Microtomy superior sectioning results

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# 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 (HM355S only)

#### **The Total Solution**

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





### Microtome Range and Selection Guide

Epredia					
Microtome Features	HM 355S	HM 340E	HM 325	HM 450	HM 430
Rotary	$\checkmark$	$\checkmark$	$\checkmark$		
Sliding				$\checkmark$	$\checkmark$
Cross-roller bearing vertical guide-ways	$\checkmark$	$\checkmark$	$\checkmark$		
Specimen trimming	$\checkmark$	<b>V</b>	$\checkmark$	$\checkmark$	
Selectable specimen retraction	$\checkmark$	<b>V</b>	$\checkmark$	<b>V</b>	
Detachable operation panel	$\checkmark$	$\checkmark$			
Manual coarse advance			$\checkmark$		$\checkmark$
Electronic coarse advance	$\checkmark$	$\checkmark$		$\checkmark$	
Stepping motor technology	$\checkmark$	$\checkmark$		$\checkmark$	
Section thickness	0.5-100 µm	0.5-100 µm	0.5-60 µm	0.5-100 μm	0.5-60 µm
Trim thickness	5-500 µm	5-500 mm		5-500 µm	
Electronic sectioning	$\checkmark$				
Handwheel locks in any position	$\checkmark$	$\checkmark$	$\checkmark$		
Integrated waste tray	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
"Rocking" mode	$\checkmark$		$\checkmark$		
Macro / SuperMega capability	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Compatible with Cool-Cut	$\checkmark$	$\checkmark$	$\checkmark$		
Compatible with Epredia™ Section Transfer System (STS™)	$\checkmark$	$\checkmark$	$\checkmark$		
Resin cutting capability	$\checkmark$				

### Microtome Total Care

#### **Microtome Consumables and Accessories**

Epredia microtomy consumables are created specifically for use with your Epredia automatic or manual microtome. Blades are designed to section many different tissue types from soft tissue to biopsies and re-cuts. The Cool-Cut and Section Transfer System aid in transferring thin and fragile tissue sections to our wide variety of glass microscope slides, protecting precious tissue samples.

#### **Microtome Service**

Your laboratory is a busy place that performs many important tasks – extended service contracts keep you up and running. Yearly preventative maintenance gives you peace of mind that your instrument is performing to the the best of its abilites. Have confidence that if your microtome from Epredia needs service or repair, your instrument repairs will be expedited, ensuring minimal downtime in your laboratory.



**Physical Specifications** 

Dimensions (D x W x H): 20.5 x 16.1 x 11 in. (52 x 41 x 28 cm)

Weight: 68.3 lbs / 31 kg

Horizontal feed range: 28 mm Cutting stroke: 72 mm Sectioning speed: 0-450 mm/s Section thickness range: 0.5-100 µm Trim thickness range: 5-500 mm Retraction: 40 µm

Power requirements: 100-240 V, 50/60 Hz, 1.6A

Includes

Standard tools, brushed aluminum cover plate, dust cover, instruction manual

### Rotary Microtome HM 355S

#### **Reproducible Quality**

- X/Y fine orientation with reproducible zero positioning
- Memory function for specimen positioning
- Control panel featuring multi-function keypad and knobs allows for easy selection of section thickness, sectioning mode, speed control, memory function, and menu options.

#### **Operator Safety**

- Safe, ergonomic, and intuitive fully automated rotary microtome
- Motorized sectioning can be operated via speed/start-stop knob, start-stop button, or optional foot pedal
- Prevention of accidental start by double-click operation and automatic brake following motorized action
- Ergonomic, removable control panel can be located on either side of the microtome
- Easily accessible emergency stop button

#### **Added Convenience**

Description

HM 355S unit only

- Easily switch between thickness settings for trim and section/fine
- Rocking mode allows the handwheel to be "rocked" into a forward position allowing advancement of the specimen without a complete rotation of the handwheel
- Four motorized modes of operation (single section, interval, multi-section, and continuous)

