



# LOGOS One

Fully automated innovative tissue processor  
Designed for reliability and unmatched tissue quality  
Focuses on the user and on specimen safety  
Allows batch **and** continuous flow operations



**MILESTONE**  
HELPING  
PATIENTS

# LOGOS One. Unmatched workflow options



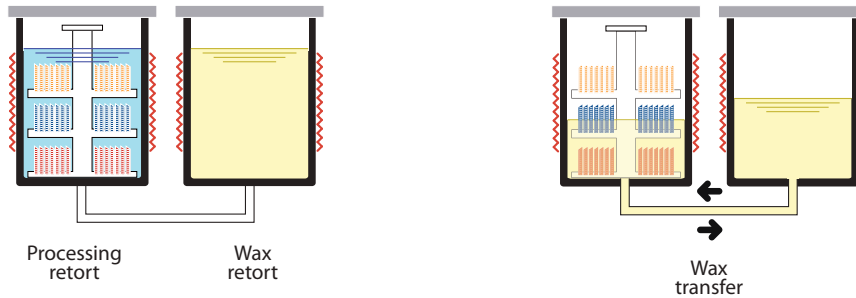
## Day operations

As a fully automated, single retort, **rapid tissue processor**



## Night operations

As a fully automated, single retort, **overnight tissue processor**



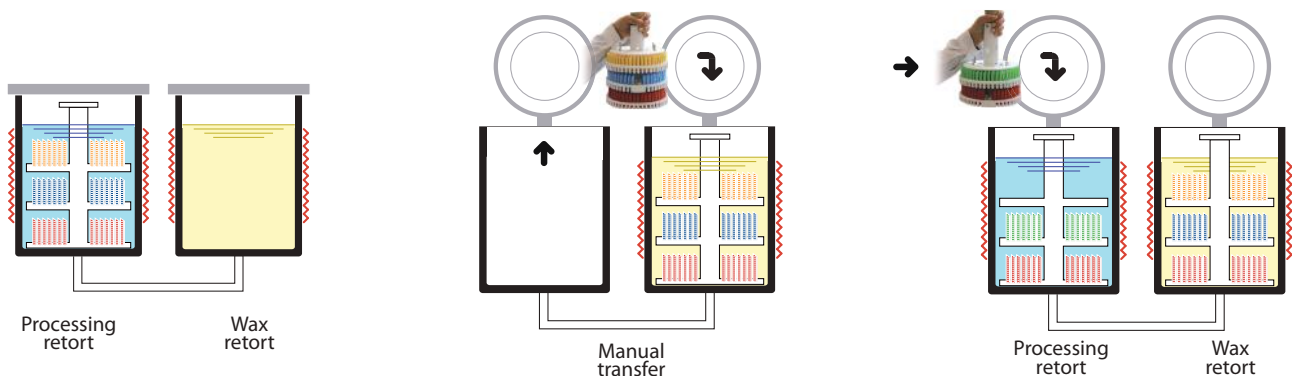
During the day, LOGOS One can run urgent biopsies in a short time as a fully automated unit. Molten wax is automatically transferred to and from the processing retort for the impregnation step. During the night, LOGOS One can run protocols as an advanced and resistant heated processor. Improved operations are carried out through xylene-free protocols with only four reagents: formalin, ethanol, isopropanol and wax. It also has an optional delayed start mode, with a desired completion time set by the user, to allow additional fixation time, if needed.

# LOGOS One. An additional unique feature...



## Day operation enhanced

As a sequential, dual retort, **continuous flow tissue processor**



1 - In the processing retort the first rack undergoes a fixation, a dehydration and a clearing phase.

2 - At the end of the processing cycle, the rack is manually transferred to the wax retort.

3 - A new rack is then manually placed in the processing retort. The two racks are processed simultaneously.

