

# Microscope Slides



## Shandon Colorfrost® Slides

- Available in a wide variety of colors for easy identification.
- Resistant to commonly used laboratory solvents.
- 1.0 - 1.2 mm thick with ground edges.

## Shandon Colorfrost® Plus Slides

- Positively-charged microscope slides give improved cellular adhesion.
- Electrostatically attracts tissue sections and cytology preparations, binding them to the slide.
- Eliminates the need for special adhesives or protein coatings.

## Shandon Colormark® Slides



COLORMARK Slides are designed for the Shandon MicroWriter™ Slide Labeler. A contrasting color is printed on the back of the Colorfrost end so that patient or specimen information etched through the painted end on the front is clearly visible. These slides are also available with positively-charged Colorfrost Plus adhesion coating for better specimen mounting.

For Complete  
Microscope Slide  
Ordering Information  
See Anatomical Pathology  
Product Catalog.

# Technical Services

Rest easy with Thermo Fisher Scientific Service.



Downtime  
equals  
wasted  
time.

**At Thermo Fisher Scientific Anatomical Pathology, we understand the importance of maintaining an efficient laboratory and happy technicians. No matter what your service requirements are, Thermo Fisher has a solution that can keep you working at peak efficiency.**

- Flexible programs to meet your workflow and laboratory needs.
- Our factory-trained technicians are conveniently located throughout the country and have years of experience servicing our equipment.
- Only original factory parts are used for repairs and maintenance.
- We provide 24/7/365 phone support (U.S. only).
- Technical hotline service available.

All equipment is provided with a one year parts and labor manufacturer's warranty (Bronze Plan) that includes one Preventative Maintenance. Additional programs can be purchased at the time of purchase of the instrument or prior to the expiration of the Bronze Plan.

### Our Platinum Plan\* (One year term)

- Covers replacement parts necessary for repairs
- Covers cost of repair and travel labor
- Repairs performed either on-site or at Thermo Fisher Scientific
- Includes one annual preventative maintenance (PM)
- If requested, loaner instrumentation will be provided at no charge if the instrument cannot be repaired within five days of notification
- All shipping charges are covered for the instrument when applicable
- Guaranteed turn-around time of 24 hours on repairs

### Our Gold Plan\* (One year term)

- Covers replacement parts necessary for repairs
- Covers cost of repair and travel labor
- Repairs performed either on-site or at Thermo Fisher Scientific
- Includes one annual preventative maintenance (PM)
- If requested, loaner instrumentation will be provided at no charge if the instrument cannot be repaired within five days of notification
- All shipping charges are covered for the instrument when applicable

### Our Silver Plan\* (One year term)

- Covers replacement parts necessary for repairs
- Covers cost of repair and travel labor
- Repairs performed either on-site or at Thermo Fisher Scientific
- All shipping charges are covered for the instrument when applicable

\* Product Support Agreements vary in different countries.

## Shandon Cryotome® Cryostat Series



Shandon Cryotome FSE  
Shandon Cryotome FE  
Shandon Cryotome SME

# Shandon Cryotome® FE and FSE

Designed with your needs in mind.



The 5th generation of Shandon Cryotomes are precision engineered, ergonomic instruments designed to meet the needs of all clinical settings, producing high quality frozen sections with less fatigue. The spacious chamber, colored cryocassettes, and superior knife holder design assist the user in producing excellent frozen sections that are easily obtained and quickly identifiable.

- Adapts to multiple users and samples.
- Rapid temperature response reduces turn-around time.
- Built-in operator comfort.
- Reliability and safety provide added peace-of-mind.

## Ease of Use: Adapts to User Expertise

- **Microtome outside the cryochamber** makes it easier and quicker to clean.
- **Simple, intuitive, multi-lingual, touch-screen display** for easy instrument operation.
- **Complete temperature controls** on the main touch-screen display.
- **Color-coded levers and graphics** make knifeholder adjustments obvious.
- Angle of clamp plate **enables easy specimen pick-up**.
- **Easy to use anti-roll plate** (glass or plastic).

## Peace of Mind

- **Dual compressor system** ensures specimen integrity by keeping specimens frozen if the cryobar fails.
- **Remote Alarm** alerts user in case of system failure.
- **Multi-level security code protection** prevents unauthorized access and protocol alterations to the Cryotome.



**NEW BLADE HOLDER:**  
Lateral movement of blade holder eliminates need to unclamp and re-clamp blade.  
Maximizes blade usage.  
Color coded levers identify lever functions.

## Faster Specimen Turn-Around Time

- **Microtome outside the cryochamber** allows faster temperature adjustment.
- **Cryobar with adjustable temperature controls and dedicated cryobar refrigeration system** (0° C to -55° C or colder with the boost feature) rapidly cools specimen to help prevent freezing artifact.
- **Specimen holder temperature control (FSE only)** allows for enhanced sectioning of a variety of tissue types.
- **Shandon Cryotome® cools rapidly** from ambient to set temperature in as little as 2 hours.
- **Easy removal of frozen specimen from the cryocassette** with the "Quick-heated" specimen release feature.

