



MOUNTING

ECOPRESS

50/100/200



mettler[®]
Technology behind Specimen

20
YEARS

Diamond Cutting Discs
CBN Cutting Discs
Cutting Fluids



Equipment Consumables

Hot Mounting Resins
Cold Mounting Resins

ABOUT METKON

Equipment Consumables

Abrasive Cut-off Wheels
Ultra-thin Abrasive Cut-off wheels
Diamond Cutting Discs
CBN Cutting Discs
Cutting Fluids

MOUNTING

Equipment Consumables

Hot Mounting Resins
Cold Mounting Resins

GRINDING & POLISHING

Equipment Consumables

Paper Grinding Discs(Plain Back)
Paper Grinding Discs(Self-adhesive)
Diamond Grinding Discs(Magneto)
Diamond Pastes
Diamond Suspensions
Diamond Sprays
Diamond Lubricant
Alumina Powders
Alumina Suspensions
Colloidal Silica
Polishing Clothes
Metkon Magnetic System

PETROGRAPHY

Equipment Consumables

SIC powders
Diamond Cutting Discs
Diamond Cup Grinding Wheels

HARDNESS TESTING

MICROSCOPY & IMAGE ANALYSIS

Equipment Consumables

Grinding Papers
Grinding Stones
Milling Tips

SAMPLE PREPARATION FOR SPECTROSCOPY

Equipment Consumables

ABOUT METKON

Grinding Papers
Grinding Stones
Milling Tips

Equipment Consumables

Abrasive Cut-off Wheels
Ultra-thin Abrasive Cut-off wheels
Diamond Cutting Discs
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Cutting Fluids

CUTTING

MOUNTING

GRINDING & POLISHING



ECOPRESS®

50/100/200



ECOPRESS 100/200 are high capacity, state of the art automatic mounting presses having advanced software with programmable coloured HMI touch screen controls. Robust bayonet closure allows for quick and safe operation. Wide selection of mould assemblies from 25 to 50 mm in diameter are available. Two mounts can be produced simultaneously with the use of an intermediate ram. ECOPRESS 200, available with dual cylinder can produce four mounts at a time offering a perfect solution for labs with high specimen throughput.

Design & Operation

All ECOPRESS models have electrohydraulic operation which do not require air. The sample is ejected fast and very smoothly. All hydraulic components are housed in a ABS cabinet which is ergonomically designed.

ECOPRESS 100/200 have 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" button. That's it! ECOPRESS does the rest for you! After pressing the start key, the fully automatic program sequence is executed with the preselected parameters. The pressure, heating and cooling are automatically controlled and the total cycle time of a complete cool mount takes 8 to 10 minutes. The parameters can be changed and adjusted during the mounting process.

ECOPRESS 100/200 has additional capacity to store up to 99 operator-created programs. User-friendly program data and instructions are displayed on a large touch screen LCD.



ECOPRESS 100



ECOPRESS 100



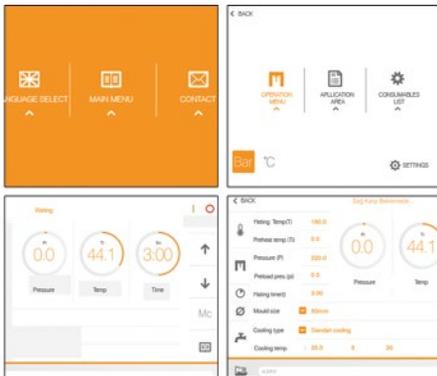
Mould cover ECOPRESS 100



Mould cover ECOPRESS 200



Bayonet mould closure



Programmable HMI touch screen controls



ECOPRESS 200 with dual cylinders



ECOPRESS 50 is a cost effective automatic digital mounting press with hydraulic pressure. (requires no air). 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.

ECOPRESS 50 is an easy to use mounting press. All touch-pad controls and direct reading pressure gauge and valve are on the front panel.

Simply place the sample and the mounting medium in the cylinder and close the mold closure. Set the "Molding Temperature", "Heating Time", "Cooling Time" and "Pressure" then press the "Start" key. 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 moulding cycle. The last parameter settings are always retained in the memory. An audible signal notifies the operator when the process is completed.



ECOPRESS 50



Consistent results with programmable parameters



Easy and comfortable operation

Heating & Cooling



Heater / Cooler Assembly

The high efficiency combined heater/cooler is housed in the upper part of ECOPRESS. With 1250 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. When the stand-by mode is switched on, pre-warming maintains a constant ready to use temperature, thus reducing the cycle time. Three cooling modes are available as "Standard", "Slow" and "Based on Time". Slow cooling is for thermoplastic resins which require far longer cooling times for best mount clarity. A stainless steel "Recirculating Cooling Unit" is optionally available.

