

PATHOLOGICAL ANATOMY TISSUE EMBEDDING SYSTEMS







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Tissue Embedding Center Model YR439

In histology labs, a very common procedure is the tissue sampling, processing and staining. This is a very common and delicate process that needs to be done in the proper way, in order to not compromise the lab results. Tissue processing is about the diffusion of substances into and out of porous tissues. The diffusion process happens when you process reagents to equal concentrations inside and outside tissue blocks.

When processing a sample, you need to take into consideration several variables such as the temperature. In the histology laboratory, the tissue processing describes the stages where the sample goes through dehydration and clearing and then goes through the tissue embedding process. Most of the time, tissues are most conveniently processed through dehydration, clearing and infiltration stages automatically.



Cassette capacity: around 200pcs/Thermal chamber Paraffin tank capacity :3L

Tissue embedding center

The paraffin embedding procedure is a very common one in any histology Finally, the dual-protection from overheating is safe, reliable and energy lab. This is the standard method to produce blocks of tissue for section cutting. Usually, this procedure is performed using an embedding center, surrounding the tissues by a medium such as paraffin wax, which when cooled and solidified will provide sufficient support for section cutting.

Tissue embedding center parts and functions

Temperature, pressure and vacuum and agitation are very important factors \checkmark that can affect the tissue processing technique. For example, you can avoid high infiltration temperatures because marked tissue shrinkage and hardening by maintaining embedding waxes 2-3°C above their melting points. On the other hand, high pressure facilitates infiltration of dense specimens with the more viscous embedding media. Finally, tissues agitation during processing ensures an adequate fluid exchange and in automatic tissue processors, continual motion of tissue containers and flow of processing fluids is maintained.

Tissue embedding equipment

This model features fully programmable computer controls that allow automatic system start and stop at any time (weekly). The systems temperature is controlled by USA microprocessors and they display using color-changing LEDs to enable clear visibility of working status. This tissue-embedding center has five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, and heating plate (working area); they are individually controlled and work independently without interference from each other. In \checkmark addition, it has a flexible heating mechanism that overcomes the shortcomings of traditional technology resulting in excessive temperature \checkmark

differences. System provides fast heating and precise temperature control. saving.

Product Name: YR439 Tissue Embedding Center. **Product Categories:** Embedding Center.

Features

- Fully programmable computer controls allow automatic system start and stop anytime (weekly).
- ✓ Temperature is controlled by microprocessors made in the USA and they are displayed using color-changing LEDs to enable clear visibility of working status.
- ✓ Five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, and heating plate (working area), are individually controlled and work independently without interference from each other.
- ✓ Flexible heating mechanism overcomes the shortcomings of traditional technology that can result in excessive temperature differences. System provides fast heating and precise temperature control. In addition, the dual-protection from overheating is safe, reliable and energy-saving.
- Automatic memory and restoration functions: After startup, all preset \checkmark temperature data are automatically stored in the system.
- Flexible module configuration options through a design which separates the Cryo Module from Embedding Module.
- √ Safe and reliable low-voltage illumination system.
- Heated working plate and forceps wells make tissue embedding more convenient.
- Large granite working area eases the cleanup of excessive paraffin.



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Tissue Embedding Center Model YR439-1

