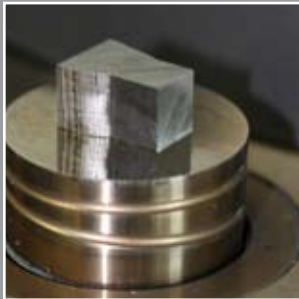


HOT MOUNTING PRESSES



COMPACT



Always a step ahead.

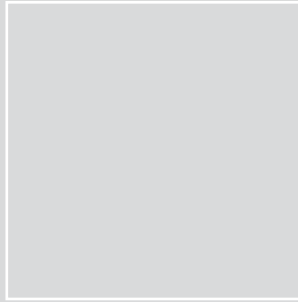
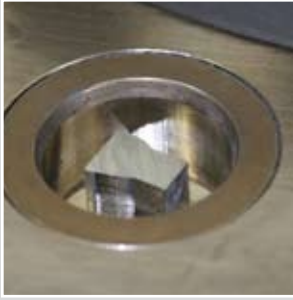


THE OPAL

Even though an Opal is amorphous, it shows internal colours. Interferences and reflections of light passing through the microstructure, creating the unique and beautiful phenomenon which is correctly termed play-of-colour.



ORIENT SAMPLE



ADD MOUNTING RESINS

CLOSE MOUNTING PRESS



CHOOSE PROGRAM



FINISHED SAMPLE

THE HOT MOUNTING OPERATION

Materialographic examination of samples generally requires encapsulation or mounting of the specimen.

During hot mounting, the samples are placed in a mounting mould which is then filled with various resin granules (e.g. Bakelite, Thermosetting Epoxy, Clear Thermoplastic Resins).

With the controlled application of pressure and heat, the resin granules are melted and cured to fill in the cavities of the specimen and mould. Then the sample is cooled under pressure with water to prevent cracking and shrinkage. The sample is then ready for grinding and polishing.

ADVANTAGES OF HOT-MOUNTING

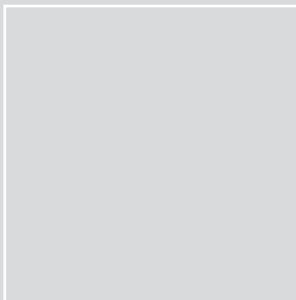
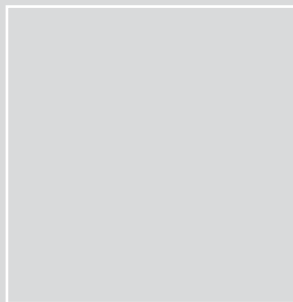
- » No mixing or handling of chemical resins
- » Gap free mounting prevents etchant from leaching out after preparation
- » High hardness of mounting resins results in good edge retention
- » Mount integrity produces coplanar surfaces
- » Minimal resin flashing and burrs
- » Easy sample marking with engraver



**MADE IN
GERMANY**

All components used by us, as well as the constructive design correspond to the normal device requirements for industry in Germany and the EC Safety Regulations. The units are finished in service friendly modular construction.





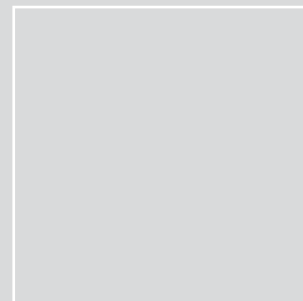
OPAL 410



OPAL 460
OPAL 480



SYSTEM
MOUNTING PRESS



OPAL HOT MOUNTING PRESSES

OPAL hot mounting presses are fully hydraulic with water cooling for optimum sample mounting. Mould cylinders are available in a variety of sizes for round and rectangular mounts. Double mounts are made by adding a spacer in the cylinder.

Our innovative closure systems guarantee easy opening and closing of the mould assembly time after time.

Solid engineering and ATM's expertise in hydraulics provide a superior pressure system with smooth movement and reduced operation noise. Powder coated aluminium construction adds to the rugged durability of OPAL presses.

All OPAL presses are available as benchtop machines. The OPAL 460 and OPAL 480 are also offered as floor model units.



E-LAB

E-Lab ready machines can be networked with your lab PC for maintaining and downloading mounting programs.

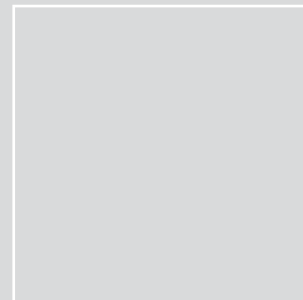
A centralized internal network can save data and download support information from ATM Lab data transfer.



OPAL 460/480 CLOSURE SYSTEM



MOUNTING MOULDS

SPACERS FOR
DOUBLE MOUNTSOPAL 410
BAYONET CLOSURE

OPERATION

OPAL hot mounting presses are innovative and user friendly.

