

Histo-Line Laboratories



Anatomy Pathology
Instruments

Your partner in Histology



English Version

Company

Histo-Line Laboratories were founded in Milan, Italy in 1987.



The company has always believed and invested in the quality of products and instruments so as to obtain the **UNI EN ISO 9001:2008** and **13485:2012** quality management certification.

We are a leading producer and distributor of products and instruments for diagnosis and research in: histology, cytology, immunohistochemistry, cellular biology, molecular biology, hematology, veterinary.

Our products' are conceived to satisfy a vast spectrum of human and veterinary research and diagnostic needs.

Our mission is to supply the best technological assistance to researchers in pursuit of excellence.

We supply a vast selection of products and systems, such as Antibodies, DNA probes, automatic and manual revelation systems, reagents and instruments for processing, staining and diagnosis of human and animal tissues.

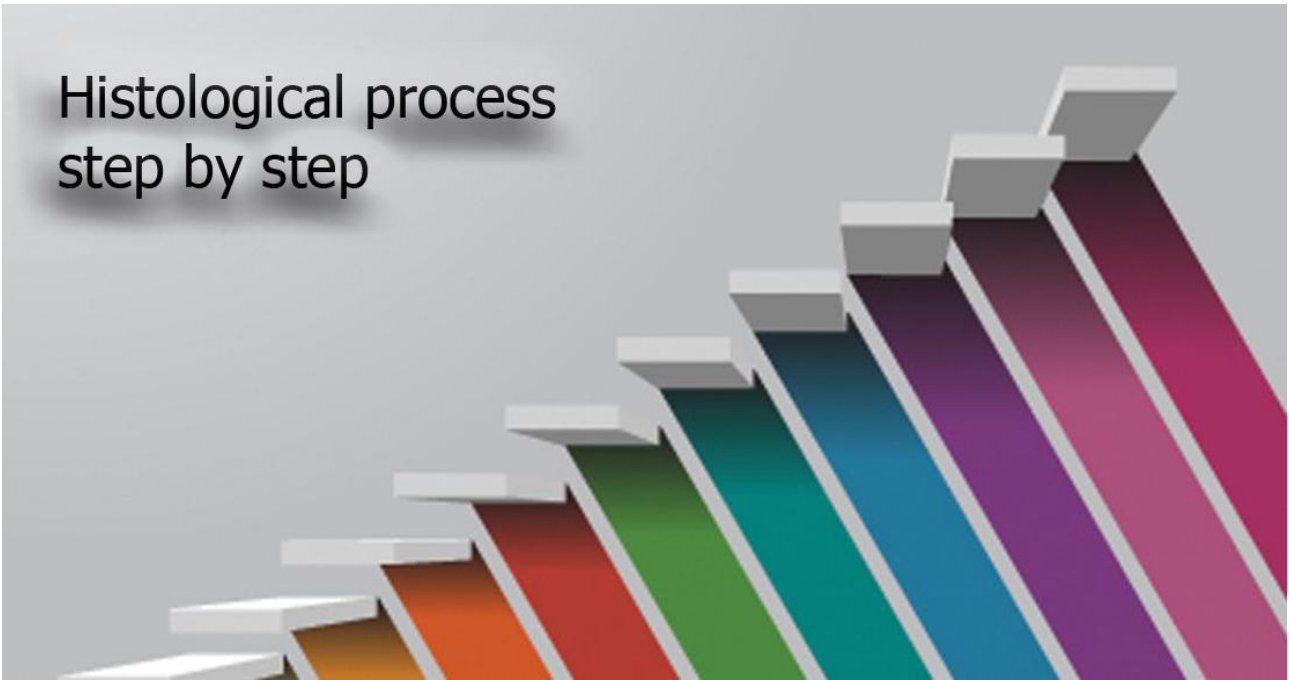
In an effort to offer an even better service, and pursuit of excellence, we recently moved in a new facility, located in Pantigliate - Viale Giuseppe Di Vittorio, 30. Close to Linate city airport and 12 km from Milan downtown.

We have expanded our previous structure and created a Conference Center able to host up to 100 people.

We offer a variety of ECM courses as well as courses on the theoretical and practical aspects of the applications of differing methodologies.



Histological process
step by step



Histo-Line Laboratories



TISSUE PROCESSING	
Histo-Pro 300 Vacuum Tissue Processor	8
Histo-Pro 200 Vacuum Tissue Processor	10
ATP 1000 Automatic Tissue Processor	12
STP 250-V Spin Vacuum Tissue Processor	14
EMBEDDING	
EMBEDDING CENTER	
TEC 2900 Tissue Embedding Center	20
TEC 2900-1 Main Console	22
TEC 2900-2 Cryo Console	23
TEC 2900-3 Thermal Console	24
TEC 2900-4 Thermal Console Double Floor	25
TEC 2900S Tissue Embedding Center small size	26
TEC 2000 Paraffin Dispenser	27
TEC 3000 Histo Trimmer	28
Histo Clip Heated forceps	29
EMBEDDING ACCESSORIES	
TEC 2500 Water Bath-Slide Dryer	34
WB 2900 Tissue Floating Bath	35
WB 2800 Water Bath	36
SD 2800 Slide Dryer	37
SECTIONING	
ROTARY MICROTOMES	
ARM 3700 Fully Motorized Rotary Microtome	42
ARM 3600 Fully Motorized Rotary Microtome	44
MRS 3500 Ultra-Thin Semiautomatic Microtome	46
MR 3000 Manual Rotary Microtome	48
MR 2258 Manual Rotary Microtome	50
MICROTOMES CRYOSTAT	
MC 5050 Microtome Cryostat with retraction	52
MC 5000 Microtome Cryostat Dual Freezing System	54
MC 4000 Microtome Cryostat Dual Compressor	56
MC 3000 Microtome Cryostat	58
STAINING	
ATS 200 Automatic Multiple Slide Stainer	64
ATS 2010 Automatic Slide Stainer	66
HISTO-24 Histo Stainer	68
CYTOLOGY	
SP100 Cytological Centrifuge	74
INDEX	
Analytic index	78

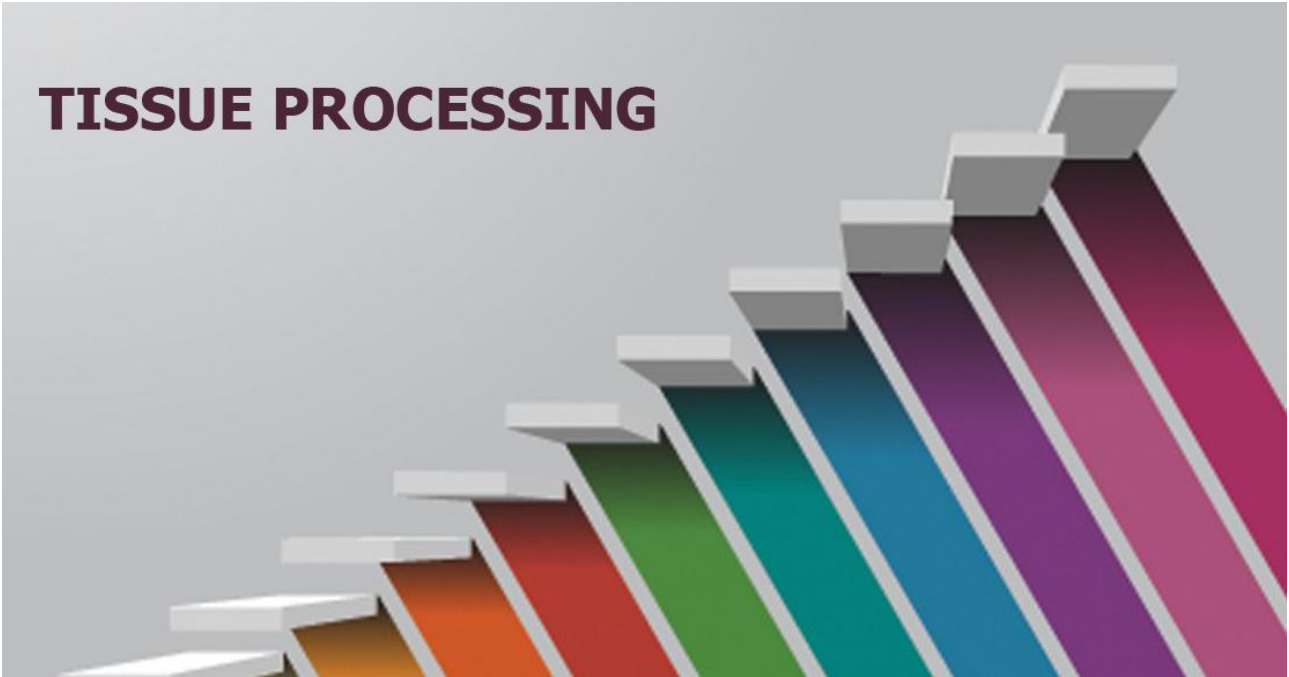
Histo-Line Laboratories



Innovative life science solutions



TISSUE PROCESSING



Histo-Pro 300 Vacuum Tissue Processor
Histo-Pro 200 Vacuum Tissue Processor
ATP 1000 Automatic Tissue Processor
STP 250-V Spin Vacuum Tissue Processor



TISSUE PROCESSING

Histo-Pro 300 Vacuum Tissue Processor

IVD CE



The Instrument

Histo-Pro 300 set a new standard in vacuum tissue processing.

Its unique reagent monitoring and management delivers significant reagent cost savings.

Superior process control, functional design, and precise temperature control ensure optimum specimen quality.

An active extraction process ensures efficient paraffin cleaning, which extends paraffin life, improves tissue quality, and reduces operating and reagents costs.

User safety is enhanced by a fully enclosed fume system and improved reagent bottle and cabinet design.

Through the control panel all the operating parameters like programs, temperatures, vacuum and levels can be freely modified

3 different reagent level according to sample quantity processed.

Histo-Pro 300 is available with Automatic fill/drain reagent system to prevent the risks of reagents contact. (Optional)

Display and Software

Large Touch-screen color Liquid Crystal Display (LCD).

User-friendly, smart icons software.

Alarm system for wrong operation and troubles

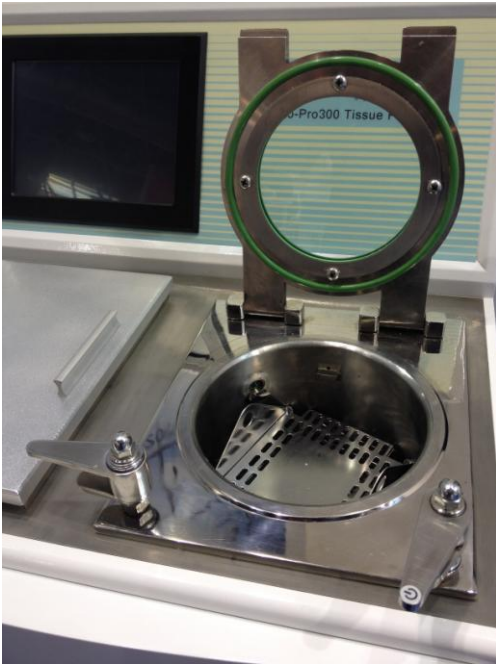
Multiple specimen protection system.

The operator can set the different programs varied in duration, temperature.

Freely customized programs for retort cleaning cycle.