## LOGOS One.

### The state-of-the-art processor for superior tissue quality

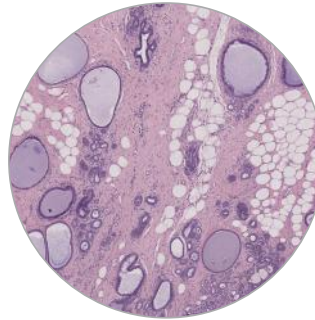
- Only two processing steps (1 ethanol and 1 isopropanol)
- Fully automated processing in overnight and in rapid mode
- Parallel processing in continuous flexible-size batch mode
- Up to 140 cassettes with 1 gallon standard reagent containers
- Up to 210/300 cassettes with 5 liter reagent containers
- Any type of tissue can be processed, up to 10 mm of thickness
- Xylene or xylene-free protocols



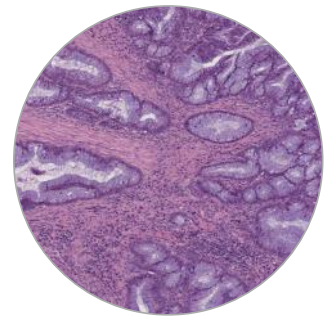
# LOGOS One

## Unmatched tissue quality

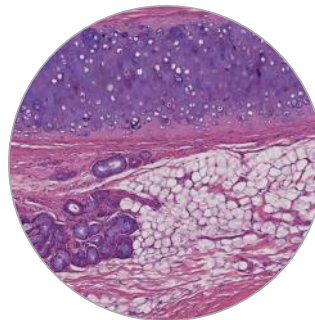
All types of specimens can be easily processed with the LOGOS One. Excellent quality results for H&E, Immunohistochemistry, FISH and molecular studies.



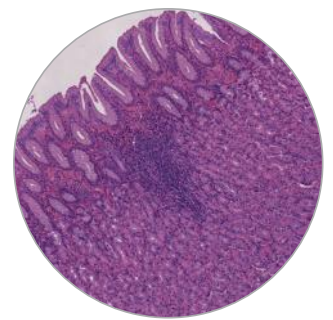
Breast



Colon



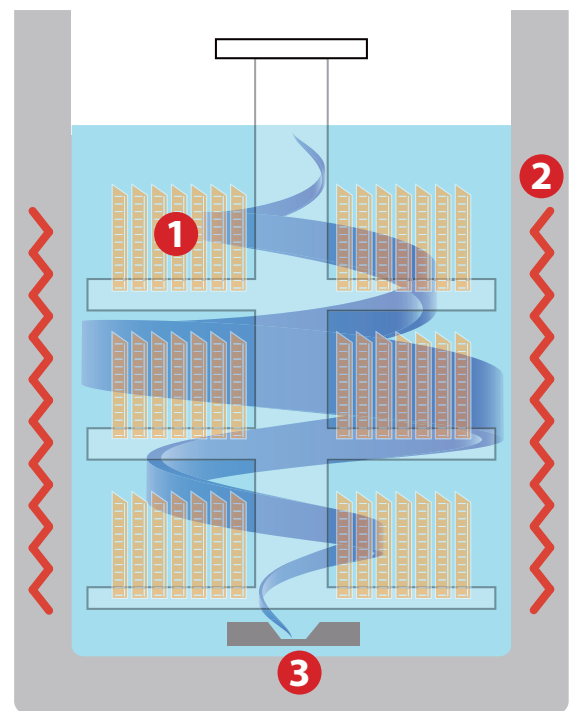
Cartilage



Stomach

## Rapid optimized tissue-processing

- 1 Reduced number of processing steps**  
The Logos One carries out rapid protocols only with 1 step of ethanol and 1 step of isopropanol, thanks to its advanced retort heating system
- 2 Fast ramp time and precise temperature control**  
The resistive heating elements, built in the aluminium retort walls, ensure a fast and homogeneous temperature increase of the reagents to the pre-set processing values.
- 3 Rapid and optimal reagent diffusion**  
The diffusion of the reagent is guaranteed by a highly efficient magnetic stirrer bar at the bottom of the retort, ensuring an optimal flow through all of the cassettes of each rack level.



