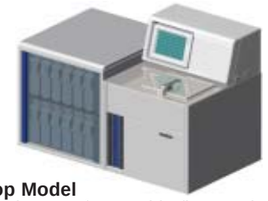
# ATP™ Tissue Processor

**Printer**
4" (102mm) high-speed (two line/sec) dot matrix, two color (black and red) printer option available to meet the quality assurance documentation requirements of the discerning laboratory.

**Auto-Dialer**
Auto-dialing modem option provides additional security in the event of a power outage or instrument failure. Three emergency telephone numbers can be programmed to alert appropriate personnel.



**Tabletop Model**
The ATP is manufactured in floor and table-top configurations. Optional conversion kits are available to reconfigure from either version to the other, should your space requirements change.

## Specifications:

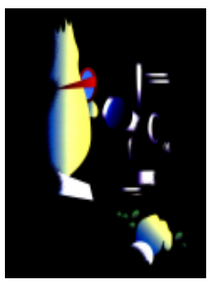
| | | | |
|---|---|---|---|
| **Capacity:** | Max. 350 cassettes | | |
| **Containers** | **Quantity** | **Capacity/Type** | **Temperture** |
| Paraffin | 4, plus 1 reserve | 2.5 L - 3.0 L | 50 to 60° C (±1) |
| Reagent | 10 | 2.5 L - 3.0 L | Amb to 45° C (±1) |
| Cleaning | 2 | 1 Clearant / 1 Dehydrant | |
| Filtration | 2 | Charcoal | |
| **Display:** | 8” Diag. Color VGA (640 x 480) display w/ built-in touch-screen controller | | |
| **Fluid Exchange:** | Adjustable bubble rate: off, 15, 20 or 30 min. intervals<br>Vacuum: -700mBar (-70KPa) | Pressure: +250mBar (+25KPa) | |
| **Dimensions HxWxD:** | Floor Model (53 x 21 x 24)in; (134 x 53 x 60)cm | Bench Model (31 x 42 x 24)in; (77 x 105 x 60)cm | |
| **Weight:** | Actual: 264lbs, 120kg | Shipping: 330lbs, 150kg | |
| **Electrical:** | 115VAC, 60Hz, 8 Amp max.; 220VAC, 50Hz, 4 Amp max.; 110VAC, 50/60Hz, 9 Amp max.; Max Power 1400W<br>For International shipments, specify requirements. | | |
| **Warranty:** | 1 Year, parts and labor | | |

TBS’ ATP has been tested by a registered independent body to rigorous international quality and safety standards, and, have been found to be in compliance with the following regulation and specifications:

| | |
|---|---|
| **UL** | 61010A |
| **CSA** | 1010-1 |
| **CE** | EN/IEC EN61010-1, Safety<br>EN61000-3-2, Harmonic Distortion<br>EN55011, Emissions<br>EN61326, Immunity<br>EN61000-3-3, Voltage Fluctuation/Flicker |

## Ordering Information:

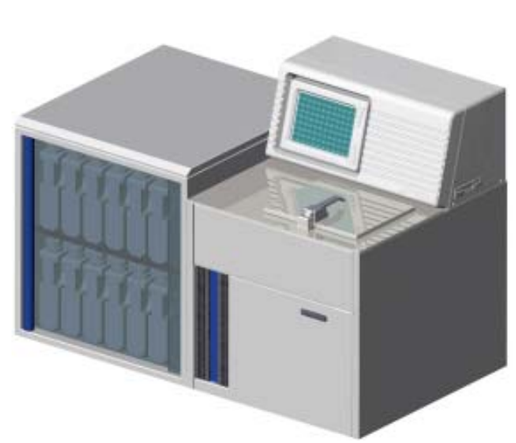
| Cat # | U/M | Description |
|---|---|---|
| ATP1-120 | ea | Floor model; w/ two cassette baskets (ATP1-B150) and 1 bulk cassette basket (ATP1-BB); 115VAC, 60Hz; 8A |
| ATP1-T-120 | ea | Tabletop model; w/2 cassette baskets (ATP1-B150) and 1 bulk cassette basket (ATP1-BB); 115VAC, 60Hz; 8A |
| ATP1-B150 | ea | Basket, cassette, 150 max cap., ss, w/cover, handle, organizer springs and dividers for cassette separation. |
| ATP1-BB | ea | Basket, cassette bulk, w/cover and handle, ss. (capacity 200-220 random and 350 stacked). |
| ATP-CFB | cs | Charcoal Filter bottles, w/ activated charcoal, 2/cs |
| ATP1-BR | cs | Bottles, wax/reagent, HDPE, reusable, w/ internal drain tubes and quick connect couplers, w/ caps, 6/cs |
| ATP1-BD | cs | Bottles, disposable w/o quick connector nozzles, w/ caps, HDPE, 6/cs |
| APT1-BC | cs | Caps, replacement for both reusable and disposable bottles, 10/cs |
| ATP1-AD | ea | Auto-Dialing modem, automatically dials appropriate personnel in the event of an instrument failure. |
| ATP1-P | ea | Printer, dot matrix, bi-directional, 2 color, 40 column, 300 baud, RS232. |
| ATP1-PP | cs | Printer paper, 12 ea / cs, for ATP1-P. |
| ATP1-PR | cs | Printer ribbon, 6 ea / cs, for ATP1-P. |



