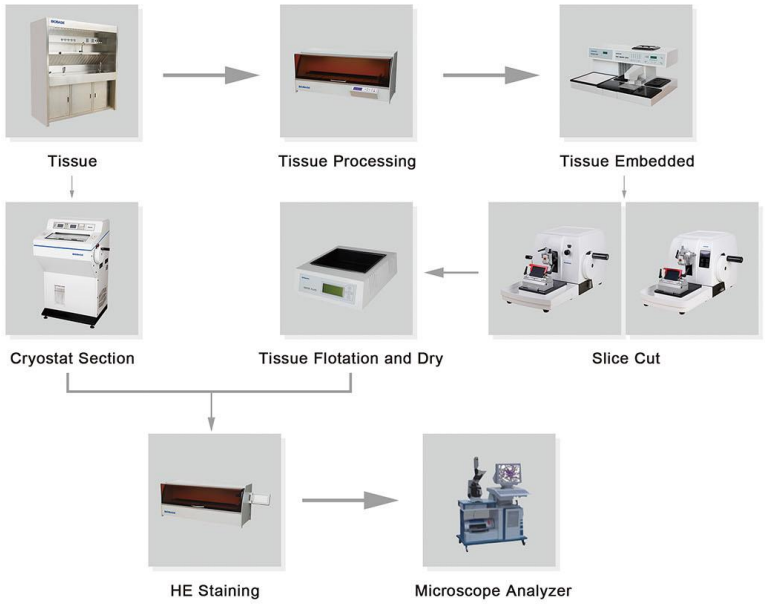
Pathology Lab Equipment

Flow Chart



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Consumables

Cryostat Microtome BK-3000

The BK-3000 Cryostat Microtome is belong to one class medical equipment. It is a device for rapid pathological section analysis of human body, animal and plant tissues. It is widely used in hospitals, medical schools, forensics, animal and plant research units for pathological diagnosis, analysis, and research.

The machine is mainly composed of four parts:

* The upper part of the machine is a microcomputer control part and panel operation, temperature display, and working status display part.
* The middle part is a low-temperature freezer, which is the part for quick freezing of biopsy tissue and sectioning operation.
* The lower part is the refrigeration part of the compressor unit.
* The middle and rear parts are mechanical transmission and motor drive parts.
* Cell pathology section, biological fiber section, etc.

Features:

* The 10-inch color LCD touch screen can separately display the total number of slices and the total slice thickness, slice thickness, specimen retraction value, temperature control, date, time, temperature, timing sleep switch, defrost and other functions. The operation display can be set to switch between Chinese and English operation interface, which is convenient for different users all over the world to operate.
* Humanized hibernation function: After selecting the hibernation state, the temperature of the freezer compartment can be automatically controlled between -1 and -9°C. After the hibernation is canceled, the sectioning temperature can be reached within 15 minutes.
* Imported dual compressors refrigerate the freezing box, freezing table, knife holder, sample chuck, and tissue presser at five points respectively.
* The knife holder is equipped with a blade thruster and a knife guard to cover the full length of the blade, which protects the user safely.
* Equipped with rubber instrument rack and waste box
* X-axis 360°, Y-axis 12°universal rotation, snap-on tissue chuck, easier and faster to install the organization
* Anti-adhesive tissue flattening device, with specimen refrigeration, the temperature can reach -50°, which is convenient for freezing the tissue and saving operation time

* The temperature sensor self-checking function can automatically detect the working status of the sensor
* Single-layer heated glass door, effectively preventing water mist condensation
* Hand wheel positioning 360° locking function at any point
* The sample chuck travels to the limit position and automatically returns to the starting position function

Technical Parameters:

