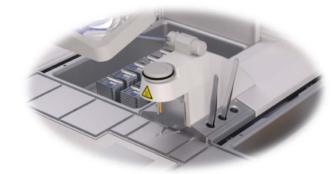


# **Processing**

# **Company Presentation**

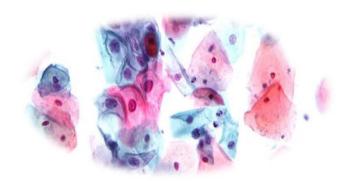


**Embedding** 





Sectioning



Staining





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#### 4. Sum up



## Summary

- ✓ Especialidades Médicas Myr, S.L. is a Spanish company dedicated to the development and manufacturing of instruments for Anatomical Pathology. Myr has been offering for over 35 years a range of equipment to perform the processing, the embedding, the sectioning and the staining.
- Myr has been active in the pathology field acting as OEM manufacturer for renowned companies and providing premium instruments for histology. Because of the reputation earned for the quality of the instruments and the reliability of our service Myr decided to launch its own Myr branded range of Anatomical Pathology Instruments.
- ✓ Our company has firmly established itself, both **nationally** and **internationally**, as a reliable, competitive and efficient partner dealing in the highly-demanding diagnostic sector.



# **Summary**

- ✓ Myr is committed to comply with the rules and directives applicable to our products (EC Declaration of Conformity Certificate).
- ✓ The company is registered in FDA as manufacturer of medical equipment.
- ✓ Myr equipments are cETLus marked.
- ✓ They are registered in several countries that require homologation by their Ministry of Health.
- ✓ Myr is certified ISO 9001 and ISO 13485, all our instruments are certified by Intertek.



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## **Our History-How it Began**

- 1986 Francisco Ruiz worked on his own with the first Tissue Processor. All parts of the instrument were handmade. Manufacturing time for each unit tissue processor was one month. Mr. Ruiz assumed the equipment sales, installation and aftersales service around Spain.
- 1988 Especialidades Médicas *Myr*, *S.L.* was born. Private laboratories and hospitals (pathology head of service) were the target. *Myr* competed in the Spanish market with Japanese, German and British equipments, providing same quality and better prices.
- 1989 First contacts with the Spanish company "Comercial Assens Llofriu" to distribute in Spain Myr instruments, being at that time tissue processor and tissue embedding center.



### **Our History-How it Began**

1992

First contact with MICROM Walldorf's owner during the Spanish Pathology Congress. Signature of exclusive wordlwide agreement with MICROM International – Walldorf (with the exception of the markets of France and Spain, where instruments were sold directly as *Myr* branded) to manufacture OEM equipment (tissue embedding center and spin tissue processor).

1993/94-2002 Several years of successful relationship with MICROM International-Waldorf. During this period, *Myr* manufactured three different models of embedding centers, AP 250, AP 280 and EC 350, two models of tissue processors, HMP 110 and STP 120 and one stainer HMS 70.

2007-2013

MICROM International was acquired by Thermo Fisher. Signature of a worldwide agreement for OEM manufacturing with TF (Thermo branded instruments), concretely spin tissue processor STP 120 and embedding center EC 350. From 2009 onwards OEM agreement with TF just included STP 120.



### **Our History-How it Began**

2013 Myr took the decision to launch its own range of Anatomical Pathology instruments marketed under Myr brand. Exclusive agreement with TF was cancelled.

2013-2018 We combine both activities, OEM manufacturer for some renowned brands and promotion f our own branded instruments, covering nowadays over 70 countries. During this period *Myr* has launched 2 new instruments, embedding center EC 500 and automated slide stainer SS-30.

