

Experience speed, accuracy, and safety

When it comes to urgent biopsies, getting accurate results to the operating room as quickly as possible is essential in maintaining excellent patient care. Cryostats from Epredia, along with blades, marking dyes, and other consumables, are designed to get the job done.

Speed

- Ability to save and repeat preferences, such as section thickness and temperature, to reduce waiting time for rush biopsies
- Each model features an integrated quick-freeze Peltier device that freezes tissue rapidly for quicker, smoother cutting, helping you get to a diagnosis faster

Accuracy

- Manual and motorized (NX70 only) sectioning options allow for precise control and premium quality sections
- Intuitive touch screen software designed for ease of use, minimizing the risk for error

Safety

- Optional disinfection features
- Ergonomic band and integrated arm rest controls (NX70 and NX50 only)
- Height adjustable from a sitting or standing position for added user comfort (NX70 and NX50 only)

The Total Solution

- Epredia blades designed to cut thin, wrinkle-free sections for analysis
- Line of tissue marking dyes specifically formulated for use with frozen sections
- Get peace of mind with Epredia extended service contracts that include preventative maintenance and thorough, expedited repairs, ensuring minimal downtime in your laboratory





Cryostat Range and Selection Guide

With three different cryostat options for your lab, rest-assured that you can find the perfect fit.

Designed to fulfill the needs of both research and clinical laboratories, the CryoStar™NX70 cryostat introduces a form-fitting design, integrated height control and motorized sectioning. Freeze and section tissue samples more efficiently with improved stability and individually controlled temperature settings on both the object specimen holder and blade carrier.

Get optimal sectioning quality paired with ergonomics and safety with the Cryostar NX50 cryostat. The NX50 cryostat is designed to accommodate the needs of your routine clinical laboratory. This manual cryostat offers a form-fitting design with optional height adjustment, cold disinfection, and Vacutome, allowing users to customize their sectioning experience.

Deliver high-quality results comfortably and efficiently with the HM525 NX cryostat, a high-performance routine cryostat with intuitive software and touch screen for simple, efficient operation. The HM525 NX cryostat offers reliability, advanced ergonomics and an intuitive interface.



Cryostar NX70 Cryostat



Cryostar NX50 Cryostat



HM525 NX Cryostat

Cryostat features	CryoStar NX70 Cryostat	CryoStar NX50 Cryostat	HM525 NX Cryostat
Cold disinfection	Optional	Optional	
JV disinfection			Optional
Encapsulated microtome	\checkmark	\checkmark	
Chamber temperature < -25 °C	\checkmark	\checkmark	\checkmark
-ast-freeze temperature	-57 °C + 3 °C	-57 °C + 3 °C	-60 °C
-ast-freeze cooling mechanism	Peltier	Peltier	Peltier
Automatic and immediate defrost	\checkmark	\checkmark	\checkmark
Active blade cooling	\checkmark	\checkmark	
Blade temperature control	\checkmark		
Specimen head temperature control	\checkmark	\checkmark	
Vacutome Vacutome	Optional	Optional	
Specimen trimming	\checkmark	\checkmark	\checkmark
Specimen retraction	20 μm	20 μm	40 μm
Section thickness range	0.5 - 500 μm	0.5 - 500 μm	1 - 500 μm
Motorized coarse advance	\checkmark	\checkmark	\checkmark
Motorized cutting	\checkmark		
Cryobar cooling / (fast-freeze) stations	18 (1)	18 (1)	27 (4)
Touch screen option	\checkmark	\checkmark	\checkmark
Height adjustable chamber	\checkmark	Optional	

Complete Solutions to Enhance Frozen Sectioning

Cryostat Consumables

Epredia offers a complete line of consumables to enhance the use of your Epredia cryostat. Epredia offers blades that are crafted using a proprietary steel hardening technology that delivers increased longevity. Our staining kits and mountants are created specifically for use with frozen tissue sections, allowing your laboratory to quickly produce high-quality slides from tissue samples that are ready for analysis.

Cryostat 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 abilities. Have confidence that if your Epredia cryostat needs service or repair, your instrument repairs will be expedited, ensuring minimal downtime in your laboratory.