TISSUE PROCESSING

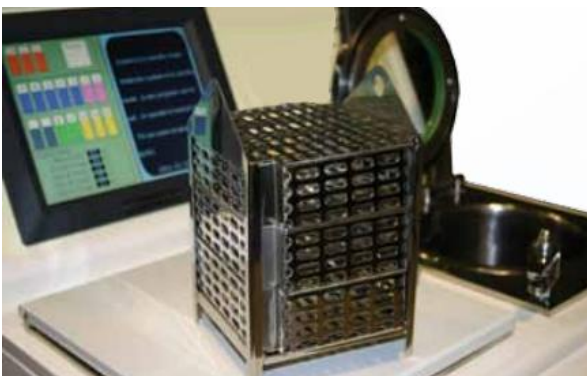


Capacities

- Capacity about 300 cassettes
- 20 programs that consist of up to 10 reagent and 3 paraffin wax steps
- Time for program step: 0 to 99 hours, 59 minutes
- Up to 300 cassettes can be processed
- Wax clean program
- 10 reagent bottles
- 3 wax baths a temperature: 50°C - 65°C
- 2 cleaning solution bottles
- 1 condensate bottle
- 1 carbon filter bottle
- Maximum bottle volume: 6.0 lt

Retort

- Reagent volume: 6.8 Lt
- Temperature (paraffin): 50°C - 65°C
- Temperature (reagents): ambient or 35°C
- Temperature (cleaning reagents): 50°C -65°C
- Temperature accuracy: + 1°C
- Filling time: up to 5 min
- Drain time: up to 5 min
- Impregnation vacuum: -70 kPa (g)
- Impregnation pressure: 35 kPa (g)
- Fill vacuum: -70 kPa (g)
- Drain pressure: 35 kPa (g)



Technical Data

- Nominal voltage: AC 220 V
- Nominal frequency: 60 Hz
- Main fuses: 10 A
- Nominal power: 1500 V/A
- Dry weight, unpacked: approx. 100 kg
- Weight, packed: 120 kg
- Operating temperature range: 15 °C to 35 °C
- Relative humidity: 10 to 80 %
- Recirculation (pump in/out): ON/OFF
- Time between cycles: 15 min

Product	Size	Packaging	Code
Histo-Pro 300 Vacuum Tissue Processor	Unit	1 pc	HistoPro300

TISSUE PROCESSING

Histo-Pro 200 Vacuum Tissue Processor

IVD CE



The Instrument

Histo-Pro 200 set a new standard in vacuum tissue processing.

Its unique reagent monitoring and management delivers significant reagent cost savings.

Superior process control, functional design, and precise temperature control ensure optimum specimen quality.

An active extraction process ensures efficient reagents quality, which extends paraffin life, improves tissue quality, and reduces operating costs.

User safety is enhanced by a fully enclosed fume system and by the improved reagent bottle and cabinet design to prevent the risk of contact and reagent carry-over.

Through the control panel all the operating parameters like programs, temperatures, vacuum and levels can be freely modified.

3 different reagent level according to sample quantity processed.

Histo-Pro 200 is available with Automatic fill/drain reagent system to prevent the risks of reagents contact. (Optional)

Display and Software

Large Touch-screen color Liquid Crystal Display (LCD)

User-friendly, smart icons software.

Alarm system for wrong operation and troubles

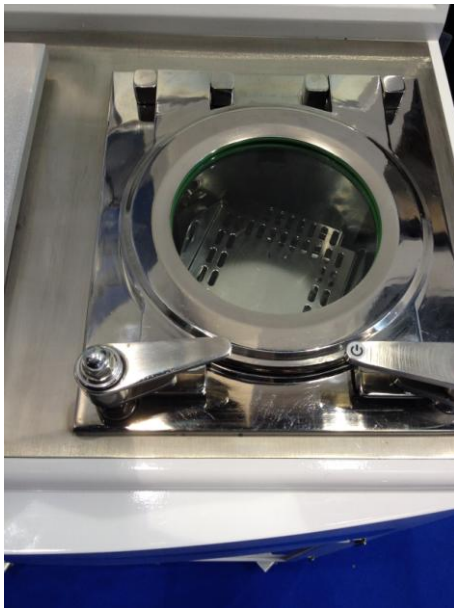
Multiple specimen protection system.

The operator can set the different programs varied in duration, temperature.

Freely customized programs for the cleaning of the reagents retort.



TISSUE PROCESSING

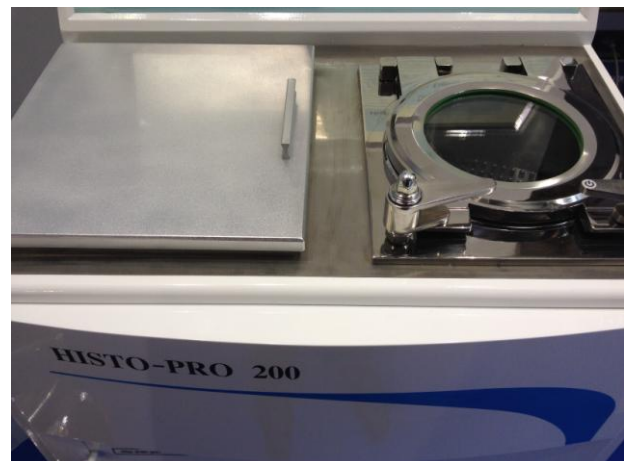


Capacities

Capacity about 200 cassettes
 20 programs that consist of up to 10 reagent and 3 paraffin wax steps
 Time per program step: 0 to 99 hours, 59 minutes
 Up to 200 cassettes can be processed
 Wax clean program
 10 reagent bottles
 3 wax baths a temperature: 50°C - 65°C
 2 cleaning solution bottles
 1 condensate bottle
 1 Carbon filter bottle
 Maximum bottle volume: 4.0 lt

Retort

Reagent volume: 6.1 Lt
 Temperature (paraffin): 50°C - 65°C
 Temperature (reagents): ambient or 35°C
 Temperature (cleaning reagents): 50°C -65°C
 Temperature accuracy: + 1°C
 Filling time: up to 5 min
 Drain time: up to 5 min
 Impregnation vacuum: -70 kPa (g)
 Impregnation pressure: 35 kPa (g)
 Fill vacuum: -70 kPa (g)
 Drain pressure: 35 kPa (g)



Technical Data

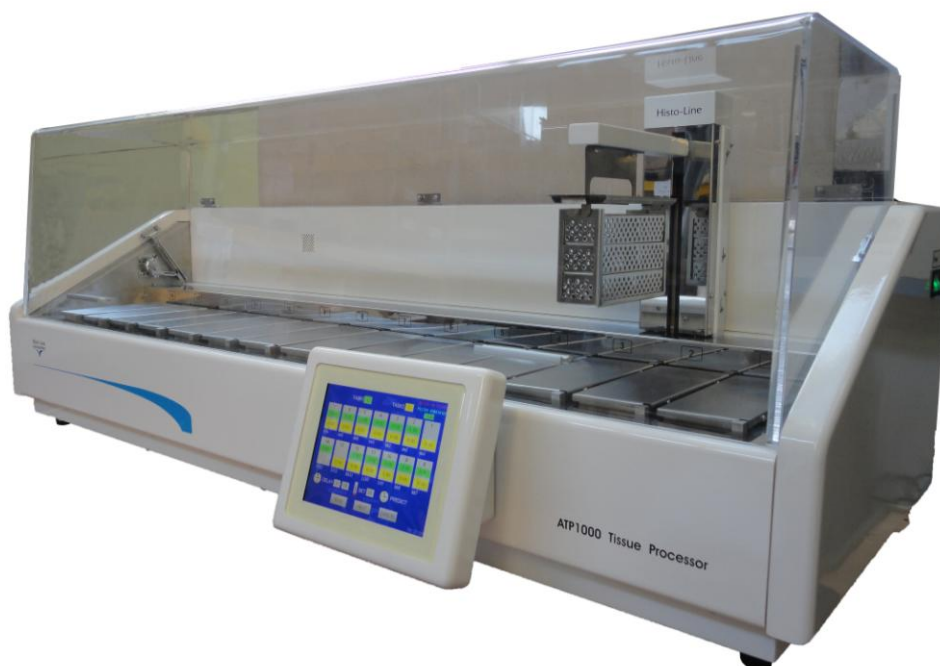
Nominal voltage: AC 220 V
 Nominal frequency: 60 Hz
 Main fuses: 10 A
 Nominal power: 1500 V/A
 Dry weight, unpacked: approx. 100 kg
 Weight, packed: 120 kg
 Operating temperature range: 15 °C to 35 °C
 Relative humidity: 10 to 80 %
 Recirculation (pump in/out): ON/OFF
 Time between cycles: 15 min

Product	Size	Packaging	Code
Histo-Pro 200 Vacuum Tissue Processor	Unit	1 pc	HistoPro200

TISSUE PROCESSING

ATP 1000 Automatic Tissue Processor

IVD CE



The unit

Is a bench-top linear closed tissue processor, a compact instrument designed with latest technology for complete automatic dehydration and infiltration of biological samples, up to final paraffin bath.

Includes 14 stations for simultaneous processing of two samples baskets programmable separately.

All the reagent and paraffin containers are closed to prevent evaporation.

Active carbon filter prevent solvent odors and pollution.

ATP 1000 can be programmed for immediate or delayed start, immersion time can be set from 1 minute to 99 hours and 59 minutes.



TISSUE PROCESSING



Specifications

All the operating parameters, like station time, temperatures, dripping time, can be easily set by the touch-screen panel, as well as daily, weekend and weekly programming. Temperatures are regulated via electronic thermostat with microprocessor. User can set up to 6 the different programs.

Capacities

Number of Stations 14
 Number of Reagent Stations 10
 Number of Paraffin Stations 4
 Number of storable programs 6
 Total samples capacity 150 (75 each basket)
 Station capacity 1500 ml
 Programmable infiltration time for station:
 From 1 min. to 99 h 59 min.
 Paraffin temperature range: From 50°C to 75°C increments 1°C
 Agitation: 4 times every 5 min.
 Delayed start: 99h 99 min.
 Drain time: 0 sec. to 99 sec.
 UPS: (Optional)
 Nominal supply voltage: 220 V / 50 Hz
 110 V / 60 Hz
 Maximum power draw: 1000 V/A

Dimension

Width: 140 cm
 Depth: 50 cm
 Height: 55 cm
 Weight: 142 Kg.



Product	Size	Packaging	Code
ATP 1000 Automatic Tissue Processor	Unit	1 pc	ATP1000

TISSUE PROCESSING

STP 250-V Spin Vacuum Tissue Processor

IVD CE



Instrument

Histo-Line STP250 automatic spin tissue processor and STP250-V automatic vacuum spin tissue processor are equipment that perform tissue infiltration, through the combination of an efficient and well-tested technology. It is widely applied in pathologic laboratories, medical colleges and universities, animal and plant scientific research institute and food inspection department.

The combination of a silent and robust precision mechanism, plus new software, enable the user to attain the highest degree of flexibility, as all function can be programmed.

Through this versatility, each user can adjust the unit to the specific requirements.

- Microprocessor operating control to ensure operating convenience and working stability;
- Tissue basket relocating controlling enabling the tissue to be put in any tank;
- Electricity protection and obstacle protection functions;
- Agitation mode to guarantee the complete mix and contact with the tissue, solvent and paraffin so as to achieve good dehydrate effect.
- Large touch-screen LCD screen shows every step of processing and easy for monitoring.
- Timing:
 - a. Delay timing up to 30 days
 - b. Tank process timing up to 10 hours
 - c. Timing increment: 1 min



TISSUE PROCESSING



Constant temperature controlling system adopted on the paraffin tank to ensure high precision of temperature controlling, nonstick TEFLON coating painted on the internal surface that provide the good condition for tissue protection. The individual covers for each one of the vessel reduce the emission of vapors to a minimum.

Technical features

Number of programs: 10
 Tank processing time: 0 ~ 10 hour
 Delay time: 0 ~ 30 days
 Environmental temperature: + 5 °C to + 40 °C
 Environmental Humidity: <85% (20°C ± 5 °C)
 N° Processing tank: 12
 Tissue basket stir: ≥10 times / hour
 Reagent tank Quantity: 9
 Reagent tank Capacity: 2.3 L
 Paraffin tank Quantity: 3
 Paraffin tank Capacity: 1.8 L
 Temperature setting: 45° ~ 85° C

Capacities

Standard tissue basket: 1 (2 optional)
 Capacity: ~ 100 cassettes

Size and weight

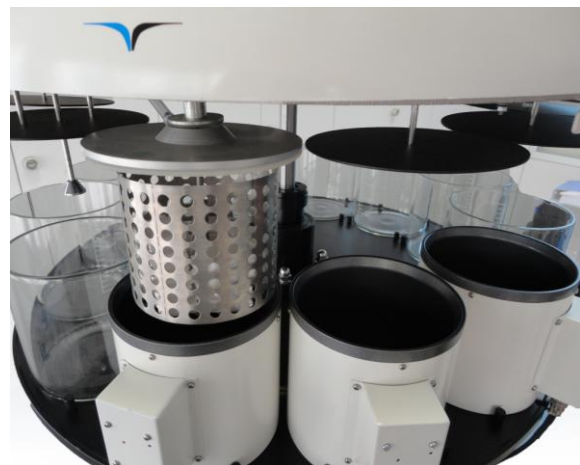
Net Weight: 70 Kg
 Overall dimension: 780 Ø × 700 ~ 570 (height) mm

Vacuum device

Pressure difference: max. 500 hPa (approx. 0.5 bar)

Electrical data

Power supply: AC 220 V, 50/60 Hz
 Power: 1000 W



Product	Size	Packaging	Code
STP 250-V Spin Vacuum Tissue Processor	Unit	1 pc	STP 250-V
STP 250 Spin Tissue Processor	Unit	1 pc	STP 250

TISSUE PROCESSING

Tissue processors comparison table

Histo-Line tissue processors help you simultaneously increase quality and throughput with built-in quality, reliability and tissue protection. So choose the right instrument for your workload to maximize efficiency and protect critical patient tissue.