Model	BK-3000
Chamber temperature	10℃ ~ -50℃
Freezing shelf temperature	0℃ ~ -50℃
Temperature control range of sample chuck	10℃ ~ -50℃
Additional semiconductor refrigeration in the freezer	-60℃
Number of freezing station	36 pcs
Pelletier number	8 pcs
Semiconductor fast cooling working time	15 minutes
Maximum specimen size	55mm×80mm
Vertical stroke	65mm
Horizontal stroke	22mm
Electric feed speed	0.9mm/s、0.45mm/s
Disinfection method	UV
Section thickness range	0.5μm~100μm Adjustable
	0.5μm~5μm Increment0.5μm
	5μm~20μm Increment1μm
	20μm~40μm Increment2μm
	40μm~100μm Increment5μm
Trimming thickness range	10μm~600μm Adjustable
	10μm~50μm Increment5μm
	50μm~100μm Increment10μm
	100μm~600μm Increment50μm
Specimen retraction	0~100μm Adjustable, Increment5μm
Dimension size(mm)	700×760×1160mm
Weight	135 KG

Manual Rotary Microtome

BK-2258

BK-2218

BK-2268

Features:

* Large-volume removable waste tray on the top of housing, convenient to use.
* Imported cross-roller guide rails and high precision screw motion mechanism.
* Advanced high-precision micro-drive feed system enables stable and high-precision sectioning.
* Small coarse-advance hand-wheel is close to the operator, in accordance with an ergonomic design.
* The precise positioning system is not only easy to use, but also provides accurate X- and Y- axis adjustment.
* Hand-wheel balance is precisely adjusted and locked at any position, ensuring safety and convenience of sectioning.
* Fast switching between paraffin block clamp and cassette clamp; Paraffin Block Clamp is for Standard Configuration , cassette clam is optional.
* Blade holder can be laterally moved without direct contact, enabling use of the entire length of the blade. (three different segments)
* Cassette clamp can be locked at any position along each of the three axes, enabling easy adjustment of the specimen sectioning angle.
* The red bar on the blade holder covers the whole length of blade to protect the user and enables easy changing of the blade.

Technical Parameters:

Model	BK-2258	BK-2218	BK-2268
Function	Sectioning, trimming, fast forward, fast backward, quick conversion; automatic retraction (Only for BK-2268).		
Specimen Retraction	/	/	60μm (on/off)
Sectioning Thickness Range	0~60μm 0~2μm increment 0.5μm 2~10μm increment 1μm 10~20μm increment 2μm 20~60μm increment 5μm	0~60μm 0~10μm increment 1μm 10~20μm increment 2μm 20~60μm increment 5μm	0~60μm 0~20μm increment 1μm 20~60μm increment 5μm
Trimming Thickness Range	0~60μm	0~60μm	0~60μm
Mini. Sectioning Thickness	0.5μm	1μm	
Max. Specimen Size	50*70mm	60*70mm	70*70mm
Precision	±5%		
Specimen Horizontal Stroke	28mm	29mm	28mm
Specimen Vertical Stroke	52mm	60mm	70mm
Specimen Orientation	XY – 8°		
External Size(W*D*H)	565*440*285mm	570*440*290mm	590*500*330mm
Package Size(W*D*H)	620*530*450mm	620*530*450mm	690*590*500mm
Gross Weight	40kg	40kg	54kg

Automatic and Semi-automatic Microtome

BK-2478 (Semi-automatic)

BK-2488 (Semi-automatic)

BK-2498 (Automatic)

Features:

* Large-volume removable waste tray on the top of housing, convenient to use.
* Imported cross-roller guide rails and high-precision screw motion mechanism.
* Fast switching between paraffin block clamp and cassette clamp.
* Hand-wheel balance can be precisely adjusted and can be locked at any position, ensuring safety and convenience of sectioning.
* Blade holder can be laterally moved without direct contact, enabling use of the entire length of the blade. (three different segments)
* The red bar on the blade holder covers the whole length of blade to protect the user and enables easy change of theblade.
* Automatic sectioning speed is adjustable by gentle button.(BK-2498 only)
* Auto slicing controller ensures trimming and slicing switching easily; When it is off, semi-auto slicing or trimming is available.(BK-2498 only)
* Safety and emergency braking systems.(BK-2498 only) Security alarm systems, driver-overload protection and auto-sleep protection system.(For all 3 models)
* Control system with 3 modes: conventional mode, intelligence sensing mode and whole layer cutting mode.(BK-2488 only)