**Order Number** 

905200

905200A

905200ER

• Large, removable section waste tray covers the entire working area



### You'll need:

With Universal Cassette Clamp and E blade holder

With Universal Cassette Clamp and ER blade holder



### Rotary Microtome HM 340E

#### **Stability and Speedy Preparation**

- Highly stable blade holder platform yields high-quality ribbons, even for difficult to cut paraffin sections
- Ergonomic removable control panel can be located on either side of the microtome
- Control panel featuring multi-function keypad and knobs allows for easy selection of section thickness, sectioning mode, speed control, memory function, and menu options.
- Easily switch between thickness settings for trim and fine sectioning
- Memory function for section positioning
- X/Y fine orientation with reproducible zero positioning
- Rocking mode allows the handwheel to be "rocked" into a forward position allowing advancement of the specimen without a complete rotation of the handwheel
- Motorized specimen advance
- Specimen retraction (can be deactivated)
- Longest stroke length available (72 mm) allows high-quality sections of Macro / SuperMega cassettes
- Large, removable section waste tray covers the entire working area

#### **Physical Specifications**

Dimensions (D x W x H): 20.5 x 16.1 x 11 in. (52 x 41 x 28 cm)

Weight: 61.7 lbs / 28 kg

Horizontal feed range: 28 mm Section thickness range: 0.5-100 µm Trim thickness range: 5-500 mm Retraction: 40 µm

Power requirements: 100-240 V, 50/60 Hz

Includes

Standard tools, brushed aluminum cover plate, dust cover, and operator guide

Description	Order Number
HM 340E unit only	905190
With Universal Cassette Clamp and E blade holder	905190A
With Universal Cassette Clamp and ER blade carrier	905190ER

#### You'll need:





### Rotary Microtome HM 325

#### **Trusted Performance, Added Efficiencies**

- High stability and precision for premium-quality paraffin sections
- Unique section thickness setting with removable knobs allowing operation with both the right and left hands
- Resettable electronic section counter
- $\bullet\,$  Two quick-trim stages (10  $\mu m$  and 30  $\mu m)$  independent from the preset fine section thickness
- X/Y fine orientation with reproducible zero positioning
- Manual coarse feed wheel
- Specimen retraction (can be deactivated)
- Long stroke length (64 mm) allows high quality sections of Macro / SuperMega cassettes
- Large, removable section waste tray covers the entire working area

#### Physical Specifications

Dimensions (D x W x H): 19 x 16.5 x 11 in. (49 x 42 x 28 cm)

Weight: 51 lbs / 23 kg

Horizontal feed range: 28 mm Section thickness range: 0.5-60 µm Mechanical trim stages: 10/30 µm Retraction: 60 µm

#### Includes

Standard tools, brushed aluminum cover plate, dust cover, and operator guide

Description	Order Number
HM 325 unit only	902100
With Universal Cassette Clamp and E blade holder	902100A
With Universal Cassette Clamp and ER blade carrier	902100ER

#### You'll need:





#### **Physical Specifications**

Dimensions ( $D \times W \times H$ ): 18.1 x 14.6 x 12.6 in. (46 x 37 x 32 cm)

Weight: 50.7 lbs / 23 kg

Accommodates specimens up to 80 x 60 mm Section thickness feed: 0.5-100 µm Trimming thickness: 10-500 µm Vertical feed range: 40 mm (max) Horizontal knife stroke: 190 mm (max)

Power requirements: 100-240 V, 50-60 HZ, 0.5A

Dust cover and operator guide

## Sliding Microtome HM 450

#### **Outcome Driven**

- Selectable specimen retraction
- Motorized coarse feed with three different speed settings
- Automatic or manual specimen advance during sectioning can be selected depending upon user preference
- X/Y fine orientation with reproducible zero positioning

#### Ease-of-Use

- Integrated knife holder glides along a maintenance-free, precision, crossroller bearing system ensuring fast, comfortable operation
- Ergonomic handle for moving knife holder
- User-friendly control panel allows for easy setting of sectioning parameters
- Incorporates stepping motor technology to ensure precise, accurate specimen advancement
- Trimming function allows for precision block trimming prior to the sectioning function
- Display shows feed (section) / trim thicknesses, feed mode and retraction status, as well as choice of section counter, step sum, or remaining travel.
- Integrated, removable waste tray
- Knife holder with integrated, movable knife guard
- Inserts available for the use of low-and high-profile disposable blades

