

Rankin Basics Semi-Automated Rotary Microtome MCT45

Simple Control

A simplified, single, control panel on the face of the microtome designed with the user in mind.

Imported Guide Rails

German cross-roller guide rails to ensure precision sectioning and an extremely smooth flywheel.

Intuitive Coarse Feed

An electronic coarse feed combined with the natural feel of a flywheel gives you more control over the specimen head compared to using a button.

2-in-1 Blade Holder

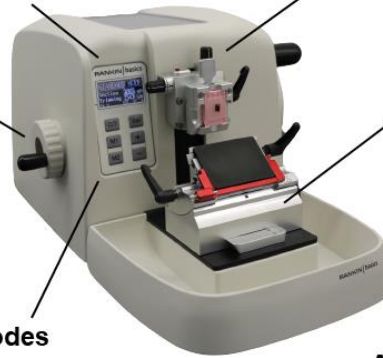
Easily switch between high profile and low profile blades within seconds. Imported Kipp levers provide reliable locking for the greatest safety and quality sections.

Three Sectioning Modes

Different operating modes to meet your specific sectioning preferences.

Absurdly Reliable

Over 1 million slides and counting have been produced in our control slide lab over a 4 year testing period to ensure reliability before coming to the market. A 2-year warranty is provided as standard.



- 2-Year Parts & Labor Warranty
- Utilizes a human-oriented design with very advanced technology and extremely reliable performance, with a user-friendly interface. It is easy to switch between cutting and trimming.
- 2-in-1 blade holder for low and high profile disposable blades comes standard.
- Specimen feed drive utilizes an intelligent control system that has three modes: Conventional Mode, Intelligence Sensing Mode, and Whole Layer Cutting Mode.
- Advanced drive systems that include multiple functions: sectioning, trimming, fast forward, fast backward, and quick conversion.
- Uses imported cross-roller guide rails and a screw motion mechanism to ensure precision resulting in superior sectioning performance.
- OLED screen shows section and trimming thickness, as well as section counter.
- Includes safety and emergency braking system, security alarm system, driver overload protection, and auto-sleep protection system.
- Hand-wheel balance is precisely adjusted and can be locked at any position, providing the maximum level of safety and convenience.

- Large-volume waste tray is easy to remove and clean, and items such as disposable blades can be stored on the top of the housing.
- Cassette holder can be locked at any position along each of the three axes, enabling easy adjustment of the specimen sectioning angle.
- The precise positioning system is not only easy to use, but also provides accurate X and Y-axis adjustments.
- Easy and fast switching between different specimen clamps. Two options: paraffin block clamp and quick cassette clamp.
- The red safety bar on the blade holder covers the whole length of blade to protect the user and the push bar enables easy changing of the blade.
- The blade holder can be laterally moved and adjusted, without the need to manually move the blade, enabling use of the full length of the blade.
- Uses imported Kipp levers found on competing microtome blade holders.
- Ergonomic design, greatly reducing the discomfort associated with long hours of operation.

Technical Specifications

Sectioning Thickness Range: 0.25 - 100 μm

0.25-2.5 μm increment 0.25 μm

2.5-5 μm increment 0.5 μm

5.0-10 μm increment 1 μm

10-30 μm increment 2 μm

30-60 μm increment 5 μm

60-100 μm increment 10 μm

Trimming: 1 – 600 μm

1-10 μm increment 1 μm

10-20 μm increment 2 μm

20-50 μm increment 5 μm

50-150 μm increment 10 μm

150-600 μm in increments of 50 μm

Specimen retraction range: 0-100 μm (adjustable, increments of 5 μm)

Total horizontal Specimen Feed: 30 mm

Course Feed Speed: 0 – 5,000 $\mu\text{m}/\text{second}$

Vertical Specimen Stroke: 70 mm

Movement range of the blade holder base: 0-20 mm (front to back)

Movement range of the blade holder top plate: 0-23 mm

Maximum Specimen Size: 70 \times 70mm

Specimen Orientation: XY – 8°

Precision Error: $\pm 1\%$

Working Voltage: AC110V $\pm 10\%$ 60HZ / AC 220V $\pm 10\%$ 50Hz

Power: 100VA

Dimensions: 595 \times 465 \times 295 mm (W \times D \times H)

Net weight: 28kg