Features

- ✓ Imported OLED module display, clear writing, you can clearly observe Technical Description the display data from any angle
 ✓ Model: YR439-1
- The interface layout is reasonable, the working status icon is displayed, and the button LED indicates, the working status is clear at
 a glance
- ✓ Fully automatic program control by computer, can be present to turn on and off at any time every week
- The integrated temperature measurement block imported from the United States has high precision and reliable performance.
- ✓ Independent seven channel PID temperature control, do not affect each other
- ✓ Using a new type of flexible heating element, rapid heating, uniform heating, energy saving and reliable
- ✓ Double overheat protection device; safe and reliable
- ✓ With memory and automatic recall functions, the present temperature is automatically retained after operation
- ✓ Two modes of operation, manual mode to start and stop immediately, automatic mode with power off memory, call auto power function
- The left and right boxes are enlarged, suitable for all kinds of dewatering baskets. The inner and outer boxes are separate design, which is convenient to take out and change the wax and maintain.
- Enlarged tweezer storage table, large and small tweezers can be placed, unique diversion groove design to prevent paraffin overflow
- Large workbench design with wax block repair device, multi-functional use
- Equipped with universal metal hose magnifier, users can be adjusted according to their needs, suitable for the organization and operation of very small samples.
- Imported semiconductor random small cold table, instant cooling, convenient for rapid sample positioning and embedding, and improve work efficiency
- Large capacity wax bath to ensure mass tissue inlay can be completed in one go
- ✓ The cold light source low-voltage lighting system adopts imported CPU constant current independent control, and the brightness is continuously adjusted without flickering
- ✓ The lighting adopts the universal metal hose design, the lighting angle can be adjusted arbitrarily, and it is more convenient to observe the tissue samples.
- ✓ Imported valve adjusts the flow rate of the wax nozzle, suitable for various tissue inlay treatments
- ✓ Soft touch automatic switch, dual control flow wax design foot switch, two ways to choose at will
- ✓ Perfect wax flow system design, automatic wax outlet, precise position and convenient inlay operation

- ✓ Paraffin Chamber Capacity \geq 6 liters
- ✓ Temperature ranges RT 85 °C:
- ✓ Temperature control precision ± 1%
- ✓ Paraffin flow control Paraffin flow control via touch plate and
- ✓ optional pedal
- ✓ Fully programmable ON / OFF control allows automatic start and stop
- ✓ from the system at any time weekly
- ✓ Paraffin Chamber Dimensions: 495 × 132 × 95 mm (width x depth x height)
- Thermal camera dimensions (each) 240 × 160 × 50mm (width x depth x height)
- ✓ Keying module workspace 540 mm × 93 mm
- ✓ Small cold plate dimensions $60 \times 50 \text{ mm}$
- ✓ Operating voltage: AC 220V ± 10% 50Hz (standard model); AC110V ± 10% 60Hz
- ✓ Power: 1000W
- ✓ Dimensions: 670×575×395mm(D×WxH)
- ✓ Net weight: 38.5kg



Cassette capacity: around 300pcs/container/Thermal chamber Paraffin tank capacity :6L



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Tissue Embedding & Cooling System Model YR441

In histology labs, a very common procedure is the tissue sampling, processing and staining. This is a very common and delicate process that needs to be done in the proper way, in order to not compromise the lab results. Tissue processing is about the diffusion of substances into and out of porous tissues. The diffusion process happens when you process reagents to equal concentrations inside and outside tissue blocks.

When processing a sample, you need to take into consideration several variables such as the temperature. In the histology laboratory, the tissue processing describes the stages where the sample goes through dehydration and clearing and then goes through the tissue embedding process. Most of the time, tissues are most conveniently processed through dehydration, clearing and infiltration stages automatically.



Cassette capacity: around 200pcs/Thermal chamber Paraffin tank capacity :3L

Features:

- ✓ Fully programmable computer controls allow automatic system start
 ✓ and stop anytime
- ✓ (weekly);
- ✓ Temperature is controlled by microprocessors made in the USA and they are displayed
- \checkmark using color-changing LEDs to enable clear visibility of working status; \checkmark
- ✓ Five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal
- ✓ Storage Compartments, and heating plate (working area), are individually controlled and
- ✓ work independently without interference from each other;
- Flexible heating mechanism overcomes the shortcomings of traditional technology that can
- ✓ result in excessive temperature differences. System provides fast heating and precise
- ✓ temperature control. In addition, the dual-protection from overheating ✓ is safe, reliable and
- ✓ energy-saving;
- ✓ Automatic memory and restoration functions: After startup, all preset temperature data are
- ✓ automatically stored in the system;
- ✓ Flexible module configuration options through a design which separates the Cryo Module
- ✓ from Embedding Module;
- ✓ Safe and reliable low-voltage illumination system;
- \checkmark Heated working plate and forceps wells make tissue embedding more

convenient;

✓ Large granite working area eases the cleanup of excessive paraffin.