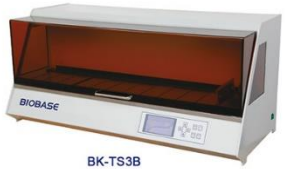
Technical Parameters:

Model	BK-2478	BK-2488	BK-2498
Mode	Semi-automatic without intelligent sensing	Semi-automatic with intelligent sensing	Automatic or Manual Mode without intelligent sensing
Function	Sectioning, trimming, fast forward, fast backward, quick conversion; automatic retraction (except BK-2478).		
Retraction Range	/	0~50μm (If 0 is set, retraction function is off) 5-50 (Retraction distance is optional in this range, and increment is 5μm, such as, 5, 10, 15, 25...)	
Display	LCD Display: sectioning thickness, trimming thickness, slice count.	OLED Display: sectioning thickness, trimming thickness, slice count.	LED display: sectioning thickness, trimming thickness, slice count, slice speed
Sectioning Thickness Range	0~60μm 0~1.0μm increment 0.25μm 1~10μm increment1μm 10~20μm increment 2μm 20~60μm increment 5μm	0.25~100μm 0.25~2.5μm increment 0.25μm 2.5~5μm increment 0.5μm 5.0~10μm increment 1μm 10~30μm increment 2μm 30~60μm increment 5μm 60~100μm increment 10μm	
Trimming Thickness Range	0~60, 0~100, 1~900μm 1~10μm increment 1μm 10~20μm increment 2μm 20~100μm increment 5μm 100~900μm increment 50μm	1~600μm 1~10μm increment 1μm 10~20μm increment 2μm 20~50μm increment 5μm 50~150μm increment 10μm 150~600μm increment 50μm	
Whole Layer Clearance Distance(Only for BK-2488)	10~6000μm (10, 12, 15, 20.....6000, after 15μm, the increment is 5μm)		
Specimen Horizontal Stroke	28mm		
Specimen Vertical Stroke	52mm	70mm	
Specimen Orientation	XY – 8°, rotation 360°	XY – 8°, rotation ±90°	
Mini. Sectioning Thickness	0.25μm		
Max. Specimen Size	50*70mm	70*70mm	
Feed Speed	450um/s	1500μm/s, 3500μm/s	
Precision	±5%		
Standard Accessory	Cassette clamp or Paraffin Block Clamp (Paraffin Block Clamp is acquiescent)		
Consumption	100W		150W
Power Supply	AC110/220V±10%, 50/60Hz		
External Size(W*D*H)	585*410*305mm	575*420*330mm	580*475*340mm
Package Size(W*D*H)	670*550*480mm	670*550*480mm	680*570*500mm
Gross Weight	45kg	45kg	60kg

Automated Tissue Processor

BK-TS3D1

BK-TS3A



BK-TS3B

Application:

Automated Tissue Processor is a kind of instrument which can automatically immerse human body or animal and plant tissues into various solvents according to the program through automatic program control to conduct pre-processing of pathological analysis such as dehydration, transparency and wax immersion, and display the operation status, data and other information of the equipment in real time. It is convenient for operators to handle and control in time, and is suitable for medical colleges, hospital pathology, medical research, animal and plant research, food detection and other departments.

Features:

* LCD display, real-time display of the working status of the machine, the work progress is clear at a glance.
* Internal circulation air purification system, highly effective adsorption of harmful gases.
* Built-in UPS power supply, can run for more than 30 hours after power failure for BK-TS3D1 and BK-TS3B, can run for more than 6 hours after power failure for BK-TS3A .
* BK-TS3D1 can dehydrate about 130 tissue samples at a time, BK-TS3B can dehydrate about 100 tissue samples at a time,BK-TS3A can dehydrate about 50 tissue samples at a time.