Peculiarity	Histo-Pro 300	Histo-Pro 200	ATP1000	STP250-V	STP250
Capacities of sample	~300	~200	~150	~100	~100
Program	20	20	6	10	10
Underfloor	X	X			
Bench			X	X	X
Vacuum	X	X		X	
Monitor touch screen	X	X	X	X	X
Agitation mode	X	X		X	X
Microprocessor control	X	X	X	X	X
Tank carbon filter	X	X			
Active Carbon filter			X	X	X
Programmable	X	X	X	X	X
Alarm system	X	X	X	X	X
Reagent level control	X	X		X	X

TISSUE PROCESSING



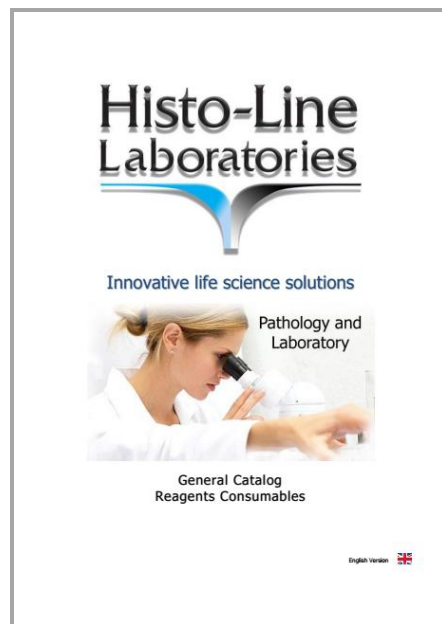
Want more information?

If you need reagents and consumable products for the processing, please refer to the *Histo-Line Reagents & Consumable* catalog.

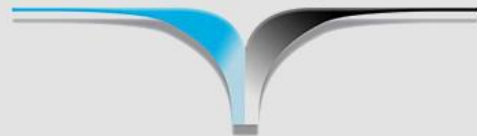
You can find the complete list useful special accessories that can help you.



Want to see all the available products? Look it in the *Histo-Line Reagents & Consumable* or visit the website!



Histo-Line Laboratories



Innovative life science solutions



EMBEDDING CENTER



TEC 2900 Tissue Embedding Center
TEC 2900-1 Main Console
TEC 2900-2 Cryo Console
TEC 2900-3 Thermal Console
TEC 2900-4 Thermal Console Double Floor
TEC 2900S Tissue Embedding Center small size
TEC 2000 Paraffin Dispenser
TEC 3000 Histo Trimmer
Histo Clip Heated forceps

EMBEDDING CENTER

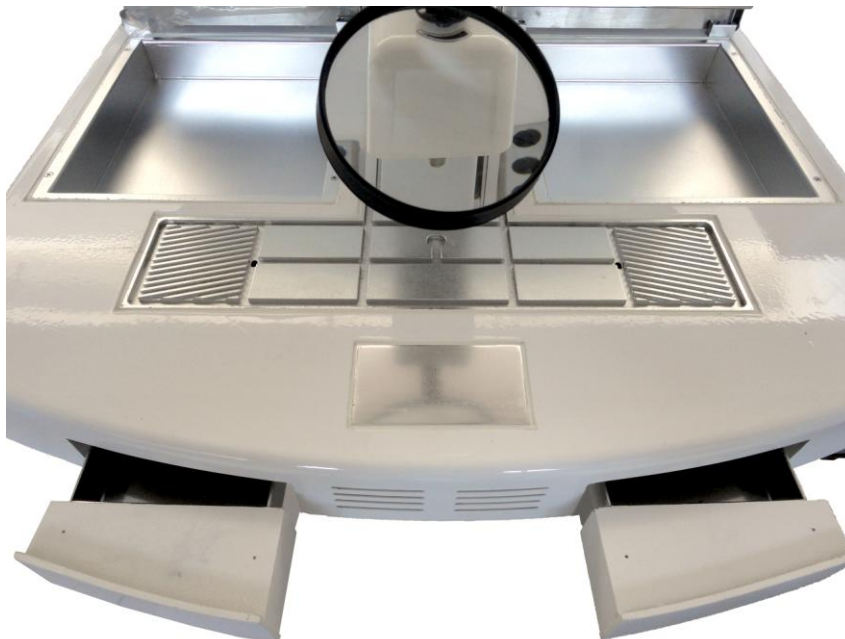
TEC 2900 Tissue Embedding Center

IVD CE



The Instrument

TEC 2900 trimodular embedding center incorporates three separate components; dispensing console, cryo console and thermal console in a modular design. The independent units offer the flexibility to ensure embedding workflow in either direction to suit the user's needs.



TEC 2900 integrates the latest technology for convenient and efficient workflow in the histology laboratory. The ideal modular tissue-embedding center for the discerning customer. The large mold and cassette warming trays are located at the same level and interchangeable to accommodate individual workflow requirements.

The model is to meet all the embedding requirements of the modern histology laboratory.

EMBEDDING CENTER

Characteristics

Features

- Separate modules: Cryo console, Paraffin dispenser and Thermal console
 - Large removable magnifier
 - All functions are controlled via an easy-to-read display, including the temperature settings for left and right warming trays, paraffin reservoir, and working surface
 - Double strip *Light-blue LED* anti-glare
 - Large, simple and robust design
 - Bright display
 - Large capacity paraffin reservoir (more than 6-liter wax capacity)
 - Good ergonomic layout
 - Easy-to-use controller
 - Large cold spot allows tissue orientation even with Super Mega Cassette
 - Socket for heated forceps
- Working days and times can be set for automatic weekly/daily on/off.

Capacity

- Paraffin reservoir 6,0 Lt
- Cassette/mold trays 1,8 Lt

Dimension

- Width: 60 cm
- Depth: 65 cm
- Height: 46 cm
- Weight: 30 Kg



Product	Size	Packaging	Code
Embedding center complete	Unit	1 pc	TEC2900
Main Console	Unit	1 pc	TEC2900-1
Cryo Console	Unit	1 pc	TEC2900-2
Thermal Console	Unit	1 pc	TEC2900-3

EMBEDDING CENTER

TEC 2900-1 Main Console

IVD CE



The unit

Paraffin dispensing module with 6 Lt liquid paraffin capacity. Large heated working surface and storage capabilities for both cassettes and molds. Uniquely designed with microprocessor temperature sensors, each single console which maximizes space utilization, multifunctional workstations. The entire unit is encased in a durable housing.

Characteristics

Working surface

- The tissue embedding cassettes and base molds trays are removable to accommodate in embedding workflow and can be set at different temperatures.
- The heated forceps wells can be set at the preferred temperature. 6 holes easy accessible.
- The ergonomic large working surface allows processing many samples at the same time.
- The paraffin flow can be easily adjusted by turning the knob. Paraffin dispensing nozzle controllable via hand switch or foot pedal.
- The large work surface allows draining of the excess paraffin into two large waste trays and allows processing many cassettes at the same time.
- It can be set heating automatically from Monday to Sunday as user requirement timing.
- The display panel allows convenience, quick operation.
- New functions: Switch off time set as user's need.

Cold Spot

- The cold spot is designed to accommodate even small and big cassettes. Allows rapid chilling of paraffin and precise orientation of the specimen.
- The temperature range is from room temperature to -10° C. approx.
- Isolated. Very rapid cooling.

Technical parameter

- Nominal supply voltage: 220 V/50Hz or 110 V/60Hz
- Maximum power draw: 1000 W/A
- Working temperature (increments 1°C): Paraffin Tank: from ambient to 80°C, Cassettes/molds tray: from ambient to 80°C, Working table: from ambient to 80°C, from ambient to 80°C.
- Capacity: paraffin reservoir: 6 Liter, cassettes/molds tray: 1.8 Liter.
- Dimensions: Width: 60 cm, Depth: 65 cm, Height: 46 cm.
- Net Weight: 30 kg

Product	Size	Packaging	Code
Main Console	Unit	1 pc	TEC2900-1

EMBEDDING CENTER

TEC 2900-2 Cryo Console

IVD CE

The unit

The Cryo console is composed of a compressor cooled work surface held to chill the paraffin blocks rapidly. Used in combination with TEC 2900-1 Dispensing console as well as a stand-alone unit near microtome station. Best fits the needs of the laboratory.

The large Teflon coated refrigerate surface can hold up to 80 standard cassettes, is equipped with anti-drip edge. It has a system of cooling cycle gas compressed, CFC-free. It equipped with Plexiglas cover to keep the temperature constant and to avoid the formation of ice on the surface in high humidity ambient.



Characteristics

Working Surface

- It can be placed 80 cassettes.
- Large Teflon coated surface for cooling embedded tissues.
- Stand alone unit. May be placed beside microtome up to user operating habit.
- New improved: used new design to ensure the best stability cooling performance.

Technical Parameter

- Nominal supply voltage: 220 V/50 Hz or 110 V/60 Hz
- Maximum power draw: 200 V/A
- Working temperature: from ambient to -20°C increments 1°C.
- Dimensions: Width: 41 cm, Depth: 63 cm, Height: 44 cm
- Weight: 24kg



Product	Size	Packaging	Code
Cryo Console	Unit	1 pc	TEC2900-2

EMBEDDING CENTER

TEC 2900-3 Thermal Console

IVD CE



The unit

TEC 2900-3 Thermal Console is designed to enable the heating and short-term storage of samples. The large and removable tray allows a big capacity of cassettes. Can contain up to 4.8 Lt of paraffin.

TEC 2900-3 Thermal Console is provided with a control panel to set and monitor the desired temperature with a temperature range between from ambient and 80°C.

TEC 2900-3 Thermal Console can be used independently from the embedding center and placed at will on the right side or the left side of dispensing console.

The metal cover can be easily fully or half opened.

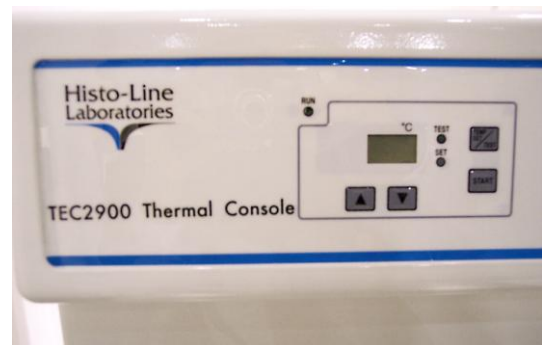
Characteristics

Working Surface

- Removable tray to facilitate transport and cleaning operations.
- Stand-alone unit. May be placed beside microtome up to user operating habit.
- Easy-to-read control panel.

Technical Parameter

- Nominal supply voltage: 220 V/50 Hz or 110V/60 Hz
- Maximum power draw:300 V/A
- Working temperature: from ambient to 80°C increments 1°C.
- Capacity: paraffin tray: 4.8 Liter
- Dimensions: Width: 41 cm, Depth: 63 cm, Height: 44 cm
- Weight: 7.5 kg



Product	Size	Packaging	Code
Thermal Console	Unit	1 pc	TEC2900-3

TEC 2900-4 Thermal Console Double Floor

IVD CE



The unit

This new "triple purpose" TEC 2900-4 Thermal Console can be used independently from the rest of the control unit of inclusion and placed at will on the right side or the left side of Embedding center. Is equipped with two chambers: the upper chamber is allocated a removable tub to put cassettes or mold. The lower chamber is used to maintain the tissue specimens in their individual cassettes at the proper temperature while awaiting embedding. All temperatures control and programming is set and monitored by the front keyboard.

Characteristics

Working Surface

- Structure composed of two independent work heated areas.
- Fixed upper chamber with cover used for metal base molds preheating.
- Removable bath. Can be used for the containment of the cassette holder baskets coming directly from the processor with a maximum height of 10 cm.
- Removable lower basin with horizontal sliding cover.

