

POWER TOME XL™



Ideal for Applications In:

- Materials Research
- Life Sciences
- Forensic Science
- Quality Control
- Failure Analysis

Designed for:

- Transmission Electron Microscopy
- Atomic Force Microscopy
- Scanning Probe Microscopy
- Scanning Electron Microscopy
- Optical Microscopy
- FTIR

Precision & Performance For The Efficient EM Lab

The PowerTome is the only fully upgradeable ultramicrotome, with the ability to take a PTXL, the routine workhorse, and build it up to the PTPCZ research level system with computer control and HD video options. The customer has the choice of upgrading to a PC based controller with or without the high-definition video package.

The PTXL is controlled via a digital tactile controller, eminently suitable for routine work. The PowerTome is capable of accommodating glass knives up to 12mm wide, triangular tungsten carbide knives, and any commercial brand of diamond knife.

The PTXL can be upgraded to the PTPC and PTPCZ, for use with a computer based controller with HD video options. Various add-on components for array tomography and cryo applications are also available.

FEATURES

- Produce high quality semi- and ultra-thin sections for TEM, SEM, block facing for AFM, TOFSIMS, LM, and CEMOVIS.
- Control system includes digital tactile controller
- Ergonomic stereo microscope system with unique lateral viewing control
- Three types of LED illumination are provided. All are independently adjustable.
 - Overhead bright diffuse LED illumination
 - Backlighting for careful approach of the knife to the specimen
 - Transillumination through the specimen holder for viewing details of the specimen within the block (Transillumination LED can also be used for spot illumination by pointing it towards the specimen or knife edge)
- Patented Power Drive[©] cutting stroke for large blocks & hard materials
- Electronic step advance for final specimen approach to the knife edge
- High stability mechanical advance system for reproducible section thickness
- Built-in calibration & service diagnostics instantly confirm functionality & simplify maintenance procedures

SPECIFICATIONS

- Specimen auto feed: 0.2 mm (200 μ m; 200,000 nm)
- Section thickness: 5nm to 10 μ m
- Cutting speed: 0.1 to 99.9mm/sec in 0.1mm/sec increments
Variable return speed over entire cutting speed range
- Knife stage movement: 50mm gross advance
25mm E-W travel
12mm N-S advance

INCLUDES**Steromicroscope Binoculars Zeiss Stemi 508**

- 8:1 zoom
- 6.3x to 50x magnification
- 10x WF (23mm) eyepieces
- 35° viewing angle

Accessory Kit

- Transilluminated Specimen Holders (Universal, 8mm Stepped, and 7mm Flat)
- Arc Segment Holder
- Arc Mounting Stub
- Trimming Block
- Trimming Post
- 12" Transillumination LED
- Cable, fuses, wrenches

ACCEPTS THE FOLLOWING KNIVES

- Glass knives up to 12mm wide
- Triangular tungsten carbide knives
- Any commercial brand of diamond knives

OPTIONAL ACCESSORIES AVAILABLE FOR PURCHASE

ROOM TEMPERATURE SPECIMEN HOLDERS

- Vise type flat specimen holder.
- Universal transilluminated specimen holder.
- 7mm flat specimen transilluminated holder.
- 5.6mm flat specimen transilluminated holder.

STEREOMICROSCOPE ACCESSORIES

- 1.3 megapixel USB color camera.
- 10x WF(23mm) eyepieces. Per pair.
- Stemi 508 trinocular stereomicroscope
50/50% beam splitter, 8:1 zoom, 6.3x to 50x magnification, 10x WF (23mm) eyepieces, phototube with 50/50% right path and c-mount camera adapter.
- 16x eyepieces. Per pair.
- Stereomicroscope mounted breath shield

OTHER POWERTOME ACCESSORIES

- Static Line Ionizer
Ionization depolarization device, 115VAC or 220 - 240VAC
- Breath shield, for knife stage
- Water trough filler.
Includes reservoir/pump, tubing and filler tube
- Specimen viewing mirror
Mounts on upper stage for straight-on viewing of specimen
- Easy-Lift glass knife spacer and post.
- PowerTome dust cover.
- Computer with control software and touch screen monitor
- Automated water level control system

Maintains constant water level in knife boat, automatically adjusting as required. For use with PTPCZ, PT3D, ATUMtome.



STATIC LINE IONIZER, 110VAC or 220 - 240VAC



AUTOMATED WATER LEVEL CONTROL SYSTEM
(for use with PTPCZ, PT3D, ATUMtome)



ZEISS 508 TRINOCULAR
STEREOMICROSCOPE with
1.3 MEGAPIXEL USB CAMERA



WATER TROUGH FILLER
(PERISTALTIC WATER PUMP)