LOGOS One. Reagent processing retort

# LOGOS One. Unmatched processing times

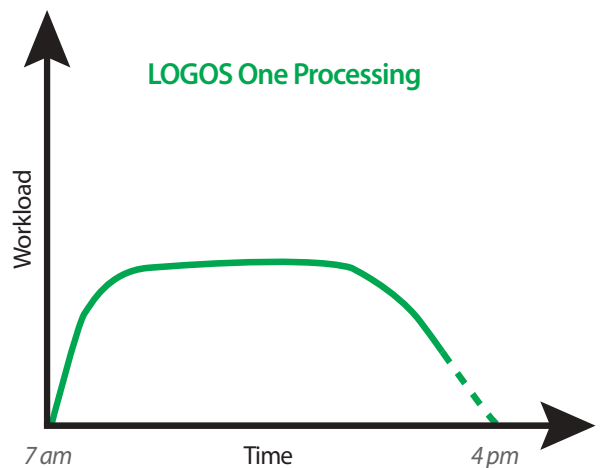
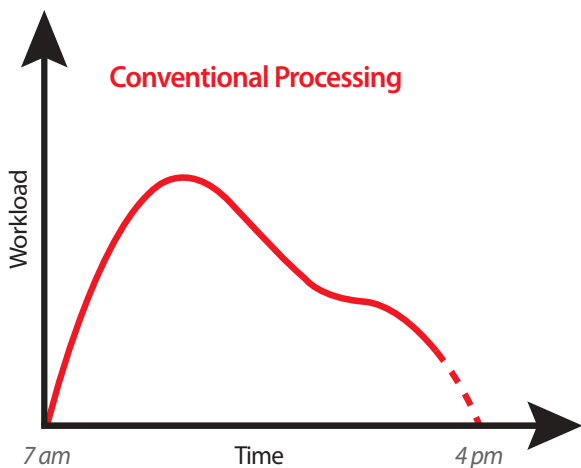
Enables same-day diagnosis with a flexible and adaptable fast processing schedule.

Specimen thickness	Rapid and fully automated protocols	Improved workflow with sequential processing in continuous batch mode
1 mm (i.e. GI/Endoscopic biopsies)	Full batch* processed in 2 h 10 minutes (excluding fixation)	Batch* loading every 1 h 47 minutes
3 mm	Full batch* processed in 3 h 34 minutes (excluding fixation)	Batch* loading every 2 h 31 minutes
5 mm	Full batch* processed in 5 h 54 minutes (excluding fixation)	Batch* loading every 3 h 34 minutes

*Note: above times are referred to ethanol/isopropanol 2 layer protocols, excluding reagent movement.  
\* Up to 140 cassettes with 1 gallon containers and up to 210 cassettes with 5 liter reagent jars*

# LOGOS One. Dramatic workflow improvement

Throughout the day the instrument can process urgent and small biopsies on demand. These samples/biopsies, which can constitute 40-60% of the workload of a histopathology lab, are rapidly processed. The short processing time allows embedding, cutting and staining of specimens so that the slides are available for the pathologist on the same day. The remaining cassettes can be automatically processed during the night.





# LOGOS One software. Intuitive, icon-driven, smartphone-like

## Touch Control



Enter the appropriate user access level. The operator can recall and run existing processing protocols. Only the administrator can modify programs or store new ones.



*Intuitive touch display. Icon-driven and user friendly.*

Run ID: HOSPITAL XYZ

Rack Type: Split # Cassettes: 210

Rack Layer: 3 Cavity Level: 3

Reagents: Eth - Iso

Programs: UP TO 3 mm

Fixation Phase:  Include  Exclude

Run Mode:  Automatic  Dual Run

Start

Delay

20 Apr 2011 16:18

The administrator can easily set up a new protocol by selecting the desired settings from the touchscreen interface.