SLIDING CLOSURE

A unique sliding mould closure system has been integrated into the OPAL 460 and OPAL 480 models. This is innovative design and engineering at its best. With these new presses, it is no longer necessary to enter the top ram into the mould cylinder, nor to manually lock the closure down.

After putting the specimen and moulding compound into the cylinder, simply slide the closure into position and press the start button. The cycle begins by sealing the mould cavity automatically, followed

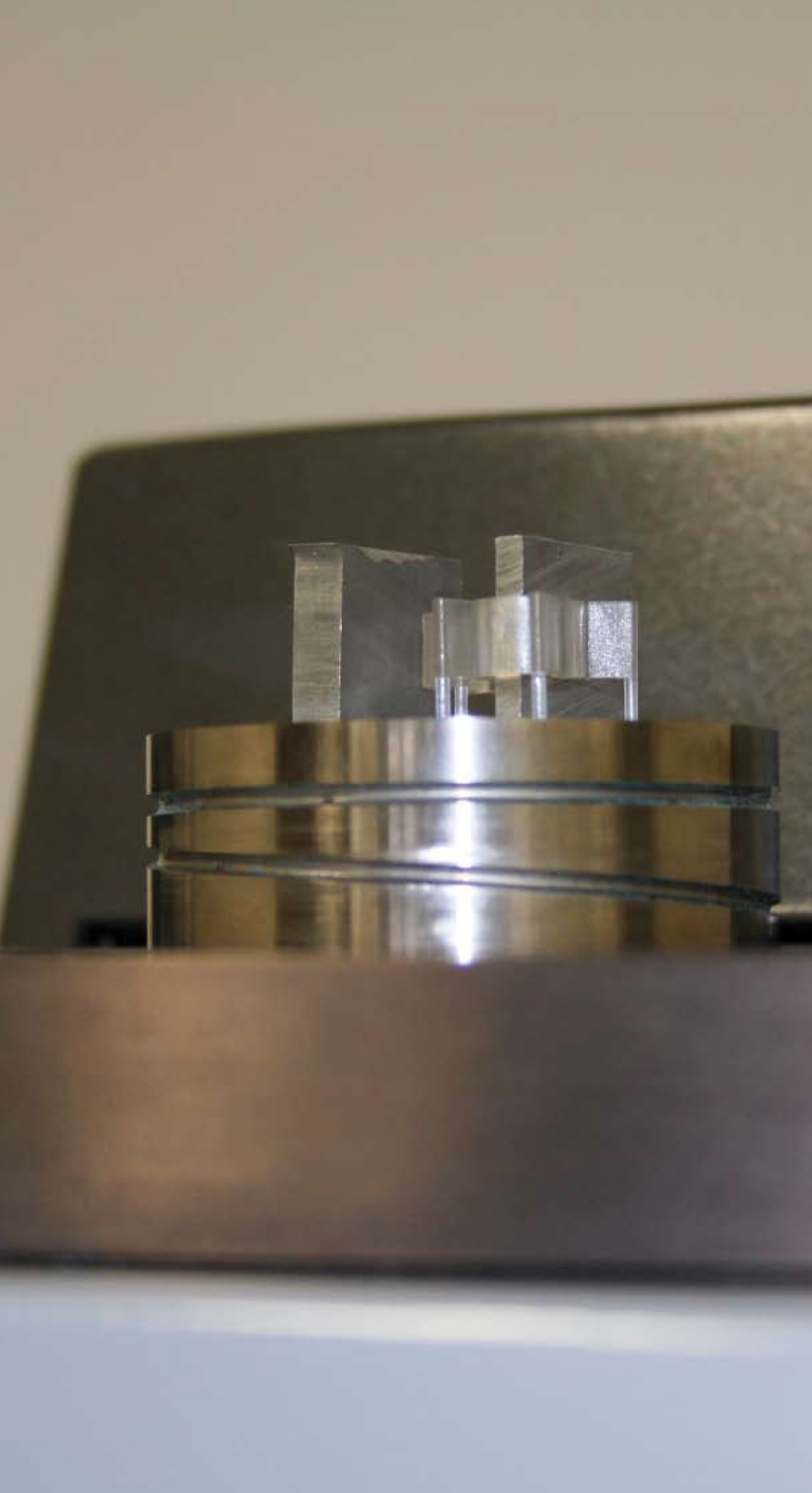
by the programmed curing and cooling cycle. Upon completion, chamber pressure is released automatically and the closure unit is slid away from the mould cylinder, allowing the encapsulated specimen to be removed.

MOULD ASSEMBLIES

Our comprehensive selection of mould assemblies, from $\text{\O} 25.2 - 70$ mm, provides the optimum size for mounting your sample. Mould assemblies for rectangular mounts are also available.

DOUBLE MOUNTS

Two round mounts can be produced simultaneously with the use of a spacer.