Technical Specifications:

- ✓ 70°C is set as the paraffin-heating temperature based on the latest internationally accepted
- principles indicating that tissue embedded in paraffin might be damaged due to excessive
- ✓ shrinkage of paraffin blocks when heating temperature is above 70°C
- ✓ Paraffin Chamber Capacity: 3 liters
- ✓ Temperature Range of Forceps Wells: 55 70°C
- ✓ Temperature Range of Paraffin-melting Chamber: 55 70°C
- ✓ Temperature Range of Thermal Storage Compartments: 55 70°C
- ✓ Temperature Range of Heated Working Areas: 55 70°C
- ✓ Temperature Range of Paraffin dispenser: 55 70°C
- ✓ Temperature Control Precision: ±1%
- Paraffin Flow Control: Paraffin flow control via finger touch plate and optional foot pedal
- ✓ Fully programmable ON/OFF control allows automatic system start and stop anytime weekly
- ✓ Working Temperature of Cryo-Module: ≤ -20°C
- ✓ Working Voltage: AC 220V±10% 50Hz (standard model); AC110V±10% 60Hz
- ✓ Power: 650W/, 300W
- Dimensions: 525×550×385 mm (D×WxH)/ 590×345×385 mm (D×WxH)Net weight: 26kg/ 27kg



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Tissue Embedding Center Model YR445

In histology labs, a very common procedure is the tissue sampling, processing and staining. This is a very common and delicate process that needs to be done in the proper way, in order to not compromise the lab results. Tissue processing is about the diffusion of substances into and out of porous tissues. The diffusion process happens when you process reagents to equal concentrations inside and outside tissue blocks.

When processing a sample, you need to take into consideration several variables such as the temperature. In the histology laboratory, the tissue processing describes the stages where the sample goes through dehydration and clearing and then goes through the tissue embedding process. Most of the time, tissues are most conveniently processed through dehydration, clearing and infiltration stages automatically.

Tissue Embedding Center Parts and Functions

Temperature, pressure and vacuum and agitation are very important factors that can ✓ affect the tissue processing technique. For example, you can avoid high infiltration temperatures because marked tissue shrinkage and hardening by maintaining embedding waxes 2-3°C above their melting points. On the other hand, high pressure facilitates infiltration of dense specimens with the more viscous embedding media. Finally, tissues agitation during processing ensures an adequate fluid exchange and in automatic tissue processors, continual motion of tissue containers and flow of processing fluids is maintained.

Tissue Embedding Equipment

This model features fully programmable computer controls that allow automatic system start and stop at any time (weekly). The use of new silicon rubber heating elements achieves rapid even, reliable, energy saving heating. Its temperature is precisely measured by temperature-sensing integrated USA blocks, and is LCD-displayed with icons demonstrating current working status. This tissue-embedding center has five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, and heating plate (working area); they are individually controlled and work independently without interference from each other. In addition, it has five temperature-control channels and multiple overheating protection mechanisms that provide safe, reliable, and energy-saving protection. It has flexible module configuration options through a design, which separates the cryo Module from embedding Module, enabling easy maintenance. Finally, with this system's cryo plate's temperature is controlled independently and can be used to freeze tissue more conveniently, particularly for small specimens.

Product Name: YR445 Tissue Embedding Center. Product Categories: Embedding Center.

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Features:

- Fully programmable computer control allows automatic system start and stop anytime (weekly).
- ✓ The use of new silicon rubber heating elements achieves rapid even, reliable,



Cassette capacity: cassette capacity: around 300pcs/container/Thermal chamber Paraffin tank capacity :4L

energy saving heating.