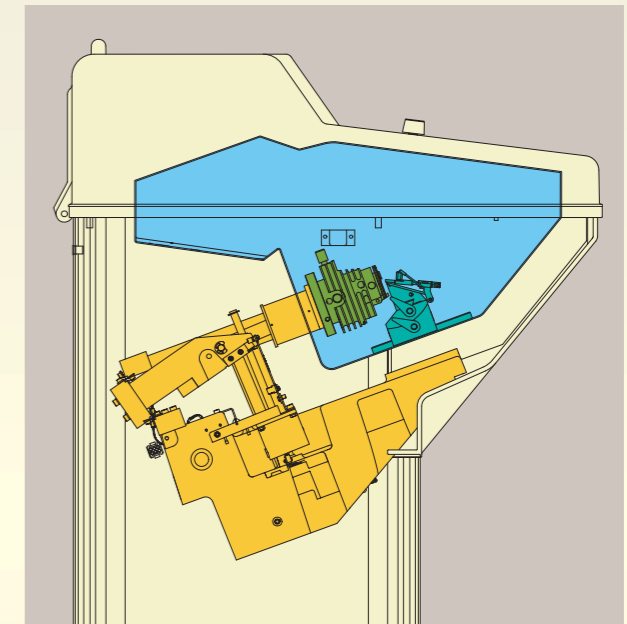
## Safety and Security

- **Microtome outside the chamber** allows easy decontamination and cleaning.
- **Positive-locking flywheel** prevents injury while working around blade and specimen.
- **CFC-free refrigerant and foam insulation.**
- **Automated fumigation cycle** to disinfect the cryochamber.

**MICROTOME OUTSIDE OF CRYOCHAMBER:**  
Allows for easy decontamination and cleaning. Faster temperature adjustment.

## Ergonomics

- **The three-level adjustable footrest** provides greater comfort and helps reduce fatigue whether sitting or standing.
- **The rounded exterior edges, the raised cutting area, and the footrest** provide comfort while sectioning by eliminating back strain and fatigue.
- **Various sized shelves** allow the user to arrange working layout inside the chamber to suit their individual needs.



**SPACIOUS CRYOCHAMBER AND COLOR-CODED CRYOCASSETTES:**  
Facilitates easy patient / specimen identification.



# Shandon Cryotome® Cryocassettes

Cryocassettes for the Shandon Cryotome FSE / FE / SME cryostats.

## Shandon Cryotome® FSE / FE Cryostat Series Specifications

Description		Order Number
Shandon Cryotome FE	230V, 50Hz	A78900001
Shandon Cryotome FE	115V, 60Hz	A78900002
Shandon Cryotome FSE	230V, 50Hz	A78900003
Shandon Cryotome FSE	115V, 60Hz	A78900004

### Physical Specifications

#### Dimensions (H x W x D)

49.2" x 27.8" (+ 5" for handle) x 29.3" (125 max. x 70.5 (+ 12.5 cm) x 74.5 cm)

WORKING HEIGHT: 41" (105 cm) max.

CHAMBER ACCESS WIDTH: 19.7" (50 cm) min.

#### Weight

275.6 lbs. (125 kg)

#### Power Requirements

1800VA (220-240 Vac); 6,147 BTU/Hr

1800VA (110-120 Vac); 6,147 BTU/Hr

#### Microtome

Section Thickness Adjustment 1 to 20µm in 1µm increments

20 to 60µm in 5µm increments

Total horizontal specimen advance 25mm

Cutting Stroke 57mm

Trim wheel 8µm indents

Motorized Coarse Advance 1mm/sec

Specimen Retraction Standard

#### Refrigeration

Cryochamber 0°C to -35°C

Cryobar 0°C to -55°C or colder

(with boost facility)

Specimen Head (FSE only): 0°C to -45°C (within +/- 10°C of

chamber temperature)

### Included with Cryotome

Specimen Head (FSE) - X-Y Orientation head with specimen temperature control

Specimen Head (FE) - X-Y Orientation head without specimen temperature control

Cryocassettes - Variety of sizes and styles

Cryobar with cryocassette identifier – 6 positions, 6 heat sink block

positions (variable weights), and plastic cover (stops excessive frost build up)

Footrest - adjustable to 3 positions

Lockable Heated Window

Heat Extractors (one each standard weight, half-weight, and double weight)

Specimen and Tool Storage Shelves

Debris Tray and Brush

Touch Screen Display

Operator Manual (Specify Language) A78910100

**Specify Knife Holder at the time of order. SEE PAGE 9.**

\* Contents, Packaging, and Quantities of Items listed under "Included with Product" are subject to change without prior notice.

### Available Accessories

Low Profile Disposable Blade Holder See Page 9

High Profile Disposable Blade Holder See Page 9

Universal Blade Holder See Page 9

Glass Anti-roll Plate A78930200

Plastic (perspex) Anti-roll Plate A78910075

XY orientation head [FE only] A78910016

Cryobar Cassette Identification Label - 4/pk. A78910054

Cryobar Cover A78910041

Cryocassette - 40mm diameter crosshatched - 6/Pk. A78910031

(multi-colored)

Shandon Cryocassette, 25 mm annular, 4 / Pk. (with handle) 77210150

Shandon Cryocassette, 35 mm annular, 4 / Pk. (with handle) 77210151

Shandon Cryocassette, 45 mm annular, 4 / Pk. (with handle) 77210152

Shandon Cryocassette, 9.5 mm annular, 4 / Pk. (with handle) 77210153

Cryocassette - 40mm diameter annular - 4/Pk. (not shown) A78910055

Cryocassette - 25 mm diameter crosshatched - 4/Pk. A78910056

Cryocassette - 28 x 40mm crosshatched - 4/Pk. A78910057

Handle - 4/Pk. A78910058

Debris tray A78910039

Heat Extractor - Standard A78910014

Heat Extractor - Half-weight A78910036

Heat Extractor - Double-weight A78910037

Tool Shelf - 60 mm width A78930121

Narrow Shelf - 56 mm width A78930166

Wide Shelf - 80 mm width A78930063

Wide Brush (Debris) P12257

Narrow Brush (Sections) P12940

#4 Camel Hair Brush (see page 12) 1910

Shandon Cryotome FSE Gold Service Plan (see page 16) A78900004C

Shandon Cryotome FSE Bronze Service Plan (see page 16) A78900004CPM

Shandon Cryotome FE Gold Service Plan (see page 16) A78900002C

Shandon Cryotome FE Bronze Service Plan (see page 16) A78900002CPM

### Agency Approvals

Designed to meet IEC 61010, CSA, UL, and CE Mark (IVDD compliant).