Please visit our website for additional product information, technical bulletins, career opportunities, MSDS files, etc.

www.trianglebiomedical.com

Distributed By:




**TRIANGLE BIOMEDICAL SCIENCES, INC.**
3014 CROASDAILE DRIVE • DURHAM, NORTH CAROLINA 27705-2507 • USA • 919.384.9393 • FAX: 919.384.9595 • E-MAIL: tbs@trianglebiomedical.com





Printed in U.S.A., July 2008 Bulletin #1.1

**While TBS founders did not trademark the familiar Tissue Tek and VIP logos, we did develop, patent and license the dependable rotary valve technology. Now you can realize the same reliability from TBS' ATP along with our newest innovations.**

### 1 Single Rotary Valve Reduces Reagent Carryover

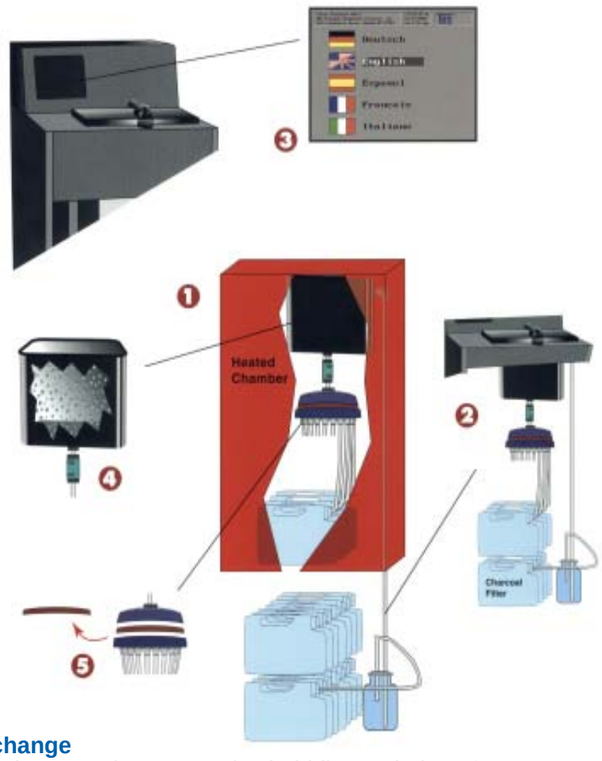
The ATP is the only tissue processor to direct the flow of all reagents, waxes and cleaning solutions to and from the processing chamber through a single rotary valve within a heated chamber. Reagent carry-over problems common to multiple valve and/or manifold systems, and, excessive wax temperatures associated with cartridge heated systems are completely eliminated. The net result is a reduction in reagent consumption with consistent processing quality.

### 2 Totally Enclosed Reagent/Pneumatic System Eliminates Noxious Vapors

No problematic overfill sensors are required to regulate retort filling or to minimize the escape of toxic fumes due to retort over-filling. Unique reagent bottle design in combination with chamber overfill collection system eliminates the adverse effect of overfill conditions by providing for the uptake of any excess reagent back into the appropriate reagent container. This innovative plumbing design feature dramatically reduces charcoal filter replacement costs and minimizes laboratory personnel exposure to hazardous fumes.

### 3 8" Color LCD Touch-Screen Controller Improves Operator Viewing and Efficiency

The ATP is the first automatic tissue processor to combine a color VGA display with a built-in touch-screen controller. For clarity, dependability, and ease of care, the ATP has taken automatic tissue processing into the 21st century.




### 4 Unique "Bubbling" Technology Maximizes Fluid Exchange

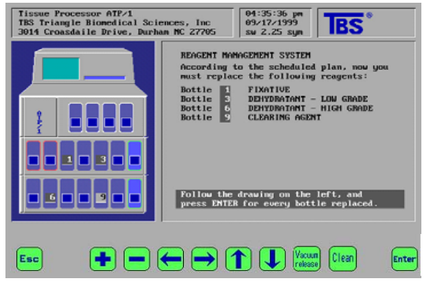
The ATP utilizes the technology to maximize fluid/tissue exchange ratios. Innovative bubbling technique forces more fluid up through the layers of cassettes than conventional magnetic stirring. Operator programmable bubbling frequency allows for the right amount of mixing without over stressing specimens.