Cryostar NX70 Cryostat

Designed to fulfill the needs of both research and clinical laboratories, the CryoStar NX70 cryostat introduces a form-fitting design, integrated height control and motorized sectioning. Go quickly from mounting tissue to ready-to-cut with quickfreeze and setup features. Section tissue samples more efficiently with improved stability and individually controlled temperature settings on both the object holder and blade carrier.

First-Rate Sectioning for the Precision You Demand

- Independent cooling of blade holder and specimen head keeps cutting area at set temperatures, even during periods of high use
- Novel knife carrier feed enhances sectioning stability and quality
- Rapid-response temperature control provides active cooling of the specimen head, blade holder, and cryobar while maintaining consistent specimen temperature
- Dedicated low- and high-profile blade holders and separate knife carrier improve stability

Safe, Comfortable, and In Control

- Large, open chamber with bright LED illumination offers an optimized workspace for operators, featuring eighteen tissue stations and one fast-freeze Peltier for quick, efficient sample preparation
- Optional cold disinfection system provides supplemental surface disinfection in under 60 minutes while the cryostat is still cold
- Light-touch handwheel requires minimal force to operate, limiting repetitive motion discomfort. Motorized cutting helps reduce user fatigue and avoid repetitive motion injury
- Body-contoured design positions the user closer to the chamber to maintain comfortable posture and aids in reducing back and neck strain often associated with frozen sectioning
- Integrated height adjustment (32-44 in. / 82-112 cm), supporting both standing and seated operation with the touch of a button

Enhanced User-Experience

- Optional Vacutome feature aids in generating wrinkle-free sections and can also be used to remove waste from chamber
- Integrated joystick control and color LCD touchscreen allow for quick, precise adjustments, easy operation for end users, and training for additional users
- Programmable and immediate defrost options

Dimensions (D x W x H): 39.4 x 29.7 x 32.3-44.0 in. (100 x 75.5 x 82-112 cm) (adjustable)

Weight: 440 lbs / 200 kg

Power requirements: 100 V, 50/60 Hz, 10A 100-120 V, 60 Hz, 10A 220-230 V, 50/60 Hz, 5A

Base Model Includes

Five specimen stages (4 x 30 mm, 1 x 40 mm), anti-roll plate, section waste tray, brush shelf, debris brush, sectioning brush, blade handling tool, and operator guide

Description	Configuration	Order Number
NX70,110 V (unit only)	HOMP	957000
NX70, 220-240 V (unit only)	HOMP	957040
NX70,110 V (unit only)	HOMPD	957010
NX70, 220-240 V (unit only)	HOMPD	957050
NX70,110 V (unit only)	HOMPV	957020
NX70, 220-240 V (unit only)	HOMPV	957060
NX70,110 V (unit only)	HOMPDV	957030
NX70, 220-240 V (unit only)	HOMPDV	957070

Please note that instrument order numbers are for the unit only. To purchase a blade holder (low- or high-profile, or steel knife), please see the blade holder section for respective order numbers.

Configuration Descriptions

- H Height Adjustment
- O Object Cooling
- M Motorized
- P Peltier
- D Cold Disinfection
- V Vacutome

Features:

- Adjustable cutting speed from 0 mm/s to 256 mm/s
- Section thickness from 0.5 μm to 500 μm
- Vertical stroke length of 64 mm
- 48 mm horizontal feed range
- 20 µm specimen retraction on return stroke, with optical indication

Order Epredia stainless steel blades, designed for cleanly cutting high-quality frozen sections in your cryostat from Epredia.

You'll need:





Get optimal sectioning quality paired with enhanced ergonomics and safety with the Cryostar NX50. The NX50 is designed to accommodate the needs of your routine clinical laboratory. This manual cryostat offers a form-fitting design with optional height adjustment, cold disinfection, and Vacutome, allowing users to customize their sectioning experience.