**RUN SUMMARY**

Run ID: HOSPITAL XYZ Protocol: Eth - Iso

Rack Type: Split Thickness: UP TO 3 mm

# Cassettes: 210 Fixation: Included

Rack Layer: 3 Run Mode: Automatic

Cavity Level: 3

START FROM PHASE:

1: fixation

Run duration: 3hr17min

Completion time: Wed, 20-Apr-2011, 19:39

Start

20 Apr 2011 16:22

The complete summary of the new protocol is displayed for approval or modification before starting the process.

all list **Events Log** List length: 196

Number	Type	Description	Date	Time	User	L1	L2	L3	L4
196	Act	Wax status red	20 Apr 11	16:22:27	Service	1	0	1	0
195	Act	Protection cover open	20 Apr 11	16:21:27	—	1	0	1	0
194	Act	Reagents status green	20 Apr 11	16:21:27	—	1	0	1	0
193	Act	Application started	20 Apr 11	16:21:25	—	1	0	1	0
192	Act	Wax status red	20 Apr 11	16:17:02	Service	1	0	1	0
191	Act	Protection cover open	20 Apr 11	16:16:02	—	1	0	1	0
190	Act	Reagents status green	20 Apr 11	16:16:02	—	1	0	1	0
189	Act	Application started	20 Apr 11	16:16:00	—	1	0	1	0
188	Act	Wax status red	20 Apr 11	16:06:00	Service	1	0	1	0
187	Act	Protection cover open	20 Apr 11	16:04:59	—	1	0	1	0
186	Act	Reagents status green	20 Apr 11	16:04:59	—	1	0	1	0
185	Act	Application started	20 Apr 11	16:04:58	—	1	0	1	0
184	Act	Wax status red	20 Apr 11	15:41:59	Service	1	0	1	0
183	Act	Protection cover open	20 Apr 11	15:40:59	—	1	0	1	0
182	Act	Reagents status green	20 Apr 11	15:40:59	—	1	0	1	0
181	Act	Application started	20 Apr 11	15:40:58	—	1	0	1	0
180	Act	Wax status red	20 Apr 11	15:39:35	Service	1	0	1	0
179	Act	Protection cover open	20 Apr 11	15:38:35	—	1	0	1	0
178	Act	Reagents status green	20 Apr 11	15:38:35	—	1	0	1	0

Nr. of events to load: 1000 (10 sec loading)

Apply a filter Export to USB Exit

An event log lists all the activities carried out with the unit, providing documentation for service and quality assurance purposes.

# LOGOS One. Focus on operator and specimen safety

## Save time

Direct transfer of solutions from commercial containers (5l / 1 US gal supplier bottles) into the processing retort. No need of filling tanks as required by conventional tissue processors.

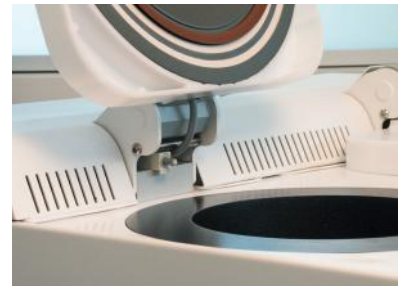


## High safety standards

No pouring, no fumes.

## Ultra protection for users safety

Fully enclosed system with a twin extraction system of fumes at the retort opening. The slide-out reagent drawer is provided with an efficient ventilation/exhaust system.



## Error-free reagents replacement

The Logos One reagent replacement is error-free thanks to a barcoding check system. When the container needs to be replaced, the operator can double-check the correctness of the reagent used and its positioning in the drawer.

1. Scan the barcode on the bottle to check the proper reagent.
2. Scan the barcode of the wall's back label to check the correct position of the bottle.



