

Instruments for Anatomical Pathology

Especialidades Médicas Myr, S.L.

Especialidades Médicas Myr, S.L. is a Spanish company dedicated to the development and manufacturing of instruments for anatomical pathology based in Llorenç del Penedès, a town located 70 km south of Barcelona.

Since its foundation more than 35 years ago, *Myr* has been active in the pathology field acting as OEM manufacturer for renowned companies and providing premium instruments for almost the whole range of specimen preparation. The reputation earned for the quality of the instruments and the reliability of our service over this period of time prompted the decision some years ago to distribute our products under our own brand name: *Myr*.

In this short period of time we have strengthened efforts to internationalise our products. The results achieved so far are encouraging. The success can be credited to a range of instruments that in terms of quality, reliability and price, exactly meet the requirements of many small and medium-large laboratories. Our portfolio includes a **tissue processor**, two **embedding centers**, a **semi-automated rotary microtome**, a **fully automated rotary microtome**, and an **automated slide stainer**; our commitment is to keep on developing instruments and become a full-range supplier for histology.

The key to our success lies in our reliability as a competent partner for all our customer's requirements, in our long-term experience as manufacturer of instruments and, last but not least, in the fact that all our products are 'made in Spain'.



Processing





Embedding



Sectioning



Staining



Instruments

Spin Tissue Processor STP 120
Tissue Embedding Center EC 350
Tissue Embedding Center EC 500
Semi-Automated Rotary microtome M-240
Fully Automated Rotary microtome M-250
Microtome Disposable Blades MCUT
Automated Slide Stainer SS-30 / SS-30H

Units are assembled at our premises in Llorenç del Penedès (Spain).



Spin Tissue Processor STP-120

With more than 3.500 units installed around the world, the most successful semi-enclosed tissue processor ever.

A tissue processor removes water from tissues and replaces it with a medium that allows sectioning.

Several methods are used to achieve this. The **STP 120** uses a patented technique that combines **rotational agitation**, **shaking** and **centrifuging***.

The basket with the cassettes are dipped into the reagent vessel where they turn at 60 rpm periodically in each direction. To get optimum results, there is an optional shaking feature, which combines the rotational agitation with an



up-and-down movement of the basket (*shaking*). Finally, the basket is placed over the reagent level and starts whirling at 120 rpm in order to minimize reagent carry-over.

Myr STP 120 tissue processor can work with one or two baskets (option). Each basket can process up to 120 cassettes.

rotational agitation



shaking



centrifuging





Technical Data Spin Tissue Processor STP 120

Nominal voltage 100 - 120 V | 220-240 V AC

Network's frequency 50/60 Hz

Capacity

No of reagent vessels 10 (9 with 3 paraffin baths)

Volume/vessel 1,8 l

N° of paraffin stations 2 (optionally 3)
N° of baskets 1 (optionally 2)
Capacity of baskets 120 cassettes (optionally 240)

Programming

No of programs 10 programs selectable

Dimensions

Diameter 850 mm

Height 500 - 700 mm

Weight 145 kg

Versions

STP 120-1	Standard instrument (basic instrument, 10 reagent vessels, 2 paraffin baths, 1 stainless steel basket for 120 cassettes).
STP 120-2	STP 120-1 + fume extraction system with charcoal filter.
STP 120-3	STP 120-2 + 3rd paraffin station and 2nd basket for another 120 cassettes.



Tissue Embedding Center EC-350

Embedding center featuring innovative design, easy operation and modularity that meets the requirements of modern labs.

After processing the tissue, the embedding center forms a block of paraffine containing the tissue.

Myr **EC 350** is a modular embedding unit consisting of a **dispensing console** and a **cryo console**.

The **dispensing console** is equipped with two large trays for both molds and cassettes at both sides of the dispensing nozzle.

Six heated wells for forceps are integrated and optionally a large field magnifier.



Ergonomical working is also enhanced with the clear arrangement and ease-of-operation of the programming keypad at the front panel. The large capacity of the paraffin container together with the large field magnifier rounds up the user-friendliness of the embedding module.

The **cryo console** can be placed at both sides of the dispensing console. It depicts a large cooling surface up to 80 cassetes / 60 moulds and can be operated also as a stand-alone instrument.

