

FORCIPOL-TS with FORCIMAT-TS



FORCIPOL-TS, when coupled with FORCIMAT-TS, becomes an automatic thin section preparation system. FORCIPOL-TS is a versatile & durable & reliable grinding/polishing machine. FORCIMAT-TS is a low speed automatic head and it mounted on a rigid hardened post which is fixed to the base of the FORCIPOL-TS grinder/polisher.

- Automatic Operation
- Single Force ApplicationSpecial Holders for Thin SectionLapping & Polishing

FORCIPOL-TS

FORCIPOL-TS can accommodate 300 mm diameter wheels with variable speed between 50-600 RPM. The modern electronics provide a smooth speed variation with soft start and soft stop. The working wheel is powered by a high torque 1.0 HP electric motor with both clockwise and counterclockwise wheel rotation possibility. By using appropriate working discs, it can carry grinding, lapping and polishing process very smoothly. The drive elements are fixed on heavy duty aluminium alloy casting. The wheels are mounted on ball bearings allowing the application of high pressures to prepare even large specimens. Ball bearings used provide quite and vibration free operation. Water inlet and flexible water outlets with control valves for wet grinding are standard features.

FORCIPOL-TS, when coupled with FORCIMAT-TS, becomes an automatic thin section preparation system. The FORCIMAT-TS is a low speed automatic head and it is mounted on a rigid hardened post which is fixed to the base of the FORCIPOL-TS grinder/polisher. It can be adapted easily and rapidly positioned by means of a quick-locking clamping mechanism.

FORCIMAT-TS is driven by a 100 Watt DC motor and adjustable from 25 to 50 RPM speed which provides high torque for big specimens and allows long operation time. Speed of head is specially adjusted for thin section and petrographic sample preparation.

The pneumatically applied individual force is adjustable between 5 N (1.1 lb.) and 60 N (13.5 lb.) from the front panel and is displayed on a gauge. The housing is made of ABS with a touchpad front panel.

Modern touch pad controls with ergonomic turn knob allows fast and easy setting of parameters and increases productivity. Sample force, wheel speed, sample holder speed, operation time, motor on/off and water on/off functions can be set in seconds. When the start button is depressed, both the FORCIMAT-TS and FORCIPOL-TS start operating simultaneously. Cooling water is automatically activated and deactivated at the beginning and end of operation. The actual wheel/head speed and operation time are digitally displayed. All parameters can be changed during operation. The last parameter settings are always retained in the memory. Upon completion of the cycle, both instrument stop and an audio signal notifies the operator.

Automatic Disc Cleaning & Drying function can be activated with a single button to obtain perfectly cleaned disc surfaces in seconds. Smart Water Saving feature allows tons of water saving over the years.

When needed, FORCIMAT-TS can work in manual mode to allow prepare specimens by hand.

Specially Designed Thin Section Holders

Specially designed thin sections holders which called LAP-TS and POL-TS are used for lapping and polishing of thin sections. LAP-TS has special Boron Carbide stops which function is to precisely determine final thickness of specimen on the glass slide. The final thickness of specimens becomes between 25 and 35 µm. POL-TS is used for polishing proces to provides smooth surface for microscopic examination



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POL-TS

DOSIMAT

DOSIMAT Peristaltic Dispenser is an optional accessory for the FORCIMAT-TS. It is an automatic fluid dispensing instrument used in combination to obtain consistent specimens and to save time and consumables. DOSIMAT can feed both diamond suspensions / lubricants and aluminium oxide suspensions. Automatic dosing of consumables is applied precisely for perfect sample surfaces. Modern touch pad controls with ergonomic turn knob allows fast and easy setting of dispensing parameters like; frequency, dosing time, etc. parameters and increases productivity. The last parameter settings are always retained in the memory.

Combination of FORCIPOL-TS, FORCIMAT-TS and DOSIMAT provides operator free, fast, precise and repeteable petrographic sample preparation.

Two different DOSIMAT Peristaltic Fluid Dispensers are available for FORCIMAT-TS:

- *DOSIMAT 12 (With 1 Peristaltic Pump)
- *DOSIMAT 52 (With 6 Peristaltic Pumps)