Cryostar NX50 Cryostat

Precise Sectioning

- Active cooling of the specimen head, blade holder, and cryobar maintains consistent specimen temperature
- Reach the ideal temperature for each sample type in just minutes with rapid temperature control
- Precise stepping-motor blade advance for minimal vibration when sectioning
- Microtome design creates a stable sectioning platform for increased precision
- Precise sectioning delivers consistent sections of uniform thickness
- Optional Vacutome feature aids in generating wrinkle-free sections and can also be used to remove waste from the chamber

Ergonomics and Comfort

- Body-contoured design positions the user closer to the chamber, maintaining comfortable posture
- Large, open work chamber with adjustable LED lighting for enhanced visibility
- Light-touch handwheel requires minimal force to operate
- Optional height adjustment can position the chamber height from 32 to 44 in. (82-112 cm), supporting both standing and seated operation, with the touch of a button
- Touch screen operation with intuitive software to accommodate multiple users

Operator Safety

- Optional cold disinfection system provides supplemental surface disinfection in under 60 minutes while the cryostat is still cold
- Manual handwheel lock secures the position of the specimen head
- Magnetic blade-transfer tool supports safe removal of the blade from the holder

Dimensions (D x W x H): 39.4 x 29.7 x 32.3-44.0 in. (100 x 75.5 x 82-112 cm) (adjustable)

39.4 x 29.7 x 36.6 in. $(100 \times 75.5 \times 93 \text{ cm})$ (fixed height model)

Weight: 440 lbs / 200 kg

Power requirements: 100 V, 50/60 Hz, 10A 110-120 V, 60 Hz, 10A 220-240 V, 50/60 Hz, 5A

Five specimen stages (4 x 30 mm, 1 x 40 mm), anti-roll plate, section waste tray, brush shelf, debris brush, sectioning brush, blade handling tool, and operator guide

Description	Configuration	Order Number
NX50,100-120 V (unit only)	OP	957250
NX50, 230 V (unit only)	OP	957220
NX50,100-120 V (unit only)	OPD	957100
NX50, 230 V (unit only)	OPD	957140
NX50,100-120 V (unit only)	OPV	957270
NX50, 230 V (unit only)	OPV	957200
NX50,100-120 V (unit only)	OPH	957260
NX50, 230 V (unit only)	OPH	957210
NX50,100-120 V (unit only)	OPHD	957110
NX50, 230 V (unit only)	OPHD	957150
NX50,100-120 V (unit only)	OPVD	957120
NX50, 230 V (unit only)	OPVD	957160
NX50,100-120 V (unit only)	OPHV	957230
NX50, 230 V (unit only)	OPHV	957170
NX50,100-120 V (unit only)	OPHVD	957130
NX50, 230 V (unit only)	OPHVD	957240

Please note that instrument order numbers are for the unit only. To purchase a blade holder (low- or high-profile, or steel knife), please see the blade holder section for respective order numbers.

Configuration Descriptions

- O Object Cooling
- P Peltier
- H Height Adjustment
- V Vacutome
- D Cold Disinfection

Features:

- \bullet Section thickness from 0.5 μm to 500 μm
- Vertical stroke length of 64 mm
- 48 mm horizontal feed range

You'll need:



Epredia extended service packages offer prompt technical support and national coverage for service or repair, ensuring your instrument will be back up and running as quickly as possible.



HM525 NX Cryostat

Deliver high-quality results comfortably and efficiently with the HM525 NX cryostat, a high-performance routine cryostat with intuitive software and touchscreen for simple, efficient operation. The HM525 NX cryostat offers reliability, advanced ergonomics and an intuitive interface.

Exceptional Sectioning

- Reliable stepping motor technology delivers reproducible section thickness
- Adjustable chamber temperature control accommodates a wide range of specimens
- Automatic specimen retraction on return stroke protects specimen and reduces carryover artifacts
- Cryochamber features 27 cooled specimen positions, including four fast-freeze stations to keep up with heavy workloads

Operator Safety

- Mechanical handwheel lock immobilizes the specimen head
- Optional, on-demand UV disinfection protects against surface contamination and occupational exposure to biological pathogens
- Stainless steel chamber and smooth surfaces allows efficient cleaning of the chamber

User-Friendly and Ergonomic

- Icon-driven interface supports intuitive operation of the cryostat
- Allows rapid selection and adjustment of functions for efficient operation
- Specimen fast-freeze function and chamber brightness can be accessed from the menu
- Light-touch handwheel requires minimal force to operate, increasing comfort
- Additional knee space to support comfortable seated operation
- Body-contoured arm rests improve posture and comfort during periods of prolonged use
- Large, flat top to keep accessories and consumables readily available