**2019** Launching of rotary Microtome series with the presentation of model M-240, a semiautomated rotary Microtome.

**2021-2022 Myr** completes the microtome series with the model M-250, a fully automated rotary Microtome.

Future

Complete our range of anatomical pathology instrumentation and expand worldwide.

plans



# **Our Workplace**

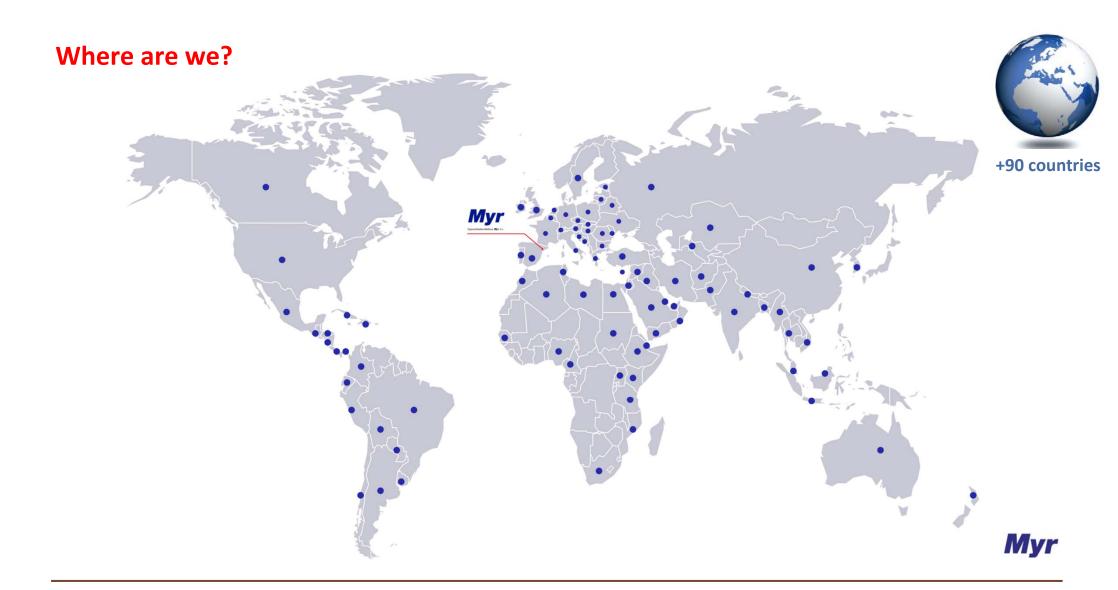




Myr has its facilities in Llorenç del Penedès, in a strategic location 70 km south of Barcelona. Our company has firmly established itself, both nationally and internationally.







## Where are we?

| EUROPE   |   | ASIA  |   | AFRICA   | AMERICA  | NORTH AMERICA   |
|--|---|---|---|--|--|---|
| AUSTRIA BELGIUM B&H BELARUS BULGARIA CROATIA CYPRUS CZECH REP. DENMARK ESTONIA FRANCE GERMANY GREECE HUNGARY HOLLAND ITALY IRELAND | LITHUANIA MALTA MONTENEGRO MOLDOVA NETHERLANDS POLAND PORTUGAL ROMANIA RUSIA SERBIA SLOVAKIA SPAIN SWEDEN SWITZERLAND TURKEY UK UKRAINE | AFGHANISTAN ARMENIA BANGLADESH CHINA INDIA INDONESIA IRAN IRAK ISRAEL JORDAN KAZAKHSTAN KOREA KUWAIT LEBANON MALAYSIA | MYANMAR NEPAL OMAN PAKISTAN PHILIPPINES QATAR SAUDI ARABIA SRI LANKA TAIWAN THAILAND VIETNAM UAE UZBEKISTAN YEMEN | ALGERIA EGYPT ETHIOPIA KENIA LIBYA MOROCCO NIGERIA S. AFRICA SUDAN TANZANIA TUNISIA UGANDA | ARGENTINA BOLIVIA BRASIL CHILE COLOMBIA COSTA RICA CUBA ECUADOR EL SALVADOR GUATEMALA HONDURAS MEXICO NICARAGUA PANAMA PARAGUAY PERU URUGUAY | CANADA USA  OCEANÍA  AUSTRALIA NEW ZEALAND  +90 countries |