Technical Parameter

- Nominal supply voltage: 220V/50 Hz or 110V/60 Hz
- Maximum power draw: 600 V/A
- Working temperature: from ambient to 75°C increments 1°C.
- Dimensions: Width: 41 cm, Depth: 63 cm, Height: 44 cm
- Weight: 9 kg



Product	Size	Packaging	Code
Thermal Console double floor	Unit	1 pc	TEC2900-4

TEC 2900S Tissue Embedding Center small size

IVD CE



The unit

A new modular embedding center, consisting of two consoles, with a robust construction and a new compact and ergonomic design. The flexibility of the new design allows cryo console to be positioned to the right or to the left of the dispensing console, according to the preference of the user. Control panel located on the front allowing easy access to both dispensing and cryo console.

Main console

Large paraffin capacity reservoir (6 liters). Bright light up the working area. Cold spot for specimen orientation and large adjustable magnifier. Wide heated working area, with 6 holes for forceps. Heated drawers to collect the excess of paraffin. Histo-Trim integrated in both sides of the plate for rapid cleaning of the blocks.

Cryo console

The cooling plate can be used for both embedding and for microtome cutting operation. The cold plate has a new frame all around the stainless steel surface which improves cooling performances and prevents the dropping of water around the instrument.

Technical features

- Dimensions overall: 90 X 68 X 42 cm (W x D x H)
- Weight: 60 kg (two modules)
- Working Voltage: 220 V / 50 Hz (110V / 60 Hz, optional)
- Power: ~ 1000 W.
- Accessories: Foot Switch (included) and Heated forceps unit (optional).

Product	Size	Packaging	Code
TEC 2900S Tissue Embedding Center small size Complete with two modules	Unit	1 pc	TEC2900S
TEC 2900S-1 Paraffin dispenser module small size Paraffin dispenser module	Unit	1 pc	TEC2900S-1
TEC 2900S-2 Cryo console small size Cryo console	Unit	1 pc	TEC2900S-2

TEC 2000 Paraffin Dispenser

IVD CE



The unit

TEC 2000 paraffin dispenser is a unit designed for paraffin of different melting points and purpose. The upper reservoir can contain up to 5 lt of paraffin. The particular structure of the reservoir allows homogeneous heat dissipation and prevents thermal shock to the molecular structure of the paraffin, which retains its characteristics over time. Three different areas with settable temperature: wax, tap and working area. Easy-to read display allows viewing of the parameters at a glance. Economic, reliable, ideal for small labs.

Technical features

- Nominal supply voltage:220 V/50 Hz or 110 V/60 Hz
- Maximum power draw:600 V/A
- Working temperature: from 30° to 90°C increments 1°C
- Dimensions: Width: 31 cm, Depth: 35 cm, Height: 41 cm
- Heat plate: width: 31 cm, depth: 15 cm
- Weight: 13 kg



Product	Size	Packaging	Code
Paraffin Dispenser	Unit	1 pc	TEC2000

TEC 3000 Histo Trimmer

IVD CE



The unit

TEC-3000 Wax Trimmer is a smart, practical device designed to remove excess of paraffin from the embedding cassettes after inclusion of specimens.

Scraping the embedded block on the "grooved" plane heated surface, excess paraffin will be removed leaving the cassette clean and ready to be set properly on the clamp of the microtome.

The excess of melted paraffin is collected in a practical removable drawer.

No more residual paraffin curls on workbench!

Technical features

- Temperature range: from 30° to 90°C increments 1°C
- Precision in the control of temperature: ± 1°C
- Nominal supply voltage: 220 V ± 10% 50 Hz
- Or 110 V ± 10% 50/60 Hz

Dimensions

- Width: 22 cm
- Depth: 16 cm
- Height: 17,5 cm
- Weight: 2,5 Kg



Product	Size	Packaging	Code
Histo trimmer	Unit	1 pc	TEC3000

Histo Clip Heated forceps

IVD CE



Characteristics

Forceps with electronic temperature control for specimen embedding. This device is preset for operation with two simultaneously heated forceps. Heat is controlled by an electronic microprocessor system to maintain forceps temperature at 65°C.

Three different tweezers size available.



Product	Size	Packaging	Code
Histo Clip heated forceps	Unit	1 pc	HL2043
Heated forceps red 1 mm	Unit	1 pc	HL4041
Heated forceps yellow 2 mm	Unit	1 pc	HL4042
Heated forceps blue 4 mm	Unit	1 pc	HL4043

EMBEDDING CENTER

Embedding Center comparison table

Great sections rely on careful embedding. Histo-Line embedding solutions help you ensure correct tissue orientation, avoid heat damage, and create the ideal block shape.

Setup a Histo-Line embedding center to match your workflow, choose productivity enhancing accessories and select base molds that match your cassettes.



Complete Embedding Center

Peculiarity	TEC2900	TEC2900S
Number of module	3	2
Module separable	X	X
Programmable	X	X
Capacity paraffin reservoir (Lt)	6	6
Switch ON and switch OFF programmable	X	X
Light-blue LED	X	X
Magnifying glass	X	X
Cold spot for Super Mega Cassette	X	X
Cold spot autonomous	X	
Foot Switch	X	X

Embedding Center Modules

Peculiarity	TEC2900-1	TEC2900-2	TEC2900-3	TEC2900-4	TEC2000	TEC3000
Adjustable temperature	X	X	X	X	X	X
Programmable	X					
Teflon surface		X	X			
Microprocessor control	X	X	X	X	X	X
Parts removable	X		X	X		



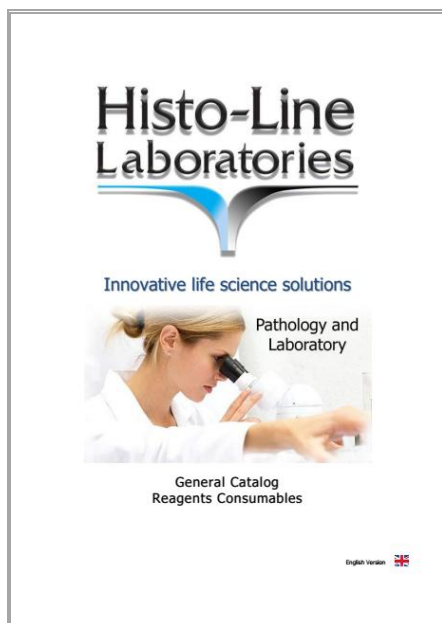
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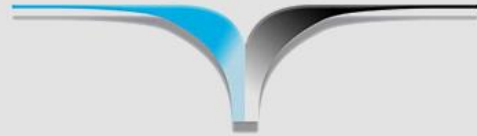
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Histo-Line Laboratories



Innovative life science solutions



EMBEDDING ACCESSORIES



TEC 2500 Water Bath-Slide Dryer
WB 2900 Tissue Floating Bath
WB 2800 Water Bath
SD 2800 Slide Dryer



ACCESSORIES EMBEDDING



TEC 2500 Water Bath-Slide Dryer

IVD CE



The unit

TEC 2500 is a practical device, designed to provide in a single, compact instrument a water bath, a slide dryer and a small oven. All temperatures can be set separately. A useful timer allows turning off the power of the areas. Easy-to read display allows viewing of the parameters at a glance.

Value are stored by a backup memory system.

Technical features:

Temperature range

Water Bath: 30°C ~ 90°C increments 1°C

Oven: 30°C ~ 90°C increments 1°C

Warmer: 30°C ~ 90°C increments 1°C

Capacity

Water Bath: W 180 x D 130 x H 80 mm

Oven: W 210 x D 100 x H 105 mm

Slide Dryer: W 230 x D 150 x H 50 mm

Slides Number: 40

Overall dimensions and weight

Width: 510 mm

Depth: 335 mm

Height: 225 mm

Weight: 13,6 kg

Electrical data

Power voltages: 220V 50 Hz

Maximum power draw: 500 V/A



Product	Size	Packaging	Code
All In One Water Bath-Slide Dryer	Unit	1 pc	TEC2500

ACCESSORIES EMBEDDING



WB 2900 Tissue Floating Bath

IVD CE



The unit

New design for this tissue floating bath for histology. Large, removable Pyrex bowl and immersion probe. Slide heater plate enclosed with settable temperature. Water temperature is monitored by an electronic thermostat and microprocessor. Automatic heater Off for a safe remove of the Pyrex tank. Intuitive and easy-to-read digital display for temperature and time set. Shows both actual and set temperature. Four led allow good lighting of water surface without glare. Easy to clean and service.

Technical features

Temperature range

Water Bath: ambient ~ 75°C increments 1°C

Capacity

Pyrex bowl: 350 x 220 x 45 mm

Overall dimensions and weight

Width: 420 mm
Depth: 510 mm
Height: 160 mm
Weight: 9,5 kg

Electrical data

Power voltages: 220 V - 50 Hz; 110 V, 60 Hz
Maximum power draw: 500 V/A



Product	Size	Packaging	Code
Tissue Floating Bath	Unit	1 pc	WB2900

ACCESSORIES EMBEDDING



WB 2800 Water Bath

IVD CE



The unit

The Water Bath WB 2800 is a simple, economical tissue flotation bath. Designed to lay sections of histological samples. The Teflon coating allows easy cleaning. The instrument is provided with a control panel to set and monitor the desired water temperature, Overheating protection. The water temperature is microprocessor controlled.

Technical features

Temperature range

Water Bath: ambient °C ~ 75°C increments 1°C

Capacity

Internal dimensions of the bath.

Width: 230 mm

Depth: 180 mm

Height: 60 mm

Overall dimensions and weight

Width: 328 mm

Depth: 300 mm

Height: 96 mm

Weight: 2,4 kg



Electrical data

Power voltages: 220 V - 50 Hz; 110 V, 60 Hz

Maximum power draw: 300 V/A

Product	Size	Packaging	Code
Water Bath	Unit	1 pc	WB2800

ACCESSORIES EMBEDDING



SD 2800 Slide Dryer

IVD CE



The unit

The SD2800 is a heated plate designed to dry histological slides. The Teflon coating allows easy cleaning. The SD 2800 is provided with a control panel to set and monitor the temperature of the heating surface. Is equipped with overheating protection. The area temperature is maintained by a microprocessor.

Technical features:

Temperature range

Heated plate: ambient ~ 75°C increments 1°C

Dimensions and weight

Width: 324 mm
Depth: 272 mm
Height: 83 mm
Weight: 2,75 kg

Electrical data

Power voltages: 220V - 50 Hz;
Maximum power draw: 300 V/A



Product	Size	Packaging	Code
Slide Dryer	Unit	1 pc	SD2800

ACCESSORIES EMBEDDING



Differences between instruments

Through a wide range of accessories for the Histo-Line embedding it is possible to equip the pathology laboratories in different ways depending on the space available and the operators' requests.



Embedding Center Accessories

Peculiarity	TEC2500	WB2900	WB2800	SD2800
Adjustable temperature	X	X	X	X
Programmable	X			
Teflon surface	X	X	X	X
Microprocessor control	X	X	X	X
Parts removable	X	X		



ACCESSORIES EMBEDDING



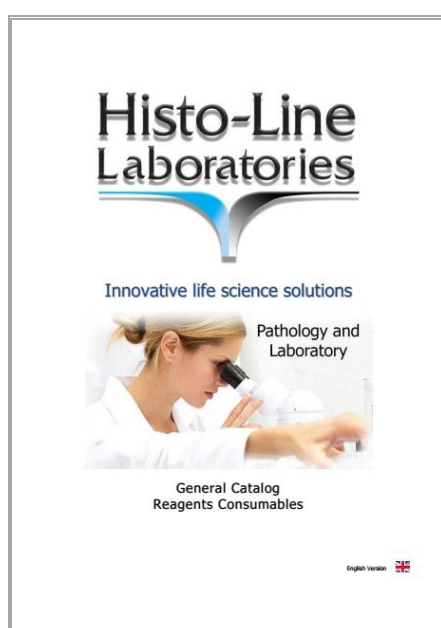
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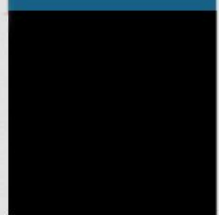


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Histo-Line Laboratories

Innovative life science solutions



SECTIONING



SECTIONING

ROTARY MICROTOMES

- ARM 3700 Fully Motorized Rotary Microtome with external keypad**
- ARM 3600 Fully Motorized Rotary Microtome**
- MRS 3500 Ultra-Thin Semiautomatic Microtome**
- MR 3000 Manual Rotary Microtome**
- MR 2258 Manual Rotary Microtome**

MICROTOMES CRYOSTAT

- MC 5050 Microtome Cryostat with retraction**
- MC 5000 Microtome Cryostat Dual Freezing System**
- MC 4000 Microtome Cryostat Dual Compressor**
- MC 3000 Microtome Cryostat**



SECTIONING

ARM 3700 Fully Motorized Rotary Microtome with external keypad

IVD CE



The unit

ARM 3700 is a full-automatic microtome with complete function of automatic sectioning, slice counting, microns counting, fast trimming.

