

# Cryostat



**Model No: SLV-2800**

## **Product specifications :**

- It is designed under overall engineering and ergonomic concept. All the components are processed with computer numerical controlled machine
- Specimen retraction function, protects specimen from blade injury
- This system comes with an anti-roll slide guide apparatus to aid in cutting frozen sections that do not curl
- Trimming/Cutting button makes it easy to switch from trim and section mode
- Equip with counter to calculate total pieces and thickness.
- Dual compressors, which are made in Germany, freeze the cryostat chamber, freezing shelf, knife holder and specimen clamp separate with pro-environment refrigerant R404
- Temperature can drop to working condition in 60 minutes after switching on.
- Adopt to UVC sterilize for 35 minutes every time.
- Peltier may be on or off manually.
- Heated, removable sliding window.



- Two defrost methods: definite time and manual, automatic defrost system built in, with cool air circulation that automatically starts to cool air circulating around the cutting specimen, knife, and anti-roll guide
- The high-precision microtome is enclosed outside the cryostat chamber to protect it from thermal expansion and contraction and keep minimum service and maintenance.
- With vacuum cleaner easy to clean the chamber
- Self-explanatory symbols for all functions and displays, easy to learn and operate.
- LED screen can display data such as sample travel, thickness, function controlling, day, time, temperature, timed on/off and so on
- Stand by mode, after initializing, the temperature in cryostat chamber can be controlled between  $-4^{\circ}\text{C}$  and  $-9^{\circ}\text{C}$  by computer automatically; when stop initializing, the temperature in freeze chamber will arrive to working temperature within 10 minutes
- Control panel with locking function to avoid wrong operation
- Glass anti-roll guide with anti-static feature to facilitate perfect stretching of sections should be available integrated vacuum system for stretching of sections and suction of debris
- Hand wheel locking
- Sensor self-diagnosis function.
- Wide freezing shelf may put 17 specimen cassettes

#### Technical Specifications

- freeze chamber temperature range:  $-10^{\circ}\text{C} \sim -40^{\circ}\text{C}$
- Cooling down time to  $-40^{\circ}\text{C}$ : 60 min
- Freeze shelf minimum temperature:  $-45^{\circ}\text{C}$
- Lowest temperature of Peltier unit on freeze shelf:  $-60^{\circ}\text{C}$
- Peltier working time: 15 minutes
- Maximum specimen size:  $45\text{mm} \times 55\text{mm}$
- Specimen vertical stroke: 60mm
- Specimen horizontal stroke: 20mm
- Coarse feeding speed:  $0.7\text{mm/s}$ ;  $0.35\text{mm/s}$
- X/Y-axis:  $12^{\circ}$ , Z-axis:  $360^{\circ}$ , the specimen holder has 360-degree specimen orientation
- Section thickness range:  $1\text{--}100\mu\text{m}$   
 $1\mu\text{m} \sim 100\mu\text{m}$  adjustable;  $1\mu\text{m} \sim 20\mu\text{m}$ , in  $1\mu\text{m}$  increment  
 $20\mu\text{m} \sim 40\mu\text{m}$ , in  $2\mu\text{m}$  increments;  $40\mu\text{m} \sim 100\mu\text{m}$ , in  $5\mu\text{m}$  increments
- Trimming thickness range:  $10\mu\text{m} \sim 400\mu\text{m}$  adjustable;  $10\mu\text{m} \sim 50\mu\text{m}$ , in  $5\mu\text{m}$  increments;  
 $50\mu\text{m} \sim 100\mu\text{m}$ , in  $10\mu\text{m}$  increments;  $100\mu\text{m} \sim 400\mu\text{m}$ , in  $50\mu\text{m}$  increments;
- Retraction range:  $0\mu\text{m} \sim 80\mu\text{m}$  adjustable; in  $5\mu\text{m}$  increment
- Voltage and frequency :  $\text{AC}220\text{V} \pm 10\%$  50Hz(Standard) Special requirement may customize by order.
- Power: 435W
- Weight: 130kg
- Dimensions(W×D×H):  $660 \times 640 \times 1130\text{mm}$

#### Standard Accessory

- 1 Power Wire
- 2 pcs Fuse