Description	Order Number	You'll nee
HM 450 unit only	910020	
With low-profile blade insert and 5 x 80 specimen clamp	910020L	
With high-profile blade insert and 5 x 80 specimen clamp	910020H	

d:





### Sliding Microtome HM 430

#### **Versatility meets Accuracy**

- Selection of the stroke length depending on the size of the specimen
- Coaxial specimen orientation and memory function for rapid re-orientation of pre-cut blocks
- Integrated blade holder glides along a maintenance-free, precision, cross-roller bearing system
- Easy knob turn selects manual or automatic advance
- Integrated removable waste tray
- X/Y fine orientation with reproducible zero positioning
- Blade holder with integrated, movable blade guard
- Ergonomic handle for moving blade holder

#### Physical Specifications

Dimensions (D x W x H): 19.3 x 14.2 x 12.6 in. (49 x 36 x 32 cm)

Weight: 50.7 lbs / 23 kg

Accommodates specimens up to 80 x 60 mm Section thickness feed: 0.5-60 µm Vertical feed range: 40 mm (max) Horizontal knife stroke: 190 mm (max)

Includes

Dust cover and operator guide

Description	Order Number
HM 430 unit only	910010
With low-profile blade holder and 5 x 80 specimen clamp	910010L
With high-profile blade holder and 5 x 80 specimen clamp	910010H

#### You'll need:



### **Blade Holders**





#### E Disposable Blade Holders for HM 355S, HM 340E, and HM 325

- With quick clamp system for high-and low-profile blades, clearance angle adjustment
- Movable blade guard with scale covers the entire blade in any position

#### ER Disposable Blade Holders for HM 355S, HM 340E, and HM 325

- With quick clamp system for high- and low-profile blades, clearance angle adjustment
- Clamping plate moves laterally to move the blade without needing to unclamp
- Used for cutting Macro / SuperMega cassettes (vertically)
- Movable blade guard covers the entire blade in any position
- Removable cutting angle adjustment lever

#### Standard Solid Knife Carrier N for HM 355S, HM 340E, HM 325

- With integrated blade guard and clearance angle adjustment
- Blade height can be adjusted by means of a guidance bar
- Removable cutting angle set lever

#### Standard Solid Knife Carrier C for HM 355S, HM 340E, HM 325

- Stable version for use with tungsten carbide and conventional blades
- Central clamping plate provides optimal stability where the cutting forces are highest
- Allows full use of the entire blade edge and clearance angle adjustment
- · Removable cutting angle set lever

Description	Order Number
E disposable blade holders for HM 355S, HM 340E, HM 325	705800
ER disposable blade holders for HM 355S, HM 340E, HM 325	705830
Standard solid knife carrier N for HM 355S, HM 340E, HM 325	705820
Solid knife carrier C for HM 355S, HM 340E, HM 325	705810

### Disposable Blades for Microtomes

### Low-Profile Blades



#### MX35 Ultra<sup>™</sup> Low-Profile Blade

All-around excellent low-profile blade for all types of tissue sectioning and increased blade life.

3053835 | Blade angle: 34° | 50 / pack



#### MX35 Premier +<sup>™</sup> Low-Profile Blade

Blade designed for sectioning hard tissue and high-quality thin sections.

3052835 | Blade angle: 34° | 50 / pack



#### MX35 Premier<sup>™</sup> Low-Profile Blade

Excellent blade for routine application with higher proportion of harder tissue.

3051835 | Blade angle: 34° | 50 / pack



### MB35<sup>™</sup> Premier Low-Profile Blade

Best for routine sectioning applications.

3050835 | Blade angle: 34° | 50 / pack



#### MB22 Premier<sup>™</sup> Low-Profile Blade

Blade designed with a steeper angle, allowing users to accurately cut thinner sections faster. Excellent for renal biopsies and lymph nodes.

3050822 | Blade angle: 22° | 50 / pack

### High-Profile Blades



#### HP35 Ultra<sup>™</sup> High-Profile Blade

All-around excellent high-profile blade for all types of tissue sectioning and increased blade life.

3153735 | Blade angle: 34° | 50 / pack



#### HP35<sup>™</sup> High-Profile Blade

Blade designed for high-quality thin sectioning.