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# The Technology



Spin Tissue Processor STP 120 Tissue Embedding Centers EC 350 & EC 500





Semi-Automated & Automated Rotary Microtomes

M-240

M-250

Automated Slide Stainer SS-30



\* Click on the pictures to watch the demo video



# **Spin Tissue Processor STP 120**

*Myr* Spin Tissue Processor STP 120 has been developed to meet the requirements of every single laboratory. The technology and the unique processing method of the STP 120 qualifies it as the most successful Spin Tissue Processors ever. More than 3.500 units installed around the world confirm its leading position.

- ✓ Nowadays 3 versions have been developed: STP 120-1, STP 120-2 and STP 120-3. Both STP 120-2 and STP 120-3 incorporate a fume extraction system with charcoal filter that cleanse the vapors before being discharged into the air.
- ✓ Tissue processing is a technique that removes water from tissues and replaces it with a medium that allows sectioning.
- ✓ Battery back-up system in case of power failure. Avoid potential dry up of tissues. In case of power failure basket will be immersed in a vessel.
- √ Adaptor for general lab extractor system available.



- ✓ STP 120 uses a patented technique that combines several movements for the tissue to achieve perfect infiltration results.
  - Rotational agitation -> the basket turns horizontally at 60 rpm and changes the rotational direction every 60 seconds. The rotational agitation achieves a perfect infiltration of tissue, an homogeneous mixture of the reagents and a reduction of processing time.



 Shaking -> it can be optionally activated and allows the basket to perform an up-down movement inside the vessel that combined with the rotational agitation fulfills an helicoidal movement that increases infiltration quality.



 Centrifuging -> the rotation of cassette basket at 120 rpm for a period of 60-180 seconds (inside the reagent vessel but over the reagent level) changing direction every 15 seconds, to minimize carry-over of reagents and allowing tissue to be optimally drained.



\*Advantages are marked in bold



## **Spin Tissue Processor STP 120**

#### **Specifications**

#### Capacity

#### Reagent stations

- ✓ Number of vessels -> 10 (9 if 3 paraffin baths are used).
- ✓ Volume per vessel -> 1,8 L.

#### Paraffin stations

- ✓ Number -> 2 (optionally 3).
- ✓ Volume -> 1,8 L.
- ✓ Temperature setting range -> 45-70°C.

#### Cassette baskets

- ✓ Number of baskets -> 1 (optionally 2).
- ✓ Basket capacity -> 120 cassettes (optionally 240).





#### Programming

- ✓ Number of programs -> the instrument has capacity to store up to 10 processing programs.
- ✓ Infiltration time per station -> from 1 m to 90h 59 m.
- $\checkmark$  Programs can be started in immediate or in delayed mode.



### **Tissue Embedding Center EC 350**

**EC 350** is a modular paraffin embedding center featuring innovative design as well as easy operation.

It consists of a dispensing console and a cryo console.

#### Dispensing console

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

- ✓ Paraffin reservoir capacity up to 5 l.
- √ Two large removable trays for the storage of cassettes and molds which can be heated independently. Capacity of 2,2L/190 cassettes/400 molds each.
- ✓ Individual programming of all temperature areas between 40-70°C (increments of 1°C).
- ✓ Integrated connector for heated tweezers.
- ✓ Automatic turning on/off with automatic consideration of the pre-heating times.
- ✓ Weekends and, if necessary, holidays are automatically exempt from the automatic turning on, to optimize the durability of the stored paraffin.
- ✓ Non-glare white LEDs illumination.



