

## CRYOSTAT MICROTOME MODEL NO.RD-2290



### ABOUT THE PRODUCT

The RD-2290 is semi-automatic microtome cryostat with manual rotary for clinical and research applications. For now, it has received many positive feedbacks. It features a powerful dual-compressor refrigeration system that ensures uniform cooling performance across multiple components. With its large-capacity freezing chamber and multi-point temperature control, it achieves consistent sectioning even for large specimens. The intuitive 10.1-inch color touch screen offers multi-language operation, real-time monitoring, and automatic defrosting functions. An antibacterial nano-coated chamber and UVC disinfection system provide a safe, clean, and hygienic working environment. The ergonomic design, quick-freeze capability, and intelligent memory function greatly improve efficiency and user comfort. RD-2290 is the ideal choice for laboratories seeking superior performance, safety, and precision in frozen section preparation.

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### Features

#### Efficient Cooling »

- Closed Freezer Cover Plate: Effectively maintains low temperature inside the chamber and prevents cold air loss.
- Dual Compressor System: Equipped with internationally renowned SECOP compressors, independently cooling the freezing chamber, knife holder, specimen clamp, and tissue flattener.
- Energy-Saving Sleep Mode: Maintains chamber temperature between -5°C and -15°C during standby and quickly restores cutting temperature within 15 minutes.
- Automatic Defrosting: Features both manual and timed automatic defrosting functions to ensure continuous, stable operation.

#### Precision Cutting »

- Intelligent Temperature Control: Built-in temperature sensor self-detects operational status for accurate control and protection.
- Accurate Specimen Movement: Offers a 66mm vertical stroke and 25mm horizontal stroke, ideal for large specimens.
- Specimen Retraction Function: Prevents tissue damage by retracting the specimen away from the blade; can be enabled or disabled as needed.
- Anti-Stick Tissue Flattener: Integrated with a refrigeration system that cools down to -50°C, allowing faster freezing and smoother sectioning

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### Safety & Convenience »

- Full-Length Knife Guard: Comes with a blue blade pusher and safety cover to protect users during operation.
- Large Quick-Freezing Shelf: Provides up to 24 specimen freezing points and 6 semiconductor-cooled points, improving sample throughput.
- 360° Handwheel Locking: Allows locking at any position for stable, precise, and secure sectioning.
- Heated Glass Window: Prevents fogging and condensation for clear visibility inside the chamber.
- UVC Sterilization: Built-in ultraviolet disinfection system ensures a clean and sterile cutting.

### Smart Display & Illumination »

- 10.1-Inch Color Touchscreen: Displays cutting parameters, section thickness, total slices, temperature settings, and system status with multilingual interface options.
- High-Brightness LED Illumination: Provides bright, energy-efficient lighting for clear viewing of the cutting area.
- Low-Noise Operation: Advanced mechanical design reduces noise to below 50 dB, creating a quiet and comfortable workspace.

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### TECHNICAL SPECIFICATIONS »

RD-2290 Specification List	
Parameter	Specification
Section thickness setting range	0.5μm-100μm Adjustable 0.5μm-5μm increment:0.5μm 5μm-20μm increment:1μm 20μm-50μm increment:2μm 50μm-100μm increment:5μm
Trimming thickness range	1μm-600μm Adjustable 0μm-50μm increment:5μm 50μm-100μm increment:10μm 100μm-600μm increment:50μm
Freezing Chamber Temperature Range	0°C to -50°C
Freezing Stage Temperature Range	0°C to -50°C
Blade holder and Specimen clamp Temperature Range	0°C to -50°C
Additional Semiconductor Cooling	Down to -65°C
Number of Specimen Freezing Points (without stage)	24
Semiconductor Cooling Points on Stage	6
Semiconductor Fast Cooling Time	15 minutes
Vertical Specimen Movement	66 mm (for large samples)
Horizontal Specimen Movement	25 mm
Maximum Specimen Size	55 × 80 mm
Speed of fast-forward and back-forward	1.8mm/s 0.45mm/s
Specimen head rotary angle	X-axis:360° , Y-axis:12°
Specimen Retraction	0~60 μm adjustable, increment 2 μm
Disinfection Method	UVC Ultraviolet Disinfection (Ozone disinfection optional)
Display Screen	10.1-inch color touch screen with multiple languages
Sleep Mode	Automatic temperature control between -5°C to -15°C
Compressor System	Compressor System
Cooling Points	Five-point independent cooling (chamber, stage, knife holder, specimen head, anti-stick device)
Defrost System	Manual and automatic defrosting
Knife Holder	Wide blade self-locking knife holder with safety guard
Anti-stick Device	Cooled to -50°C for smooth specimen handling
Air Circulation System	Cold air circulation with anti-bacterial filtration
Data Interface	USB port and TF card support
Glass Window	Heated glass to prevent condensation
Dimensions (L×W×H)	700 × 780 × 1230 mm 180KG
Voltage and frequency	AC220V±10%, 50Hz(Standard) AC110V±10%, 60Hz
Power	500W
Noise	50db(A)
Maximum temperature and humidity	25 ~ 45°C /80%
Certification	CE/ISO 13485
Brand	ROUNDFIN, Accept OEM
Warranty	1 year and whole lifetime technical support