

**Shandon  
Tissue  
Processors**



**Shandon Excelsior™  
Shandon Pathcentre®  
Shandon Citadel™  
Tissue Processing  
Consumables**

a leader in anatomical pathology

**Thermo**

## Shandon Excelsior™ Tissue Processor

The new center of excellence in tissue processing



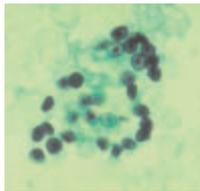
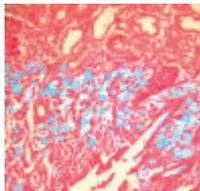
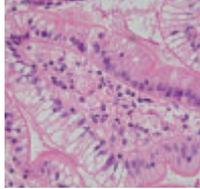
- **Downdraft Fume Control**
- **In-Process Reagent Management**
- **Power Outage Management Battery Back-Up**
- **Pre-Heated Reagents**
- **Remote Monitoring and LIMS Interface**



### Features

- 222 cassette capacity with the organized basket and up to 300 with the random basket\*.
- Sloped lid design allows for excess condensation removal during processing. Glass lid allows for viewing during processing.
- 12 customized programs and 3 flush options.
- 3 wax baths.
- Multilingual screen displays.
- Baskets are microwavable and designed to be used in conjunction with microwave pre-fixation. Organized baskets have unique interlocking design.
- 5 levels of counter-stir agitation available.
- 7 password protected areas.
- 3 distinct fill levels to reduce process time.
- Dehydrant and clearing agents can be preheated for more rapid and consistent processing.
- Vacuum cycling.
- Complete temperature control with ambient option.

\*When using 5.0 L reagent bottles. Refer to Application Note "Shandon Excelsior Random Basket".



# Shandon Excelsior™ Rotation Concept

## Principle:

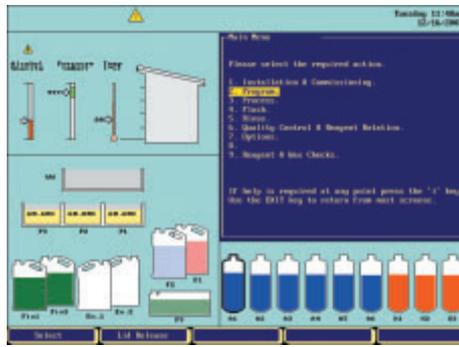
### Specific Gravity

- Specific gravity is monitored in the 1st alcohol.
- When a set point is established and reached, the Shandon Excelsior will prompt you to start a rotation cycle during your next processing run.

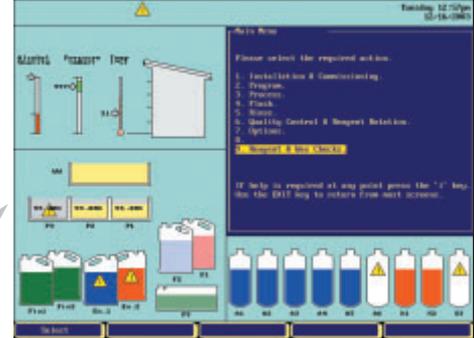
**This revolutionary process has enabled hundreds of the new Shandon Excelsior customers to significantly reduce reagent usage.**

## Rotation of alcohols, clearants, and waxes occurs during 2 normal processing runs.

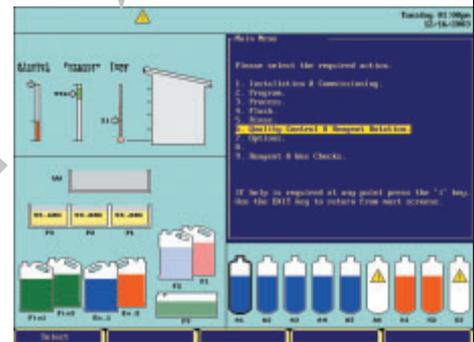
**1st processing run:** the oldest reagents are discarded into the waste containers and the remaining reagents are rotated to their next position.



**2nd processing run:** the fresh reagents are drawn into the reaction chamber when needed during processing and placed into their appropriate bottles when the step is complete.



Fresh reagents are fitted into the 2 exchange areas (alcohol and clearant) and wax pellets are added to 3rd wax bath.



## Reagent Savings

The average Shandon Excelsior user changes reagents approximately every 1,500 cassettes when using specific gravity monitoring.