A78910031 40 mm Cross-hatch Multi-colored 6 / Pk.



77210150\*

Annular  
25 mm  
4 / Pk.



77210151\*

Annular  
35 mm  
4 / Pk.



77210152\*

Annular  
45 mm  
4 / Pk.



77210153\*

Annular  
9.5 mm  
4 / Pk.



A78910057

28 x 40 mm  
Cross-hatch  
4 / Pk.



A78910056

25 mm  
Cross-hatch  
4 / Pk.



\* One each supplied in Variety Pack 77210154.

#### NOTE:

Shandon Cryotome FSE / SME has specimen holder components pre-mounted in cryochamber (cryocassette clamp, XY orienting head, and peltier). These components are replaceable only through Thermo Electron Corp., Anatomical Pathology Service Department. Call for details.



A78910058

Cryocassette  
Handle  
4 / Pk.



SHANDON CRYOTOME FSE / FE / SME BLADE HOLDERS

Specify at the time of order.

SEE PAGE 9 for detailed ordering information.

Shandon Cryotome E Cryocassettes and Accessories – see Anatomical Pathology Product Catalog for complete ordering information.

## Suggested Cutting Temperatures for Frozen Tissue

Tissue Type	Chamber Temperature (°C)
<b>UNFIXED TISSUE</b>	
Brain	-12°
Liver	-14°
Lymph Nodes	-14°
Kidney	-16°
Spleen	-16°
Muscle	-20°
Thyroid	-20°
Skin	-25°
Breast	-25°
Breast with Fat	-30° or below
Adipose Tissue	-30° or below
<b>FIXED TISSUE</b>	
	-12° to -17°

# Shandon Cryotome<sup>®</sup> SME Cryostat

Fully automated cryostat.



## Safety

- Features **formaldehyde fumigation for the cryochamber** – a method proven effective against tuberculosis and many other known pathogens.
- Fumigation and defrost **may be activated instantly or programmed to delay.**
- The **cryochamber window automatically locks** during formaldehyde fumigation.
- **Waste fluids drain efficiently** into easy-access collection jar.
- **Positive-locking flywheel** with 3-position lock.
- **Locking, frost-free window** places a barrier between the operator and the specimen.
- Features an **emergency stop button.**

## Peltier Controls

- **Peltier-controlled cold spot** on the Cryobar aids quick-freezing to  $-60^{\circ}\text{C}$ , reducing ice crystal artifact formation.
- **Peltier-controlled specimen head** to  $\pm 10^{\circ}\text{C}$  of chamber temperature.

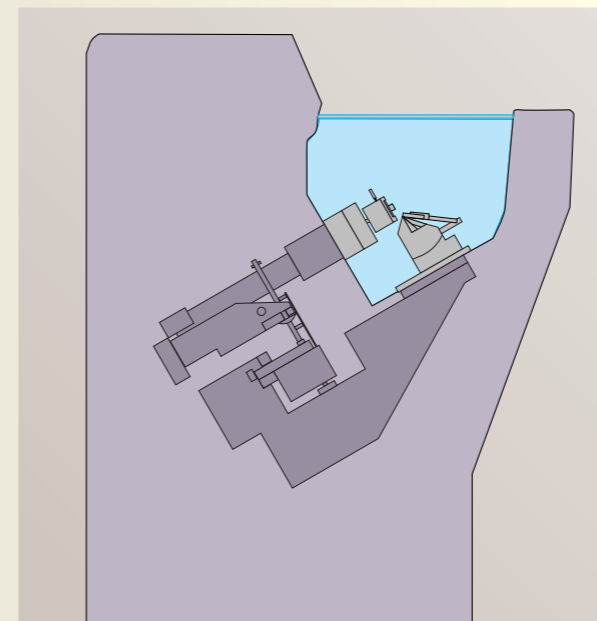
## Spacious Cryochamber

- Cryochamber temperature to  $-30^{\circ}\text{C}$ .
- Operator controls microtome movement **from outside of cryochamber.**
- **Open-top design** minimizes temperature gain during prolonged use.
- **Well-illuminated, stainless steel chamber.**
- **CFC-free refrigerant** and foam insulation.
- **Accessories in the cryochamber are removable** for easy cleaning and disinfecting of the chamber.
- **Automatic programmable defrost.**
- **Automatic programmable formaldehyde fumigation.**



## Microtome Features

- **Microtome is housed outside the cryochamber** for easy cleaning and maintenance.
- **Precision microtome** has a light, balanced feel over the complete travel range.
- Shandon Cryotome SME features **ACCU-FEED system with 25,000  $\mu\text{m}$  advance** that may be set at 1-20 $\mu\text{m}$  intervals in 1  $\mu\text{m}$  increments and 20-60 $\mu\text{m}$  intervals at 5 $\mu\text{m}$  increments
- **360 $^{\circ}$  specimen orientation capability.**



## Control Panel

- Shandon Cryotome SME cryostat features **microprocessor-based, touch-key controls** with specimen travel graphic indicator, clear digital displays of cryochamber and cryobar temperatures.



## Accessories

- Select from universal blade holder, high-profile disposable blade holder, or low-profile disposable blade holder.
- High and low-profile blade holder includes an easy-to-use, **glass anti-roll plate.**
- Universal blade holder includes a **plastic anti-roll plate.**
- **XY orientation head** is standard.

