

Revos™ Tissue Processor

Technical Specifications



Epredia Revos™ Tissue Processor combines rapid tissue processing with simple operation, reagent management and custom programming capability.

The Revos Tissue Processor features a state-of-the-art canted chamber that rotates back and forth to enhance reagent distribution. This unique method helps decrease the time it takes to process tissue samples and does not require heat.

Up to 300 cassettes can be processed at any one time in standard baskets. Optional mega baskets allow up to 42 Super Mega Cassettes to be processed simultaneously. Revos can process various types and sizes of tissue.

Significant reagent cost savings

Alcohol quality measurement enables you to extend your reagent life and provides significant cost savings.

Automatic reagent rotation further extends reagent life using a proven system.

Triggers for reagent rotation can be based on days of the week, usage counts or alcohol quality (influenced by the total number of cassettes processed).

Product details

Revos™ Tissue Processor

A84100001

Base Unit

Revos™ Tissue Processor

A84100001ATC

*Line Conditioner included

"Epredia recommends ensuring that Epredia instrumentation have a line conditioner to protect equipment from power surges, correct voltage and waveform distortions, and remove external electrical noise with the intent to solve problems before they occur."

Mechanical Specifications

Dimensions (D x W x H)	Imperial (inches)	Metric (cm)
Height to working area (with tray)	22.8 x 33.4 x 42.5	58 x 85 x 108
Height to top of monitor	22.8 x 33.4 x 54	58 x 85 x 137
Weight	Imperial (lbs.)	Metric (kg)
With no reagents	363	165
With typical reagents	529	240
Maximum working pressure	0.2 bar (g)	

Electrical Specifications

Power Supply Voltages	100 - 240 VAC
Frequency	50/60 Hz
Power	1300 VA (maximum) 300 VA (typical)
Battery Backup Power	3 hours

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Environmental Specifications

For Indoor Use Only

Temperature (operating limits)	+5°C to +40°C (+41°F to +104°F)
Temperature (recommended operation)	+15°C to +30°C (+59°F to +86°F)
Temperature (transit/storage)	-25°C to +55°C (-13°F to +131°F)
Humidity	Maximum 80% RH at 31°C (88°F) decreasing linearly to 50% RH at 40°C (104°F)
Altitude	Up to 2000 m above sea level (6500 feet)
Pollution Degree	2

Over Voltage Category	II
Noise Level	<70dBA

Interface Connections

Remote Alarm	24 V DC, 3A max, operation non-powered output, protection for overtemperature, overpressure and overeating
LIMS	Serial RS232
Remote Access	Virtual Network Computing (VNC) via RJ45

Instrument Specifications

Total cassettes on board	Max. 300 standard cassettes in the organized baskets or 42 super mega cassettes in the mega baskets
Number of reaction chamber	1
Number of baskets per chamber	6 "Organized" baskets (50 standard cassettes or 7 super mega cassettes per basket)
Basket design	Organized basket with built in space for fluid movement between cassettes
Chamber agitation	Canted rotation
Agitation mode	Constant vacuum, cycled vacuum, cycled pressure
Wax heating temperature	45°C to 65°C
Reagents heating temperature	Ambient to 55°C (Fixative 65°C, Dehydrant & Solvents 55°C)
Reagents preheat	Up to 35°C for alcohol and xylene
Cleaning reagent heating temperature	≤65°C
Chamber level sensor	Three optical IR sensors
Wax tank level sensor	3 sets Temperature sensors
Retort lid feature	Transparent lid, unique feature to visualize tissue processing
Temperature of retort lid	Ambient up to 65°C
Number of process and flush programs	10 Processes(4 preprogrammed) 6 flushes (2 preprogrammed)

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Example Protocols Actual optimized times may vary

Name	Dimensions	Duration	Cassette Type
Routine surgical	3 x 20 x 20 mm	5 hr	Standard
Rapid biopsy	1 x 1 x 20 mm & 3 x 1 x 20 mm	2 hr	Biopsy
Thick surgical	5 x 20 x 20 mm	7 hr	Standard
Large surgical	5 x 45 x 60 mm	15 hr	Mega