Rotation uses:

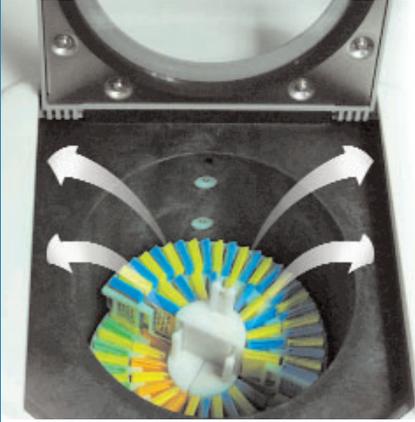
- 1 gallon (3.8L) Alcohol
- 1 gallon (3.8L) Xylene
- 1 gallon (3.8L) Wax

## Example of typical savings from an average user:

Annual Reagent Savings Calculator	Alcohol	Xylene	Wax	Labor
Consumption Changed per week on current tissue processor	6 gallons (22.8L)	2 gallons (7.6L)	1 gallon (3.8L)	3 hours
Number of cassettes run per week	1,110	222 cassettes per day, 5 days per week		
Results do not include fixatives or flush reagents	Current Tissue Processor	Excelsior Tissue Processor	Savings by using the Excelsior Tissue Processor	Percent reagent savings
Alcohol / Gallons	313 (1189L)	38 (144L)	275 (1045L)	88%
Xylene / Gallons	105 (399L)	38 (144L)	67 (255L)	63%
Wax / Gallons	52 (198L)	38 (144L)	14 (53L)	26%
Labor hours	156	3	153	98%

This example shows an 88% reduction in alcohol use, a 63% reduction in xylene use and a 26% reduction in wax use on a single tissue processor. Best of all, there is a savings of 153 hours of labor per year.

## Downdraft Fume Control



In the state-of-the-art reaction chamber, reagent circulates freely around specimens, with downdraft fume extraction.

### Safety

- Reaction chamber has Downdraft Ventilation for reducing exposure to hazardous vapors when adding reagents after the process has started.
- Potassium permanganate and charcoal filters for fume control.
- Downdraft Extraction Duct Adapter Kit available for venting into a facility fume hood.

### Reagent Handling

- Automatic in-process reagent and wax rotation. No more pouring!
- User's choice of monitoring reagent rotation by days, runs, cassette count or specific gravity of alcohol.

### Reagent Storage

- Can be used with commercial 3.8 to 5.0 liter reagent bottles.
- Built to flammable cabinet specifications.
- Lockable doors for added safety.
- Main Air System Duct Adapter Kit available for venting into a facility fume hood.



Interior of reagent storage cabinet

Filters

Downdraft  
Extraction Duct  
Adapter Kit



### Temperature Uniformity

The main feature of the circular reaction vessel is its no-corners design. This means greater temperature uniformity; no hot spots; and even distribution of reagents to allow adequate processing of specimens.

### Agitation

The reaction vessel's no-corners design also allows for continuous agitation. The counter-stir agitation system has 5 levels of stirring. The specimen basket rotates gently enough that even very delicate and friable specimens are safe. It provides all the mixing required without having to move fluid in and out from the reaction chamber.



### Microwavable Baskets

#### Basket Design

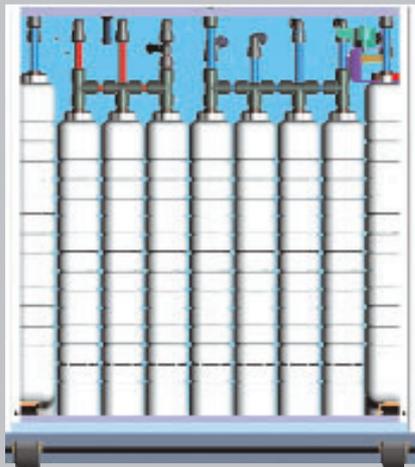
- Organized and random baskets provided.
- Newly developed plastic design allows for microwaving of baskets.
- Organized baskets have unique interlocking design.

### Specimen Protection

- Battery back-up for safely processing specimens in the event of a power outage.
- 2 remote alarms to signal possible problems.
- Remote monitoring capabilities (Netmon Remote Monitoring).
- Automatic underfill recovery to finish processing in the safest environment possible.

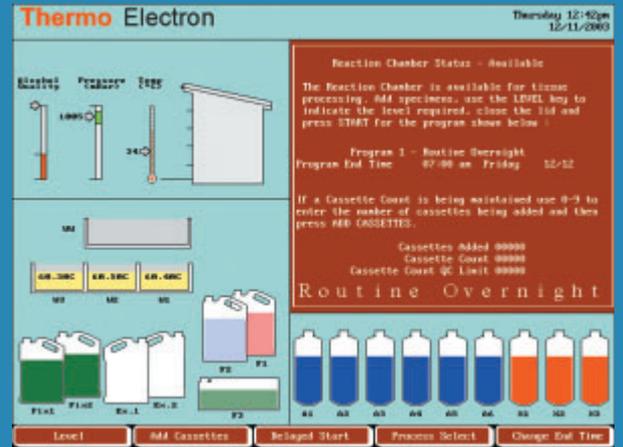
### Hidden Bottles and Preheating Area

- The hidden bottles will hold 5 liters of reagent.
- Preheating of reagents in this area is available.

