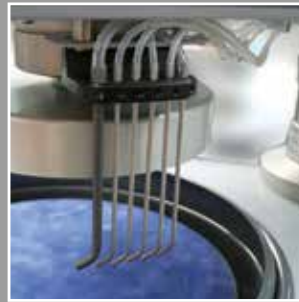
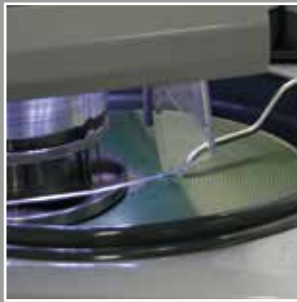


GRINDER AND POLISHER



PLANAR



Always a step ahead.



SAPPHIRE AND RUBY
(german:
SAPHIR AND RUBIN)

Sapphire is one of two gem varieties of corundum, the other being the red ruby. Although blue is the most well known hue, sapphire is any colour of corundum except red. The Sapphire is acid and heat resistant and can be produced synthetically.

TOPAZ
(german: TOPAS)

The Topaz is, in pure form, colorless and transparent. Heat treating and irradiation will produce color in Topaz.

JADE

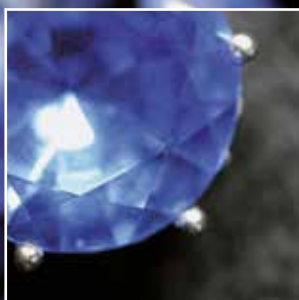
The term jade is applied to different metamorphic rocks of different silicate minerals, e.g. jadeite or nephrite. Ornamental polished Jade is known as an opaque, light green jewelry stone.



RUBY



TOPAZ



JADE



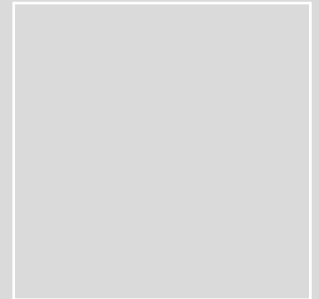
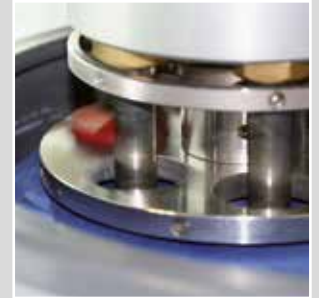


PRE-GRINDING



MANUAL POLISHING AND GRINDING

AUTOMATIC MODE



GRINDING AND POLISHING

Grinding and polishing is the final stage in the sample preparation procedure and consists of several steps. Each step uses finer abrasive than the previous one, the ultimate goal being to produce a deformation-free, scratch-free and highly reflective sample surface. The sample may need to be examined, either etched or unetched, to reveal the microstructure of a material.

Pre-grinding will remove damage from cutting, mounting resin flash and burrs, and prepare the surface for grinding. For simple applications and the preparation of single specimens, the grinding and polishing step may be done manually.

Simultaneous processing of several samples in the automatic mode will save time and ensure that every preparation process is reproducible. Storing of individual programs and parameters such as exactly defined pressure and controlled supply of suspensions and lubricants will also increase efficiencies.



**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.



JADE 700



SAPHIR 375



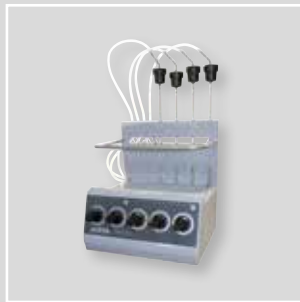
SAPHIR 300



SAPHIR 320/330



SAPHIR 520/530
WITH RUBIN 500



TOPAS 130

SAPHIR 350/360



SAPHIR 560 WITH
RUBIN 520/530



SAPHIR 550 WITH RUBIN 520/530/540



SYSTEM COMBINATIONS

THE GRINDER AND POLISHER SAPHIR

SAPHIR grinding and polishing machines meet every preparation challenge and achieve superior results.

The complete grinding and polishing process can be automated with standardized and reproducible procedures.

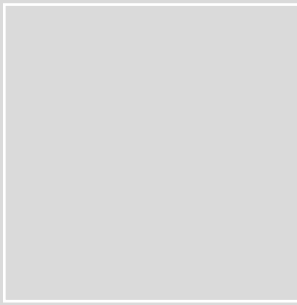
Innovative RUBIN 520 and 530 polishing heads for single or central pressure can have integrated automatic dosing systems.

The stand alone TOPAS 130 dosing unit can be used with all other polishers.