## Packed with the latest technology for an improved work environment

- 1 "Soft-close" cover for enhanced safety
- 2 Heated PTFE coated internal surface to avoid the condensation of reagents for consistent processing and enhanced operator safety
- 3 Swing-up control panel cover for easy access to condensation traps
- 4 Easy and safe transfer of exhausted wax through a heated PTFE connector

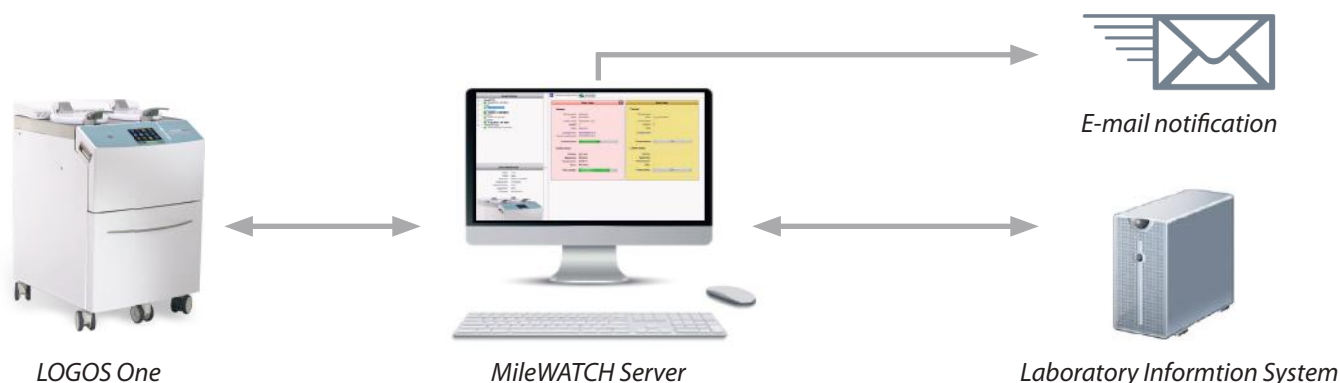


# Conventional processing with “unconventional” options

## An innovative unit surveillance system

### MileWATCH

The optional middleware MileWATCH monitors from remote, in real time, 24/7 the processor status with live notifications. MileWATCH can be set to send e-mails to the interested parties: protocol status to the laboratory manager, alerts to service personnel, providing all the necessary information for a prompt action to assure trouble-free operations.



## Fully automated processing and embedding in one unit

### Synergy

Synergy is a revolutionary Patented (n. EP 2 439 510 A1) method to automatically embed tissues as part of the processing protocols. Thanks to a dedicated rack and consumables, the same processor unit can also carry out automatic embedding. The Synergy is available as an option for the LOGOS One unit.

### SYNERGY performance

N° of blocks per run: 45. Processing cycles:

- 1mm thickness processed **and** embedded in 2h 10m\*
- 3mm thickness processed **and** embedded in 3h 34m\*
- 5mm thickness processed **and** embedded in 5h 54m\*

### SYNERGY benefits

- Optimal flat positioning of small biopsies such as needle core biopsy
- Flexibility to run standard processing automatic embedding



\*Time for reagents loading/unloading excluded

### MILESTONE



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MILESTONE Srl - Via Fatebenefratelli, 1/5 - 24010 Sorisole (BG) - Italy  
Tel: +39 035 4128264 - Fax: +39 035 575498  
www.milestonemedsrl.com - email: medical@milestonesrl.com

**UNI EN ISO 9001: 2008 / UNI CEI ISO 13485:2012 CERTIFIED**

MILESTONE MEDICAL TECHNOLOGIES, INC.  
6475 Technology Avenue, Suite F, Kalamazoo, MI 49009 - USA  
Tel: 269-488-4950 - Toll-free: 866-995-5300 - Fax: 269-488-4949  
www.milestonemed.com - email: info@milestonemed.com

In your country: