



TORONTECH

ACCURATE ROTARY MICROTOME



Accurate Rotary Microtome - ToronTome™ 400

Automatic Rotary Microtome ToronTome™ 400 is a precision Microtome developed for research institutions, laboratories, and medical pathology departments that need dependable sectioning of paraffin and harder embedded specimens. Accurate Rotary Microtome - ToronTome™ 400 is an upgraded model based on the ToronTome™ 550 series, with imported guide rail, screw mandrel, and ratchet rod components, along with direct use of disposable blades for routine sectioning work.

This Rotary Microtome is positioned for stable operation, maintenance-friendly use, and accurate specimen feed. The unit is suitable for hard tissue sectioning, including plastic, fiber, bone, plant, and hair samples, which makes it a practical choice for laboratories working beyond routine soft-tissue paraffin blocks.

ToronTome™ 400 combines a compact footprint with a rigid mechanical layout, adjustable blade carrier movement, and handwheel locking. That gives operators strong control during trimming and sectioning while helping support repeatable results across daily laboratory work.

APPLICATIONS

Accurate Rotary Microtome - ToronTome™ 400 Applications

- Histology and pathology laboratories: ToronTome™ 400 is suitable for tissue sectioning in pathology and histology laboratories. Specifically for medical pathology departments among its intended users, which makes it appropriate for routine specimen preparation before staining and microscopic review.
- Research institutions and teaching laboratories: this makes the instrument a strong fit for academic, biomedical, and life science settings where reliable manual sectioning and straightforward maintenance are important.
- Hard tissue and specialty specimen sectioning: the machine is suitable for slicing hard tissue and related materials such as plastic, fiber, bone, plant, and hair. That broadens its use into specialty sample preparation where a stable Rotary

Microtome with direct disposable-blade use is preferred.

- General laboratory sample preparation: With its adjustable blade carrier, stable feed mechanism, and compact design, this Microtome can also support routine embedded sample preparation in general laboratory workflows where reproducible sectioning and practical bench use matter.



Standards

- **ISO 9001:2008** is a foundational international standard for quality management systems that mandates strict process control and comprehensive documentation to ensure manufacturing consistency. Within the industrial testing sector, it established the rigorous framework for quality manuals and corrective actions required to guarantee that equipment consistently meets exact technical specifications and global regulatory compliance.

FEATURES

Accurate Rotary Microtome - ToronTome™ 400 Key Features

- Upgraded platform design: ToronTome™ 400 is an improved model derived from the ToronTome™ 550 series. This suggests a refined mechanical layout intended for more stable routine sectioning.
- Imported core motion components: specifically guide rail, screw mandrel, and ratchet rod components. These parts are central to specimen movement and overall sectioning stability.
- Direct disposable-blade compatibility: disposable blades can be used directly. This supports convenient daily operation and simplifies blade replacement for routine laboratory work.
- Suitable for hard tissue and specialty materials: the system is intended for harder specimen types such as plastic, fiber, bone, plant, and hair, in addition to regular laboratory sectioning applications.
- Maintenance-friendly operation: maintenance-free or low-maintenance operation, making the unit attractive for labs that want simpler upkeep and dependable daily use.
- Adjustable blade carrier: the blade carrier can move forward and backward and the cutting angle can be adjusted. This gives the operator more flexibility to optimize sectioning conditions for different sample types.
- Handwheel locking: the handwheel can be locked in any position. This improves safety and convenience during specimen loading, blade changes, and setup.
- Alarm system: the Microtome has an alarm system. This adds an extra layer of operational awareness during routine use.

THEORY & METHOD

Theory and Method

A Rotary Microtome cuts thin sections by advancing a specimen block toward a blade in controlled increments. The operator secures the specimen, aligns it to the blade, selects the desired thickness, and uses the handwheel-driven mechanism to produce thin sections for microscopic evaluation or other analytical work.

ToronTome™ 400 uses a mechanical specimen-feed system designed for stable sectioning. With the key motion components and direct compatibility with disposable blades, the blade carrier can move forward and backward and its angle can be adjusted. Together, these features help the operator optimize blade position, cutting geometry, and ribbon formation.

Section quality depends on feed stability, blade sharpness, specimen alignment, and vibration control. That is why this Microtome emphasizes rigid construction, maintenance-friendly operation, and secure handwheel locking to support smoother, more repeatable cutting performance.

TECHNICAL SPECIFICATIONS

Accurate Rotary Microtome - ToronTome™ 400 Technical Specification

Parameter	ToronTome™ 400
Product type	Accurate Rotary Microtome
Section thickness range	1-30 µm
Minimum setting value	1 µm

Parameter	ToronTome™ 400
Horizontal specimen feed	35 mm
Vertical specimen stroke	46 mm
Precision error	±5%
Maximum section size	60 × 40 mm (also shown as 50 × 30 mm, 50 × 40 mm in brochure image)
Dimensions	400 × 350 × 350 mm
Net weight	30.5 kg

Standard Accessory

- Clamp (1)
- Blade carrier for disposable blade (1)
- Cassettes (50 pcs)

Optional Accessories

- Microtome disposable blade
- Cassette clamp



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