

## 05 Performance Characteristics | Other Security Systems

- Backup power supply, quick intervention, duration > 3 hours;
- Electronic lock to ensure cylinder cover is locked; Ultrasonic liquid level detection;
- Heating temperature abnormal protection system function to avoid temperature runaway;
- Exhaust gas automatic collection filter box to improve air quality;
- Operate with benzene or without benzene (environmentally friendly dehydrating liquid, environmentally friendly transparent liquid)

# T/ST Intelligent Tissue Processor

220/380/450/660

## Tissue Processor Series

Model	ST380	ST450	ST660	T120 (Customized)	T220 (Customized)	ST900 (Customized)	ST1200 (Customized)
Dehydration capacity	380	450	600	120	200	900	1200
Qty of retorts	1	2	2	1	1	2	2
Twin-core system	✓	✓	✓	✓	✓	✓	✓
Reagent concentration detection	✓	✓	✓	✓	✓	✓	✓
AI intelligence	✓	✓	✓	✓	✓	✓	✓
Remote monitoring	✓	✓	✓	✓	✓	✓	✓
Rapid dehydration	/	✓	✓	✓	/	✓	✓
Color touch screen	10 inches/ 15 inches	10 inches/ 15 inches	10 inches/ 15 inches	10 inches/ 15 inches	10 inches/ 15 inches	10 inches/ 15 inches	10 inches/ 15 inches
Qty of reagent cabinets	14	14/16	14/16	14	14	14/16	14/16
Qty of wax retorts	3	4	4	3	3	4	4
Size	750*670*1100mm (length, width and height)	800*780*1120mm (length, width and height)	800*780*1120mm (length, width and height)	/	/	/	/
Weight	160kg	160kg	160kg	/	/	/	/



# 01 Performance Characteristics Intelligent Dual Retorts Design

Adapt to the different processing requirements of different tissues and ensure the best dehydration conditions for each tissue.

- The dual retorts design makes it possible for the first time to run multiple programs in parallel on one instrument. Different tissues require different treatments, and the dual retorts design enables the tissue processor to set different dehydration conditions for different types of tissues at the same time, ensuring that each tissue can be optimally treated and avoiding the mutual influence of dehydration conditions between different tissues.

## More Flexible Dehydration Arrangements

- The dual retorts design allows the pathology laboratory to flexibly arrange dehydration tasks for the two retorts separately, so as to easily cope with different needs such as overnight operation, routine biopsy and emergency samples. This design not only helps to rationalize the use of equipment, but also effectively optimizes the pathology process and improves the overall operational efficiency of the laboratory.

## Larger Capacity

- Compared with the single retort design, the dual retorts design provides a larger processing capacity. 380/450/660 standard, 900/1200 customized.



## Smaller Equipment Footprint

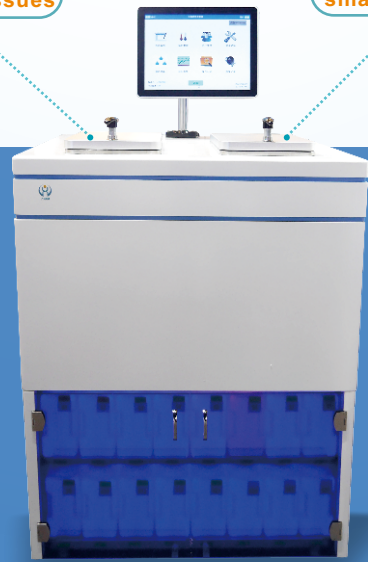
- One dual retorts tissue processor can optimize laboratory floor space by more than 55% compared to two single retort tissue processors.

## Make Laboratory Management Simple

- Compared with two single retort tissue processors, the daily technical maintenance time (including maintenance, cleaning, replacement of reagents, etc.) can be greatly shortened, and the dual retorts design allows for more sophisticated management and monitoring.

Dehydration of large tissues

Dehydration of small tissues



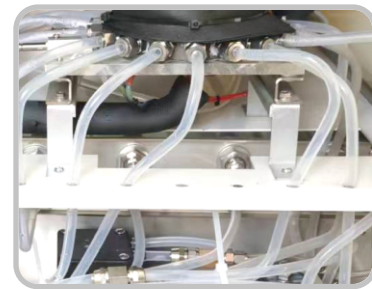
# 02 Performance Characteristics Twin-core System Protection

## Twin-core

- Dual gas circuits, liquid circuits, patented pipelines dual air pumps, rotary valves dual operating systems...