It's the ideal microtome in histopathology.

ARM 3700 incorporates a refined design with a precise electronic, controls and stable performance.

Driving feed system is controlled by smart procedure, quick rotary-switch or automatic slicing.

Automatic sectioning speed can be adjusted, with safe quick braking system; precise electronic mechanic design and manufacture to ensure precision of tissue sections. Separate panel and footswitch for comfortable cutting operations.

Hand wheel can lock at any position. Both steel knife (optional) and disposable low or high profile blades can be used. Stable in performance with automatic protection system, interchangeable specimen clamp system, LCD display and separate keypad. Easy to operate.



SECTIONING



The automatic feed of the sample is controlled precisely by the side electronic panel. The hand wheel allows to set the automatic speed of execution of cutting through a speed variator from 0 to 55 rpm, to allow an excellent and more precisely automatic section results even for difficult tissues. The sample retraction can be set in value by user.



Sample orientation is simple and precise; when the red spot is visible, the orientation plane is at zero. The steel quick-clamp is equipped with a device for quick change of cassettes without altering the inclination of the sample. The clamp is suitable for all types of standard cassettes, and is interchangeable by the operator with the ring holder (optional). The sample holder arm is equipped with a mechanism that allows a quick and precise orientation along the x and y.

Technical features

Cut thickness range: 0,25 - 100 µm

Trim thickness range: 1 - 600 µm

Cut thickness adjustment:

0,25 to 2,5 µm in 0,25 µm increments;

2,5 to 5 µm in 0,5 µm increments;

5 to 10 µm in 1 µm increments;

10 to 30 µm in 2 µm increments;

30 to 60 µm in 5 µm increments;

60 to 100 µm in 10 µm increments

Trim thickness adjustment: 1 to 10 µm in 1 µm increments;

10 to 20 µm in 2 µm increments;

20 to 50 µm in 5 µm increments;

50 to 150 µm in 10 µm increments;

150 to 600 µm in 50 µm increments

Horizontal Specimen feed: 25 ± 1 mm (stepper motor)

Stroke length: 70 mm

Max size of specimen (LxHxD):

70 X 70 X 40 mm

Specimen orientation: X and Y axis:

from 0 to +/- 8°, with zero point.

Z axis: rotation of 90°

Cutting speed: variable speed up 1500 µm/s to 3500 µm/s

Retraction:

- Manual mode: 0 to 50 µm in 5 µm increments;

- Automatic mode: speed based. Selectable

Size and weight

Total length: 475 mm

Total depth: 580 mm

High: 340 mm

Net Weight: 40 kg

Electrical data

Working voltage:

220/230V

Frequency: 50/60 Hz

Power: 150 W

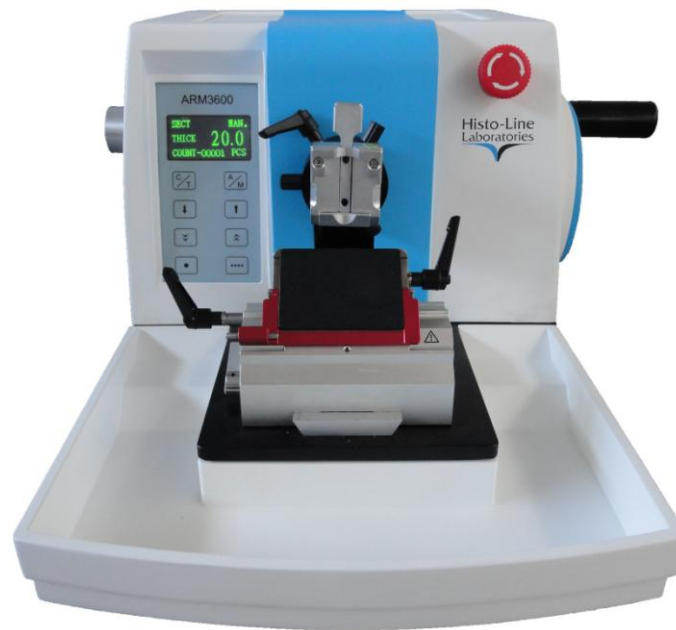


Product	Size	Packaging	Code
Fully Motorized Rotary Microtome with keypad	Unit	1 pc	ARM3700

SECTIONING

ARM 3600 Fully Motorized Rotary Microtome

IVD CE



The unit

Histo Line ARM 3600 is Full Automatic rotary microtome, designed for routine and research in histology and research laboratories.

Fast, easy to use, the section and trimming thickness are selectable between 0.5 and 100 μm . and are easily set through the control panel. Cutting and trimming function can be finished by the control system. The hand wheel can be locked at any position, to ensure the safety of the operation. The large waste tray can be easily removed for cleaning. Two kinds of the specimen clamp can be changed conveniently; cassettes or block. Two section mode: Manual and automatic, the user can switch arbitrarily. Four speed of section: 25 circle/minute, 35 circle/minute, 45 circle/minute, 55 circle/minute. Switch arbitrarily between section and trimming.



SECTIONING

The display, located on the left side of the operator, gives an indication of the working parameters of the most important, including:

- Cutting thickness
- Trimming thickness
- Switch modes "Cutting / trimming"
- Total and partial sections counting
- Single cut mode
- Continuous cut mode

Characteristics

- Motorized drive;
- Compatible Embedding Material paraffin, plastic
- The cutting and trimming function are finished by the control system;
- The hand wheel can be locked at any position, so as to ensure the safety of the operation
- Large waste tray.
- Two kinds of the specimen clamps, standard block and universal cassette.
- Two section mode: Manual and automatic, the user can switch arbitrarily;
- Switch arbitrarily between section and trimming
- Speed control through the knob for enhanced efficiency
- Intuitive control panel
- Partial and total section counter
- New blade holder with finger safe
- Wide range of accessories
- Foot switch control

Technical features

Cut thickness range: 0,25 - 100 μm

Trim thickness range: 1 - 600 μm

Cut thickness adjustment:

0,25 to 2,5 μm in 0,25 μm increments;

0,5 to 2 μm in 0,5 μm increments;

2 to 10 μm in 1 μm increments;

10 to 20 μm in 2 μm increments;

20 to 100 μm in 5 μm increments

Trim thickness adjustment: 1 to 10 μm in 1 μm increments;

1 to 10 μm in 1 μm increments;

10 to 20 μm in 2 μm increments;

50 to 100 μm in 10 μm increments;

100 to 600 μm in 50 μm increments;

Specimen retraction: 20 μm

Object feed: 26 mm \pm 1 mm, feed motion via step motor

Vertical stroke: 52 mm

Max. specimen size (LxHxW): 50 x 60 x 40 mm

Max. sectioning area w/o retraction: 65 mm (without specimen orientation)

Max. sectioning area with retraction: 60 mm



Size and weight

Width (with hand wheel): 413 mm

Width (without hand wheel): 300 mm

Depth (with waste tray): 618 mm

Depth (without waste tray): 520 mm

Working height (knife edge): 100 mm (measured from the base plate)

Working height (knife edge): 168 mm-(measured from the stage)

Height (total): 305mm (with storage area on the housing)

Weight (without accessories): app. 32 kg

Electrical data

Working voltage: 220/230V

Frequency: 50/60 Hz

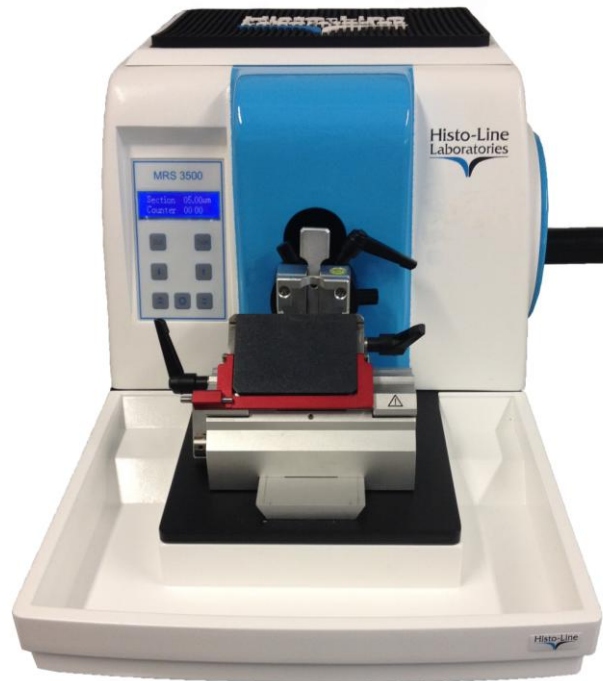
Power: 150 W

Product	Size	Packaging	Code
Fully Motorized Rotary Microtome	Unit	1 pc	ARM3600

SECTIONING

MRS 3500 Ultra-Thin Semiautomatic Microtome

IVD CE



The unit

Histo Line MRS 3500 Ultra-Thin, Semi-motorized rotary microtome, designed for routine and research applications in histology, research and industrial quality assurance laboratories. High-precision motorized specimen feed allows an efficient operation and maximum section quality during manual sectioning. The section thickness is selectable between 0.25 and 60/100 μm . Trimming and cutting thickness can be easily set through the control board.

Choose between "Standard" version for full-handwheel rotation manual sectioning or "Ultra" version for experience Rocking cutting mode (back and forth turn handwheel over a short distance) with Smart features like selectable retraction fast "trim-to-cut" switch mode.



SECTIONING

Precision cutting for paraffin or resin embedded samples. Suitable for routine and research laboratories
 High precision specimen feeding provides consistent section quality between 0.25 µm and 60 µm.
 Designed for the executions of cutting extremely fine, with increments of 0.25 µm from 0 to 1 micron, for sensitive staining method.
 Step motor and roller bearing without play and low maintenance.

The display, located on the left side of the operator, gives indication of the working parameters:

- Cutting thickness
- Trimming thickness
- Operating modes "Cutting / trimming"
- Partial and total section counter

Characteristics

- Motorized drive;
- Compatible for paraffin or resin embedded samples.
- The cutting and trimming function are finished by the control system;
- Hand wheel lock in any position, so as to ensure the safety of the operation
- Easy to remove large waste tray.
- Two kinds of the specimen clamps, standard and universal cassette can be changed easily
- Intuitive control panel
- Partial and total section counter
- New blade holder with finger safe
- Wide range of accessories

Technical features

Section thickness setting: 0 - 100 µm;
 0,25 to 1 µm in 0,25 µm increments;
 1 to 10 µm in 1 µm increments;
 10 to 20 µm in 2 µm increments;
 20 to 60 µm in 5 µm increments

Horizontal specimen feed: 26 mm ± 1 mm

Vertical stroke: 52 mm

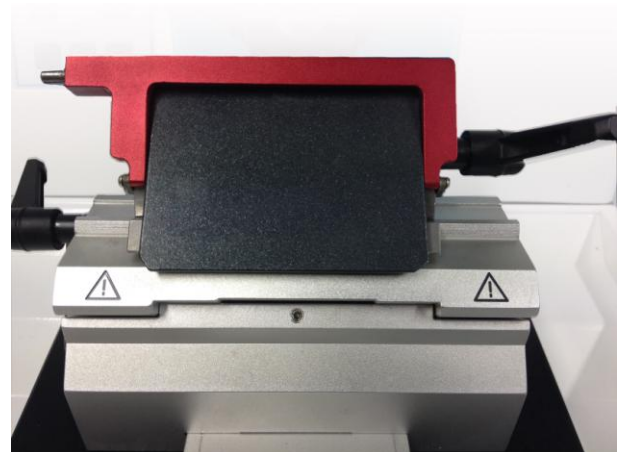
Specimen orientation Optional

Horizontal: 8 °

Vertical: 8 °

Rotability ± 90 mm

Trimming thickness selection: 0,25 to 100 µm



Size and weight

Width (with hand wheel): 413 mm
 Width (without hand wheel): 300 mm
 Depth: 618 mm
 Height: 305 mm
 Working height (knife edge): 100 mm
 Weight (without accessories): 30 kg

Electrical data

Working voltage: 220/230V
 Frequency: 50/60 Hz
 Power: 100 W

Product	Size	Packaging	Code
Ultra-Thin Semiautomatic Microtome	Unit	1 pc	MRS3500

SECTIONING

MR 3000 Manual Rotary Microtome

IVD CE



The unit

Histo-Line MR 3000 Microtome: all you can get from a manual microtome. Precision, with advanced guide rail. Durability, internal maintenance-free mechanical structure. Comfort, with mechanical trimming function, balanced handwheel and selectable retraction. This model has professional design, solid structure, high-precision and stable performance.

