

# Superior sectioning results – **perfectly simple**

**Epredia Rotary and Sliding Microtomes**For research and clinical laboratories







## Section safely with excellent quality

Microtomes from Epredia are designed to be precise and stable, helping to yield superior sectioning results for even the most difficult-to-cut paraffin sections.

### Designed with the end user in mind

 With both automatic and manual options available, we have the right fit for you, your lab, and your paraffin sections

### Specificity in action

- User-friendly control panels facilitate flexiblity
- Fully-adjustable to ensure the correct thickness

### Non-tiring comfort

- Ergonomic designs with integrated waste trays to save you time and energy
- Emergency stop features to keep you safe (Epredia HM355S only)

### The total solution

- Wide variety of steel low- and high-profile blades for cutting various tissue types
- Epredia Cool-Cut and Epredia<sup>™</sup> Section Transfer System<sup>™</sup>
   (STS) assist in placing cooled, wrinkle-free sections on glass microscope slides
- Get peace of mind with Epredia service contracts that include preventative maintenance and thorough, expedited repairs, ensuring minimal downtime in your laboratory



### Lean sectioning

Improve workflow at the microtome by transferring sections directly onto slides as they are generated. Combining an Epredia microtome with a water bath and Epredia™ SlideMate™ AS or SlideMate Pro slide printer offers straight-forward, costeffective means of simultaneously streamlining workflow and reducing the risk of sample identification errors.

# **Rotary Microtomes**

Designed for precision and stability to help labs achieve quality ribbons even with difficult-to-cut paraffin sections.



## Manual

### Epredia HM 325

A premier manual rotary microtome with additional capability to support rapid set-up and cleaning for improved workflow.

- 64 mm vertical stroke can accommodate Epredia<sup>™</sup>
   Super Mega<sup>™</sup> Cassettes in horizontal orientation
- Wrap-around, detachable waste tray for safe and speedy debris collection and disposal
- XY fine orientation and zero positioning for rapid re-orientation of pre-cut blocks
- Ultra-light touch, ergonomic flywheel
- Optional Epredia Section Transfer System supports workflow transition from ribbon to slide
- Compatible with Epredia Cool Cut to extend cutting periods for efficient step and serial sectioning

HM 325 manual microtome	902100
With E blade holder	902100A
<ul> <li>With ER blade holder</li> </ul>	902100ER



## Semi-automated

### Epredia HM 340E

A semi-automated rotary microtome combining mechanized feed with manual cutting.

- 72 mm vertical stroke for efficient sectioning of macro and Super Mega Cassettes
- Memory function for specimen positioning with XY fine orientation and wraparound waste tray to speed up preparation and clean-up
- Ergonomic removable control panel to suit user preferences
- three different speeds for the coarse feed are available: 400, 800 and 1200 µm/s.
- Compatible with Epredia Section Transfer System and Epredia Cool Cut

HM 340E semi-automated	905190
microtome	
With E blade holder	905190A
<ul> <li>With ER blade holder</li> </ul>	905190ER



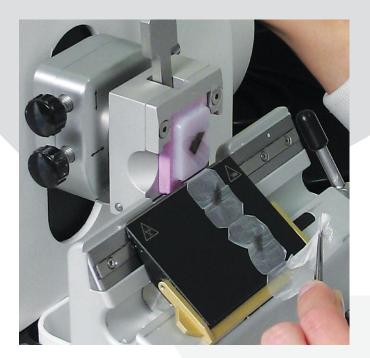
## Fully automated

### Epredia HM 355S

A fully automated microtome with four mechanized cutting modes to deliver exceptional sections across an extensive range of specimen types.

- 72 mm vertical stroke for efficient sectioning of Super Mega Cassettes and other large samples
- · Choice of manual or mechanized sectioning
- Single, multiple, interval and continuous cutting modes for optimum control according to sectioning requirements
- Unique "double-tap" startup is designed to prevent accidental operation
- Compatible with Cool-Cut and Section Transfer System for improved workflow
- Programmable cutting window to define the sectioning area for more efficient sectioning
- Memory function for specimen positioning with XY fine orientation and wraparound waste tray to speed up preparation and clean-up
- Ergonomic removable control panel to suit user preferences
- Emergency stop, manual, and electronic brake

HM 355S fully automated microtome 905200
With E blade holder 905200A
With ER blade holder 905200ER



Histological examination continues to be the gold standard for detection, diagnosis and characterization of many clinical conditions



# Sliding Microtomes

Epredia sliding microtomes – smart choices for reliability, comfort and versatility.