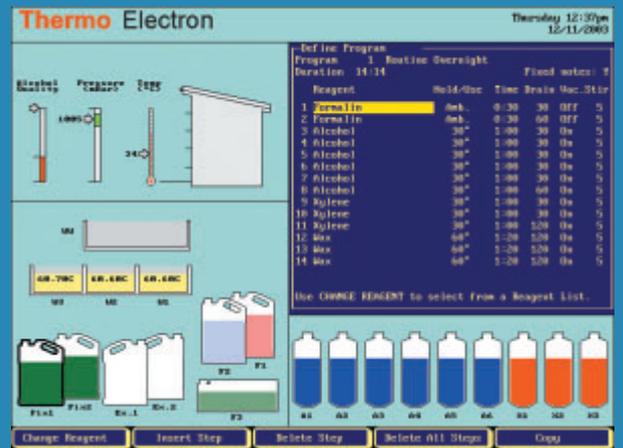


### Intelligent Software

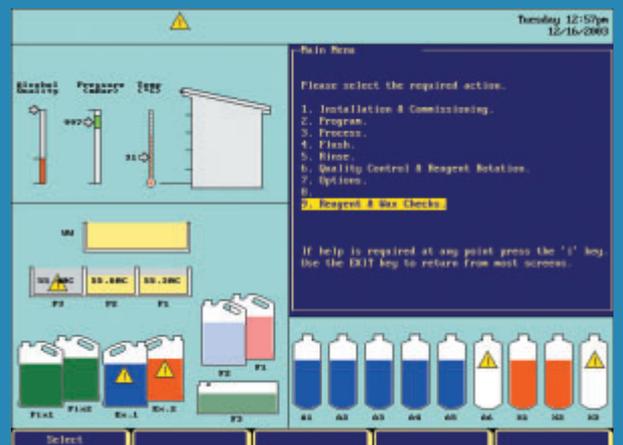
- User-friendly software is like having an electronic user's manual at your fingertips.
- Easy to use international icons (see page 8).
- Disk drive to save quality control reports, event logs, and program information.
- LIMS (Laboratory Information Management Systems) interface capabilities.



### Starting the Instrument



### Programming



### Reagent Rotation

## Shandon Excelsior™ Specifications

**100–240V, 50/60Hz, 1Ph**  
**Shandon Excelsior**

**Order No.**  
**A7840001**

### Physical Specifications

#### Dimensions:

**Height:** 63.0" (160 cm) to top of monitor  
44.5" (113 cm) to monitor platform

**Width:** 26.5" (67 cm)

**Depth:** 20.5" (52 cm)

**Weight:** 246.5 lbs (112 kg)

**Power Requirements:** 950VA (maximum); 200VA (typical)

### Environment

**General:** Indoor use only

**Temperature (operation):** +5°C to +40°C

**Temperature:** –25°C to +55°C (+70°C for short exposure)  
(transit/storage)

**Humidity:** 80% max. for temperatures <31°C  
50% max. for temperatures 31° to 40°C  
(non-condensing environment)

**Altitude:** up to 6,500 feet (2000m)

**Pollution degree:** 2

**Over voltage category:** II

### Included with Product

Filter Formaldehyde (Potassium Permanganate) – Each	9990612
Filter Vapor (Charcoal) – Each	9990610
Organized Basket (6 baskets)	A78410025
Random Basket	A78410021
Basket Lid (Organized and Random)	A78420056
Large Block Metal Divider (for Random Basket)	A78430198
Water Flush Bottle	A78420039
Storage Bottles – 5 liter (2 supplied)	See below
Waste Wax Drawer Kit (2 drawers, 1 lid, 1 cover)	A78410027
Monitor	AP14340
Operator Manual	A78410100
Service Record Book	A78410110
Spatula	P09046
Wax Fill Chute	A78430265
Wax Waste Liners (20)	AP14747
Wrench/Spanner	A78430308

### Optional Accessories

Filter Formaldehyde (Potassium Permanganate) – package of 6	B9990612CS
Filter Vapor (Charcoal) – package of 6	7411258
Service Manual	A78410101
Plastic Basket Carrying Container (microwavable)	B1002517
Storage Bottles – 5 liter (package of 6)	A78410026
Downdraft Extraction Duct Adapter Kit	A78410023
Main Air System Duct Adapter Kit	A78410024
Monitor Clamp Kit	A78410029

### Agency Approvals

Designed to meet IEC1010, CSA, UL and CE Mark (IVDD compliant).



### Battery Back-up

When the power fails, the Shandon Excelsior doesn't.

The Shandon Excelsior has a specially designed, built-in power management system that continually monitors the input power. In the event of any type of power interruption or fluctuation, the system will safely continue processing tissue for up to five hours running on battery power. Once the normal power is restored, the Shandon Excelsior will recharge so that it is ready for the next power interruption, whenever it might occur.

### Shandon Excelsior™ Icons

A brief description of the icons.