## Shandon Cryotome<sup>®</sup> SME Cryostat Series Specifications

Description	Order Number
Shandon Cryotome SME 110-120V, 60Hz	77200002
Shandon Cryotome SME 220-240V, 50Hz	77200001

German and French keyboards are available. Contact your sales representative for details.

## Physical Specifications

### Dimensions (H x W x D)

42.5" x 26" x 25.5" (107 x 66 x 64 cm)

### Weight

330 lbs. (150 kg)

### Power Requirements

1400VA (220-240 Vac)

1700VA (110-120 Vac)

## Included with Shandon Cryotome SME\* Order Number

XY Orientation head with specimen temperature control	Included
Debris Tray	0620-004
Storage Shelf	0620-002
Shandon Cryocassette, 35 mm annular, 4 / Pk. (with handle)	77210151
Shandon Cryocassette, variety pack	77210154
1 ea. 10, 25, 25, 45 mm annular with 2 handles	
Footswitch	77220533
Operator Manual (specify language)	77210160
Service Record Book	A77210167

\* Contents, Packaging, and Quantities of Items listed under "Included with Product" are subject to change without prior notice.

## Available Accessories for Shandon Cryotome SME Order Number

Shandon Low Profile Disposable Blade Holder	See Page 9
Shandon High Profile Disposable Blade Holder	See Page 9
Shandon Universal Blade Holder	See Page 9
Cryocassette - 40mm diameter crosshatched - 6/Pk. (multi-colored)	A78910031
Shandon Cryocassette, 25 mm annular, 4 / Pk. (with handle)	77210150
Shandon Cryocassette, 35 mm annular, 4 / Pk. (with handle)	77210151
Shandon Cryocassette, 45 mm annular, 4 / Pk. (with handle)	77210152
Shandon Cryocassette, 9.5 mm annular, 4 / Pk. (with handle)	77210153
Cryocassette - 40mm diameter annular - 4/Pk.	A78910055
Cryocassette - 25 mm diameter crosshatched - 4/Pk.	A78910056
Cryocassette - 28 x 40mm crosshatched - 4/Pk.	A78910057
Handle - 4/Pk.	A78910058
Shandon MOHS Organizer Tray	77230046
Replacement Handles for SME Cryocassettes	77220537
Plastic Knife Guard	A77210064
Glass Anti-Roll Plate	A78930200
Service Manual (Specify Language)	77210166
Shandon Cryotome SME Gold Service Plan (see page 16)	1196101
Shandon Cryotome SME Bronze Service Plan (see page 16)	1196101PM

## Agency Approvals

Designed to meet IEC 61010, CSA, UL, and CE Mark (IVDD compliant).

# Shandon Cryotome<sup>®</sup> Accessories

# Shandon Cryotome<sup>®</sup> Blade Holders

Blade holders for the Shandon Cryotome FSE / FE and SME / E.



**A78910014** Heat Extractor Standard  
Shandon Cryotome FSE / FE ONLY



**A78910037** Heat Extractor Double-weight  
Shandon Cryotome FSE / FE ONLY



**A78910036** Heat Extractor Half-weight  
Shandon Cryotome FSE / FE ONLY



**A78930200**  
Glass  
Anti-roll Plate



**A77210064**  
Plastic  
Knife Guard



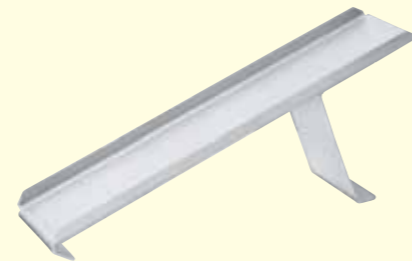
**P12940**  
Narrow Brush



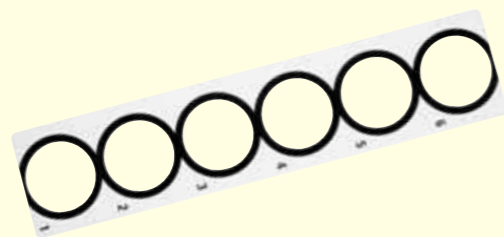
**P12257**  
Wide Brush



**A78910041**  
Cryobar Cover  
Shandon Cryotome FSE / FE ONLY



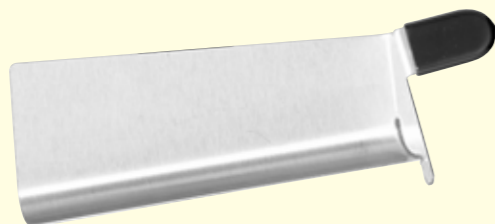
**A78930121**  
Tool Shelf  
Shandon Cryotome FSE / FE ONLY



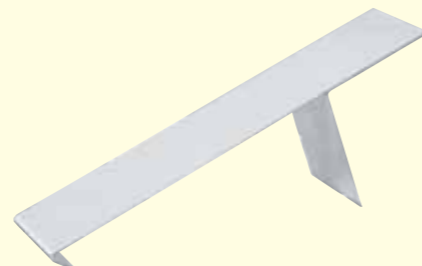
**A78910054**  
Cryobar Cassette Identification Label - 4 / Pk.  
Shandon Cryotome FSE / FE ONLY



**A78930063**  
Wide Shelf  
Shandon Cryotome FSE / FE ONLY



**A78910039**  
Debris Tray  
Shandon Cryotome FSE / FE ONLY



**A78930166**  
Narrow Shelf  
Shandon Cryotome FSE / FE ONLY

## Shandon Universal Blade Holder



- Accepts standard "C" or "D" profile knife up to 220 mm. (120 mm is standard length.)
- May be used with standard steel knives or with disposable blade holder.
- Use in conjunction with Disposable Blade Holders Part Nos. 40 or No. 47. **See Page 11.**