3150734 | Blade angle: 34° | 50 / pack



#### HP35N Ultra<sup>™</sup> High-Profile Blade

Sections all types of tissue for quality thin tissue sections. No PTFE coating.

3151735 | Blade angle: 34° | 50 / pack

Blade Type		Low-Profile Blades			High-Profile Blades			
Description	MX35 Ultra	MX35 Premier +	MX35 Premier	MB35 Premier	MB22 Premier	HP35 Ultra	HP35	HP35N Ultra
Order number	3053835	3052835	3051835	3050835	3050822	3153735	3150734	3151735
Edge angle	34°	34°	34°	34°	22°	34°	34°	34°
Cryostat	Best	Good	Good	Good	Best	Best		Good
Soft tissue	Best	Good	Good	Good	Good	Best	Good	Good
Hard tissue	Best	Best	Good	Good		Best		Good
Thin sectioning	Best	Good	Good	Good	Best	Best	Best	Good
Biopsies and recuts	Best	Good	Best	Good		Best		Good

#### Richard Allan Scientific<sup>™</sup> Edge-Rite<sup>™</sup> Disposable Microtome Blades

Made of surgical-grade steel, low- and high-profile blades are specially coated to increase longevity and optimize section quality.

#### **Low Profile Blades**

- Low-profile blades are 20% thicker than traditional blades to increase knife edge stability, which allows for excellent ribboning and facilitates usage in cryostats
- Blades are 5% longer, allowing for more sections per blade
- Fits any low-profile blade holder

Low-Profile (4280L) | High-Profile (4275H) | 50 / pack



#### **Shandon Premium Disposable Microtome Blades**

Shandon premium standard high-profile disposable blades are available in heavyduty and PTFE-coated styles.

Premium High-Profile (1001259) 50/pack

Premium High Profile with PTFE-coating (1001593) | 50 / pack

### **Knives and Blades**



#### **Reusable Steel Knives**

Epredia Reusable Steel Knives can be used with microtomes or cryostats when the technical application dictates that requirement.

- C-profile knives are used for standard paraffin and cryo-techniques
- D-profile knives are used for sectioning of harder materials that require greater knife stability
- Tungsten carbide knives are used for strength and durability in sectioning of very hard samples or resin embedded samples
- Appropriate knife case(s) may be ordered with the knife or knives; each case holds two knives

Accesories	Order Number
Steel C-profile knife 16 cm	152020
D-profile tungsten carbide tip 16 cm	152120



### Cool–Cut and Section Transfer System

Simplify your workflow at the microtome with two specially designed accessories which integrate seamlessly with the HM 355S, HM 340E and HM 325 rotary microtomes.

#### **Cool-Cut**

- Maintains a cool, consistent temperature for paraffin blocks reducing the need to repeatedly ice down blocks
- Particularly effective during extended cutting sessions for "step sections" or "serial sections"
- Peltier device fits directly onto the specimen cylinder of the microtome and can be equipped with a universal cassette clamp or a standard specimen clamp

Description	Order Number
Cool-Cut with universal cassette clamp	771110
Cool-Cut with standard clamp	771120

#### Cool-Cut Physical Specifications

Dimensions (D x W x H): 3.74 x 2.36 x 7.1 in. (9.5 x 6 x 18 cm)

Weight: 1.54 lbs / 700 g

Power requirements: 100-240 V, 50-60 HZ, 0.6A

#### Includes:

Peltier device with integrated specimen clamp, counter-balance weights and power supply.

Section Transfer System Physical Specifications

#### Includes:

Control unit, water bath with lid, section transfer unit, disposable blade holder and cables.

#### Section Transfer System

- Adjustable, laminar water flow rate produces more usable sections per block
- Selectable water temperature from ambient temperature up to 50 °C
- Illuminated, aluminum water bath enhances section visibility
- The common manual transfer of the sections into a water bath is no longer necessary

Description	Order Number
Section Transfer System with bar guide-way	771200

For more information on Epredia's full range of microtome accessories, please contact your Epredia representative.