## Manual

### Epredia HM 430

A manually operated microtome suitable for a range of botanical samples in addition to anatomical tissue.

- Variable stoke length to meet specimen requirements
- Accommodates specimens up to 80 mm x 60 mm
- Coaxial specimen orientation and memory function for rapid re-orientation of pre-cut blocks
- · Choice of manual or automated advance

HM 430 manual microtome	910010
<ul><li>With low-profile blade carrier</li><li>With high-profile blade carrier</li></ul>	910010L 910010H



## Fully automated

### Epredia HM 450

An automated sliding microtome with additional capability for cutting large and hard specimens.

- Choice of manual or mechanized operation
- Coaxial specimen orientation and memory function for rapid re-orientation of pre-cut blocks
- User-friendly control panel for easy operation
- Optional retraction to protect specimen

HM 450 fully automated microtome	910020
<ul><li>With low-profile blade carrier</li><li>With high-profile blade carrier</li></ul>	910020L 910020H

### Essential accessories

Epredia microtomes can be custom-configured for optimal application-specific performance.



# Epredia Cool-Cut and Section Transfer System

Discover the efficiencies of a complete sectioning solution. Simply pair one of our Epredia rotary microtomes with the Epredia Cool-Cut paraffin block cooler, and Epredia Section Transfer System. These accessories are designed to help laboratories improve quality and efficiency – two key influencers of positive patient outcomes.

The Cool-Cut provides object cooling for high-quality sectioning and process efficiency. The Section Transfer System automatically transfers section ribbons from the blade to the water bath reducing manual handling. Their compact, integrated design saves valuable bench space.

Both are designed to be used exclusively with the Epredia HM 325, HM 340E, and HM 355S rotary microtomes.



Our variety of clamps and blade holders allow users to fine-tune the performance of their microtomes to precisely match specific specimen and media types, section thicknesses and cutting styles.



### Microtome blades

Epredia high- and low-profile disposable blades deliver longevity, reliability and ribbon generation across a range of tissue types.



Austria: fishersci.at Belgium: fishersci.be Denmark: fishersci.dk Germany: fishersci.de Ireland: fishersci.ie Italy: fishersci.it Finland: fishersci.fi France: fishersci.fr Netherlands: fishersci.nl Norway: fishersci.no Portugal: fishersci.pt Spain: fishersci.cs Sweden: fishersci.se Switzerland: fishersci.ch UK: fishersci.co.uk



# Technical data/accessories





### Knife carrier systems

The knife carrier system combines outstanding stability with unsurpassed ergonomics. The reduced number of levers cannot be mixed up during operation and are usable without any tools. The levers being adjustable and usable from right and left side simplify appliance with increased operator safety. The knife carrier system offers an individual configuration for each application. With the horizontal precision guidance standard knives, tungsten carbide knives and disposable blades (low and high profile) can be used. All knife holders are equipped with a finger guard.

### Disposable blade carrier E

Clamping plate that can be moved aside for easy positioning of the blade. For high and low profi le blades.

### Disposable blade carrier ER

The blade can be moved aside without opening the blade clamping. For high and low profi le blades.

### Disposable blades SEC 35

Of high-quality steel and coated with a newly

developed, unique layer allowing best cutting results with longevity of the knife.

### Standard knife carrier N

For conventional knives, tungsten carbide knives and disposable blade holders with knife height adjustment.

### Standard knife carrier C

With central clamping plate for highest stability clamping.

### **Technical features HM 340 E**

Ergonomic design

Compact dimensions

Vertical guidance by zero-backlash and maintenance-free cross roller bearings

Electronic precision feed mechanism with stepping motor technology

Section thickness range from 0,5 up to 500 µm

Especially smooth running handwheel

One-hand quick clamp change,

Fine orientation with one-hand operation and zero positioning

Easy exchange of specimens

Specimen retraction during return travel, can be turned off

Two section thickness areas that can be pre-selected; easy switchable

Removable operating panel with full-graphic display

Indication of all relevant information such as section thickness, trim thickness, number of sections, section thickness sum, remaining travel of the specimen feed as well as time and date

Reduced number of buttons for intuitive operation

Patented and ergonomic one-knob operation of the specimen feed with variable speed adjustment

