



Technical data STP 120

Capacity

- Reagent stations**
- Number of vessels: 10
(9 if 3 paraffin baths are used)
 - Volume per vessel: 1.8 l

- Paraffin stations**
- Number: 2 (optionally 3)
 - Volume: 1.8 l
 - Nominal voltage: 24 V AC
 - Nominal power per station: 100 VA
 - Temperature setting range: 50 - 70 °C
 - Overtemperature release: 75 °C > (± 4 °C)

- Cassette baskets**
- Number of baskets: 1 (optionally 2)
 - Basket capacity: 120 cassettes

- Programming**
- Number of programs: 10 (selectable)
 - Programmable infiltration time per station: From 1 sec. to 99 h 59 min
 - Spiral agitation: selectable
 - Vertical agitation: selectable
 - Centrifuging: selectable
 - Centrifuging time: selectable
 - Program start delay selectable without time limit

- Power requirements**
- Nominal voltage: 100-120 V / 220-240 V AC (± 10%)
 - Network's frequency: 50 - 60 Hz

Accessories

- Aluminium vessels with supporting frames
- Stainless steel basket with capacity for 120 cassettes
- Stainless steel counterweight to keep the specimens submerged
- Paraffin bath

Paraffin Type 1, 3, 6, 9

These four different blends of highly refined paraffin and polymers offer a choice of infiltration times and cutting characteristics to meet all your needs. All paraffins melt between 55°-57 °C and are triple-filtered to 0.5 microns.

Dimensions

- Diameter: 850 mm
- Height: 500 - 700 mm
- Diameter of the roller's circle: 670 mm

Weight

- Net (fully equipped): 70 kg

Standard equipment

- 1 Basic instrument
- 10 Aluminium vessels for reagents
- 2 Paraffin baths
- 1 Stainless steel basket (capacity for 120 cassettes)
- 1 Tool kit
- 1 User manual

Optional equipment

- 1 Spiral support for a second cassette basket (thus doubling the processing capacity up to 240 cassettes)
- 1 Additional basket
- 1 Additional paraffin bath (if the instrument with two cassette baskets is used, it should incorporate a third paraffin bath)
- Vapor extraction system, with active charcoal filter

Options

- STP 120-1: Standard instrument
- STP 120-2: Standard instrument + fume extraction system with active charcoal filter
- STP 120-3: Standard instrument + fume extraction system with active charcoal filter + 3rd paraffin station and 2nd cassette basket

TurbOflow™ Cassettes

TurbOflow cassettes are uniquely designed to hold specimens securely and ensure optimal fluid exchange, 85% more than traditional cassettes. This helps reduce reagent carryover and when used with the TurbOflow base molds, will use less paraffin and virtually eliminate flash.



**New technology
High performance
Advanced design**

STP 120 - Spin Tissue Processor

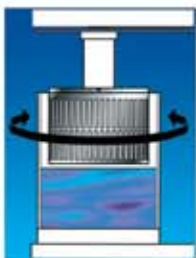
A new technology ensuring high performance with advanced ergonomic design

Thermo is setting new standards through innovative technical developments for tissue infiltration, through the combination of an efficient and well-tested technology with advanced design and performance.

The Tissue Processor STP 120 incorporates two new functions that have enabled us to develop the most advanced Carousel Tissue Processor in the world.

Spiral agitation of the cassette basket

During the infiltration process this function makes it possible for the basket to turn permanently and to automatically change the rotation direction every 60 seconds. This reduces the processing times and obtains a full and homogenous mixture of the reagents plus a perfect infiltration.



Via this new function it is possible for the reagents to last longer, as their contamination is reduced to a minimum since reagents are not carried over from one vessel to the next.

Due to these two new functions the quality of the specimens is equal to the quality obtained by a vacuum instrument.

Flexibility

The combination of silent and robust precision mechanics, plus a new software, enables the user to attain the highest degree of flexibility, as all functions can be programmed. Through this versatility each user can adjust the instrument to the specific requirements of each laboratory.

Various options

- STP 120-1
Basic instrument
- STP 120-2
Basic instrument + fume extraction system with active charcoal filter
- STP 120-3
Basic instrument + fume extraction system with active charcoal filter + 3rd paraffin station and 2nd cassette basket.

The STP 120-3 version doubles the instrument's capacity by incorporating a second cassette basket, thus processing up to 240 cassettes and significantly increasing the efficiency of routine and research jobs.



Centrifuging (Whirling)

This function is activated as soon as the infiltration time in a reagent is elapsed. The basket rises above the reagent's level, but inside the vessel. During a period of time of 60 seconds it rotates at high speed and automatically changes the rotation direction every 15 seconds, which enables the basket and the specimens to be optimally drained.



Ergonomic control panel

The buttons of the control panel are arranged ergonomically for easy handling.

The LCD (liquid crystal display) shows all the parameters throughout the process, such as program number, vessel, remaining time, start time, start delay, total duration of the program, spiral agitation & basket's centrifuging, temperature of paraffin baths, date and time.

Ease of use

The instrument has capacity to store up to 10 different programs that can be freely set up by the user. Each one of the programs can be started in immediate or delayed mode, without time limit. The instrument can easily be rotated via four rollers. This allows the user to have fast and safe access to each one of the vessels.

Maximum safety standards for the user and specimens

The individual covers for each one of the vessels reduce the emission of vapors to a minimum. The STP 120-2 and STP 120-3 versions incorporate a fume extraction system that - through a fan and an active charcoal filter - cleans the vapors. The tissue samples are protected against desiccation and solid paraffins in case of a power failure.

In case of a power shutdown, the specimens are automatically lowered inside the vessel through a battery. Once power is restored, the instrument resumes the program at the same point in which it was interrupted. If it is a long power failure and the paraffin baths become solidified, the safety program will be activated. The instrument will then wait for the baths to be fully liquified before going ahead with the change to the paraffin baths. Emergency motions can be operated through the battery, such as moving the basket up and down, change it to another station. Emergency stop button. Possibility to interrupt a program for reloading and advance sampling. Insulation of the electric and electronic components from the working areas.

Correction and alarm during program deviations

In case the specimens remain inside a station for a longer time than the programmed time, e.g. due to a power failure, the display will show a message indicating the station number and the overtime spent in that station compared with the initially programmed time. The acoustic and visual alarms can easily be identified by the user. The keyboard can be locked by the user to avoid an inadvertent change of the process parameters during operation.