### 5 Innovative Design Minimizes Downtime and Reduces Service Costs

The ATP was designed by service engineers. The knowledge gained from years of experience servicing competitive tissue processors provided the foundation for unrivaled dependability and minimal service costs. The heart of the ATP is a single rotary valve that is designed such that any wearable part can be replaced for under $300. Compare the number of pumps, valves and heaters to other designs and you will come to realize why earlier, more established brands avoid feature comparisons.

**Unique Bottle Design**
Innovative bottle design, available with or without a quick release coupler built-in to the neck of the bottle, affords the option of purchasing prefilled reagent bottles or conveniently filling from your own bulk reagent supply. Optional adapter kits available to reconfigure your ATP to either reagent handling method.

**Eliminate Paraffin Splashing**
The ATP utilizes four 2.5L paraffin bottles with one extra (always pre-warmed) in reserve. Oven heating maintains constant 50° - 60° C (+/- 1) without the extreme temperature gradients of cartridge heated systems. Extra heated bottle eliminates the concern for sufficient melted paraffin for changes and can be used to replace paraffin in embedding centers when a source of molten paraffin is suddenly needed.




### Reagent Management Efficiencies

When replacing the oldest paraffin, reagent and cleaning bottles, the ATP reagent management software eliminates the need to shift the remaining bottles. Innovative software automatically manages the access based on the order of cleanliness – independent of location or sequence in the reagent cabinet. Quality management can be controlled by specific groups or by individual bottles. Technician handling is reduced to a minimum and processing quality maximized.

## Operational Simplicity

### Multi-Lingual/Country Operations

The ATP was designed with the international market in mind – Multiple languages, voltages and regulatory approvals to meet the needs of TBS' customers around the world.

### Specimen Protection

Unique pressure sensor technology eliminates the need for problematic level sensors thereby assuring complete chamber filling. In the event of a low reagent situation, processing is immediately suspended, the chamber is emptied, filled with fluid from the previous station and then processing is restarted skipping the affected station.

### Automatic Paraffin Cleaning Function

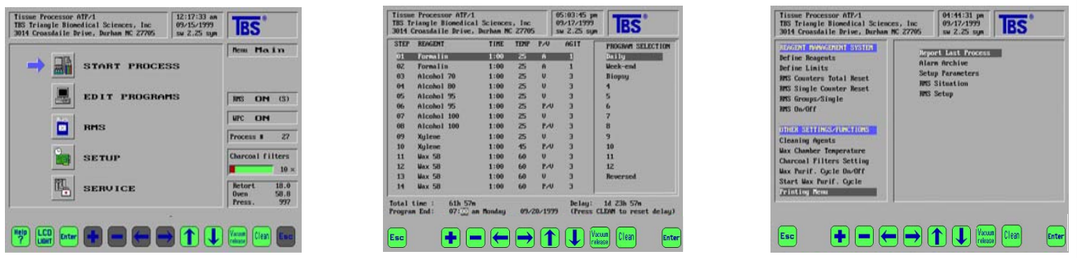
To prolong paraffin life and reduce reagent cost, the ATP automatically removes xylene sequentially from each paraffin bottle immediately following the completion of the purge process. No operator attention is required. No pumping of the paraffin into the retort is required. Excess xylene vapor is extracted by an activated charcoal filter. It is estimated that the process reduces paraffin purchases by a third or more. Processing quality is maintained at a high level while cleaning time, operator involvement and valve cycling is kept to a minimum.

### Quality Assurance

Contamination of reagents, paraffin, cleaning fluid and charcoal filters is tabulated in order to determine when each station requires changing. Consumption can be more predictably managed by actual conditions rather than routinely discarding good reagent or compromising processing quality by exceeding the useful life of a consumable.

### Security

Use the RS232 serial output to a lab PC or connect to a printer for a permanent record of each cycle. Included internal modem provides remote diagnostic capabilities. Optional auto-dial modem provides further assurance in the event of a power outage or component failure.




### Programming Ease

Menu driven color display of up to 12 user defined programs with battery back-up protection. A 13th program is available for reverse processing. Simultaneous viewing of the entire processing schedule, including time, day, date, and program name. Edit at any step in the process. Simply touch the desired command on the color display touch-screen controller.

### Versatile Cassette Baskets

A combination of baskets and cassette arrangements provides maximum specimen throughput while optimizing processing quality. With row dividers but without springs, one cassette basket accepts 150 (5 rows of 30) cassettes. Since the processing chamber holds two baskets, the throughput is 300 per run. This tightly packed arrangement is recommended for biopsies and small tissue samples. Where larger specimens are the norm, row dividers and spring organizers provide separation for enhanced fluid exchange. A bulk (random) basket is also included for smaller runs where spacing is not a concern. Approximately 200-220 cassettes can be randomly loaded or if neatly stacked, the capacity is 350. Regardless of the arrangement, the ATP exclusive "bubbling" fluid exchange process dramatically increases the movement of fluid around and through each individual cassette.