



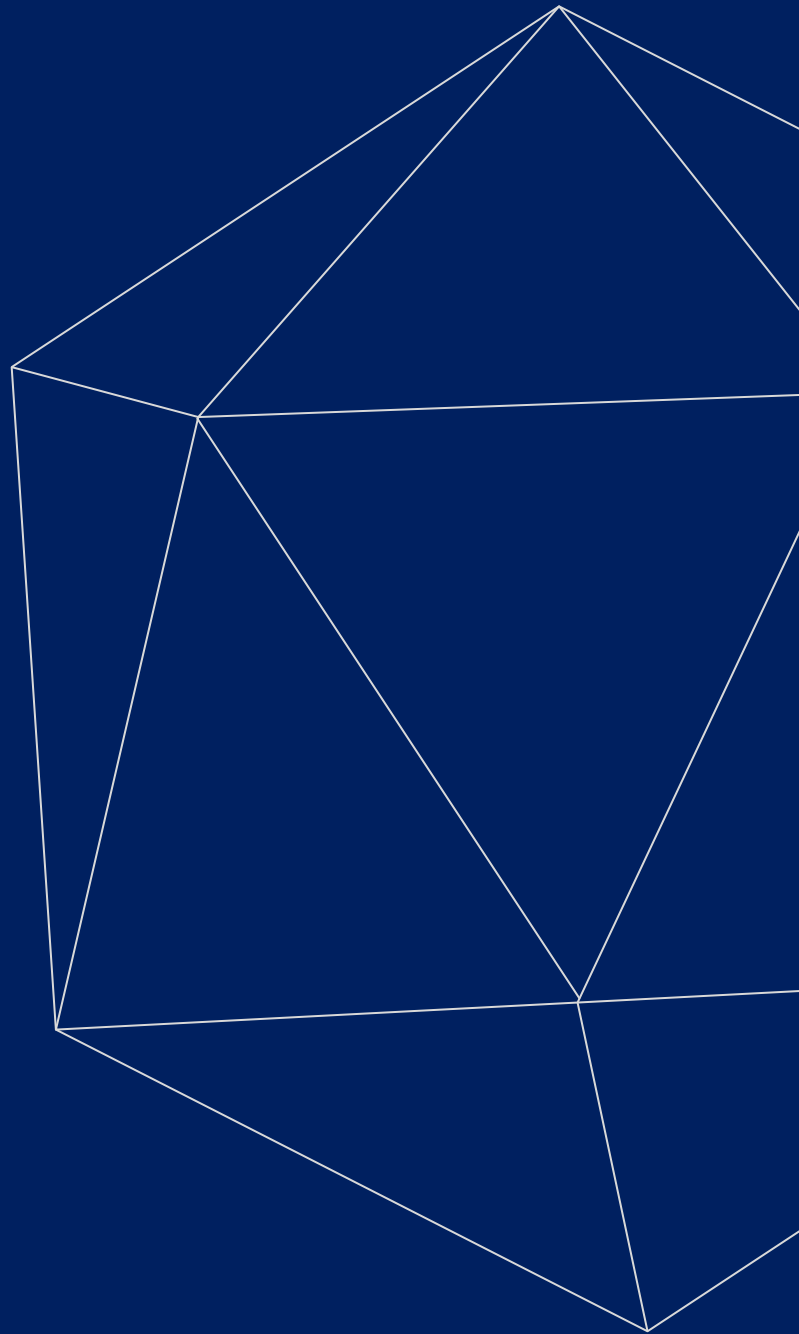
# PATHOLOGICAL ANATOMY

## TISSUE EMBEDDING SYSTEMS



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## Tissue Embedding Center

### Model YR442

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

The paraffin embedding procedure is a very common one in any histology 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 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). It has an automatic memory and restoration functions: After startup, all preset temperature data are automatically stored in the system. 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 a flexible heating mechanism that overcomes the shortcomings of traditional technology resulting in excessive temperature differences. System provides fast heating and precise temperature control. Moreover, the dual-protection from overheating is safe, reliable and energy saving. The cryo module working temperature is  $\leq -20^{\circ}\text{C}$ . Its temperature control precision is  $\pm 1\%$ . Finally, its dimensions are 560 mm  $\times$  550 mm  $\times$  385 mm (W $\times$ D $\times$ H) and its net weight is 35 Kg.

**Product Name:** YR442 Tissue Embedding Center.

**Product Categories:** Embedding Center.



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## Tissue Embedding Center

### Model YR442

#### Features:

- ✓ Fully programmable computer controls allow automatic system start and stop anytime (weekly).
- ✓ Temperature is controlled by using microprocessors made in the USA and are displayed by using color-changing LED 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), is individually controlled and work independently without interference by each other.
- ✓ Flexible heating mechanism overcomes the shortcomings of traditional technology that results in excessive temperature differences provides fast heating and precise temperature control. Dual-protection of overheating makes this system 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 the Embedding Module.
- ✓ Paraffin Chamber with a super large capacity enables embedding a large number of specimens at the same time.
- ✓ 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.

#### Major Technical Specifications:

- ✓ 70°C is set as the paraffin-heating temperature based on the latest internationally accepted principle 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: 5 liters.
- ✓ Temperature Range of Forceps Wells: 55 - 70°C.
- ✓ Temperature Range of Paraffin Chamber: 55 - 70°C.
- ✓ Temperature Range of Thermal Storage Compartments: 55 - 70°C.
- ✓ Temperature Range of Heating Plate: 55 - 70°C.

- ✓ Working Temperature of Small Cooling Plate: 15°C lower than the working area surface.
- ✓ 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: 800W (YR442), 300W (YR443).
- ✓ Dimensions: 560×550×385 mm (W×D×H)(YR442) 590×345×385 mm (W×D×H)( YR443).
- ✓ Net weight: 35kg (YR442) , 24kgs (YR443).



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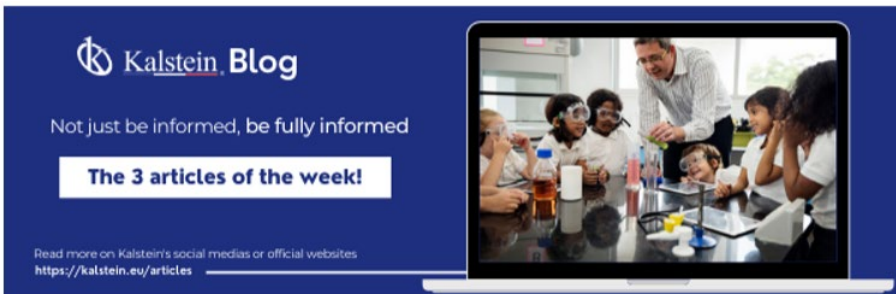
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