Alerts you to **Demonstration Mode**



Alerts you to a tripped **Over Temperature Breaker**



Alerts you that the **Security Code Protection** is unlocked



Alerts you that **storage cabinet** is open



Alerts you that the **Battery Back-up** is not ON



Alerts you to a **Quality issue** with reagents



Alerts you to a condition that **requires attention**



Alerts you of **activation** of your two **Remote Alarms**



Alerts you of **activation** of a **Netmon connection**

# Shandon Netmon™ Service

## Shandon Excelsior™ Netmon



Shandon Excelsior Netmon is a service that directly connects the Shandon Excelsior in the customer's laboratory to the Thermo Electron Service Support Center in Pittsburgh, U.S.A., and Runcorn, U.K.\* By using a dedicated telephone line at the customer site, high-value support services are made available to the user in a real-time manner.

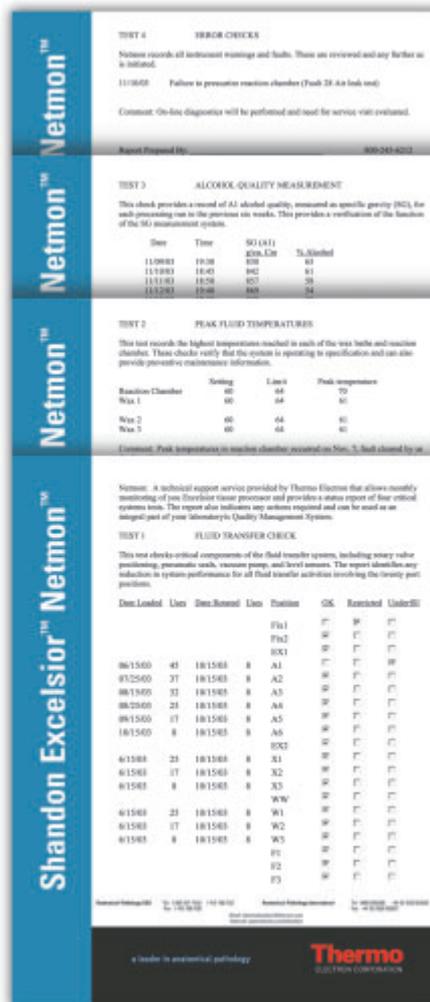
### The Shandon Excelsior Netmon service includes:

- Monthly preventive maintenance review
- Monthly monitoring report for inclusion in the customer's Quality Management system.
- Rapid on-line diagnosis and resolution of system problems
- Escalation to service call, if required, with dispatch of needed spare parts
- On-line technical support to resolve operational issues

### Customized Monthly Report provides the following information:

- Four fundamental system tests
- Fluid Transfer Check
- Peak Fluid Temperatures
- Alcohol Quality Measurement
- Error Checks
- Signature of Service Support Engineer

Please contact your local Sales Representative for ordering information.

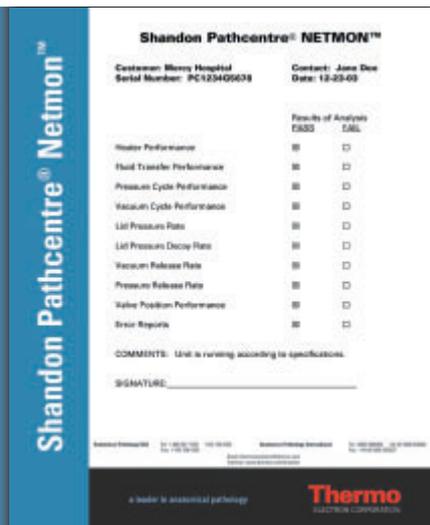


Shandon Excelsior Netmon™ customized report

## Shandon Pathcentre® Netmon™

A similar remote monitoring service is also available for the Shandon Pathcentre Tissue Processor to program and monitor the unit from any location via modem and personal computer. The service enhances preventive maintenance capabilities. Thermo Electron service technicians may access the unit (with your permission) from their base\* to perform on-line diagnostics or provide monthly monitoring service.

Please contact your local Sales Representative for ordering information.



Shandon Pathcentre® Netmon™ Remote Monitoring Report

\*Netmon Remote Monitoring is available only in U.S.A. and U.K.

## Shandon Pathcentre®

Enclosed Tissue Processor

- Complete user control
- Excellent reagent agitation
- Remote monitoring capabilities
- Help screens guide the user through programming



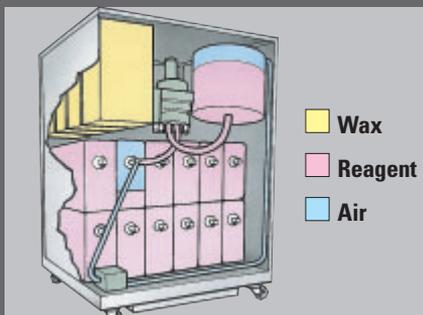
The Shandon Pathcentre is Thermo Electron's high-volume, totally enclosed tissue processor.