Technical Parameters:

Model	BK-TS3D1	BK-TS3B	BK-TS3A
Number of Liquid Cups	12 (9 reagent cups, 3 medical paraffin cups)		
Capacity of Each Cup	2L	1.5L	1L
Temperature Range	RT~80℃		RT ~ 99℃
Temperature Control Precision	±1℃		
Single Cup Processing Time	0~99h(the first cup);0~24h(the 2nd to 12th cup)		
Programmable	20 sets		2 sets
Drain Time	10s ~ 60s, adjustable		30s
Frequency of Agitation	0-6 times/minute, adjustable		2 times/minute
Tissue Protection Station	From the 1st to 7th station		7th station
Consumption	500W		
Power Supply	AC220V±10%, 50/60Hz (standard); AC110V±10%, 60Hz(optional)		
Standard Accessories	Dehydration basket*1		
Instrument Size(W*D*H)	1170*465*535mm	1055*480*495mm	1010*420*450mm
Package Size(W*D*H)	1320*590*680mm	1220*620*620mm	1180*540*560mm
Net Weight	85kg	75kg	67kg
Gross Weight	116kg	96kg	90kg

Paraffin Dispenser

Features:

* Microcomputer controller
* Temperature sensors are made in USA, precise and reliable
* Automatically save the last operation settings
* Memory and automatic restoration function
* LED display

Technical Parameters:

Model	BK-PD10
Capacity	10L
Temp. Range	RT ~ 100℃ adjustable
Temp. Precision	±1℃
Consumption	1200W
Power Supply	AC110V/220V±10%, 50/60Hz
External Size(W*D*H)	355*410*540mm
Package Size(W*D*H)	480*450*560mm
Gross Weight	21kg

Paraffin Trimmer

Features:

* Microcomputer controller
* Temperature sensors are made in USA, precise and reliable
* Automatically save the last operational settings
* Memory and automatic restoration function
* LED display

Technical Parameters:

Model	BK-PT230
Working Area	230*160mm
Temp. Range	RT ~ 90℃ adjustable
Temp. Precision	±1℃
Consumption	150W
Power Supply	AC110V/220V±10%, 50/60Hz
Standard Accessories	5 Waste paraffin collection boxes
External Size(W*D*H)	255*180*155mm
Package Size(W*D*H)	330*260*230mm
Gross Weight	3kg

Tissue Flotation Water Bath & Slide Dryer

Features:

* Integrate tissue flotation water bath and slide dryer, compact structure and easy operation
* High-brightness LCD display, real-time display of temperature.
* Highly sensitive temperature control integrated unit, high precision and reliable performance.
* With over-temperature alarm function
* Using new heating materials, heating fast, uniform heating, low thermal inertia, energy saving and reliable.
* With memory function. The set temperature is automatically retained.
* Louver-type drying table, easy to operate, better drying effect
* The work surface is sprayed for corrosion resistance.

Technical Parameters:

Model	BTH-I
Temp. Range	RT to 90℃
Temp. Precision	2℃
Environmental Temp. Range	0~40℃
Over-Temp. Alarm Range	1~5℃
Drying Area	344*260mm
Bath Tank Size(W*D*H)	304*207*52mm
Display	LCD
Power Supply	AC220V±10%, 50/60Hz; AC110V±10%, 60Hz
Consumption	600W
External Size(W*D*H)	695*400*210mm
Package Size(W*D*H)	800*510*320mm
Gross Weight	20kg

Tissue Embedding Center & Cooling Plate

BK-TEI

BK-CPI & BK-TEI

Features:

* Microprocessor Control for temperature,made in the USA.
* The Embedding Module and Cooling Module can be assembled freely.
* Flexible heating mechanism, Dual-protection; Safe, Reliable and Energy-Saving.
* Fully programmable computer controls allow automatic system start and stop anytime within a week.
* Automatic Memory and Restoration: After start, all preset temperature data are automatically stored.
* Paraffin Chamber, Paraffin Dispenser, Left and Right Thermal Storage Compartments, and Heating Plate (working area) are individually controlled.