### **Microscope Slides**

Our microscope slides are made from fine white glass, manufactured to high quality standards in our Swiss glass manufacturing plant. The clarity achieved by our manufacturing process helps ensure high levels of transparency to aid in accurate diagnosis. Our skilled glassmakers strive to create slides with lot-to-lot and box-to-box consistency. Fully integrated quality controls include several checkpoints for testing, ensuring high quality product for laboratory use. All slides are pre-cleaned, thin, flat, and feature finely ground edges. Each pack is wrapped to protect against humidity and moisture.

#### **Plain Slides**

- Slide surface is completely plain without a frosted or printed tab
- Manufactured to the highest quality standards for use in hematology, microbiology, urinalysis, as well as other applications.

#### Superfrost and Colorfrost Slides

- Superfrost and Colorfrost<sup>™</sup> Slides feature a durable, easy to write, print and label printed tab
- Printed tab is impervious to virtually all common laboratory chemicals and reagents
- Available in a wide variety of colors to ease identification

#### **Specialty Printed Slides**

- · Localize cells in an easily-identifiable area on the slide surface
- Wells are surrounded by a chemical and water-resistant hydrophobic ink mask
- Available in 1, 3, 8, 10, and 12-well configurations

#### **Polysine Adhesion Slides**

- Adhesive coating attracts paraffin-embedded sections to slide surface
- Polysine slides are coated with a derivative of the chemistry for poly-I-lysine
- Feature a durable, easy to write, print, and read printed white tab
- Printed white tab is impervious to virtually all common laboratory chemicals and reagents

#### Superfrost Excell Adhesion slides

- Superfrost Excell adhesion slides feature a unique chemistry with strong adhesion properties
- Useful in applications involving high pH Heat Induced Epitope Retreival (HIER)
- Feature a durable, easy to write, print and read printed white tab
- Printed tab is impervious to virtually all common laboratory chemicals and reagents

#### **Superfrost Plus Gold Adhesion Slides**

- Superfrost Plus Gold Adhesion Slides are made with a complex adhesive technology which attracts and chemically bonds fresh or formalin-fixed frozen tissue sections firmly to the surface of the slide
- Recommended for hard-to-hold tissue samples like bone, brain, breast and skin
- Feature a durable, easy to write, print and read printed white tab
- Printed tab is impervious to virtually all common laboratory chemicals and reagents

#### SuperFrost Plus and ColorFrost Plus Adhesion Slides

- SuperFrost<sup>™</sup> Plus and Colorfrost Plus adhesion slides are designed to secure tissue sections without the need for laboratory-applied coatings
- Slides secure frozen and formalin-fixed, paraffin embedded tissue sections as well as cytology preparations.
- Each slide features a chemistry based on silane, although optimized to improve application performance
- Feature a durable, easy to write, print, and read printed tab
- Printed tab is impervious to virtually all common laboratory chemicals and reagents
- Available in a wide variety of colors to ease identification



### Paraffin Repellent

#### Parapel<sup>™</sup> Paraffin Repellent

Protect against excess buildup of wax on countertops and instrumentation.

50 mL | 12 / case

Description	Quantity	Order Number
Parapel paraffin repellent 50 mL	ea.	2300TS

### **Freezing Sprays**



#### Richard-Allan Scientific<sup>™</sup> Cytocool<sup>™</sup> II Freezing Spray

Used to "flash-freeze" tissue specimens during microtomy.

- Does not contain ozone-depleting CFCs
- Simply vary finger pressure on the trigger nozzle to control tissue freezing; helps to prevent over-cooling of specimen
- Integral trigger nozzle eliminates need to attach separate handle to each can, making Cytocool II freezing spray less bulky and more comfortable to hold during use

11 oz (325 mL) | 12 / case

#### Ice-It<sup>™</sup> Rapid Freezing Spray

Ozone-friendly freezing spray for use during microtomy.

- Comfortable trigger nozzle makes dispensing easy to control
- Attachable capillary nozzle enables spot freezing
- Contains 1, 1, 1, 2 Tetrafluoroethane

11 oz (325 mL) | 12 / case



#### Shandon<sup>™</sup> Envi-Ro-Tech<sup>™</sup> Freezing Spray

Freezing spray for use during microtomy.

• Ozone friendly

234 mL

Quantity	Order Number
12 / case	8323
12 / case	8325
ea.	6769038
	12 / case 12 / case

Not available for purchase in EU or Canada