Description	Order Number
Shandon Universal Cryotome Blade Holder	A78910047

## Shandon Low-Profile Blade Holder



- Lateral movement of blade holder eliminates need to unclamp and re-clamp blade.
- Color coded levers identify lever functions.
- Use with low-profile disposable blades. **See Page 10.**

Description	Order Number
Shandon Low Profile Cryotome Blade Holder Base and Top Stage	A78910032

## Shandon High-Profile Blade Holder



- Lateral movement of blade holder eliminates need to unclamp and re-clamp blade.
- Color-coded levers identify lever functions.
- This holder will accept either standard or heavy-duty high-profile blades, providing a wide range of tissue sectioning. **See Pages 10 and 11.**

Description	Order Number
Shandon High Profile Cryotome Blade Holder	A78910033

## Shandon Cryostat Lubricating Oil

- Available in 4 oz. (118 ml) bottle.

Description	Pkg/Qty	Order Number
Shandon Cryostat Lubricating Oil	Each	291

## Shandon MOHS Organizer Tray



- Holds multiple cryocassettes for better organization of specimens.
- Measures 10.5" x 4.7" (26.6 x 11.9 cm).
- For use in Shandon Cryotome SME.

Description	Order Number
Shandon Mohs Organizer Tray	77230046

# Disposable Blades

## Low Profile

Description	Benefits
<b>Shandon MB DynaSharp™ Low-Profile Disposable Blade</b> <small>80 x 8 x 0.25 mm 34° Facet Angle</small>	Ribbons well from initial cut. Best for derm and biopsy tissues. Increased sharpness lowers friction during sectioning. Quickly reaches optimal performance.
<b>Shandon MX35 Premier+ Low-Profile Disposable Blade</b> <small>80 x 8 x 0.25 mm 34° Facet Angle</small>	Increased durability. Increased sharpness lowers friction and lessens resistance during sectioning. Reduces blade usage.
<b>Shandon MX35 Premier Low-Profile Disposable Blade</b> <small>80 x 8 x 0.25 mm 34° Facet Angle</small>	Durable – longer blade life Longer optimal sectioning performance.
<b>Shandon MB35 Premier Low-Profile Disposable Blade</b> <small>80 x 8 x 0.25 mm 34° Facet Angle</small>	Ribbons well from initial cut. Well suited for routine sectioning. Quickly reaches optimal performance.
<b>Shandon MB22 Premier Low-Profile Disposable Blade</b> <small>80 x 8 x 0.25 mm 22° Facet Angle</small>	Excellent for needle biopsies of kidney and liver. Quickly reaches optimal sectioning performance. Use where 1 - 2 micron sections are desired.

## High Profile

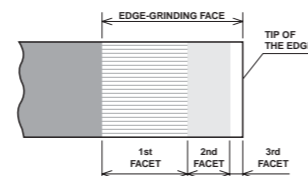
Description	Benefits
<b>Shandon HP35 High Profile Disposable Blade with PTFE Coating</b> <small>75 x 14 x 0.31 mm 34° Facet Angle</small>	Durable – longer blade life Quickly reaches optimal sectioning performance.
<b>Shandon HP35n High Profile Disposable Blade without PTFE Coating</b> <small>75 x 14 x 0.31 mm 34° Facet Angle</small>	Increased durability. Low cost.



## Structure of a Blade Edge

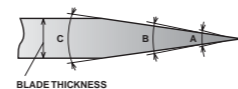
### Superior Edge Profile

The shape of the blade edge is optimized to provide excellent sectioning performance, ensuring easier ribboning and improved sharpness.



### Coating

Coating is optimized to provide durability and easy ribboning.



Description	Pkg/Qty	Order Number
<b>Shandon MB DynaSharp Low Profile</b>	50 / Pk.	3050836
<b>Shandon MX-35 Premier+ Low Profile</b>	50 / Pk.	3052835
<b>Shandon MX-35 Premier Low Profile</b>	50 / Pk.	3051835
<b>Shandon MB-35 Premier Low Profile</b>	50 / Pk.	3050835
<b>Shandon MB-22 Premier Low Profile</b>	50 / Pk.	3050822
<b>Shandon HP-35 Coated High Profile</b>	50 / Pk.	3150734
<b>Shandon HP-35n High Profile</b>	50 / Pk.	3152735

# Microtome Knives / Blade Holders

## Tungsten Carbide Microtome Knife

- D-profile has tungsten carbide tip for extra strength and support to the cutting edge.

## Standard Microtome Knives

- Superior quality surgical steel is thoroughly tempered and individually tested for hardness.
- Round back design is precisely balanced and shaped.

## Premium Microtome Knives

- Precision ground for outstanding sectioning and extended cutting life; flat-back design.
- Assured performance through multiple tests.
- All Shandon C-profile and D-profile knives are drilled and tapped in the base for direct attachment to holders for sharpening.
- Four lengths of C-profile knives: 120 mm, 160 mm, 185 mm and 240 mm.
- Two lengths of D-profile knives: 160 mm and 240 mm.

## Stainless Steel Microtome Knives

- Ideal for cryostats. Round-back design.
- Replaces carbon steel wherever moisture is a problem to prevent minute oxidation which may occur on ordinary microtome knife edges.
- Resists corrosive action.
- Hardened throughout to the exact temper for the best quality in edge efficiency and tested for hardness.