Dimensions (D x W x H): 29.9 x 25.2 x 47.2 in. (75.9 x 64 x 119.8 cm) (w/o handwheel)

Weight: 315 lbs / 143 kg

Power requirements: 100 V, 50 Hz, 12A 100 V, 60 Hz, 12A 115 V, 60 Hz, 12A 220/230 V, 50 Hz, 6A 220 V, 60 Hz, 6A 240 V, 50 Hz, 6A

Six specimen stages (30 mm), freezing medium (118 mL), cryostat oil (118 mL), section waste tray, debris brush, sectioning brush, tools and operator guide.

Description	Order Number
HM525 NX (unit only)	
HM 525 NX, 115 V (unit only)	956640
HM 525 NX, 220-230 V (unit only)	956650
HM525 NX with UV disinfection (unit only)	
HM525 NX with UV disinfection, 115 V (unit only)	956641
HM525 NX with UV disinfection, 220-230 V (unit only)	956651

Features:

- Chamber cooling to -35 °C
- Integrated peltier fast-freezing device rapidly cools to -60 °C
- Section thickness from 1 µm to 500 µm
- Vertical stroke length of 60 mm
- 28 mm horizontal feed range
- 40 µm specimen retraction on return stroke
- X/Y specimen orientation with 360° Z-axis rotation

You'll need:



Cryostat Blade Holders

Description	Order Number	CryoStar NX70	CryoStar NX50	HM525 NX
Blade holders for disposable blades				
EC70 blade holder	705630			\checkmark
EC blade holder	705470			V
Low-profile blade holder	705840	✓	\checkmark	
High-profile blade holder	705940	✓	✓	
Knife carriers for solid knives		·		
Standard	705460			\checkmark
Standard knife carrier	705950	V	✓	_



EC70 Disposable Blade Holder for HM525 NX

- Suitable for high- and low-profile disposable blades, with clearance angle adjustment
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (69.5 mm)



EC Disposable Blade Holder for HM525 NX

- Suitable for high- and low-profile disposable blades, with clearance angle adjustment
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (39.5 mm)



Standard Blade Holder for HM525 NX

- For use with standard solid knives
- Clearance angle adjustment and removable clamping jaws
- Precision dovetail guide and quick clamping mechanism allows for easy movement
- Includes anti-roll guide and two glass anti-roll plates (69.5mm)

Disposable Blades for Cryostats

Low-Profile Blades



MX35 Ultra™ Low-Profile Blade

Blades feature a proprietary steel hardening technology (Pink Technology) that delivers unbeatable longevity, making them excellent for cutting frozen sections.

3053835 | Blade angle: 34° | 50 / pack



MX35 Premier +[™] Low-Profile Blade

Blades are designed to be extra sharp with an extended cutting life. Excellent for hard tissues.

3052835 | Blade angle: 34° | 50 / pack



MX35 Premier[™] Low-Profile Blade

Blades are designed for routine histology and are good for a variety of tissue types, including hard tissue.

3051835 | Blade angle: 34° | 50 / pack



MB35™ Premier Low-Profile Blade

Blades are best for routine applications and have consistent edge sharpness for high-quality thin sections. Feature superior edge stability.

3050835 | Blade angle: 34° | 50 / pack



MB22 Premier[™] Low-Profile Blade

Blade is designed with a steeper angle that allows users to cut thinner sections.

3050822 | Blade angle: 22° | 50 / pack

High-Profile Blades



HP35 Ultra™ High-Profile Blade

Blades designed for use with cryostats. Proprietary steel hardening technology (Pink Technology) delivers increased longevity.

3153735 | Blade angle: 34° | 50 / pack



HP35N Ultra[™] High-Profile Blade

Blades designed similarly to the HP35 Ultra High-Profile Blade, but with 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	HP35N Ultra
Order number	3053835	3052835	3051835	3050835	3050822	3153735	3151735
Edge angle	34°	34°	34°	34°	22°	34°	34°
Cryostat compatibility	Best	Good	Good	Good	Best	Best	Good



Richard Allan Scientific[™] Edge-Rite[™] 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 are 20% thicker than traditional blades to increase knife edge stability, which facilitates usage in cryostats
- Low-profile blades are 5% longer, allowing for more sections per blade

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



Shandon Premium Disposable Microtome Blades

Epredia Shandon premium high-profile disposable blades are available in non-coated and PTFE-coated styles.