- ✓ Six independently heated wells for forceps offer comfortable manipulation of cable-free standard forceps.
- ✓ 5°C Cold spot integrated into the working surface.
- ✓ The heated working surfaces are thermically insulated towards the operator and ergonomically shaped.
- ✓ The paraffin flow can be released manually as well as via footswitch.
- ✓ Urgent biopsies can be embedded any time. In "standby mode" paraffin reservoir and conduit are always heated (optional).



# **Tissue Embedding Center EC 350**

### Cryo console

It can be placed either on the right or left side on the dispensing console.

- ✓ Large cooling surface for more tan 80 cassettes / 60 molds.
- ✓ Selectable temperature between 0 and -12ºC.
- ✓ Even temperature distribution over the entire surface.
- √ Stand-alone operation possible.
- ✓ Environmentally friendly refrigerant (R134a).
- ✓ Optional **methacrylate cover** to minimize the building up of frost.









## **Tissue Embeding Center EC 500**

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



#### Dispensing console

- √ Adjustable paraffin dispenser paddle to accommodate Mega and Super Mega cassettes.
- ✓ Eight heated wells for forceps.
- √ Two built-in paraffin trimmer.
- √ Non-glare white LED illumination with adjustable intensity.
- √ 5L paraffin reservoir.
- ✓ Knob to adjust paraffin flow.
- ✓ Paraffin flow can be released manually (touch plate) or via footswitch.



- ✓ Integrated connector for electrically heated tweezers.
- ✓ Individual programming of all temperatures between 40-70°C.
- ✓ 5°C Cold spot integrated into the working surface.
- √ 2 front drawers for surplus paraffin.
- ✓ Urgent biopsies can be embedded any time. In "standby mode" paraffin reservoir and conduit are always heated (selectable).
- ✓ Weekends and, if necessary, holidays are automatically exempt from the automatic turning on, to optimize the durability of the stored paraffin.
- $\checkmark \ \ \text{Insulated working surfaces ergonomically shaped}.$



## **Tissue Embeding Center EC 500**

#### Cryo console

- ✓ Large cooling surface for up to 80 cassettes / 60 molds.
- ✓ Selectable temperature between 0 and -12°C.
- ✓ Even temperature distribution over the entire surface.
- ✓ Allow placement on the right or left side of dispensing console.
- √ Stand-alone operation possible.
- ✓ Optional methacrylate cover to prevent building up of frost.



#### Thermal console

- ✓ Accepts baskets from any common tissue processor in the market.
- √ Two possibilities of cassettes storage:
  - Two removable trays with capacity for 2 baskets (200 cassettes).
  - Three baskets (300 cassettes without trays).
- ✓ Mold storage with capacity for more than 400 molds.
- √ High profile cover for cassette storage.
- ✓ Operation only possible if connected to embedding console.



## **Semi-Automated Rotary Microtome M-240**

- ✓ Full color TFT 7" display with PCAD (projected capacitive) touchscreen. Size and tilt of the display allow an easy and effortless selection of the parameters and increase user safety. The integrated ergonomic armrest at the back of the display improves the user comfort and productivity.
- ✓ **Button Memory function** (MEM) to retrieve previous cuttings settings.
- ✓ Smooth-working handwheel to minimize user fatigue. The handwheel can be locked in any angular position.
- ✓ Spacious and easy to mount waste tray. **Special antistatic coating** prevents paraffin adhesion and minimizes the cleaning time. Ergonomic design with surface for arm rest. Wide area on the top of the microtome for the storage of tools.
- ✓ Blade holder slides sideways in both directions allowing the use of the entire cutting edge. The standard knife carrier, model MR, accepts low- and high-profile blades.







- ✓ Thanks to a blocking mechanism the easy to operate change system allows to work with different specimen clamps.
- ✓ Indication of 0-position in x and y direction by palpable "click" for the precise alignment of the specimen.
- ✓ Cutting-edge design of the specimen clamp that prevents building up of dirt and facilitates operations with the microtome.