Description	Pkg/Qty	Order Number
<b>D-Profile Microtome Knife</b> Tungsten Carbide Tip, Blade Length: 160 mm	Each	5601006
<b>Standard Microtome Knife</b> Round Back, Blade Length: 125 mm	Each	7702
<b>Stainless Steel Back</b> For 125 mm Standard Microtome Knife 7702	Each	77022
<b>Standard Microtome Knife</b> Round Back, Blade Length: 185 mm	Each	7703
<b>Stainless Steel Back</b> For 185 mm Standard Microtome Knife 7703	Each	77023
<b>Standard Microtome Knife</b> Round Back, Blade Length: 250 mm	Each	7704
<b>Stainless Steel Back</b> For 250 mm Standard Microtome Knife 7704	Each	77024
<b>Shandon C-Profile Microtome Knife</b> Flat-back, Blade Length: 120 mm	Each	9992009
<b>Shandon C-Profile Microtome Knife</b> Flat-back, Blade Length: 185 mm	Each	9992011
<b>Shandon C-Profile Microtome Knife</b> Flat-back, 160 x 34 x 10 mm	Each	2222003
<b>Shandon C-Profile Microtome Knife</b> Flat-back, 240 x 33 x 13 mm	Each	2222005
<b>Shandon D-Profile Microtome Knife</b> Flat-back, 240 x 33 x 14 mm	Each	2222006
<b>Shandon D-Profile Microtome Knife</b> Flat-back, 160 x 34 x 10 mm	Each	2222004
<b>Stainless Steel Microtome Knife</b> Round-back, Blade Length: 125 mm	Each	7619
<b>Stainless Steel Microtome Knife</b> Round-back, Blade Length: 185 mm	Each	7719

## Stainless Steel

### Disposable Blade Holder



- All stainless steel construction.
- Holds most standard high- and low-profile blades.
- Fits most standard microtomes and cryostats.

Description	Order Number
<b>Stainless Steel Disposable Blade Holder, 6.7" (170 mm)</b>	40

## Spring-Loaded

### Disposable Blade Holder



- Spring-loaded clamp enables easy knife changes.
- Shaped like standard microtome knife to fit most standard microtomes and cryostats.
- Holds most heavy-duty blades, including the Shandon Premier Heavy-Duty blades (see below).

Description	Order Number
<b>Spring-Loaded Disposable Blade Holder, 5.1" (130 mm)</b>	47

## Shandon Standard High Profile Disposable Blades



Description	Pkg/Qty	Order Number
<b>Shandon Standard High Profile</b>	100 / Pk. x 5	49

## Shandon Premier High Profile Disposable Blades



Description	Pkg/Qty	Order Number
<b>Shandon Premier High Profile</b>	50 / Pk.	1001259
<b>Shandon Premier High Profile with PTFE</b>	50 / Pk.	1001593
<b>Shandon Premier Heavy-Duty High Profile</b>	30 / Pk.	1702

## Shandon M-1 Embedding Matrix



- Particularly effective on specimens with high water content such as eyes and CNS.
- Water soluble, clear, embedding matrix.
- Optimum sectioning temperature of -12° to -13° C.

Description	Pkg/Qty	Order Number
Shandon M-1 Embedding Matrix	180 ml x 1	1310

## Shandon Cryomatrix™



- Outstanding embedding resin used to support tissue for frozen sectioning.
- Forms a firm bond with the specimen holder that secures and supports tissue.
- Removed during staining.
- Freezes quickly, sections smoothly, and dissolves in water without residue.

Description	Pkg/Qty	Order Number
Shandon Cryomatrix	120 ml x 4	6769006

## Envi-Ro-Tech™ Freezer Spray



- Ozone-friendly freezing spray for use at the microtome and cryostat.
- Facilitates rapid freezing and consistent results.
- Attachable capillary nozzle enables spot freezing.
- Contains 1,1,1,2-tetrafluoroethane.

Description	Pkg/Qty	Order Number
Shandon Envi-Ro-Tech Freezer Spray	6 / Cs.	6769038

## Shandon Camel Hair Brush



- Epoxy painted wood handle with a total length of 7.5" (19.1 cm).

Description	Pkg/Qty	Order Number
Shandon Camel Hair Brush	12 / Pk.	1910

## Shandon Cryochrome™



- Outstanding embedding resin used to support tissue for frozen sectioning.
- Color-codes frozen sections for easy identification and tracking.
- Four colors available – pink, blue, yellow, green.
- Formulated with physical characteristics identical to Shandon Cryomatrix™.
- Shandon Cryochrome Kit includes Colorfrost slides to match Shandon Cryochrome colors.

Description	Pkg/Qty	Order Number
<b>Shandon Cryochrome Kit</b>	Each	9990427
1 each pink, blue, yellow, green 120 ml Bottle		
100 of each pink, blue, yellow, green Colorfrost Slides.		
<b>Shandon Cryochrome Compound Sampler</b>	4 / Pk.	9990426
1 each pk, bl, yllw, grn 120 ml Bottle		
<b>Shandon Cryochrome Compound</b>	4 / Pk.	9990429
PINK, 120 ml		
<b>Shandon Cryochrome Compound</b>	4 / Pk.	9990422
BLUE, 120 ml		
<b>Shandon Cryochrome Compound</b>	4 / Pk.	9990423
YELLOW, 120 ml		
<b>Shandon Cryochrome Compound</b>	4 / Pk.	9990428
GREEN, 120 ml		

## Shandon Heat Extractor



- Speed freezing process for frozen section specimens.
- Provides freezing action in seconds.
- Planes the block surface parallel to knife edge to minimize trimming.
- Hand-held to permit use in all makes of cryotomes and cryostats.
- Stainless steel block is 1.2" (3 cm) diameter.
- Steel stem is 3" (7.6 cm) long and fitted with a plastic knob.