Technical Data Tissue Embedding Center EC 350

Dispensing console E	C 350-1		Cryo Console EC 350-2	
Dimensions			Dimensions	
Console	650 x 595 x	432 mm	Console	340 x 620 x 405 mm
Tray	262 x 175 x	55 mm	Cold plate	375 x 307 mm
Capacity			Capacity	up to 80 cassettes /
Paraffin reservoir	5 l			60 moulds
Left/right chamber	1,7 l / 190 c	assettes	Temperature settings	0 / -12 °C
-	400 m	nolds	Weight	24,4 kg
Power requirements	version 1	100-120 V	Power requirements	version 1 100 V
	version 2	220-240 V		version 2 110 - 120 V version 3 220 - 240 V

Options



Electrically heated tweezers Methacrylate cover for cryo console Magnifier

Tissue Embedding Center EC-500

Modular center with dispensing console, thermal and cryo unit for enhanced embedding of paraffin blocks.

This embedding center has been developed to meet the requirements of modern labs.

In contrast to the EC 350, *Myr* **EC 500** consists of three separate modules with an increased capacity of both, storage place and embedding surface.

The **thermal unit** integrates two large storages both for cassettes and molds that can accept baskets from any tissue processor.

The **dispensing console** is equipped with eight heated wells for forceps, white LED illumination



with adjustable intensity, two paraffin trimmer and a connector for electrically heated tweezers. The control panel features an user friendly keyboard for easy programming and setup of working parameters.

The large surface of the **cryo unit** allows the storage of up to 80 cassettes / 60 moulds or molds and offers an even temperature distribution over the entire surface.

Operation as stand-alone unit is possible.



Technical Data Tissue Embedding Center EC 500

Dispensing console EC 500-2

Dimensions

Console **345 x 641 x 405 mm**Heated area **340 x 253 mm**

Adjustable temperature range

Paraffin reservoir 40-70 °C
Heated area / wells 40-70 °C

Capacity

Paraffin reservoir 5 l

Thermal Console EC 500-3

Dimensions

 Console
 340 x 623 x 395 mm

 Cassette storage
 269 x 510 x 88 mm

 Mold storage
 275 x 170 x 180 mm

Adjustable temperature range

Cassette storage 40-70 °C Mold storage 40-70 °C

Cryo Console EC 500-1

Dimensions

Console **335 x 623 x 395 mm**

Cold plate 375 x 307 mm

Adjustable temperature range

Cold plate from 0 to -12 °C

Options

Electrically heated tweezers Methacrylate cover for cryo console Magnifier



Semi-Automated Rotary Microtome M-240

The M-240 guarantees sectioning excellence and precise specimen cuts through its quality and precision design.

Equipped with the largest touchscreen in the market to enhance user-friendliness and ergonomics, *Myr* M-240 semi-automated rotary microtome provides the operational convenience and the stability required for outstanding sectioning in routine, research and industry applications.

Spacious waste tray with a special antistatic coating to prevent paraffin adhesion minimizing the cleaning time. Ergonomic design that includes surface for arm rest.



Knife carrier system of outstanding stability. Blade holder slides sideways in both directions allowing the use of the entire cutting edge. It accepts lowand high-profile blades.

The retraction function, that can be deactivated, helps extending the blade's shelf life.

Equipped with a specimen orienting head with indication of 0-position in x and y direction by palpable "click" for the precise alignment of the specimen.

Technical Data Semi-Automated Rotary Microtome M-240

Specifications

Section thickness			Vertical stroke (mm)	72 ±1mm
Total range in (μ)	0,5 - 100			
Thickness settings in (μ)	0,5 - 5	in increments of 0,5	Specimen retraction	
	5 - 20	in increments of 1	Total range in (μ)	Selectable between 5 - 250
	20 - 60	in increments of 5		(Optional function)
	60 - 100	in increments of 10		
			Specimen orientation	± 8° horizontal and vertical
Trimming				Rotational capability: 360°
Total range in (μ)	1 - 600			
Thickness settings in (μ)	1 - 10	in increments of 1	Sectioning speed	0,5- 450 mm/sec
	10 20			
	10 - 20	in increments of 2		
	20 - 50	in increments of 2 in increments of 5	Power requirements	100-240 VAC/
			Power requirements	100-240 VAC/ 50-60Hz
	20 - 50	in increments of 5	Power requirements	
	20 - 50 50 - 100	in increments of 5 in increments of 10	Power requirements Dimensions	
Specimen feed (mm)	20 - 50 50 - 100	in increments of 5 in increments of 10	·	50-60Hz

Options



Standard specimen clamp 55x50 mm Knife carrier for disposable blades, model ME

Fully Automated Rotary Microtome M-250

The M-250 microtome uses state-ofthe-art technology and embodies the company's commitment to quality and excellence in the microtomy.

The fully automated rotary microtome, M-250, has been designed to combine high-quality sections and trouble-free operation. Four different possibilities to start the automatic sectioning show our efforts to satisfy the habits of histotechnologists all over the world.

Integrated lateral button for speed/start-stop functions (included in basic delivery) and available by request, foot pedal, external control panel and control mouse.



