS has preprogrammed moulding sequences with microprocessor control and it is a fully automatic high-capacity instrument suitable for all known hot mounting compounds for materialographic applications.

## METAPRESS-A®

### Automatic Mounting Press

METAPRESS-A is a cost effective automatic digital mounting press using hydro-pneumatic pressure and microprocessor control technology. It is fully automatic and suitable for all current hot mounting materials used in materialography. User friendly touch-pad controls for mounting parameters provides high productivity with last parameter settings being retained in the memory.

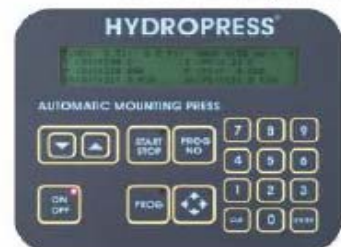
## METAPRESS-M®

### Mounting Press

METAPRESS-M is a compact hot mounting press with which many different compounds can be processed. It is designed for applications where a moderate number of samples are being prepared. It's semi-automatic design with digital display makes it a practical, efficient and easy to operate mounting press for small and medium sized laboratories.



HYDROPRESS Programmable Automatic Mounting Press



Mounting parameters are displayed on the LCD



Exchangeable mould assemblies from 25 to 50 mm diameter

## HYDROPRESS

HYDROPRESS has electrohydraulic operation which does not require pressurized air. The sample is ejected fast and very smoothly. All hydraulic components are housed in a GRP glass reinforced plastic cabinet which is ergonomically designed.

HYDROPRESS has preprogrammed moulding sequences built-in (factory set) from which you can choose according to your own applications. You only need to place the sample in the mould, select the program number for your specific application and depress the "Start" touch-pad button. That's it! HYDROPRESS does the rest for you! The pressure, heating and cooling are automatically controlled and the total cycle time of a complete cool mount takes 8 to 10 minutes. HYDROPRESS has additional capacity to store up to 190 operator-created programs. User-friendly program data and instructions are displayed on a large LCD screen and touch-pad keyboard is on the front-panel for data entry.



Electro-hydraulic pump and preprogrammed moulding sequences allow a smooth and comfortable operation.



## METAPRESS-A

METAPRESS®-A uses an air over oil pressure system requiring a 6 Bar air supply. The glass reinforced plating (GRP) housing provides an easy to clean surface and houses the hydro-pneumatic system. All touch-pad controls and direct reading pressure gauge and valve are on the front panel.

Simply place the sample and mounting medium in the cylinder and close the mold closure. Set the "Molding Temperature", "Heating Time", "Cooling Temperature" and "Pressure" then press the "Start" key. The METAPRESS®-A will do the rest. Pressure, heating and cooling are automatically controlled and the total cycle time for a complete cool mount takes 10 to 12 minutes. The actual heating temperature and the heating time are digitally displayed throughout the molding cycle. The last parameter settings are always retained in the memory. An audible signal notifies the operator when the process is completed.



METAPRESS-A Automatic Mounting Press

## METAPRESS-M

METAPRESS®-M is contained in a stylish fibre glass reinforced plastic housing. The direct reading pressure gauge and digital set and display of mounting parameters are mounted on the front panel of the instrument. METAPRESS®-M is equipped with a proven hydraulic system which provides moulding force up to 5 tons. Reloading is fast by means of a quick ram return mechanism. METAPRESS®-M is suitable for all types of thermosetting and thermoplastic resins.

The specimen and the mounting compound are placed in the mould and the mould closure is closed. The required heating temperature, cooling temperature, heating time and auto/manual cooling is set from the front panel and the desired pressure is achieved by the hand actuator lever. After the heating process is completed, the heater stops and the cooling water starts running automatically until the cooling temperature is reached. Finally an acoustic signal is emitted to inform the operator that the complete mounting cycle is finished.



METAPRESS-M Mounting Press



Setting and display of mounting parameters digitally ensures reproducible results.

## Heating & Cooling

The high efficiency combined heater/cooler is housed in the upper part of METKON Mounting Presses. With 1400 W of thermostatically controlled heating power, molding times are kept to a minimum. At the end of the heating cycle the cooling water is automatically switched on and will turn off once the "Cooling Temperature" is reached.

## Mould Assemblies

All METKON mounting presses METAPRESS-M, METAPRESS-A and HYDROPRESS® 50 can accept several mould sizes from 25 mm to 50 mm whereas HYDROPRESS® 70 can accept 60 and 70mm diameter moulds. All moulds can be exchanged simply and easily. An intermediate ram can be used to double the production capacity.