Mould Assemblies



Mould cylinder, upper ram, lower ram



Mould assembly

ECOPRESS mounting presses can accept several mould sizes from 25 mm to 50 mm. All moulds can be exchanged simply and easily. An intermediate ram can be used to double the production capacity. Insulated mold closure protects the operator.

Easy-to-use dovetail connection for the lower ram eliminates the need for mechanical fastening.

Robust bayonet mold closure maximizes safety and eliminates the need to clean cylinder threads before closing. There will be no need to replace molds because of worn threads in the future.



ECOPRESS 50



ECOPRESS 100



ECOPRESS 200

Order No	25 04	25 07	25 08
Max. Pressure, bar	300	300	300
Max. Temperature, C	200	200	200
Heating Power, W	1250	1250	2x1250
Water Cooling	Yes	Yes	Yes
Operation	Automatic / Hydraulic	Programmable / Hydraulic	Programmable / Hydraulic
Display	Digital Display	7" HMI touch screen LCD	7" HMI touch screen LCD
Mould Assembly, mm.	25-50	25-50	25-50
Size W x D x H, (mm)	360 x 560 x 470	360 x 560 x 470	470 x 560 x 470
Weight, (kg)	37	38	54
Mains, (V)	1 phase, 230V, 50Hz. AC	1 phase, 230V, 50Hz. AC	1 phase, 230V, 50Hz. AC

Specifications

25 07 ECOPRESS 100

Programmable Automatic Mounting Press with one cylinder, 7" HMI touch screen control, with Siemens PLC control unit, programmable with coloured LCD display program based mounting sequences, electro hydraulic pressure (requires no air), pressure upto 300 bar, temperature upto 200 C, operation time upto 59:99 minutes, short cycle time, thermostatically controlled heating power of 1250W, automatic cooling cycle with three modes of cooling rates(standart cooling, slow cooling and based on time), programmable preheating and preloading, selectable mould sizes from 25 mm to 50 mm, audible warning signal, ready for operation. 230 V, 1-phase, 50 Hz. Mould assemblies are ordered seperately. Includes a standard set of mounting consumables composed of 3 different hot mounting compounds; 1 kg of each and a total of 3 kg.

25 08 ECOPRESS 200

Programmable Automatic Mounting Press with two cylinders, 7" HMI touch screen control, with Siemens PLC control unit, programmable with coloured LCD display program based mounting sequences, electro hydraulic pressure (requires no air), pressure upto 300 bar, temperature upto 200 C, operation time upto 59:99 minutes, short cycle time, thermostatically controlled heating power of 2X1250W, automatic cooling cycle with three modes of cooling rates(standart cooling, slow cooling and based on time), programmable preheating and preloading, selectable mould sizes from 25 mm to 50 mm, audible warning signal, ready for operation. 230 V, 1-phase, 50 Hz. Mould assemblies are ordered seperately. Includes a standard set of mounting consumables composed of 3 different hot mounting compounds; 1 kg of each and a total of 3 kg.

25 04 ECOPRESS 50

Automatic Mounting Press with one cylinder, Fully automatic operation with microprocessor controls, electro hydraulic pressure (requires no air), with touch pad front panel controls and digital display of; heating time, moulding temperature, cooling temperature, ram up/down, auto/manual cooling, cycle start/stop, last parameter settings retained in the memory, with direct reading pressure gage, moulding pressure upto 300 bar, temperature upto 200 C, operation time upto 59:99 minutes, short cycle time, thermostatically controlled heating power of 1250W, automatic cooling cycle, selectable mould sizes from 25 mm to 50 mm, audible warning signal, ready for operation. 230 V, 1-phase, 50 Hz. Mould assemblies are ordered seperately. Includes a standard set of mounting consumables composed of 3 different hot mounting compounds; 1 kg of each and a total of 3 kg.

Mould Assemblies

26 01	Mould assembly, 1" with intermediate ram
26 02	Mould assembly, 1 1/4" with intermediate ram
26 03	Mould assembly, 1 1/2" with intermediate ram
26 07	Mould assembly, 2" with intermediate ram
26 04	Mould assembly, 25 mm with intermediate ram
26 05	Mould assembly, 30 mm with intermediate ram
26 06	Mould assembly, 40 mm with intermediate ram
26 08	Mould assembly, 50 mm with intermediate ram

Accessories for ECOPRESS

GR 1363	Recirculating Coolant System, composed of 40 litres stainless steel cooling tank, 24V recirculating pump and connection hoses, etc.
GR 0937	Cabinet for floor model, MTC 251/ECOPRESS



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