

## CRYOSTAT MICROTOME

AST 500 SEMI-AUTOMATIC CRYOSTAT MICROTOME AST 550 FULLY-AUTOMATIC CRYOSTAT MICROTOME

## Cryostat Microtome Design Features

## AST 500 Semi-automatic Cryostat Microtome AST 550 Fully-automatic Cryostat Microtome

It is designed under overall engineering and ergonomic concept. All the components are processed by computer numerical controlled machine.

Retraction function prevents specimen damage from blade.

Total thickness calculation.

The low temperature refrigeration system with environment friendly refrigerant R404.

Adopt UV and O<sup>3</sup> sterilize for 30 minutes every time.

Peltier specimen clamp refrigeration can be turn On or Off manually.

Two defrosting methods: manual and automatic.

- Two running ways : manual and automatic.

Emergency stop function : Press the red button to stop running when any emergency happens.

The high precision unit is enclosed outside the cryostat chamber to prevent it from thermal expansion and contraction, and keeps minimum maintenance requirement.

Artificial intelligent interface is easy to learn and operate.

LCD screen can display all information including thickness, thickness sum, controlling time, temperature, timed on/off and so on. Sleep Function. After activating this function, the temperature in cryostat chamber can be kept between -1°C and -10°C; After stopping this function, the temperature in freeze chamber will arrive to working temperature within 30 minutes.

Control panel with locking function could avoid wrong operation.

Handwheel locking function.

Wide freezing shelf can load 8 specimen cassettes simultaneously, and two of them are equipped with peltier tomeet different temperature.

## Cryostat Microtome Technical Specifications

	AST 500	AST 550
Freeze chamber minimum temperature	-35°C±2°C	
Freeze shelf minimum temperature	-45°C±5°C	
Lowest temperature of Peltier unit on freeze shelf	-55℃±5℃	
Lowest temperature of Peltier unit on Specimen Clamp	-50°C±5°C(working time of Peltier is 15 minutes.)	
Maximum specimen size	35×35mm	
Specimen vertical stroke	48±1mm	
Specimen horizontal stroke	15±0.2mm	
Coarse feeding speed	300μm/s (slow) or 900μm/s(rapid)	
Section thickness range	0μm ~ 100μm adjustable; 3μm ~ 10μm, in 1μm increments; 20μm ~ 100μm, in 5μm increments;	0μm ~ 3μm, in 0.5μm increments; 10μm ~ 20μm, in 2μm increments;
Trimming thickness range	10μm ~ 600μm adjustable; 50μm ~ 100μm, in 10μm increments;	10μm ~ 50μm, in 5μm increments; 100μm ~ 600μm, in 50μm increments
Retraction range	0~80µm adjustable, in 5µm increments	
Electric coarse feed	Slow $300\mu m/s \pm 30\mu m/s$ Rapid $900\mu m/s \pm 30\mu m/s$	
Motorize cutting speed	-	75-230mm/s±10%;
Specimen holder	Rotation 360°	
Heating Glass	Yes	
Voltage and frequency	$220 \text{ V} \pm 10\%$ , $50 \text{ HZ} / 110 \text{ V} \pm 10\%$ , $60 \text{ HZ}$	
Nominal Power	1000 W	
Weight	about 130 KG	
Dimensions(W×D×H)	805×715×1210mm	