Optional:

BK-CPI Cooling Plate: Working Temp.: RT-40℃, Temp. can not be adjustable. The lowest can be -30℃.
Working Size: 320*300mm

Technical Parameters:

Model		BK-TEI
Paraffin Chamber Capacity		3L
Temp. Range	Forceps Wells	55~70℃
	Paraffin-melting Chamber	
	Thermal Storage Compartments	
	Heated Working Areas	
	Paraffin Dispenser	
Temp. Precision		±1%
Material of Work Table		Granite, easy to clean
Paraffin Flow Control		Finger touch plate and optional foot pedal
Consumption		650W
Power Supply		AC110/220V±10%, 50/60Hz
External Size(W*D*H)		525*550*385mm
Package Size(W*D*H)		630*670*520mm
Gross Weight		41kg
Optional Accessory		BK-CPI Cooling Plate
Package Size of BK-CPI (W*D*H)		700*450*530mm
Gross Weight of BK-CPI		37kg

Tissue Embedding Center & Cooling Plate

Features:

* Low-voltage, safe and bright LED lamp
* Manual and automated operation modes
* Flexible heating mechanism and PID technology
* Trimming plates at both sides for convenient tissue block trimming
* Freezing temperature can be adjusted due to the use of a new-type inverter compressor
* Adjustable gravity-feed paraffin dispenser using latest heating and DC low-voltage control mechanism
* Flexible module configuration options through a design separating Cryo Module from Embedding Module
* Seven working areas are individually controlled and work independently
* A big magnifying glass can be adjusted at any direction and angle, suitable for embedding extremely small tissue specimens

BK-TE II

BK-CP II & BK-TE II

Optional: BK-CP II Cooling Plate

Temp. Range of Cryo Module: +5℃ ~ -20℃
Optional Work Temp.: approximately -10℃~-15℃, and the temperature is under delay protection

Technical Parameters:

Model	BK-TE II
Paraffin Chamber Capacity	≥6L
Temp. Ranges	RT~85℃
Temp.Precision	1%
Paraffin Flow Control	Finger touch plate and foot pedal
Display	LED
Size of Paraffin Chamber(W*D*H)	495*132*95mm
Thermal Storage Chamber Size(W*D*H)	240*160*55mm
Embedding Module Working size	540*93mm
Small Cold Plate Size	60*50mm
Consumption	1000W
Power Supply	AC110V/220V±10%, 50/60Hz
External Size(W*D*H)	675*575*395mm
Package Size(W*D*H)	780*700*550mm
Gross Weight	54kg
Optional Accessory	BK-CP II Cooling Plate
Cryo Module Size	315*380mm
Package Size of BK-CP II (W*D*H)	790*480*560mm
Gross Weight of BK-CP II	38.5kg

Tissue Flotation Water Bath

Features:

* High-brightness LCD display, real-time display of temperature.
* Highly sensitive temperature control integrated unit, high precision and reliable performance.
* With over-temperature alarm function
* Using new heating materials, heating fast, uniform heating, low thermal inertia, energy saving and reliable.
* With memory function. The set temperature is automatically retained.
* The work surface is sprayed for corrosion resistance.