## **Automated Rotary Microtome M-250**

- ✓ **User Interface.** Full color TFT 7" touchscreen. The size and tilt of the display allow an easy and effortless selection of the parameters and increased user safety.
- ✓ Parameters on the main screen. Section mode, speed, electronic brake, manual brake, section and trimming thickness, section counter, section sum, remaining travel, coarse feed, retraction, memory function and cutting window.
- ✓ Motorized coarse feed & Home return. Continuous and step coarse feed. In continuous mode, speed is selectable between slow and fast to ensure a controlled specimen approach. Superfast backwards speed to return the specimen to the home position for fast specimen exchange.







- ✓ **Sectioning handwheel.** Innovating counterweight system with excellent balance for maximum comfort when manual sectioning is required. Smooth-working to minimize muscle strain.
- ✓ Memorized position. For higher productivity. Optimized position for fast and efficient trimming can be retrieved by simply pressing a key.
- ✓ **Detachable handle.** For safety reasons, handle can be removed easily from the handwheel, when sectioning in automatic mode.

\*Advantages are highlighted in bold **WV** 



## **Automated Rotary Microtome M-250**





- ✓ Waste tray storage area. Spacious waste tray with antistatic coating to prevent paraffin adhesion and minimize the cleaning time. Ergonomic design that includes surface for arm rest. Wide area on the top of the microtome for storage of the tools.
- ✓ **Specimen orienting head.** Able to work with different specimen clamp types. Indication of 0- position in x and y direction by palpable click.

- ✓ **Control button.** Embedded lateral button for speed and start / stop functions.
- ✓ **External control panel.** With all existing functions in integrated touchscreen. Optionally available.
- ✓ External control mouse. Detachable control mouse for speed and start / stop functions.



\*Advantages are highlighted in bold **MV** 



#### **Automated Slide Stainer SS-30**

#### **Multistaining Capability**

- ✓ **Up to 5 staining protocols can be run simultaneously** depending on protocols (identical and/or different), load frequency and instrument configuration.
- ✓ 20 stations in total distributed in:
  - Up to 2 loading stations.
  - Up to 3 unloading stations (2 only if drying station available).
  - Up to 3 wash stations with running water.
  - 1 drying station (only in model SS-30H).
- √ 30 slides per Rack.
- ✓ Reagent stations capacity: 300 ml.
- ✓ Up to 20 programs 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 version SS-30H).





#### **Automated Slide Stainer SS-30**

#### **Dedicated Software**

- ✓ Individually programmable agitation system for each station.
  - Available in 4 different modes with 3 configurable parameters: number, speed and amplitude of the dips.
  - Special programming for washing stations.
- ✓ Programmable immersion time between 1s to 59m 59s per step.
- ✓ Up to 52 reagents in the memory (49 can be edited and 32 pre-programmed).
- ✓ Real time display of staining protocol status.
- ✓ **Drain function**: it minimizes reagent carryover and helps reducing reagent consumption to optimize costs.
- ✓ USB connector to acquire data and program staining protocols.

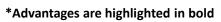






#### **Specifications**

- ✓ Battery backup with 2h autonomy.
- ✓ Integrated filtration system equipped with a charcoal filter.
- ✓ Drying station temperature: 30-70°C (only for SS-30H).
- $\checkmark \ \, \text{Adaptors available for the most popular coverslipper} \, \text{in the market}. \\$
- ➤ Water overflowing in the stainer is secured thanks to an innovative two water level sensors system.
- ✓ Optional adaptor for the laboratory general extraction system.
- $\checkmark$  External 12V power supply.





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#### **Conclusion**

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 100% "made in Spain"**.

*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, always maintaining **high levels of quality** along with **user friendly** of the instruments.

Nowadays *Myr* exports to more than **90 countries**, we expect to continue growing in the coming years and that our equipments will be used in all the markets around the world.

We are confident that our customers will benefit from our product portfolio and will appreciate our efforts to supply them with competitive technology and excellent service.