### Practical Design

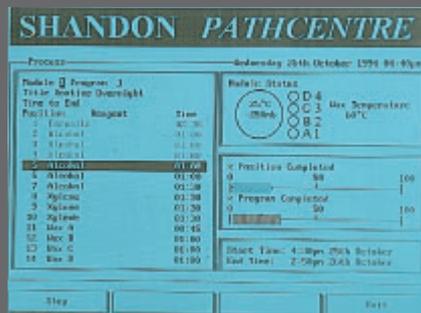
- **Up to 306-cassette capacity** plus the ability to add up to three extra processing modules for high throughput laboratories.
- **Totally enclosed.** Fumes stay within the system, and do not escape into your lab.
- **Gentle counter-stir** agitation and Shandon tidal flow system promotes maximum fluid penetration through baskets and cassettes for the ultimate in processing quality and consistency.
- **4 wax baths** provide maximum specimen infiltration.
- Unique **circular** shaped reaction chamber optimizes temperature uniformity.
- **Glass reaction chamber lid** allows visual inspection of processing.
- **Lid** automatically locks during processing.
- **Sealed reaction chamber lid** is easily operated with one hand.
- **Plug-in reagent bottles** have color-coded labels and are engineered for ease of use.

### Flexible Programming

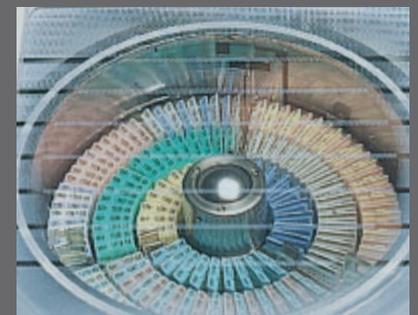
- **Simple multi-lingual programming** with full on-screen prompt graphics. Back-lit LCD monitor displays commands in English, French, Spanish, German, Italian or Swedish.
- **User selectable processing parameters** include heat, vacuum, pressure, immersion time, drain time and agitation.
- Stores **9 processing programs** for each unit.
- **Wide reagent compatibility** includes acetone and chloroform.
- Delayed start can be programmed in any reagent position. Options for heat, vacuum pressure, and agitation can be changed during delayed time.
- **Real time programming** with built-in clock and delayed start facility for overnight, weekend, and holiday periods. It can be programmed up to 7 days in advance.
- Multilevel **pass-code** security protects instrument from unauthorized access



The Pathcentre's "Closed Loop System" captures fumes from reagents inside the machine.

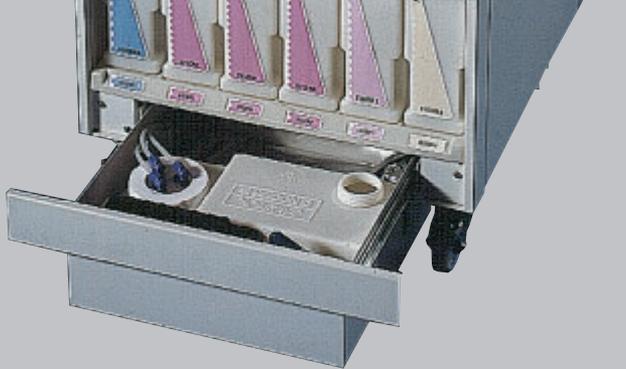


On-screen graphics guide the user through program commands. The screen displays the current point in the procedure.



In the state-of-the-art reaction chamber, reagent circulates freely around specimens.

Pull-out accessory drawer provides easy access to condensate bottle, charcoal filter, air bag and spillage bottle for routine maintenance.



### Specimen Safety

- **Automatic underfill recovery** system protects your specimens by automatically rerouting reagents and completing processing.
- Independent, selectable flushes – either **standard** flush or **extended** flush.
- You can choose a **water rinse option** at the end of flush.
- **Audible and remote alarm** signals are standard.
- Pathcentre will **print out** a record of programs, processing routines and real-time events when connected to a parallel 80-column printer.

### Quality Control

- Pathcentre **automatically alerts** you when it is time for routine maintenance and service or to change reagents.



Extendible design—Add extra processing capacity without buying a complete new system. Up to 4 processing modules may be controlled by one command module.

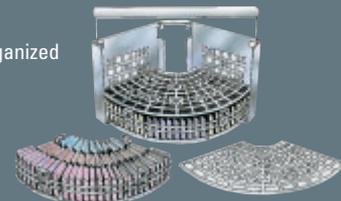
### Building *THE* Better Bottle

The Pathcentre's high-density polyethylene bottles were engineered for user convenience and efficiency. The translucent bottles each have a color-coded label. Corresponding labels on the instrument give technicians extra assurance that the bottle is in the correct position. Wide-based and wide necked, these bottles are easy to fill. Heavy-duty construction including shafts through the bottle centre for extra strength. Most importantly, the bottles plug directly and easily into position on the unit using a coaxial connection.