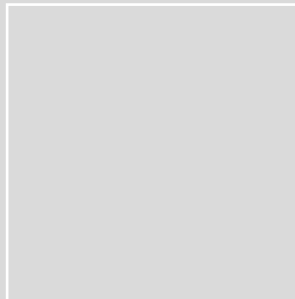
Automating grinding and polishing operations creates more time for sample evaluation.

All machine housings are made of rugged, powder coated aluminium.

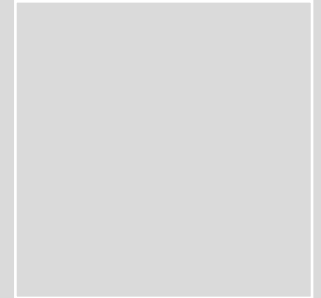




JADE 700



AUTOMATIC DRESSING



SAPHIR 375

MANUAL PRE-GRINDING

The JADE 700 is a stable wet double-belt grinder for deburring and pre-grinding of samples or other material.

It is possible to use belts with two different grain sizes simultaneously. Both shroud covers are simple to open and changing belts is easy. New belts can be centered by rotating the adjustment wheel onto the middle of the working surface.

The water supply provides cooling over the whole width of the front end of the belt and waste material is carried to the back of the machine into a drain.

AUTOMATIC PRE-GRINDING

The free-standing high speed System Grinder SAPHIR 375 is especially suitable for precision plane grinding with central pressure and automatic material removal measurement.

The abrasive stone is dressed automatically and at controlled intervals.

A recirculation coolant system is integrated into the modular aluminium construction.

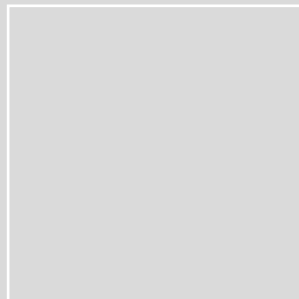
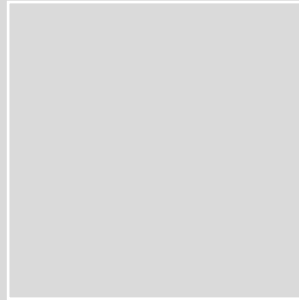
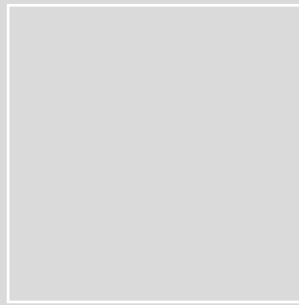
The SAPHIR 375 is available in various configurations for use with abrasive grinding stones or diamond discs.



STRONG AND QUIET

The heavy duty speed-controlled drive, shock-resistant plastic basin, powder-coated aluminium housing and high standard of technology result in durable SAPHIR grinders and polishers that operate at minimal noise levels.





SAPHIR 300

WATER SUPPLY



VARIABLE SPEED

Each SAPHIR grinder and polisher is equipped with variable speed which can be changed during the working process.

WATER

Optimum distribution of water can be reached by swinging the tap left and right across the diameter of the working wheel.

The tap has a hose extension and can be used for rinsing out the basin.



E-LAB

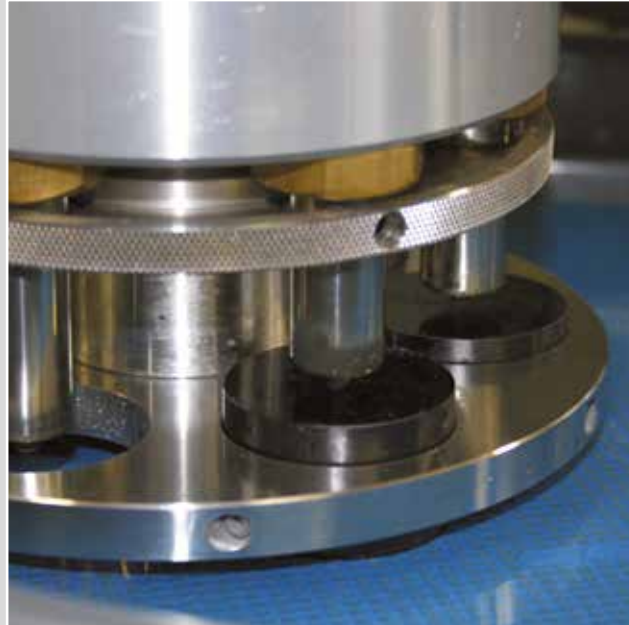
E-Lab ready machines can be networked with your lab PC for maintaining and downloading grinding and polishing programs. A centralized internal network can save data and download support information from ATM Lab data transfer.