The sectioning handwheel has an innovative counterweight system for ultimate user comfort and a detachable handle for increased safety.

The available sectioning modes, manual and fully motorized, and the two selectable speeds and modes for motorized specimen feed ensure a controlled specimen approach and maximum usage flexibility. This flexibility joined with the improved ergonomic design of the controls, allows for effortless and reliable serial sectioning.



Technical Data Fully Automated Rotary Microtome M-250

Specifications

Section thickness			Vertical stroke (mm)	72 ±1mm
Total range in (μ)	0,5 - 100			
Thickness settings in (μ)	0,5 - 5	in increments of 0,5	Specimen retraction	
	5 - 20	in increments of 1	Total range in (μ)	Selectable between 5 - 250
	20 - 60	in increments of 5		(Optional function)
	60 - 100	in increments of 10		
			Specimen orientation	± 8° horizontal and vertical
Trimming				Rotational capability: 360°
Total range in (μ)	1 - 600			
Thickness settings in (μ)	1 - 10	in increments of 1	Sectioning speed	0,5- 450 mm/sec
	10 - 20	in increments of 2		
	20 - 50	in increments of 5	Power requirements	100-240 VAC/
	50 - 100	in increments of 10		50-60Hz
	100 - 600	in increments of 50		
			Dimensions	465 x 540 x 298 mm
Specimen feed (mm)	28 ±1mm		Weight	39 Kg

Options



Standard specimen clamp 55x50 mm Knife carrier for disposable blades, model ME

Microtome Disposable Blades MCUT

MCUT blades enable microtome and cryostat uniform sectioning in hard and soft tissues for the whole range of individual applications.

MCUT microtome disposable blades have been developed to section the specimens at a certain selected stable thickness through required technical expertise such as sophisticated heating processes and polishing/coating techniques.

The end result is exceptional sharpness, durability and consistency. **MCUT**, stainless steel microtome



blades, allow users to deliver precise sections throughout all sample types.

Latest plasma technology with unique hardened cutting edge, improving the sharpness and durability of the blades and creating a superior cutting performance.

Available in two models, **MCUT-3508** and **MCUT-3514**, low-and high profile universal blades that can be used in any microtome and cryostat available in the market.



Technical Data Microtome Disposable Blades MCUT

REF.	Description	Edge angle	Lenght x heigh x thickness
MCUT-3508	Disposable microtome blades (low profile) Disposable microtome blades (high profile)	35°	80 x 8 x0,25 mm
MCUT-3514		35°	80 x 14 x0,32 mm







Automated Slide Stainer SS-30

Multi-loading slide stainer for routine and special staining protocols. Flexible and versatile design for optimized staining results.

SS-30 is the perfect slide stainer for H&E and Papanicolau staining.

With a compact footprint, it is ideal for labs with shallow benchs to optimize valuable space.

The agitation system can be individually programmed for each station: it is available in 4 different preset dip modes with 3 configurable parameters: number, speed and amplitude of the dips. A special programming for the washing stations is also available.



SS-30 offers more staining flexibility allowing simultaneous and automatic staining of up to five slide racks, enabling up to 150 slides to be stained simultaneously. The instrument calculates the most efficient route for each rack/protocol.

The stainer can store up to 20 programmed protocols in memory with 50 steps each maximum.

The Reagent Management System (RMS) keeps track of reagent usage and ensures an optimal staining quality (only available in SS-30H).

Technical Data Automated Slide Stainer SS-30

Specifications

Specimens Histological and/or

cytological

Staining capacity up to 5 racks

simultaneously

Slide rack capacity 30 slides

N° of programs up to 20

Immersion time from 1 s to 59 m

Reagent stations up to 19

Water stations up to 3
Load stations up to 2

Unloading stations up to 3 (2 if drying station

is available)

Dimensions

1.200 x 440 x 368 mm

Weight

55 kg

Nominal voltage

100-240 VAC /

50-60 Hz

Drying station temperature

30 - 70 °C

Versions

SS-30	Automated slide stainer
SS-30H	Automated slide stainer with drying station & R eagent M anagement S ystem







Photos courtesy of **Synlab diagnosticos globales S.A.** (www.anatoscopo.cat)



Photo courtesy of **LLebalust Patología**, ATRYS HEALTH Group, Medical Center Teknon in Barcelona.

Myr's role in the pathology sector is not completed yet. In our aim to become a global instrument provider in the anatomic pathology field, we are continuously improving our current equipment and developing new devices.

We continue to work to ensure that our product portfolio brings even greater added value to our customers and that they will benefit from the effort we are making to supply them with top quality products and services.











35 years equipping the world

Histology instruments manufactured by





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