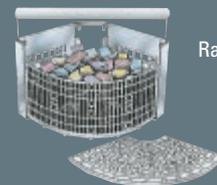


### A Basket For Every Routine

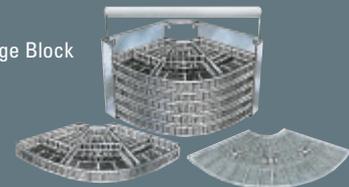
Organized



Random



Large Block



Choose between an organized cassette basket or a random cassette basket in the initial kit. Baskets are interchangeable. Additional baskets or large block baskets may be ordered separately.

### Physical Specifications

**Dimensions (H x W x D):** 52" x 22" x 25" 132 x 56 x 63 cm

**Power Requirements:** 1200VA

**Weight:** 353 lbs. (160 kg) (net)

### Included With Product

### Reorder No.

Wax Drain Container	75210147
Reaction Chamber	
Drain Filter	75210154
Reagent Storage Bottles pk/3	A75210193
Reagent Bottle Labels	75210152
Airbag	66110048
Charcoal Filter	66110056
Overfill Sensor Cap	73910136
Tissue Basket Handle	75220419
Viton Seal	75230681
Wax Chamber Seal	75210149
Cassette Basket	See Order Info
Operator Manual ( <i>Specify Language</i> )	75210150
Displacement Block (Organized Version Only)	A75210197
Reagent Bottle Pour Spout	P13433
Wax Drain Key	P12648
Mains Lead	Call For Info

### Optional Accessories

### Reorder No.

Large Block Basket (1 Segment)	75210166
Random Cassette Basket (1 Segment)	75210165
Organized Cassette Basket (1 Segment)	A75210192
Note: The Pathcentre reaction chamber holds three basket segments. Organized, random or large block baskets may be used in combination.	
Wax Bag	75210161
Service Manual	75210151
Printer	1241180
Cable	1931002
Bottle Connector Seals	75210148
Reagent Bottle Caps pk/3	A75210194

### Agency Approvals

Designed to meet IEC1010, CSA, and UL. CE Mark on 220-240V unit (IVDD compliant)

### Description

### Order Number

<b>Pathcentre with Random Basket (110-120V, 50/60Hz)</b>	75200012
<b>Pathcentre with Random Basket (220-240V, 50/60Hz)</b>	75200011
<b>Pathcentre with Organized Basket (110-120V, 50/60Hz)</b>	75200014
<b>Pathcentre with Organized Basket (220-240V, 50/60Hz)</b>	75200013
<b>Extension Unit with Random Basket (110-120V, 50/60Hz)</b>	75200112
<b>Extension Unit with Random Basket (220-240V, 50/60Hz)</b>	75200111
<b>Extension Unit with Organized Basket (110-120V, 50/60Hz)</b>	75200114
<b>Extension Unit with Organized Basket (220-240V, 50/60Hz)</b>	75200113
<b>Portable Wax Station (110-120V, 50/60Hz)</b>	75210202
<b>Portable Wax Station (220-240V, 50/60Hz)</b>	75210201

The Shandon Citadel fits conveniently inside the Shandon Hyperclean™ 2 Work Station. Sides of the work station can be removed and replaced easily for access to the equipment inside.



## Shandon Citadel™ Tissue Processor

Carousel-type tissue processor



Order Vacuum Unit Separately.

**The Citadel is a time-tested carousel-type tissue processor with convenient touch key operation.**

- The Citadel 2000 has a **110-cassette capacity**, and the Citadel 1000 has a capacity for 60 cassettes.
- Integral fume hood.
- Reagent stations are easily removed from the unit for replenishing.
- Delayed start feature may be programmed up to 9 days in advance.
- Hand-held touch key controller is **simple to use**.
- Store up to **4 complete programs** in the Citadel's memory.
- Program immersion time and agitation during each step.
- Loading station protects tissue baskets from air as the baskets are raised.
- The Citadel **protects** the user from open containers.
- The unit fits in most standard fume cabinets, as well as the Shandon Hyperclean™ 2 Work Station.
- **Optional vacuum unit** facilitates efficient and rapid wax infiltration of specimens.
- Unit has **10 reagent containers** and **2 wax baths**.
- **Add extra wax stations** for a maximum of 4 wax baths.
- Random and organized baskets available.
- Tissue baskets load and unload **easily** with hanger clips in the unit's hood.