Technical Parameters:

Model	BT-I
Temp. Range	RT to 90℃
Temp. Precision	1℃
Over-Temp. Alarm Range	1~5℃
Environmental Temp. Range	0~40℃
Bath Tank Size(W*D*H)	240*180*55mm
Display	LCD
Power Supply	AC220V±10%, 50/60Hz; AC110V±10%, 60Hz
Consumption	200W
External Size(W*D*H)	345*340*130mm
Package Size(W*D*H)	440*440*220mm
Gross Weight	5kg

Slide Dryer (Hot Plate)

Features:

* High-brightness LCD display, real-time display of temperature.
* Highly sensitive temperature control integrated unit, high precision and reliable performance.
* With over-temperature alarm function
* Using new heating materials, heating fast, uniform heating, low thermal inertia, energy saving and reliable.
* With memory function. The set temperature is automatically retained.
* The work surface is sprayed for corrosion resistance.

Technical Parameters:

Model	BH-I
Temp. Range	RT to 90℃
Temp. Precision	1℃
Environmental Temp. Range	0~40℃
Over-Temp. Alarm Range	1~5℃
Drying Area	345*260mm
Display	LCD
Power Supply	AC220V±10%, 50/60Hz; AC110V±10%, 60Hz
Consumption	200W
External Size(W*D*H)	345*340*130mm
Package Size(W*D*H)	440*440*220mm
Gross Weight	5kg

Fully Automated Tissue/Slide Stainer

BK-TS2

BK-TS3

Features:

* Imported high-quality parts, smooth operation, low noise, ergonomic design
* Intelligent automatic water influx/efflux/drainage control system
* Green inner-cycling air purification system remove poisonous gas(BK-TS2)
* Real-time visual simulation with icons displays working status dynamically, clearly and intuitively(BK-TS2)
* Small footprint can be placed near the sectioning area for optimal workflow (BK-TS3)
* The APS-coated sturdy housing, resistance to corrosion
* The slide rack can be optionally stopped either above or submerged in cup based on user's selection after the staining process ends
* Operation error alarm

Technical Parameters:

Model	BK-TS2	BK-TS3
Display	LCD touch screen	
Cup Number	18 (Station 1 is for drying Station 10 is for washing)	15 (Station 1 is for drying, station 2 is for washing, other 13 stations for reagents)
Single Cup Capacity	750ml	350ml
Each Cup Processing Time	0~59 min	
Slides Processed Simultaneously	52 slides	24 slides
Dripping Time	Adjustable within 0~30s (shakes above cup)	Adjustable within 0~60s (shakes 0~6times/min adjustable)
Consumption	500W	400W
Power Supply	AC220V±10%, 50/60Hz; 110V±10%, 60Hz	
Packing Size(W*D*H)	1175*460*470mm	1060*370*400mm
Gross Weight	71kg	47kg

Slides Cabinet

Paraffin Block Cabinet BKC-PB450

Slide Cabinet BKC-S400

Slide Storage Cabinet BKC-SS450

Technical Parameters:

Model		BKC-S400	BKC-PB450	BKC-SS450
Capacity		72 Drawers (12 layers*6 grid, plus a base) Loading: 760*72=54720 pcs glass slides	18 Drawers (3 layers*6 grid, plus a base) Loading: 12000 pcs paraffin bock	18 Drawers (3 layers*6 grid, plus a base) Loading: 4464 or 8928 pcs glass slides
Material	Cabinet	Cold-rolled steel plate. Surface Treatment: Degrease oil, Table regulator, Zinc parkerising , Passivation, Powder spraying		
	Drawer	Specialized slide drawer, ABS slide plate		
	Slot	Made by special mold		
	Mark Groove	Integration forming		
External Size(W*D*H)		403*478*1625mm	450*478*1295mm	450*478*1295mm
Package Size(W*D*H)		570*490*430mm(1-3 layers) 570*490*430mm(4-6 layers) 570*490*430mm(7-9 layers) 570*490*560mm (10-12 layers+Base stand)	550*520*440mm(1st layer) 550*520*440mm(2nd layer) 550*520*570mm (3rd layer+Base stand)	550*520*440mm(1st layer) 550*520*440mm(2nd layer) 550*520*570mm (3rd layer+Base stand)
Gross Weight		110kg	82kg	80kg