TOUCH-DISPLAY

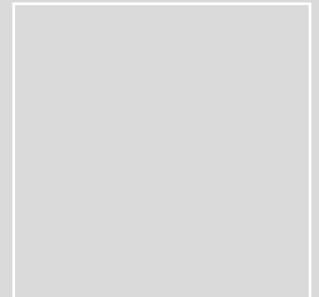


CENTRAL PRESSURE



SINGLE PRESSURE

TOPAS 130



RUBIN 540

SINGLE AND CENTRAL PRESSURE

The RUBIN grinding and polishing heads, developed by ATM, are available with both the classical central and individual pressure modes. In central pressure mode, a pre-set depth of material removal is possible.

In single sample pressure mode, multiple samples of different sizes can be placed in a sample carrier and ground or polished simultaneously.

With single pressure, each sample is pressed to the grinding surface by its own piston.

SAFETY CONCEPT

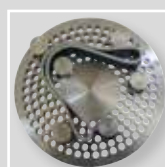
An automatic transparent protective hood in the head of Rubin 520 sets a new standard for operational safety. Sensors interrupt the working sequence when there is access in the clearly visible and easily accessible LED illuminated working area.

OPERATION

Depending on the model, the grinding and polishing heads are operated via a LCD display on a clearly laid out touch-screen.

They are capable of clockwise and counter-clockwise rotation, and side and height settings in manual (RUBIN 500) or automatic mode with memory function (RUBIN 520).

The integrated dosing unit is also controlled by the touch-screen.

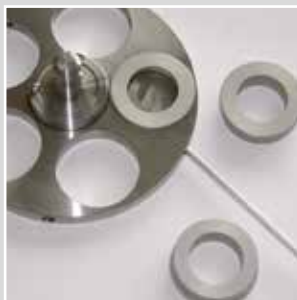


*SPECIAL
SAMPLE HOLDERS*

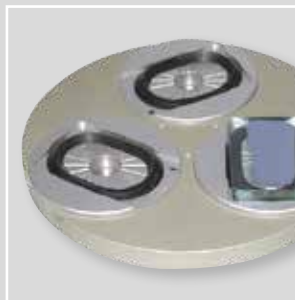
*We are able to design
and manufacture
custom-made solutions
for special dimensions,
geometries and
applications.*



DISTANCE RINGS

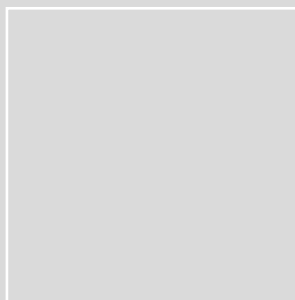


VACUUM SAMPLE HOLDER



EASY-CLAMP SYSTEM

FOR CENTRAL PRESSURE



FOR SINGLE PRESSURE



LEVELLING PLATE



LEVELLING DEVICE

EASY-CLAMP SYSTEM

The sample holder is designed with our Easy-Clamp system, where the force needed for clamping and loosening of samples has been reduced to a minimum. The samples are gently fixed with a simple 120° turn.

STANDARD SAMPLE HOLDER

We offer sample holders for individual or central pressure in a variety of round sample diameters and rectangular shapes.



SYSTEM LAB COMBINATIONS

System Lab delivers the right combination of options, performance, safety, looks and flexibility for the standard lab.

For special needs, you can choose from the whole range of customized options.





LAB INTEGRATION



SYSTEMAUTOMAT



MODULAR CONSTRUCTION

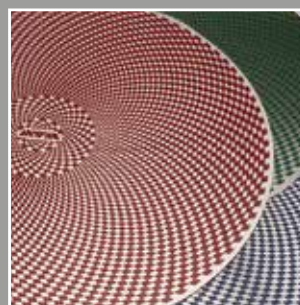
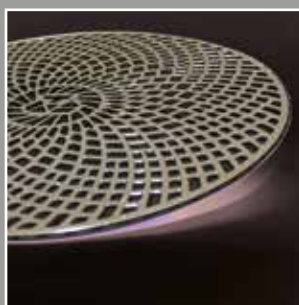
The proven ATM modular system will enable you to create a custom grinding and polishing work station. This design flexibility gives you maximum stability, customized functionality, ample storage space and a sleek, standardized look.

Machines, accessories and utility connections, such as electrical, water and compressed air, are integrated in the System Lab cabinets. The electronic controls are situated in an easily accessed sealed drawer. You can also add fully automatic ultrasonic or high speed cleaning stations to your design.

ATM GMBH

Emil-Reinert-Str. 2

D - 57636 Mammelzen



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

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» MATERIALOGRAPHY