It's perfectly suited for those who expect precision sectioning.



SECTIONING

The handwheel is equipped with ergonomic handle for ease and comfort cutting operation.

The rapid trimming function, conveniently placed next to the coarse feed, help the operator during trimming operation.

The handwheel can be locked in any position, or use the one-thumb device for locks the specimen head in uppermost position, for an easy and safe specimen or blade change.

Unit is equipped with a "quick-clamp" for quick samples change.

The clamp is suitable for all types of standard cassettes, and is interchangeable by the operator with the ring holder (optional).



Characteristics

- Ergonomic and compact design, fatigue-free for routine operation.
- Excellent section results using both steel knife or disposable blade
- Specimen clamp positioned at 8 X/Y precision orientation system
- Handwheel locked at any position
- Specimen retraction function (selectable On/Off)
- Course feed hand wheel systems, closer to user to protect fatigue-free section
- Exact zero position precise orientation systems, easy to operate
- Red Knife guard to avoid any damage to user, and easy to change disposable blade
- An integrated storage tray (optional) ensures that ancillary tools are on hand at all times
- Large Waste tray, easy to clean and remove

Technical features

Section thickness range: 0 ~ 60 μm ;

Setting value: 0 ~ 20 μm increment 1 μm ;

20 ~ 60 μm increment 5 μm ;

Minimum setting value: 1 μm ;

Precision error: $\pm 1\%$;

Maximum specimen size: 60 x 50 mm;

Trimming setting mode: 15 or 35 μm ;

Specimen retraction range: 90 μm

Specimen retraction range of 90 μm can be off;

Object feed: 28 mm;

Vertical stroke: 70 mm;

Specimen Orientation System: 8° X/Y;

Size and weight

Width (with hand wheel): 500 mm

Depth (including tray): 570 mm

Depth (excluding tray): 500 mm

Height: 300 mm

Weight (without accessories): 37 kg

Product	Size	Packaging	Code
Manual Rotary Microtome	Unit	1 pc	MR3000

SECTIONING

MR 2258 Manual Rotary Microtome

IVD CE

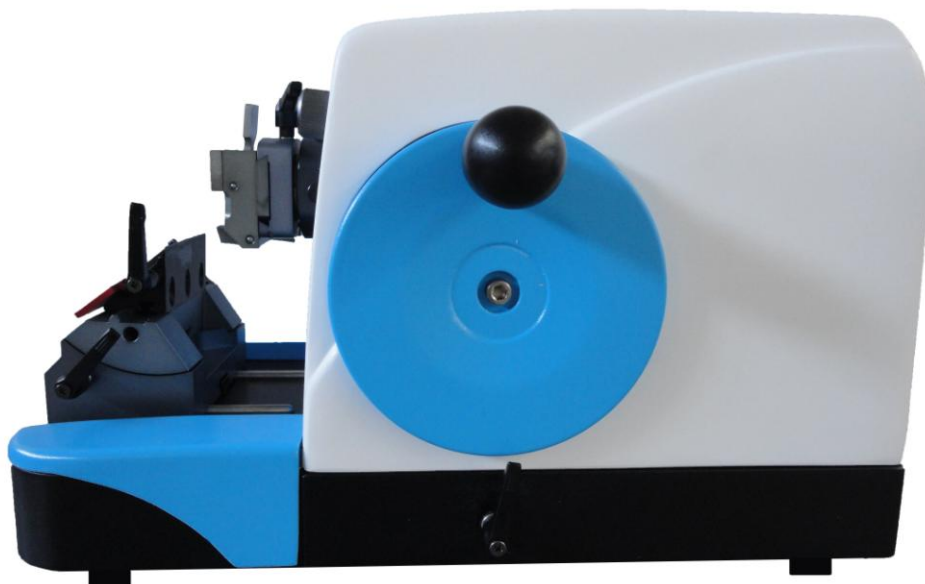


The unit

Simple, reliable, essential, inexpensive. Histo-Line MR 2258 is a manual rotary microtome particularly suitable for cutting of paraffin sections, for normal use in histopathology, but also for the cuts finer used in research.

No extra features but all you need for safe and highly productive sectioning.

The microtome is equipped with a precise feed mechanism, vibration-free metal base, advanced blade holder and specimen clamp.



SECTIONING

The handwheel is equipped with ergonomic handle for ease of cutting.

The rapid advance handwheel is placed on the left side of the instrument; ergonomic and easy accessibility by the operator.

Block of the handwheel in any position.

Unit is equipped with a "quick-clamp" for quick samples change.

The clamp is suitable for all types of standard cassettes, and is interchangeable by the operator with the ring holder (optional).

Characteristics

- Ergonomic and compact design, fatigue-free for routine operation.
- Excellent section results using both steel knife or disposable blade
- Specimen clamp positioned at 8 X/Y precision orientation system
- Handwheel locked at any position
- Course feed hand wheel systems, closer to user to protect fatigue-free section
- Precise orientation systems, easy to operate
- Red Knife guard to avoid any damage to user, and easy to change disposable blade
- An integrated storage tray (optional) ensures that ancillary tools are on hand at all times
- Large Waste tray, easy to clean and remove



Technical features

Range of the slice thickness: 0 - 60 μm

Section thickness setting:

0,5 to 2 μm in 0,5 μm increments;

2 to 10 μm in 1 μm increments;

10 to 20 μm in 2 μm increments;

20 to 60 μm in 5 μm increments

Movable range for the blade holder basal

Forward/Backward: ± 65 mm

Left / Right: ± 40 mm

Size and weight

Width: 400 mm

Depth (including tray): 540 mm

Depth (excluding tray): 500 mm

Height of cutting edge: 105 mm

Height: 290 mm

Weight (without accessories): 25 kg

Product	Size	Packaging	Code
Manual Rotary Microtome	Unit	1 pc	MR2258

SECTIONING

MC 5050 Microtome Cryostat with retraction

IVD CE



Model MC 5050 Semi-automatic Cryostat with fully encapsulated Microtome, is used for rapid freezing of pathological sections of human and animal tissues. It can be widely used for pathological diagnosis, analysis and research in hospitals, medical colleges, and legal medical institutes. Ergonomic, attractive and modern design features rounded corners and easy-to-use joystick. Convenient working height.

The touch-screen display gives all unit status in a glance.

UVC disinfection to minimize contamination risks by infectious material.



SECTIONING

The unit

The instrument consists of 4 major parts:

- The touch-screen control panel is in top area. Displays the temperature, the settings and the general working conditions of the instrument.
- The cryochamber, wide and spacious with constant low temperature, ergonomic storage and flat freezing shelf.
- In the cryochamber is located the fully encapsulated microtome with stepper motor feed-in.
- The lower area is the heart of the refrigeration system, with the compressor unit.



The freezing chamber is wide and spacious. The sliding window is anti-fog and anti reflection and when open, the UV lamp is automatically disabled. The holder disks are located on left side of chamber and can be stored on shelf area in 20 refrigerated places. On frontal touch-screen display, it's possible to check and regulate all necessary parameters for excellent cut like thickness, temperature, sample retraction and so on. On frontal left side, a useful joystick allow an easy control for sample forward and backward and further sets for cutting operations. All these operations can be easily performed with eyes on cut operations.

Technical features

Microtome:

Section thickness range: 0-100 μm

Adjustable Increment:

Value	Move value/step
0 μm – 10 μm	1 μm
10 μm – 20 μm	2 μm
20 μm – 50 μm	5 μm
50 μm – 100 μm	10 μm

Trimming thickness range: 0~500 μm

Adjustable Increment:

Value	Move value/step
0 μm – 20 μm	2 μm
20 μm – 50 μm	5 μm
50 μm – 100 μm	10 μm
100 μm – 500 μm	50 μm

Specimen retraction: 20 μm

Horizontal stroke: 25 mm

Vertical stroke: 59 mm

Specimen's max size: 55 mm X 55 mm

Specimen orientation: 12°(X,Y,Z three directions)

Specimen fast moving speed: 0,7 mm/s

Cryostat

Refrigerating capacity: 690 W

Chamber temperature: -10°C ~ -35°C Adjustable

Freezing shelf temperature: -45°C

Number of freezing station: 20

Peltier number: 2

Refrigerant: R404a, 300g±10g

Compressor oil: 0.6L EMKARATE RL-22S, ICI

Size and weight

Width: 780 mm (650 mm without hand wheel)

Thickness: 700 mm

Height: 1152 mm

Net weight: 145 kgs

Gross weight: 190 kgs

Electrical data

Working voltage: 220/230V

Frequency: 50/60 Hz

Power: 650 V/A

Product	Size	Packaging	Code
Microtome Cryostat with retraction	Unit	1 pc	MC5050

SECTIONING

MC 5000 Microtome Cryostat Dual Freezing System

IVD CE



Histo-Line MC 5000 Semi-automatic Microtome Cryostat, is used for rapid freezing tissue sectioning. Widely used for pathological diagnosis and research in hospitals, medical colleges and legal medicine institutes. MC 5000 combine a high precision fully encapsulated microtome with high stability refrigeration system and exceptional reliability.

The Vacuum Assisted Sectioning makes cutting operations and section collections easier. UVC disinfection to minimize contamination risks by infectious material.

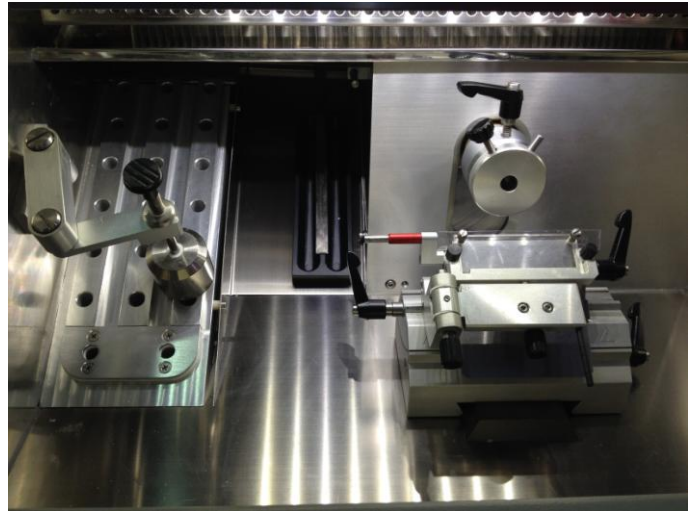


SECTIONING

The unit

The instrument consists of 4 major parts:

- The control panel. This area displays the temperature and the general working conditions of the instrument.
- The center body is the constant low temperature chamber used to rapidly freeze the tissue and cutting operations.
- In the cryochamber is located the fully encapsulated microtome with stepper motor feed-in.
- The lower area is the heart of the refrigeration system, with the compressor unit and waste liquid container.



Motorized drive.

Chamber temperature down to -35°C

Double Peltier unit for rapid freezing down to -50°C

Automatic and manual defrosting

Cutting and trimming function checked by the control system.

Holder for disposable blades with adjustable cutting angle

Anti-roll device

The hand wheel can be locked at any position, so as to ensure the safety of the operation.

The specimen clamp can be oriented on the X – Y axis

Vacuum Assisted sectioning and section waste aspiration system.

Section and trimming fast switch mode.

Thickness and section counter.

New blade holder with finger safe.

Technical features

Microtome:

Section thickness range: 0-90 μm

Adjustable Increment:

Value	Move value/step
0 μm – 20 μm	1 μm
20 μm – 40 μm	2 μm
40 μm - 90 μm	10 μm

Trimming thickness range: 10~400 μm

Adjustable Increment:

Value	Move value/step
10 μm – 50 μm	5 μm
50 μm – 100 μm	10 μm
100 μm – 400 μm	50 μm

Specimen retraction: 20 mm

Horizontal stroke: 25 mm

Vertical stroke: 59 mm

Specimen's max size: 55 mm X 55 mm

Specimen orientation: 8° (X,Y,Z three directions)

Specimen fast moving speed: 0.7 mm/s

Cryostat

Refrigerating capacity: 690 W

Chamber temperature: $-10^{\circ}\text{C} \sim -35^{\circ}\text{C}$ Adjustable

Freezing shelf temperature: -50°C

Number of freezing station: 20

Peltier number: 2

Refrigerant: R404a, 300g \pm 10g

Compressor oil: 0.6L EMKARATE RL-22S, ICI

Size and weight

Width: 780 mm (680mm without hand wheel)

Thickness: 700 mm

Height: 1150 mm

Net weight: 140 kgs

Electrical data

Working voltage: 220/230V

Frequency: 50/60 Hz

Power: 650 V/A

Product	Size	Packaging	Code
Microtome Cryostat Dual Freezing System	Unit	1 pc	MC5000

SECTIONING

MC 4000 Microtome Cryostat Dual Compressor

IVD CE



This unique dual compressor semiautomatic cryostat, is equipped with double cooling circuit that allows user to set temperature of specimen differently from cryochamber and shelter temperature.