- Temperature is precisely measured by temperature-sensing integrated blocks made in USA, and is LCD-displayed with icons demonstrating current working status.
- ✓ Five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, and heating plate (working area), are individually controlled and work independently without interference from each other.
- ✓ Five temperature-control channels and multiple overheating protection mechanisms provide safe, reliable, and energy-saving protection.
- ✓ Automatic memory and restoration functions: After startup, all preset temperature data are automatically stored in the system.
- Flexible module configuration options through a design which separates the Cryo Module from Embedding Module, enabling easy maintenance.
- ✓ Freezing temperature can be adjusted due to the use of a new-type inverter compressor.
- The temperature of the cryo plate equipped with this system is controlled independently and can be used to freeze tissue more conveniently, particularly for small specimens.
- Paraffin Chamber with super large capacity enables embedding a large number of specimens at same time.
- Safe and reliable low-voltage illuminating system with two ON/OFF control options (finger or foot-operated).
- ✓ Heated working plate and forceps wells make tissue embedding more convenient.
- ✓ High-precision clock makes time setting more convenient and accurate.
- There is an automatic actuation, can make sure the unit will continue working after a power-down.
- Using the imported solenoid valve to help the Paraffin Dispenser to adjust the flow rate.
- ✓ This unit set the control power socket, it can work with BL and BC and the same time.
- ✓ Dimensions: 670*590*445mm (D.W.H)



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Tissue Embedding & Cooling System

Model YR448

Features:

- ✓ OLED screen: energy-saving, crisp display without the necessity of background light, clear vision without blind spots from any angle;
- Flexible heating mechanism and PID technology are used to achieve fast heating and precise temperature control;
- ✓ Seven working areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, heating plate (working plate), small Cooling Plate, and Cryo Module are individually controlled and work independently without interference by each other;
- ✓ Adjustable gravity-feed paraffin dispenser using latest heating and DC ✓ low-voltage control mechanism: dispenser is heated with wrapping-type ✓ heating film to achieve smooth, safe and reliable heating;
- ✓ Trimming plates at both sides for convenient tissue block trimming;
- A big magnifying glass can be adjusted at any direction and angle, suitable for embedding extremely small tissue specimens;
- Manual and automated operation modes: under a manual mode, the system can be started and stopped any time; under an automated mode,
 ON/OFF can be set at any weekday, hour and minute; all settings are automatically stored once the program starts to run;
- ✓ All buttons are equipped with luminotron to clearly show the working status;
- ✓ Low-voltage, safe and bright LED lamp: both angle and brightness are adjustable, enabling easy and convenient specimen observation;
- ✓ Flexible module configuration options (left-to-right or right-to-left) through a design separating Cryo Module from Embedding Module; Cryo Module can be automatically started or stopped along with Embedding Module by optionally using a power serial port;
- ✓ Freezing temperature can be adjusted due to the use of a new-type inverter compressor;
- ✓ There is an automatic actuation, can make sure the unit will continue working after a power-down.

Technical specifications for the Embedding System:

- ✓ Paraffin Chamber Capacity: ≥6 liters
- ✓ Temperature Ranges: RT 85°C:
- ✓ Temperature Control Precision: ±1%
- Paraffin Flow Control: Paraffin flow control via finger touch plate and optional foot pedal
- ✓ Fully programmable ON/OFF control allows automatic system start and

stop anytime weekly

- ✓ Dimensions of Paraffin Chamber: 495×132×95mm(W x D x H)
- ✓ Working area of Embedding Module: 540mm×93mm
- ✓ Dimensions of small cold plate: 60×50mm
- ✓ Working Voltage: AC 220V±10% 50Hz (standard model); AC110V±10% 60Hz
- ✓ Power: 1000W
- ✓ Dimensions: 675×575×395mm(W x D x H)
- ✓ Net weight: 39kg

Technical specifications for the Cooling System:

- ✓ Temperature Ranges of Cryo Module: 0 to -20°C
- ✓ Temperature setting of Cryo Module: the optimal working temperature is approximately -10°C, and the temperature is under delay protection
- ✓ Dimensions of Cryo Module: 315×380 mm
- ✓ Working Voltage: AC 220V±10% 50Hz (standard model); AC110V±10% 60Hz
- ✓ Power: 300W
- ✓ Dimensions: 710×350×390mm (D×WxH)
- ✓ Net weight: 25kg



Cassette capacity: around 300pcs/container/Thermal chamber Paraffin tank capacity :6L



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