Paraffin Wax and Reagent Stations Specifications

Number of wax tanks	3 Wax tanks (5.6L), 1 Waste wax tray/drawer (5L) for ease of exchange and disposal
Reagent Stations	16 Reagent bottles (5L) - 6 Dehydrants - 3 Clearants - 2 Fixatives - 2 Exchange bottles - 3 Cleaning reagents

Reagent Management System (RMS)

Number of density meter	1 for measuring the in-process specific gravity of alcohol (Note: factory default value for the A1 Quality Threshold is approximately 45%).
Paraffin and reagent rotation prompts(options)	- A1 Alcohol Quality(Recommended) - Days of the weeks - Usage counts
RFID Reagent tracking system	Scan RFID on the Alcohol and Xylene bottles to track usage and lot number.
Discarding waste wax	Single use waste wax drawers for end user safety

Fume Control Specifications

Downdraft ventilation on the retort	U.S. Patent 6465245 European Patent 1279444
Number of onboard filters	1 Xylene Neutralizing filters (Activated Carbon) - Part #: 9990610 and 7411258 2 Formaldehyde Neutralizing filters (Potassium Permanganate) - Part #: 9990612 and B9990612CS
External ventilation: Optional	Maximum flow rate of extraction 33 m3/hr.

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Additional Information

Manufactured by	Shandon Diagnostics Limited, a subsidiary of Epredia														
Country of Manufacture	UK														
Compatible Consumables	<table><thead><tr><th>Type</th><th>Approved Reagents</th></tr></thead><tbody><tr><td>Fixatives</td><td> 10% neutral buffered formalin (phosphate buffers) - Richard-Allan Scientific Pen-Fix </td></tr><tr><td>Dehydrants</td><td> - Ethanol - Reagent grade alcohol (RGA) / industrial methylated spirit (IMS) – up to 5% methanol in ethanol - Isopropyl alcohol - Richard-Allan Scientific Flex 100 (up to 40% methanol in isopropyl alcohol) </td></tr><tr><td>Clearants</td><td> - Xylene - Toluene - Shandon Xylene Substitute - Richard-Allan Scientific Clear-Rite 3 </td></tr><tr><td>Infiltrants</td><td> - Shandon Histoplast - Shandon Precision Cut - Richard-Allan Scientific Histoplast PE - Richard-Allan Scientific Histoplast LP - RA Lamb VA5 - Richard-Allan Scientific Type 1, Type 3, Type 6, Type 9, Type L and Type H </td></tr><tr><td>Flush</td><td> - Any of the named clearants (max 65° C) - Any of the named dehydrants - Water </td></tr><tr><td>Surface Cleaning</td><td> - Sodium hypochlorite (10% in water used at ambient temperature) </td></tr></tbody></table>	Type	Approved Reagents	Fixatives	10% neutral buffered formalin (phosphate buffers) - Richard-Allan Scientific Pen-Fix	Dehydrants	- Ethanol - Reagent grade alcohol (RGA) / industrial methylated spirit (IMS) – up to 5% methanol in ethanol - Isopropyl alcohol - Richard-Allan Scientific Flex 100 (up to 40% methanol in isopropyl alcohol)	Clearants	- Xylene - Toluene - Shandon Xylene Substitute - Richard-Allan Scientific Clear-Rite 3	Infiltrants	- Shandon Histoplast - Shandon Precision Cut - Richard-Allan Scientific Histoplast PE - Richard-Allan Scientific Histoplast LP - RA Lamb VA5 - Richard-Allan Scientific Type 1, Type 3, Type 6, Type 9, Type L and Type H	Flush	- Any of the named clearants (max 65° C) - Any of the named dehydrants - Water	Surface Cleaning	Sodium hypochlorite (10% in water used at ambient temperature)
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