Premium High-Profile with no coating (1001259) | 50 / pack

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

Specimen Stages

Description	Order Number	CryoStar NX70	CryoStar NX50	HM525 NX
Specimen Stages				
20 mm specimen stage	715700			\checkmark
30 mm specimen stage (color coded)	715220			\checkmark
30 mm specimen stage	715710			✓
30 mm specimen stage	715600	\checkmark	✓	•
30 mm specimen stage; red	715870	V	V	
30 mm specimen stage; green	715880	V	V	
30 mm specimen stage; blue	715890	/	V	
30 mm specimen stage; gold	715900	V	V	
40 mm specimen stage (color coded)	715230			✓
40 mm specimen stage	715720			V
40 mm specimen stage	715610	\checkmark	\checkmark	-
60 mm specimen stage	715620	\checkmark	\checkmark	
50 x 50 mm specimen stage	715730			\checkmark
55 x 55 mm specimen stage	715740			V
60 x 55 mm specimen stage	715750			1
75 x 70 mm specimen stage	715760			V
Cryo-Molds				•
Cryo-mold, 10 mm	570400	✓	✓	✓
Cryo-mold, 15 mm	570380	\checkmark	\checkmark	\checkmark
Cryo-mold, 22 mm	570390	\checkmark	\checkmark	\checkmark



Staining Kits



Frozen Section Staining Kit (145)

Ideal for laboratories that process frozen sections. Works well for staining tissue mounted on coverglass.

- Sturdy cover with piano hinge seals beakers to minimize evaporation
- Rubber feet on rack protect table surface
- Glass beakers have a capacity of 200 mL and are 10 cm tall
- Slide holder will hold ten 76 x 25 mm slides
- Stainless steel rack measures 21.6 x 48.3 x 22.6 mm
- Kit includes twelve beakers, a stainless steel slide holder, and a heavy-gauge stainless steel support rack with six round openings to hold beakers

Embedding Media



Shandon Cryomatrix[™] Embedding Medium

Outstanding embedding medium 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

120 mL | 4 / pack



Shandon M-1 Embedding Matrix

Water-soluble, clear embedding medium.

- Particularly effective on specimens with high water content such as eyes and CNS
- Optimum sectioning temperature of -12 °C to -13 °C

180 mL | 1 each





Cryochrome

- Outstanding embedding matrix used to support tissue for frozen sectioning
- Easy tracking and identification with multiple color options
- Formulated with physical characteristics identical to Epredia[™] Cryomatrix[™] embedding medium

Neg-50 Frozen Section Medium

- Water-soluble frozen section medium that yields high-quality sections down to -50 °C without chatter
- Leaves no residue after staining
- Easy tracking and identification with varying colored matrix

Description	Quantity	Order Number
Shandon Cryomatrix Embedding medium (120 mL)	4 / pack	6769006
Shandon M-1 Embedding Matrix (180 mL)	ea.	1310

Description	Quantity	Order Number
Cryochrome blue, 120mL	4 / pack	9990422
Cryochrome yellow, 120 mL	4 / pack	9990423
Cryochrome green, 120 mL	4 / pack	9990428
Cryochrome pink, 120 mL	4 / pack	9990429
Cryochrome sampler (one of each color), 120 mL	4 / pack	9990426

Description	Quantity	Order Number
Colorless Neg-50, 4 oz (118 mL)	2 / case	6502
Blue Neg-50, 4 oz (118 mL)	2 / case	6502B
Green Neg-50, 4 oz (118 mL)	2 / case	6502G
Orange Neg-50, 4 oz (118 mL)	2 / case	65020
Pink Neg-50, 4 oz (118 mL)	2 / case	6502P
Yellow Neg-50, 4 oz (118 mL)	2 / case	6502Y
Colorless Neg-50 4 oz (118 mL)	6 / case	6506
Neg-50 sampler (one of each color) (118 mL)	6 / case	6505M