Description	Pkg/Qty	Order Number
Shandon Heat Extractor	Each	2821

## Shandon Rapid-Chrome H&E Frozen Section Staining Kit



Produces permanently stained slides. The kit includes Rapid-Fixx™, an economical, alcohol-based formalin ideal for fixing slides from frozen sections.

### Kit Components:

- Rapid-Fixx™ Fixative
- Deionized Water
- Eosin Y
- Xylene
- Gill™ 3 Hematoxylin
- Bluing Reagent
- 100% Alcohol
- Mounting Medium

Description	Pkg/Qty	Order Number
<b>Rapid-Chrome H&amp;E Frozen Section Staining Kit</b>	100 Slide Capacity / Kit	9990001

## Shandon Histobath™ 2



- Prevents the development of microscopic ice crystals and sample distortion caused by hyperosmolar tissue samples that are slowly frozen in a cryostat.
- Excellent method for snap-freezing tissue for enzyme assay.

- Tissue freezes through transfer of heat from the tissue to the working fluid in the chamber.
- Stainless steel mesh basket makes immersion quick and neat.
- Uses a CFC-free refrigerant and has stable temperature control.

Description	Order Number
<b>Shandon Histobath 2</b>	110-120V, 60Hz 2431030
	220-240V, 50Hz 2431035

### Physical Specifications

Dimensions (H x W x D)	
External:	14.75" x 19.25" x 13.5" (38 x 24 x 34 cm)
Bath Work Area:	4" Dia. x 5" Deep (10.2 x 14 cm)
Weight	
	55 lbs. (25 kg)
Bath Volume	
	33.8 oz. (1 L)

## Shandon Rapid-Chrome Kwik-Diff™ Staining Kit



Specially configured for performing quick, high-quality differential stains. Ideal for FNA carts.

### Kit Components:

- Fixative
- Methylene Blue
- Spill-Free Slide Jar
- 1 Plastic Slide Grip
- Superfrost® Slides
- Eosin
- Deionized Water
- 24 x 50, No. 1 Coverglass
- Resin Mount Mountant
- 1 Cardboard Slide Folder
- Secureline® Marker

Description	Pkg/Qty	Order Number
<b>Rapid-Chrome Kwik-Diff Staining Kit</b>	100 Slide Capacity / Kit	9990702

## Shandon Frozen Section Staining Kit



- Kit includes 12 beakers, a stainless steel slide holder, and a heavy-gauge stainless steel support rack with six round openings to hold beakers.
- Sturdy cover with piano hinge seals beakers minimizes evaporation.
- Glass beakers have a capacity of 6.75 oz. (200 ml) and are 4" (100 mm) tall.
- Slide holder will hold ten 3" x 1" (76 x 26 mm) slides.
- Stainless steel support rack measures 0.85" x 1.9" x 0.89" (21.6 x 48.3 x 22.6 mm).

Description	Pkg/Qty	Order Number
<b>Shandon Frozen Section Staining Kit</b>	Each	145
<b>Glass Beakers Only</b>	12 / Pk.	146
<b>Slide Holder Only</b>	Each	147
<b>Stainless Steel Support Rack Only</b>	Each	23145

# Shandon Linear Stainers for Cryotomy

## Shandon Linistat™ Linear Stainer



- Compact answer to H&E frozen section protocols.
- Efficient footprint fits on top of most cryostats for streamlining workflow during frozen sectioning.
- Features include 14 staining stations (20 sec. each), running water, and a 13-slide capacity collection tank.
- Staining time is under five minutes.
- Shandon color-coded slide clips correspond to the colored slides and colored frozen section embedding media, Shandon Cryochrome®.

Description	Order Number
Shandon Linistat	110-120V, 60Hz B1000200
Shandon Linistat	220-240V, 50Hz B1000201

**Agency Approvals**  
Designed to meet IEC 61010, CSA, UL, and CE Mark (IVDD compliant).

Included with Product*	Order Number
Single Station Staining Dishes	6754003
Double Station Staining Dishes	6754004
Slide Clips	See "Available Accessories"
Rinse Water Tubing Kit	7879070

\* Contents, Packaging, and Quantities of items listed under "Included with Product" are subject to change without prior notice.

Available Accessories	Order Number
Double Station Staining Dishes - 5/Pk.	6754004
Single Station Staining Dishes - 10/Pk.	6754003
Slide Clips, Pink - 25 / Pk.	6754005
Slide Clips, White - 25 / Pk.	6754002
Slide Clips, Blue - 25 / Pk.	6754006
Slide Clips, Yellow - 25 / Pk.	6754007
Slide Clips, Green - 25 / Pk.	6754008
Anti-evaporation Lid (Single Station)	231644
Anti-evaporation Lid (Double Station)	231645
Anti-evaporation Lid (Triple Station)	231646
Stainless Steel Holding Tank	7860260
Evaporation cover - 18" (46 cm)	B1000223

**Physical Specifications**  
**Dimensions (H x W x D)**  
 18.4" x 25" x 6.25" (27 x 64 x 15.9 cm)  
 Clearance Height: 9.75" (24.8 cm)  
**Weight**  
 16.3 lbs. (7.3 kg)  
**Power Requirements**  
 110-120 VAC, 60 Hz, Maximum 2.0A  
 220-240 VAC, 50/60 Hz, Maximum 1.0A

## Shandon Linistain™ SLS Linear Stainer



- The 23-station (30 sec. each) Shandon Linistain SLS is an economical, midsize linear stainer especially useful for cytology staining and other procedures that do not require heat.
- Water wash may be added at any station.