### Physical Specifications

#### Dimensions:

Shandon Citadel	Diameter: 27.2" (68 cm)
	Height: 25" (62.5 cm)

#### Power Requirements:

	500 VA
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#### Weight:

	115 lbs. (52 kg)
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#### Vacuum Unit

	Diameter: 27.2" (68cm)
	Height: 25" (62.5cm)

### Included With Product

### Reorder No.

Citadel 2000	
Organized Basket	69810030
Random Basket	69810035
Basket Hanger ( 2L )	69810037
Basket Lid	69810031
Wax Baths 110V	69810053
Wax Baths 240V	69810051
Reagent Container (Polypropylene)	69810018
Reagent Container (Stainless Steel)	69810131
Operator Manual	69810040

### Ordering Information

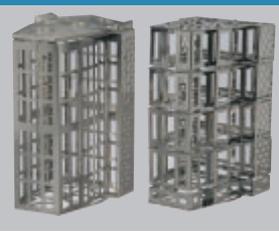
Shandon Citadel 1000, 220-240V 50/60Hz	English manual, UK 3 pin plug.	69800001
Shandon Citadel 1000, 220-240V 50/60Hz GER	German manual, European 2 pin plug.	69800002
Shandon Citadel 1000, 110-120V 50/60Hz USA	English manual, USA 3 pin plug.	69800003
Shandon Citadel 2000, 220-240V 50/60Hz	English manual, UK 3 pin plug.	69800004
Shandon Citadel 2000, 220-240V 50/60Hz GER	German manual, European 2 pin plug.	69800005
Shandon Citadel 2000, 110-120V 50/60Hz USA	English manual, USA 3 pin plug.	69800006
Shandon Citadel 2000, 220-240V 50/60Hz EUR	English manual, European 2 pin plug.	69800007
Shandon Citadel 1000, 220-240V 50/60Hz EUR	English manual, European 2 pin plug.	69800008
Vacuum Units for Shandon Citadel, 110-120V	USA 3 pin plug	69810025
Vacuum Units for Shandon Citadel, 220-240V	UK 3 pin plug	69810024
Vacuum Units for Shandon Citadel, 220-240V	European 2 pin plug	A69810054

### Optional Accessories:

Shandon Citadel Service Manual	69810095
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### Agency Approvals

Designed to meet IEC1010, CSA, and UL.  
CE Mark on 220-240V unit (IVDD compliant)



The Shandon Citadel 2000's Random Cassette Basket (shown above, left) holds about 70 cassettes. The Shandon Citadel 2000's Organized Cassette Basket (above, right) holds 110 cassettes.

Not shown: The Shandon Citadel 1000 also has random and organized baskets. The unit's organized basket has a maximum capacity of 60. Random Basket capacity is about 40 cassettes.



	Shandon Paraplast®	Shandon Paraplast Plus	Shandon Paraplast X-tra	Shandon Precision Cut	Shandon Histoplast	
<b>Form</b>	Pellet	Pellet	Pellet	Pellet	Pellet	
<b>Fixatives</b>	Plastic	DMSO	Microcrystalline Wax	Purified Paraffin with Polymers	Contains No Plastic Polymers	
<b>Special Use</b>	General Purpose	Enhanced Infiltration & Sectioning	Thin Sectioning	Low polymer content for improved infiltration, Embedding. Good ribbon capability with longer blade life.	General Purpose	
<b>Melting Point</b>	56°-57°C	56°C	50°-54°C	52°-54°C 56°-58°C 62°-64°C	56-57°C	
<b>Packaging</b>	18 lb/Bag x 8 (1 kg)	18 lb/Bag x 8 (1 kg)	18 lb/Bag x 8 (1 kg)	4 x 2.5 kg	22 lb/Bag (10 kg)	5.5 lb/Box (2.5 kg)
<b>Order No.</b>	501006 CE IVD	502004 CE IVD	503002 CE IVD	B24209 B1002490 B24210	6774060	6774006



### Shandon Biopsy Bags

- Allows unrestricted fluid movement around tissue.
- Reduces risk of small specimen loss.
- Reduces reagent carry-over and pressure artifact often found with sponges.
- Peel-open, acid resistant Biopsy Bags conveniently expose specimen for rapid removal and have all the benefits of regular biopsy bags plus acid resistance for use in decalcification.

Description	CE	IVD	Pkg/Qty	Order No.
Nylon (Small) 1" x 1.33" (30 x 40 mm)	CE	IVD	200/Pk	6774014
			500/Pk	6774015
			1000/Pk	6774010
Nylon (Medium) 1.75" x 3" (45 x 75 mm)	CE	IVD	200/Pk	6774012
			500/Pk	6774013
			1000/Pk	6774009
Nylon (Large) 3" x 3.75" (75 x 95 mm)	CE	IVD	500/Pk	6774011
Acid Resistant (Small) 1" x 2" (30 x 50 mm)	CE	IVD	250/Pk	6774051
Acid Resistant (Medium) 1.75" x 3" (45 x 75 mm)	CE	IVD	250/Pk	6774050
Acid Resistant (Large) 3" x 3.75" (75 x 95 mm)	CE	IVD	250/Pk	6774052



CE IVD

### Shandon Biopsy Processing/Embedding Cassettes II

Qty: 500/Box  
Pore Style: Small, Square  
Locking lid attached by two hinges

Color	Order No.
White	1001097
Pink	1001098
Green	1001099
Yellow	1001100
Blue	1001101
Gray	1001104
Orange	1001106
Peach	1001102
Tan	1001103
Lilac	1001105
Aqua	1001107
Dark Green	B1001005
Dark Red	B1001006
Dark Blue	B1001007