# Specifications

## HYDROPRESS-50

Programmable Automatic Mounting Press, microprocessor controlled, program based mounting sequences, electrohydraulic pressure and drive system (requires no air), programmable pressure up to 310 bar, programmable temperature up to 240°C and programmable operation time up to 59:99 minutes, thermostatically controlled heating power of 1400 W, automatic cooling cycle with two modes of cooling rates (fast cooling and slow cooling), programmable preheating and preloading, selectable mould sizes from 25 mm to 50 mm, audible warning signal, large LCD screen and touch-pad front panel, ready for operation. 220 V, 1-phase, 50 Hz.

Order No: 25 03

## HYDROPRESS-70

Programmable Automatic Mounting Press, microprocessor controlled, program based mounting sequences, electrohydraulic pressure and drive system (requires no air), programmable pressure up to 310 bar, programmable temperature up to 240°C and programmable operation time up to 59:99 minutes, thermostatically controlled heating power of 2200 W, automatic cooling cycle with two modes of cooling rates (fast cooling and slow cooling), programmable preheating and preloading, selectable mould sizes of 60 and 70 mm, audible warning signal, large LCD screen and touch-pad front panel, ready for operation. 220 V, 1-phase, 50 Hz.

Order No: 25 04

## MOULD ASSAMBLIES for METAPRESS-M, METAPRESS-A and HYDROPRESS 50

Mould assembly, 1" Order No: 26 01  
 Mould assembly, 1 1/4" Order No: 26 02  
 Mould assembly, 1 1/2" Order No: 26 03  
 Mould assembly, 2" Order No: 26 07  
 Mould assembly, 25 mm Order No: 26 04  
 Mould assembly, 30 mm Order No: 26 05  
 Mould assembly, 40 mm Order No: 26 06  
 Mould assembly, 50 mm Order No: 26 08

## For HYDROPRESS-70

Mould assembly, 60 mm Order No: 26 09  
 Mould assembly, 70 mm Order No: 26 10

## Intermediate rams

Intermediate ram, 1" Order No: 26 015  
 Intermediate ram, 1 1/4" Order No: 26 025  
 Intermediate ram, 1 1/2" Order No: 26 035  
 Intermediate ram, 2" Order No: 26 075  
 Intermediate ram, 25 mm Order No: 26 045  
 Intermediate ram, 30 mm Order No: 26 055  
 Intermediate ram, 40 mm Order No: 26 065  
 Intermediate ram, 50 mm Order No: 26 085

## METAPRESS-A

Automatic Mounting Press, fully automatic microprocessor controlled operation, touch pad front panel controls and digital display of heating time, molding temperature, cooling temperature, ram up/down, auto/manual cooling, cycle start/stop and a direct reading pressure gauge. Molding pressure up to 310 Bar, molding temperature up to 240°C, thermostatically controlled heating power of 1400 W, automatic cooling cycle and an audible signal for end of cycle. Last molding parameter settings retained in memory. Supplied with all necessary hoses, fittings, power cord and instruction manual, selectable mould sizes from 25 to 50mm, for use on 220V, 50 Hz. 1 phase.

Order No: 25 02

## METAPRESS-M

Semi-automatic Mounting Press, 5 ton capacity. Touch pad front panel controls and digital display of heating time, molding temperature, cooling temperature, ram up/down, auto/manual cooling, cycle start/stop and a direct reading pressure gauge. Self contained bench design, integral heating and cooling unit, thermostatically controlled heating power of 1400 W, automatic cooling cycle, with audible warning signal and ready for operation, selectable mould sizes from 25 to 50mm, 220 V, 1-phase, 50 Hz.

Order No: 20 01

## HOT MOUNTING PRESSES



Instrument	METAPRESS-M	METAPRESS- A	HYDROPRESS-50	HYDROPRESS-70
Order No.	20 01	25 02	25 03	25 04
Max. Pressure, bar	310	310	310	310
Max. Temperature, C	240	240	240	240
Heating Power, W	1400	1400	1400	2200
Water Cooling	Yes	Yes	Yes	Yes
Operation	Semi-Auto / Hydraulic	Automatic / Hydro-pneumatic	Programmable / Hydraulic	Programmable / Hydraulic
Display	Digital	Digital	LCD	LCD
Air Supply	-	8 bar	-	-
Mould Assembly, mm.	25-40	25-50	25-50	60-70
Size W x D x H cm	32 X 39 X 54	35 X 69 X 46	35 X 69 X 46	35 X 69 X 46
Weight, kg.	55	65	70	75
Mains	1ph, 220V, 50Hz AC	1ph, 220V, 50Hz AC	1ph, 220V, 50Hz AC	1ph, 220V, 50Hz AC

All specifications are subject to change without notice.