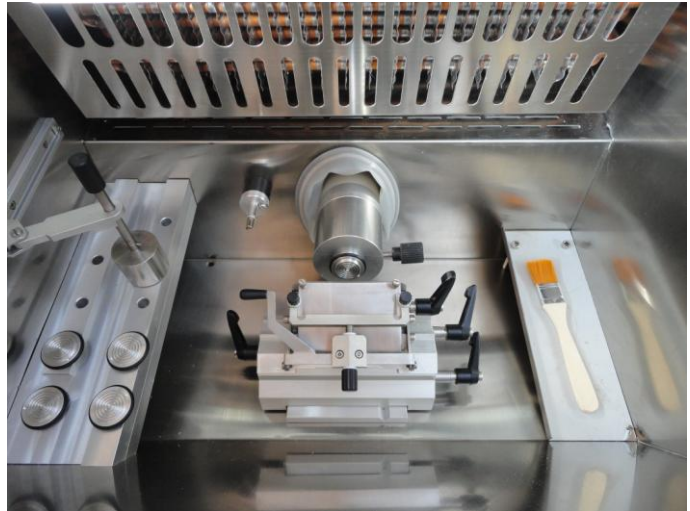
UVC lamp decontamination and automatic defrosting included. MC 4000 is provided with disposable blade holder with adjustable cutting angle and anti-roll device. Easy to operate, all function is settable through keyboard. The motorized feed control is accessible through a separate control panel. The microtome mechanism is located outside the cryochamber, with access from back panel, for a very easy service, no need to switch off unit, and reduced maintenance.



SECTIONING

The unit

- Feed system of the sample with the motor step by step
- Feed system, stepper motor and mechanical located outside cryochamber.
- Double compressor for independent set of chamber and specimen temperature
- Blade holder with adjustable cutting angle to the use of any type of disposable blades
- Anti-roll integrated
- Orientable head. Allows uniform orientation and perfect alignment of the sample.
- 4 different temperatures. Cryochamber, specimen, shelter and Peltier
- Peltier unit for rapid cooling down to -50°C
- Easy and intuitive control panel
- Automatic Daily Standby for reduce power consumption.



Technical features

Microtome:

Section thickness range: 1 - 80 μm Adjustable

Adjustable Increment:

Value	Move value/step
1 – 20 μm	1 μm ;
20 – 40 μm	2 μm ;
40 – 80 μm	5 μm

Trimming thickness range: 10 - 400 μm Adjustable

Adjustable Increment:

Value	Move value/step
10 – 50 μm	5 μm
50 – 100 μm	10 μm
100 – 400 μm	50 μm

Specimen retraction: 0-95 μm Adjustable

Increment: 5 μm

Horizontal stroke: 20 mm

Vertical stroke: 60 mm

Chamber temperature: -10°-30°C Adjustable

Freezing shelf temperature: $\leq 40^\circ\text{C}$

Number of freezing station: 10

Peltier station: 1

Cryostat

Temperature setting range: 0°C to -30°C

Cooling down time to -35°C: appr. 4 hours

Chamber defrosting: programmable or manual-

1 automatic defrosting cycle / 24 hour duration 9 min.

Freeze shelf temperature: -40°C

Number of freezing station: 10

Peltier number: 1

Refrigerant: R404a, 300g \pm 10g

Compressor oil: 0.6L EMKARATE RL-22S, ICI

Size and weight

Width: 760 mm (705 mm without hand wheel)

Depth: 640 mm

Height: 1150 mm

Net weight: 130 kgs

Electrical data

Working voltage: 220/230V

Frequency: 50/60 Hz

Power: 850 V/A

Product	Size	Packaging	Code
Microtome Cryostat Dual Compressor	Unit	1 pc	MC4000

SECTIONING

MC 3000 Microtome Cryostat

IVD CE



Histo-Line MC 3000. High quality sections while controlling costs. UVC lamp decontamination and automatic defrosting included. MC 3000 is provided with disposable blade holder with adjustable cutting angle and anti-roll device. Easy to operate, all function is settable through keyboard. The motorized feed control is accessible through a separate control panel. The microtome mechanism is located outside the cryochamber, with access from back panel, for a very easy service, no need to switch off unit, and reduced maintenance.



SECTIONING

The unit

- Feed system, stepper motor and mechanical located outside cryochamber.
- 3 different temperatures. Cryochamber, shelter and Peltier
- Blade holder with adjustable cutting angle to the use of any type of disposable blades
- Anti-roll integrated
- Orientable head. Allows uniform orientation and perfect alignment of the sample.
- Peltier unit for rapid cooling down to -50°C
- Easy and intuitive control panel
- Automatic Daily Standby for reduce power consumption.



Technical features

Microtome:

Section thickness range: 1 - 80 μm Adjustable

Adjustable Increment:

Value	Move value/step
1 – 20 μm	1 μm ;
20 – 40 μm	2 μm ;
40 – 80 μm	5 μm

Trimming thickness range: 10 - 400 μm Adjustable

Adjustable Increment:

Value	Move value/step
10 – 50 μm	5 μm
50 – 100 μm	10 μm
100 – 400 μm	50 μm

Specimen retraction: 0-95 μm Adjustable

Increment: 5 μm

Horizontal stroke: 20 mm

Vertical stroke: 60 mm

Chamber temperature: -10°-30°C Adjustable

Freezing shelf temperature: $\leq 40^\circ\text{C}$

Number of freezing station: 10

Peltier station: 1

Cryostat

Temperature setting range: 0°C to -35°C

Cooling down time to -35°C: appr. 4 hours

Chamber defrosting: programmable or manual

1 automatic defrosting cycle / 24 hour duration 9 min.

Freeze shelf temperature: -40°C

Number of freezing station: 9

Peltier number: 1

Refrigerant: R404a, 300g \pm 10g

Compressor oil: 0.6L EMKARATE RL-22S, ICI

Size and weight

Width: 720 mm (660 mm without hand wheel)

Depth: 640 mm

Height: 1140 mm

Net weight: 125 kgs

Electrical data

Working voltage: 220/230V

Frequency: 50/60 Hz

Power: 650 V/A

Product	Size	Packaging	Code
Microtome Cryostat	Unit	1 pc	MC3000

SECTIONING

Microtomes and cryostats comparison table

Cut each block carefully and maintain critical diagnostic detail. Histo-Line rotary microtomes and cryostats give skilled microtomists the precision, control and comfort they need to get the best from every block.

So place a Histo-Line rotary microtome and cryostats on your bench and consistently get the best possible sections from any block, for each patient, on every day.



Rotary microtome equipment

Peculiarity	ARM3700	ARM3600	MRS3500	MR3000	MR2258
Motorized drive	X	X	X		
Manual				X	X
Programmable	X	X			
Keypad control	X				
Retraction	X	X		X	
Ultra-Thin Cut	X	X	X		
LCD display	X	X	X		
Blade holder with finger safe	X	X	X	X	X
Clamp" for quick change	X	X	X	X	X
All types of biocassettes standard	X	X	X	X	X
All types of microtome blade	X	X	X	X	X
Wheel locked at any position	X	X	X	X	X

Cryostat equipment

Peculiarity	MC5050	MC5000	MC4000	MC3000
Number of freezing station	20	18	9	9
Number of Peltier	2	2	1	1
LCD display touch-screen	X			
Joystick control	X			
Waste aspiration system		X		
Section counter	X	X		
Automatic and manual defrosting	X	X	X	X
Anti roll device	X	X	X	X
Window anti-fog	X	X	X	X
All types of microtome blade	X	X	X	X
UV Lamp	X	X	X	X

SECTIONING

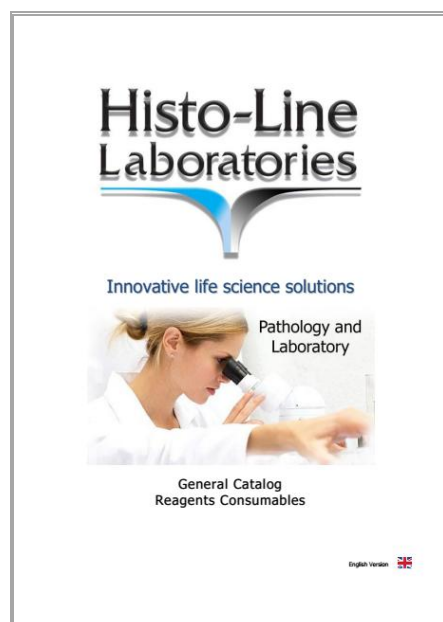


Want more information?

If you need products for cutting section, please refer to the *Histo-Line Reagents & Consumable* catalog. You can find the complete list useful special accessories that can help you.



Want to see all the available products? Look it in the *Histo-Line Reagents & Consumable* or visit the website.



Histo-Line Laboratories

Innovative life science solutions



STAINING



ATS 200 Automatic Multiple Slide Stainer
ATS 2010 Automatic Slide Stainer
HISTO-24 Histo Stainer



STAINING



ATS 200 Automatic Multiple Slide Stainer

IVD CE



ATS200 Automatic Slide Stainer is the necessary equipment for pathology workflow. Designed for staining applications in pathology and research, ATS 200 can perform simultaneous process of different staining protocols, allows continuous unload & reload without interrupting staining cycle. All functions, menu-driven programming, incubation times and sequence of use of reagent stations are freely programmable and controlled by the touch screen panel. Ergonomic design, integrated oven for slides drying, digital electronic temperature control, movement parts are in bearing linear guide for high precision on axis. Total flexibility of open consumables and reagents for a superior staining quality.



STAINING



The unit

- Histo-Line ATS 200 is provided with a control system of the PLC and functions
 - Freely programmable functions like immersion and incubation times, agitation and the station sequence.
 - Large, easy-to-read LCD touch screen panel.
 - Precise high performance stepping motor with transmission belt, in order to ensure a balanced stroke, and noise reduction.
 - Equipped with a photoelectric switch in a fixed position, able to memorize the position and automatically restores functions.
 - Ergonomic design, integrated heating station for drying the slides, and digital temperature control.
 - Ability to store and run up to 8 different user defined staining protocol.
 - Can be attached to a UPS backup (optional), in order to carry out the work during power failure.
- ATS 200 has 26 stations available, among which 18 stations for reagents, 3 tanks for water rins, 3 waiting stations, 1 loading station; 1 output station for unloading the rack of slides, 1 heating station



Technical features

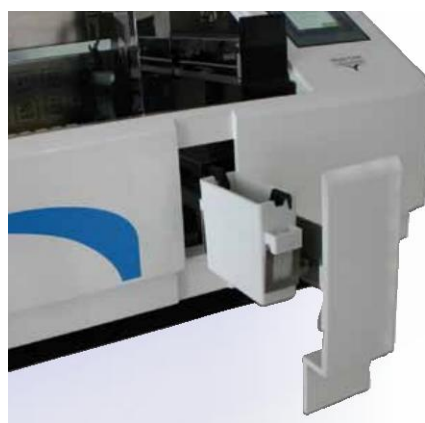
Specimen slide throughput: At least 200 specimen slides for hour (depend on the selected program)
 Loading: 5 slides rack
 Slide rack capacity: 30 specimen slides
 Number reagent stations: 18
 Total number stations: 26
 Reagent container volume: 600 ml
 Number of wash stations: 3
 Number of wait stations: 3
 Oven: 1
 Oven chamber temperature: from ambient temperature to 85 °C
 Load/unload stations: 1 each
 Incubation time setting: from 0 sec. up to 9999 sec.
 Permanent memory capacity: 8 programs up to 32 programs steps each

Size and weight

Width: 120 cm
 Depth: 50 cm
 Height: 60 cm
 Weight: 110 kg

Electrical data

Working voltage: 110V, 220V
 Frequency: 50/60 Hz
 Power: 300 V/A



Product	Size	Packaging	Code
Automatic Multiple Slide Stainer	Unit	1 pc	ATS200

STAINING



ATS 2010 Automatic Slide Stainer

IVD CE



ATS 2010 is a bench top automatic slides stainer for the pathology and research labs. Compact design and precision in staining, versatility, operator safety and maximum cleaning of the instrument.