Indication of cutting parameters, can be switched over to large indication

Ergonomically optimized operating elements for non-tiring usage

Design with highest demands concerning operational safety and ergonomics

Integrated removable storage plate

### Technical specifications HM 340 E

Stepping motor micrometer mechanism

Specimen retraction during return travel: 40 µm, can be turned off

Section thickness range FINE:

0,5 µm up to 100 µm

from 0,5 ... 2  $\mu m$  in 0,5  $\mu m$ -increments from 2 ...10  $\mu m$  in 1  $\mu m$ - increments

from 10...20  $\mu$ m in 2  $\mu$ m- increments from 20...30  $\mu$ m in 5  $\mu$ m- increments

from 30...40  $\mu$ m in 10  $\mu$ m- increment from 40...100  $\mu$ m in 20  $\mu$ m- increments

Section thickness range TRIM:

5 up to 500 µm

from 5 ... 10  $\mu$ m in 5  $\mu$ m- increments from 10 ...100  $\mu$ m in 10  $\mu$ m- increments from 100...200  $\mu$ m in 20  $\mu$ m- increments from 200...500  $\mu$ m in 50  $\mu$ m- increments

Horizontal overall specimen feed 28 mm

Vertical specimen stroke 72 mm

Specimen orientation universal 8°, can be rotated 360°

Dimensions: (W x D x H): 420 x 490 x 280 mm

Weight: 28 kg

Certificates: CE: c-CSA-us

## Multipurpose microtome for routine. The integrated removable operating panel can be positioned and used either in the left or right hand side of the instrument. To increase apparator. and research

### HM 340 E Rotary Microtome

The high section stability and precision turn this instrument into an universal multi-purpose microtome for highest demands on sectioning paraffin as well as on the hard sectioning technique in biology, medicine and industry. The individual adaptability to the work flow in your specific laboratory allows the usage in wide-range

### Precise stepping motor technology

The large section thickness range from 0,5 µm up to 500 µm is practice-oriented and divided into fine sectioning and trim sectioning. With the preselection function you can switch between these two ranges by simply pressing a knob also while sectioning. The retraction function that can be turned off offers best conditions for highest section quality even with difficult specimens.

#### Zero-backlash vertical specimen movement

Two steps of 10 µm and 30 µm, ensuring a rapid and precise specimen advance to the knife and trimming of the specimen. This feature avoids the loss of biopsy material by cutting too much off the specimen by mistake.

### Ergonomic coarse feed operation

The patented one-knob operation of the specimen feed represents another HM 340 E innovation on microtomy and can intuitively be comprehended. It allows the specific and secure approach of the specimen towards the knife with variable speed at a reduced expenditure of time. Due to the precise adjustable approach speed, the danger of damaging a specimen by an incorrect approach process can almost be excluded.

## Specimen fine orientation with quick change function

- The specimen fine orientation allows a precise alignment of the specimen in horizontal (X-) and vertical (Y-) direction with O-positioning.
- Equipped with a snap-in function, the parallel alignment towards the cutting surface is easy and fast.

• The operating knobs on the left side allow an ergonomic one-hand operation resulting in an easy accessibility.

### Integrated operating panel

- either in the left or right hand side of the instrument. To increase operator safety all operating knobs can be used with one hand and are accessible without encompassing. The operating knobs can also be replaced from left to right side and vice versa. The large graphical display shows all relevant information such as number of sections, section thickness sum, remain travel of specimen feed, date, and time. Alternately the current section thickness can be shown as large figure. Additional settings can be made in the menusScientific Microm Cool-Cut.
- All clamping devices can easily and fast be replaced by loosening one lever only.
- The especially flat design guarantees favourable leverages to avoid artifacts, especially when high cutting forces are applied.

### Constant sections

The specimen approach via stepping motor provides an optimum on section quality and reproducibility.

### Memory positioning

Storing a cutting position allows the fast movement to this position after having changed the specimen. Pressing one button, specimen moves into the cutting position.

### Handwheel brake

The handwheel can be locked in any position and guarantees a safe specimens exchange.

## Ergonomic design with unique section waste tray

The outstanding ergonomics in the daily routine is shown in the pa-tented, well-shaped knife carrier insertion. The entire working area both behind and below the knife carrier is covered by a spacious removable section waste tray, which is very easy and fast to clean. The front area of the section waste tray is designed as an arm rest.