CE IVD

### Shandon Biopsy Processing/Embedding Cassettes I

Qty: 500/Box  
Pore Style: Small, Square  
Locking lid attached by two hinges

Color	Order No.
White	1000968
Pink	1001090
Green	1000969
Yellow	1000970
Blue	1001091
Gray	1000971
Orange	1001095
Peach	1001092
Tan	1001093
Lilac	1001094
Aqua	1001096
Dark Green	B1000999
Dark Red	B1001000
Dark Blue	B1001001



CE IVD

### Shandon Processing/Embedding Cassettes II

Qty: 500/Box Pore Style: Slotted  
Locking lid attached by two hinges to open from front or back

Color	Order No.
White	1001061
Pink	1001060
Green	1001059
Yellow	1001058
Blue	1001057
Gray	1001054
Orange	1001052
Peach	1001056
Tan	1001055
Lilac	1001053
Aqua	1001051
Dark Green	B1001002
Dark Red	B1001003
Dark Blue	B1001004



CE IVD

### Shandon Microsette® Biopsy Cassettes

Qty: 1000/Case (4 x 250 per box)  
Pore Style: Small holes of 0.36 mm diameter  
Large compartment measuring 25 x 30 mm for maximum fluid exchange

Color	Order No.
White	B1000733WH
Pink	B1000733PK
Green	B1000733GR
Yellow	B1000733YW
Blue	B1000733BL
Gray	B1000733GY
Orange	B1000733OR
Peach	B1000733PE
Tan	B1000733TN
Lilac	B1000733LI
Aqua	B1000733AQ
Dark Green	B1000733DGR
Dark Red	B1000733DRD
Dark Blue	B1000733DBL



CE IVD

### Shandon Biopsy Embedding Cassettes

Qty: 1000/Case (4 x 250 per box)

Color	Order No.
White	B1000735WH
Pink	B1000735PK
Green	B1000735GR
Yellow	B1000735YW
Blue	B1000735BL
Gray	B1000735GY
Orange	B1000735OR
Peach	B1000735PE
Tan	B1000735TN
Lilac	B1000735LI
Aqua	B1000735AQ

### Shandon Formal-Fixx™ and Formal-Fixx Concentrate

- **Phosphate-free**, 10% neutral buffered formalin produces consistent results, and extends life of rotary valve.
- Store all specimens **without excessive shrinking** or hardening.
- **Premixed**, ready-to-use.
- Use for storage of all tissue – **eliminates presorting** of EM specimens.
- Available in **economical concentrate** – just add water or alcohol.
- Concentrate is **not affected by freezing**, reduces shelf space and is less expensive to ship.
- **Prefilled, leak resistant cups** are available. Cups are packed in sturdy trays for courier transport.



Description	CE	IVD	Pkg/Qty	Order Number
Ready-To-use			19 L x 1	6764240
Pre-filled Cups			20 ml Cups, filled To 10 ml, 180/Case	9990910
			60 ml Cups, filled To 30 ml, 125/Case	9990914
			90 ml Cups, filled To 45 ml, 125/Case	9990916
			120 ml Cups, filled To 60 ml, 125/Case	9990918
Concentrate (5x)			3.8 L x 1 (makes 19L)	6764254
			1L x 2* (makes 5L)	9990244

### Shandon Xylene

- **Clearing agent** for processing, staining and coverslipping.
- A **filtered**, quality reagent.
- Color-coded bottle for Shandon Excelsior



Description	Pkg/Qty	Order Number
Xylene	4 L x 1*	9990501
	10 L x 2	9990502
	55 Gal. (209 L) x 1	9990503

### Shandon Xylene Substitute

- A **safer, more convenient alternative** to xylene for processing, staining and coverslipping.
- Airborne exposure limit **three times safer** than xylene (TLV 300 ppm).
- Virtually **odorless** aliphatic hydrocarbon – no citrus aroma.
- **Not sensitizing** to normal skin.
- Evaporation rate similar to xylene – **slides dry quickly**.
- **Greaseless**
- Can be **recycled** with solvent recyclers.
- Color-coded bottle for Shandon Excelsior



Description	Pkg/Qty	Order Number
Shandon Xylene Substitute	4 L x 1*	9990505
	4 L x 4*	6764506
	10 L x 2	6764508
	5 Gal. (19 L) x 1	9990507
	55 Gal. (209 L) x 1	9990509

### Shandon Reagent Alcohol

- **Blend** of 90% absolute ethanol; 5% methanol; 5% isopropanol.
- A **filtered**, quality reagent.
- Use in place of absolute (100%) ethanol for **most pathology procedures**.
- **No license required** by Bureau of ATF.
- Color-coded bottle for Shandon Excelsior



Description	Pkg/Qty	Order Number
Reagent Alcohol	4 L x 1*	9990520

\*Ready-to-use, color-coded Shandon Excelsior packaging.

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