Leica TP1020
Automatic Tissue Processor for the Histology Laboratory
Leica sets new standards in many fields of application with technically innovative instruments for specimen preparation. The Leica TP1020 is an automatic tissue processor that perfectly combines approved technology with modern, user-friendly design. Gentle specimen processing and maximum safety for tissue at all stages of the processing run, robust engineering design based on innovative precision mechanics in conjunction with a modern user interface – these are the convincing features of the Leica TP1020. Easy to program, this instrument offers the user utmost flexibility to suit the individual requirements of any laboratory.

**Reduced exposure to hazardous fumes**

The instrument variation with fume control system offers two options for removing solution fumes:

- The use of two different activated carbon filters (for formalin and alcohol/xylene) frees the exhaust air from the solution fumes and releases the cleansed air into the ambient atmosphere.
- An exhaust air tube directs the solution fumes to an outlet.

The efficiency of the system is further enhanced by a two-part plexiglass fume containment shield surrounding the reagent container platform.

**Tissue infiltration under vacuum**

Vacuum can be applied to any of the stations both in manual and automatic operation. The advantage: substantially improved infiltration of tissue in a shorter time. Instruments with the vacuum feature are equipped with anodized aluminum containers.
Maximum safety for the tissue

The tissue specimens are protected from drying out even during a power failure since the tissue baskets are automatically immersed in a station. The program is resumed where interrupted once mains power is restored. After a long-term power failure, the wax will be liquefied. If the programmed infiltration time for any of the stations is exceeded a warning message is displayed indicating the station number and the time in excess of program.

Practical details

The specimen throughput can be doubled by using a second tissue basket for improved productivity in routine and research laboratories. The tissue basket is moved up and down in the liquid at three-second intervals to ensure thorough and even mixing of the reagents and optimum infiltration of the tissue. Sealing rings on the container lids reduce solution loss and therefore also emission into the ambient atmosphere to a minimum. All reagent stations are easily accessible because the instrument can be rotated nearly immediately and without difficulty by using the integrated and adjustable rollers.

User-friendly, easy-to-use control panel

The buttons of the control panel are arranged in functional groups. The easy-to-read LCD indicates the station parameters such as number of tissue baskets, vacuum function and remaining infiltration time, real time, start time (delayed start), overall duration and end of run time. Each of the nine programs can be run with immediate or delayed start.

Wide range of accessories:

- Glass beakers with beaker carriers
- Anodized aluminum container with beaker carriers
- Teflon coated wax bath
- Three-part tissue basket with lid (for organized loading of cassettes)
- Standard tissue baskets
- Basket removal device with drip tray

Four configurations are available: basic instrument; base instrument with vacuum; base instrument with fume control system; and base instrument with vacuum and fume control.
Outstanding Product Features

› Carousel type with 12 stations
› Configurations: – Basic instrument
  – Vacuum function
  – Fume control system
  – Vacuum function with fume control system
› Option: two basket loading
› Tissue baskets made of metal with varying capacities of up to 100 cassettes
› Ergonomic control panel with foil-protected keyboard and LCD
› Infiltration time separately programmable for each station
› Delayed start function up to 9 days
› Possibility of interrupting an automatic process for reloading or removing cassettes for special applications before the end of a run
› Easy editing and changing of programs, even during a processing run
› Audible alarms, error messages and warning codes
› Advanced safety concept
› Wide range of accessories

Up-to-date development, production and quality control procedures certified under DIN EN ISO 9001 ensure highest quality and reliability.

Technical Specifications

Electrical specifications:
Nominal voltage: _______________________________ 100 / 120 / 230 / 240 V AC ±10%
Nominal frequency: ___________________________________________ 50 / 60 Hz

Dimensions:
Carousel id: _______________________________ 820 mm Ø
Height: _______________ 595 – 780 mm
Diameter of rollers: _______________ 610 mm
Dry weight (including accessories): _______________ 60 kg

Wax baths:
Number: _______________________________ 2 (3 optional)
Capacity: _______________ 1.8 l
Temperature range: _______________ 45 °C – 65 °C
Excess temperature cutout: _______________ 75 °C ± 4 °C

Reagent containers:
Number: _______________________________ 10 (9)
Capacity: _______________ 1.8 l

Standard tissue basket:
Number: _______________________________ 1 (2 optional)
Capacity: _______________ max. 100 cassettes

Programs:
Number: _______________________________ 9, freely selectable
Programmable infiltration time per station: _______________ 99 h 59 min
Delayed start: _______________ 9 days
Drain time: _______________ 60 s

Vacuum device (depending on the configuration):
Pressure difference: _______________ max. 500 hPa (approx. 0.5 bar)

Leica Biosystems brings together products, quality and support.
Offering a complete solution that helps you advance workflows, enhance diagnostic clarity and deliver what really matters – better patient care.