Description	Order Number
Shandon Linistain SLS	110-120V, 60Hz 1903601
Shandon Linistain SLS	220-240V, 50Hz 1903602

**Agency Approvals**  
Designed to meet IEC 61010, CSA, UL, and CE Mark (IVDD compliant).

Included with Product*	Order Number
Single Station Staining Dishes	6754003
Slide Clips	See "Available Accessories"
Rinse Water Tubing Kit	7879070
Elevated Feet	231420

\* Contents, Packaging, and Quantities of items listed under "Included with Product" are subject to change without prior notice.

Available Accessories	Order Number
Double Station Staining Dishes - 5/Pk.	6754004
Single Station Staining Dishes - 10/Pk.	6754003
Slide Clips, Pink - 25 / Pk.	6754005
Slide Clips, White - 25 / Pk.	6754002
Slide Clips, Blue - 25 / Pk.	6754006
Slide Clips, Yellow - 25 / Pk.	6754007
Slide Clips, Green - 25 / Pk.	6754008
Anti-evaporation Lid (Single Station)	231644
Anti-evaporation Lid (Double Station)	231645
Anti-evaporation Lid (Triple Station)	231646
Stainless Steel Holding Tank	7860260
Evaporation cover - 13" (33 cm)	231643
Evaporation cover - 18" (33 cm)	B1000223

**Physical Specifications**  
**Dimensions (H x W x D)**  
 6" x 43" x 6" (15.2 x 109.2 x 15.2 cm)  
 Clearance Height: 12" (30.5 cm)  
**Weight**  
 40 lbs. (18.1 kg)  
**Power Requirements**  
 110-120 VAC, 60 Hz, Maximum 2.0A  
 220-240 VAC, 50/60 Hz, Maximum 1.0A

# Shandon Stains and Reagents

## Shandon Harris Hematoxylin

- No mucoid staining.

Description	Pkg/Qty	Order Number
Shandon Harris Acidified Hematoxylin	4 L x 1	6765004
Shandon Harris Nonacidified Hematoxylin	1 L x 2	6765003
Shandon Harris Acidified Hematoxylin	4 L x 1	6765002
Shandon Harris Nonacidified Hematoxylin	1 L x 2	6765001

## Shandon Instant Hematoxylin

- No mucoid staining.
- Stains from blue-black to light blue, depending upon preparation.

Description	Pkg/Qty	Order Number
Shandon Instant Hematoxylin	6 / Pk. (Makes 1 L x 6)	6765015

## Shandon Gill™ Hematoxylin

- Mucoid staining.
- **Gill 1;** Light blue nuclei.
- **Gill 2;** Medium blue nuclei.
- **Gill 3;** Blue-black nuclei.

Description	Pkg/Qty	Order Number
Shandon Gill 1 Hematoxylin	4 L x 1	6765006
Shandon Gill 1 Hematoxylin	1 L x 2	6765005
Shandon Gill 2 Hematoxylin	4 L x 1	6765008
Shandon Gill 2 Hematoxylin	1 L x 2	6765007
Shandon Gill 3 Hematoxylin	4 L x 1	6765010
Shandon Gill 3 Hematoxylin	1 L x 2	6765009

## Shandon Reagent Alcohol

- Blend of 90% absolute ethanol; 5% methanol; 5% isopropanol.
- Use in place of absolute (100%) ethanol for most pathology procedures.
- No license required by Bureau of ATF.

Description	Pkg/Qty	Order Number
Shandon Reagent Alcohol	4 L x 1	9990520
Shandon Reagent Alcohol	209 L (55 gal.)	B9990521

## Shandon Rapid-Fixx™ Formalin

- Used in Rapid-Chrome™ Frozen Section Stain Kit (9990001) for fixing frozen section slides.
- Excellent for antigenic preservation, avoids the need for enzyme digestion, and rapidly penetrates into tissue.

Description	Pkg/Qty	Order Number
Shandon Rapid-Fixx	1 L x 2	6764212

## Shandon Bluing Reagent

- Blues hematoxylin-stained nuclei.
- Gentle – no loss or lifting of material from slides associated with ammonia water.
- Thoroughly pH-controlled for completely effective bluing.
- Ready-to-use.

Description	Pkg/Qty	Order Number
Shandon Bluing Reagent	4 L x 1	6769002
Shandon Bluing Reagent	1 L x 2	6769001

## Shandon Eosin Y

- Stable and precipitate-free – no filtering.
- Ready to use; produces consistent results.
- pH-adjusted for maximum stain uptake.
- Produces brilliant staining.
- Available in alcoholic or aqueous formulations.

Description	Pkg/Qty	Order Number
Shandon Eosin Y Alcoholic	4 L x 1	6766008
Shandon Eosin Y Alcoholic	1 L x 2	6766007
Shandon Eosin Y Aqueous	4 L x 1	6766010
Shandon Eosin Y Aqueous	1 L x 2	6766009

## Shandon Instant Eosin

- Stable and precipitate-free – no filtering.
- Produces consistent results.
- pH-adjusted for maximum stain uptake.
- Produces brilliant staining.
- Economical powder – stores indefinitely.
- Available as either an alcoholic or aqueous formulations.

Description	Pkg/Qty	Order Number
Shandon Instant Eosin (alcoholic)	6 / Pk. (Makes 6 L)	6765040
Shandon Instant Eosin (aqueous)	6 / Pk. (Makes 6 L)	6765540

## Shandon Xylene

Description	Pkg/Qty	Order Number
Shandon Xylene	4 L x 1	9990501
Shandon Xylene	10 L x 2	9990502

## Shandon Xylene Substitute

Description	Pkg/Qty	Order Number
Shandon Xylene Substitute	4 L x 1*	9990505
Shandon Xylene Substitute	4 L x 4	6764506
Shandon Xylene Substitute	10 L x 2	6764508
Shandon Xylene Substitute	19 L	9990507
Shandon Xylene Substitute	209 L (55 Gal.)	9990509