## Super Strong Stability and Reliability

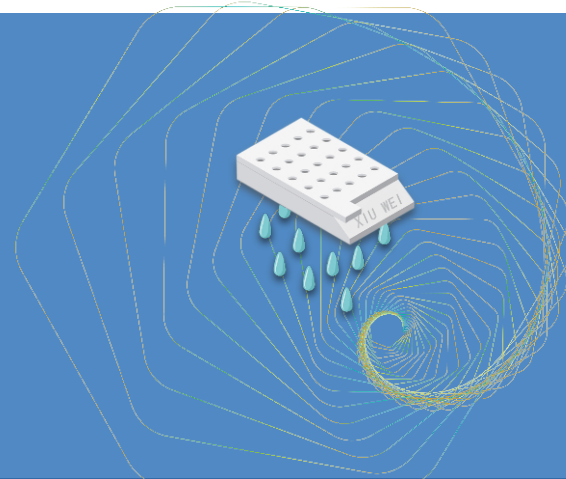
- The dual-system working mode is adopted, with the main system responsible for the core dehydration function and the auxiliary system providing support and backup. The dual systems back up each other and automatically switch when a fault occurs without affecting the dehydration operation. The dual systems supervise each other, have excellent fault diagnosis capabilities, and report in a timely manner.



Pipeline Rotary valve Positive and negative pressure pump

## Efficient Dehydration Technology

- The advanced fine control technology and precise temperature and pressure regulation system are used to greatly enhance the dehydration effect of pathological tissues.
- The special impeller forms a reagent vortex in the dehydration retort to ensure comprehensive dehydration of tissues, optimize the dehydration process, and improve the uniformity of dehydration.
- The dehydration strategy and procedures have been optimized to further enhance the dehydration effect.
- The unique design of the dehydration basket facilitates the immersion and drainage operations.



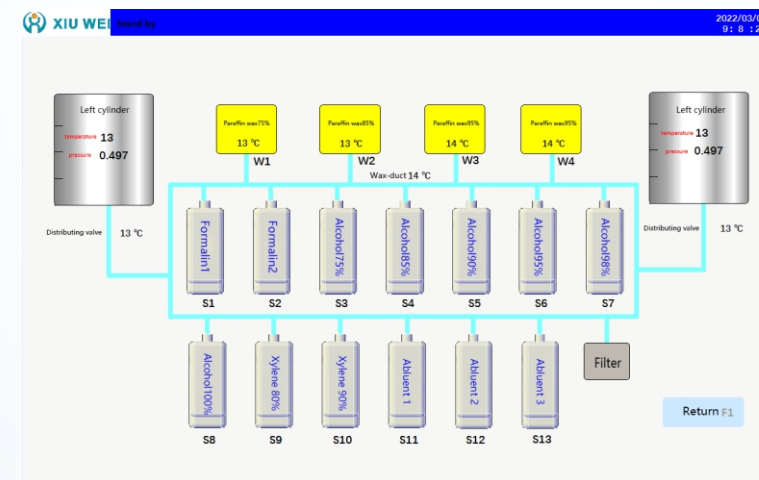
# 03 Performance Characteristics Full Reagent Testing

## Full Reagent Testing and Software Monitoring

Xiuwei's CRDFAX full reagent detection technology is the first in the industry to realize the online instant detection function of the three key reagents: "formalin, alcohol, and xylene".

This innovative measure significantly improves the accuracy and timeliness of dehydration reagent concentration detection, ensuring the accuracy and reliability of experimental data. By real-time monitoring of reagent concentration changes, the equipment can quickly remind users to change reagents, thereby ensuring that the dehydration effect is always maintained at the optimal level.

The successful application of this technology not only optimizes the dehydration process, but also greatly improves the management efficiency and level of pathology laboratories, providing more powerful and reliable technical support for pathology analysis.



Step	Reagent name	Soak time (H:M)	Temperature (default temperature)	Pressure	Stir	Time-delay
1	Formalin	0 : 5	35	Atmosphere		
2	Xylene pure	0 : 20	35	Atmosphere	✓	
3	Paraffin wax 75%	1 : 1	65	Atmosphere	✓	
4	Paraffin wax 85%	1 : 0	65	Atmosphere		
5	Paraffin wax 95%	1 : 0	65	Atmosphere		
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# 04 Performance Characteristics Rapid Dehydration

The perfect combination of three technologies makes the rapid dehydration effect more excellent

## Ultrasonic Technology

- Ultrasonic cavitation can greatly improve the permeability of cell membranes and the ability to exchange substances.

## Magnetic Stirring

- This function ensures that the reagents and tissue samples are fully mixed, improving the efficiency and uniformity of the dehydration reaction.

## Fast Stripping Reagent

- Speed up the dehydration process. Rapid dehydration does not affect the results of immunohistochemistry.

## Small tissues

30 mins (fast stripping reagent) < 4h (normal reagent)

## Large tissues

90 mins (fast stripping reagent) < 6h (normal reagent)