ATS2010 allows a adaptability to any type of consumer product in place, along with the ability to use reagents, consumables and protocols of the Histo-Line Laboratories. The ATS 2010 is specially designed for the simultaneous process of different staining protocols, allows continuous operation and recharge without interrupting the staining.



STAINING



The unit

- ATS2010 is equipped with a control system of the PLC and electronic.
- All functions, menu-driven programming, incubation times and the sequence of use of the reagent stations are freely programmable and controlled by reliable and simple software.
- Precise and high performance stepper and transmission belt, in order to ensure a balanced stroke, and a noise reduction.
- Ergonomic design, integrated heating station for drying the slides, and digital temperature control.
- Has 9 programs that can be set to fully meet the different requirements of staining protocols.
- UPS backup (optional), in order to carry out the work during power failure.
- 18 stations available, among which 15 stations for reagents; 1 water rinse station; 1 loading /heating station; 1 output station for unloading the slide rack;
- 47 slides per basket, and work simultaneously with 2 baskets with a maximum capacity of 94 slides.
- All the reagent and paraffin containers are closed to prevent evaporation.
- Active carbon filter prevents solvent odors and pollution.
- Alarm to remind the operation and errors.



Technical features

Specimen slide throughput: At max 94 slides
 Loading: 2 slides rack
 Slide rack capacity: 47 specimen slides
 Number reagent stations: 15
 Total number stations: 18
 Reagent container volume: 1000 ml
 Number of wash stations: 1
 Heat tank set temp.: 1 +15°C ~+70°C
 Run Mode for continuous loading
 Time in each tank: 1 sec. to 99 min. and 59 sec.

Size and weight

Width: 140 cm
 Depth: 50 cm
 Height: 55 cm
 Weight: 110 kg

Electrical data

Working voltage: 110V, 220V
 Frequency: 50/60 Hz
 Power: 400 V/A

Product	Size	Packaging	Code
Automatic Slide Stainer	Unit	1 pc	ATS2010

STAINING



Histo-24 Histo Stainer

IVD CE



HISTO-24 Histo Stainer is a compact, space saving automatic slides stainer designed for histology and research laboratories as well as extemporaneous staining. This unit combines the simplicity of use with the maximum safety and reliability, for the histological staining, cytology and special staining. Flexible programming makes Histo-24 ideal for many sample types. Ease to operate, Histo-24 helps laboratory to maintain consistent diagnostic quality while reducing waste and cutting reagent costs.



STAINING



The unit

- Touch screen control panel to view and modify the operating parameters, like programs, station time, dripping time, agitation, water rinse and oven temperature.
- The adjustment of the working parameters is carried out via electronic thermostat with microprocessor.
- The operator can set 25 different programs, diversified by duration, and for a succession of different baskets.
- The stainer can handle up to 30 programmable steps for stroke. The basket can "jump" from one tank to another without following the strict numerical.



Technical features

Specimen slide throughput: At max 24 slides

Loading: 1 slides rack

Slide rack capacity: 24 specimen slides

Number reagent stations: 13

Total number stations: 15

Reagent container volume: 350 ml

Number of wash stations: 1

Heating tank temp.: 1 +15°C ~+80°C

Shaking frequency: 0 min. to 6 times per minute

Dripping time: 0 min. to 59 seconds

Run Mode Run the baskets continuous

Tank time: 1 second to 99 Min. and 59 Sec



Size and weight

Width: 92 cm

Depth: 25 cm

Height: 26 cm

Weight: 26 kg

Electrical data

Working voltage: 110V, 220V

Frequency: 50/60 Hz

Power: 400 V/A

Product	Size	Packaging	Code
Histo-24 Histo Stainer	Unit	1 pc	HISTO-24

STAINING



Automatic slide stainer comparison table

Pathologists use your slides to make life-changing diagnostic decisions.

Make sure they have the clear detail they need for every patient.

Histo-Line understands that high-clarity stains depend on great reagents, precision stainers and good practice.

So a Histo-Line routine staining solution integrates stain, stainer and expert advice.

Choose a Histo-Line staining solution for a high-efficiency path to consistent staining, and diagnostic confidence.



Automatic slide stainer equipment

Peculiarity	ATS200	ATS2010	HISTO-24
Different staining protocols	X		
Continuous unload & reload	X	X	
LCD touch screen panel	X	X	X
Number of program	5 programs up to 24 programs steps each	6	25
Number of slide	At least 200 specimen slides for hour	94 specimen (47 color slides for basket)	24 specimen
Number of stations available	26	18	15
Loading	5 slides rack	2 slides rack	1 slides rack
Oven	X	X	X
Microprocessor control	X	X	X
All types of slide standard	X	X	X
Active carbon filter	X	X	
System alarm	X	X	X



STAINING

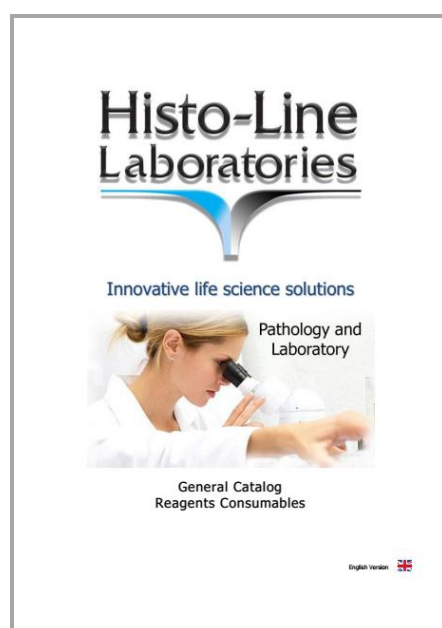


Want more information?

If you need products for staining procedure, please refer to the *Histo-Line Reagents & Consumable* catalog. You can find the complete list useful special accessories that can help you.

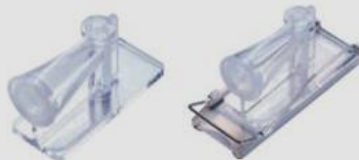


Want to see all the available products? Look it in the *Histo-Line Reagents & Consumable* or visit the website!



Histo-Line Laboratories

Innovative life science solutions



CYTOLOGY



SP100 Cytological Centrifuge

CYTOLOGY



SP100 Cytological Centrifuge

IVD CE



The unit

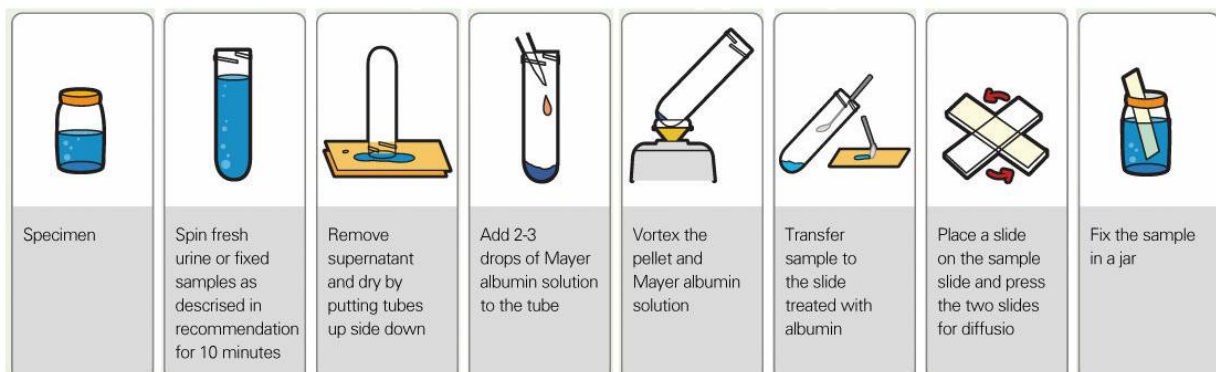
- Centrifuge microprocessor controlled
- Program save and recall up to 10 protocols
- Gentle stop and fast braking: pre-select 3 braking rates
- Warning indicators for imbalance, over speed, door open, setting failure
- Rotor imbalance is detected and immediately signaled to operator
- Transparent cover
- Completely removable rotor for easy cleaning.
- Tight lid to prevent escape of aerosol.
- Digital *soft-key pad* with intuitive menu



Methods

The general method to extract the sample in a jar with existing equipments

- Pre centrifugation with another centrifuge is recommended if the sample volume is big enough for one clip assembly
- Fixation and drying of the sample on a slide after centrifugation can minimize loss of cells



CYTOLOGY



Technical features

- Maximum RPM: 3,000
- Maximum RCF: 1,057
- Maximum capacity: 12 Slide x 6cc
- Specimen range: 0,5 to 6 cc
- Timer: 99min 59sec or "free" for long run
- Braking rates: 3 setting
- Programmability: 10 memory
- Digital display: Speed, Time, Brake, Program
- Drive motor: High torque DC Motor

Size and weight

- Width: 340 mm
- Depth: 410 mm
- Height: 280 mm
- Weight: 24 kg

Electrical data

- Working voltage: 110V, 220V
- Frequency: 50/60 Hz
- Power: 0,5 KW



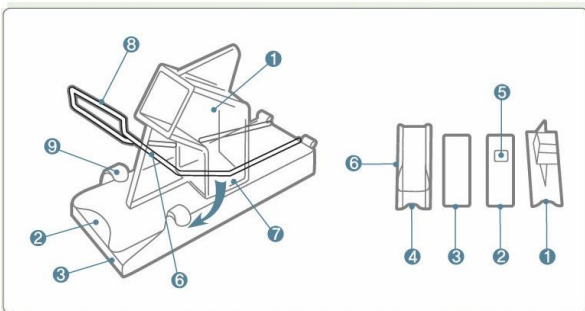
Accessories



Standard Accessories	
Cell (0.5 cc)	12 pieces of PVC 14×14 mm
Rubber plate	12 pieces of Silicon Rubber 14×14 mm
Cell holder	12 pieces Stainless Steel



Optional Accessories	
Cell (0.5 cc)	12 pieces of PVC 14×30 mm
Rubber plate	12 pieces of Silicon Rubber 14×30 mm
Cell holder	12 pieces Stainless Steel



Specifications
1 Specimen chamber
2 Rubber plater
3 Slide
4 Chamber opening
5 Hole
6 Slide Holder
7 Chamber retaining plate
8 Knob
9 Hitching part

Product	Size	Packaging	Code
Cytological Centrifuge	Unit	1 pc	SP100

Histo-Line Laboratories



Innovative life science solutions



INDEX



Analytic index



INDEX



Analytics index

Code	Product	Page
ARM 3600	Fully Motorized Rotary Microtome	44
ARM 3700	Fully Motorized Rotary Microtome with pad	42
ATP 1000	Automatic Tissue Processor	12
ATS 200	Automatic Multiple Slide Stainer	64
ATS 2010	Automatic Slide Stainer	66
HISTO-24	Histo-24 Histo Stainer	68
Histo-Pro 200	Vacuum Tissue Processor	10
Histo-Pro 300	Vacuum Tissue Processor	8
HL 2043	Histo Clip Heated forceps	29
MC 3000	Microtome Cryostat	58
MC 4000	Microtome Cryostat Dual Compressor	56
MC 5000	Microtome Cryostat Dual Freezing System	54
MC 5050	Microtome Cryostat with retraction	52
MR 2258	Manual Rotary Microtome	50
MR 3000	Manual Rotary Microtome	48
MRS 3500	Ultra-Thin Semiautomatic Microtome	46
SD 2800	Slide Dryer	37
SP 100	Cytological Centrifuge	74
STP 250-V	Spin Vacuum Tissue Processor	14
TEC 2000	Paraffin Dispenser	27
TEC 2500	Water Bath-Slide Dryer	34
TEC 2900	Tissue Embedding Center	20
TEC 2900-1	Main Console	22
TEC 2900-2	Cryo Console	23
TEC 2900-3	Thermal Console	24
TEC 2900-4	Thermal Console Double Floor	25
TEC 2900S	Tissue Embedding Center small size	26
TEC 3000	Histo Trimmer	28
WB 2800	Water Bath	36
WB 2900	Tissue Floating Bath	35



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Customers Area

In customer area log-in allows to consult operator manuals, product, technical data sheet and safety data sheet.

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