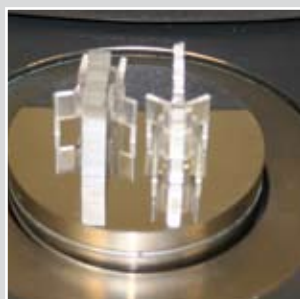
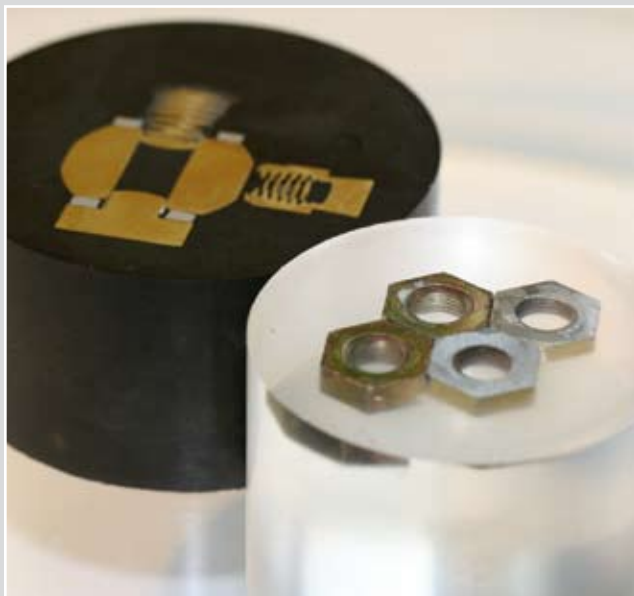
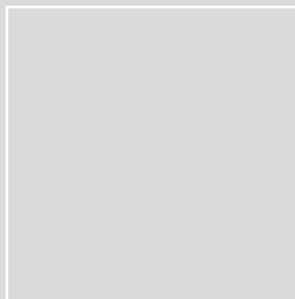
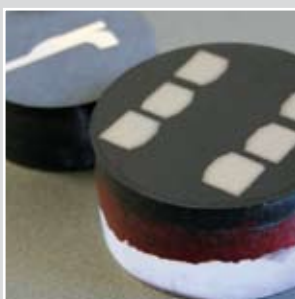


ECOLOGY

Variable cooling rates will reduce water consumption and help with controlled cooling of clear resins.



OPTIMIZED PRESSURE MODES

MOUNTING
ACCESSORIES

SIMPLE OPERATION

ELECTRONIC OPERATION

With a clear LCD control screen, it is possible to control and monitor all mounting parameters.

STORE

You can load and save up to eighteen different mounting programs.

PRESSURE CONTROL

In addition to the standard full pressure and heating mode, you can choose among three other pressure modes:

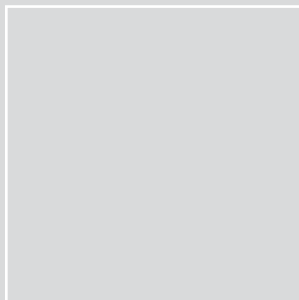
- » Pressure increases parallel with the heating process (ideal for hollow specimens such as tubes and rings)
- » Pressure increases after the preset temperature is reached to enhance resin flow into complex geometries
- » Pressure increases as a percentage of temperature increase (good for fragile specimens and clear mounting resins)



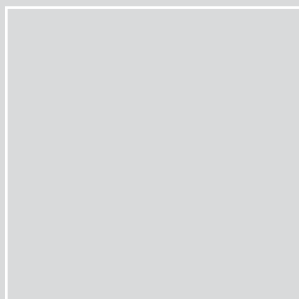
WE HAVE A SYSTEM!

ATM offers unique, flexible solutions for the Materialographic laboratory. All machines and furniture are manufactured in-house, which allows integration of equipment, accessories and cabinet components in endless combinations. With ATM, you are able to customize your workplace to your specific needs.





VARIATIONS OF THE SYSTEM MOUNTING PRESS

SYSTEM CABINET
WITH INTEGRATED
COOLING UNIT

THE SYSTEM MOUNTING PRESSES

The OPAL 460 and OPAL 480 are available as free standing floor models with one, two or three presses per unit.

By integrating the mounting press in our System furniture, the machine has a comfortable working height. The System cabinets also provide ample storage space for supplies and samples.

The System Lab mounting press can be equipped with a closed chilled water recirculation system, an innovative solution when direct water connections are not available. The 6L cooling unit significantly reduces water usage and is conveniently integrated into a sliding drawer for easy access.

ATM GMBH

Emil-Reinert-Str. 2

D - 57636 Mammelzen



The consumables were tested in our central lab and specifically selected for our machines.

Tel. +49(0)2681.9539.0

Fax +49(0)2681.9539.20

E-Mail info@atm-m.com

Web www.atm-m.com



Aptex Ltd,
P.O. Box 14337,
Solihull, West Midlands, B93 3DW

Telephone: 01564 206393

Fax: 08704 790595

Email: sales@aptex.co.uk

www.aptex.co.uk

Steve Bradley - mobile - 07976 390491

Mike Skidmore - mobile - 07805 221957

» MATERIALOGRAPHY