

## Anexa 47, Microtom manual

M- 240, Especialidades Médicas Myr S.L., Spania, Numar de inregistrare: DM000284044

Parametri solicitati	Parametri oferiti
<p>"1. Să dețină reglaj fin al grosimii de secționare minim 1 – 60 μm.</p> <p>2. Plaja de alimentare orizontala de maxim 28 mm.</p> <p>3. Cursa verticala specimen de minim 64 mm.</p> <p>4. Dotat cu posibilitate de retragere a specimenului la cursa de întoarcere, care poate fi oprită.</p> <p>6. Grosime secțiune fasonare rapida 10 μm si 30 μm.</p> <p>7. Roata pivotanta integrată ce se poate bloca în orice poziție.</p> <p>8. Să aibă orientare fină pe 2 X/Y +/- 8°.</p> <p>9. Să dețină adaptabilitate pentru fiecare clema de specimen.</p> <p>10. Suport combinat pentru lame, atât pentru cuțite cu profil lat, cit si pentru cuțite cu profil îngust.</p> <p>11. Tava detașabilă cu suport ergonomic pentru mână.</p> <p>12. Tava să fie amplasată și sub suportul de cuțit pentru curățare ușoară.</p> <p>13. Să fie livrat standard cu: husa anti praf, 1 cutie (50buc) lame profil îngust, 1 sticlută cu ulei de ungere, 1 perie cu magnet, clemă universală pentru fixarea casetelor și clemă pentru fixare super casete. Anul de producere: minim 2023.</p> <p>Cerințe de certificare: Certificat CE sau declarație de conformitate CE cu anexele corespunzătoare pentru produsele oferite, valabil, copie confirmată prin semnătura și ștampila participantului și certificat IVD.</p> <p>Termen de garanție: ≥ 36 luni</p> <p>Instalare, darea in exploatare, instruirea de către participantul câștigător - obligatoriu</p> <p>Training pentru utilizatori la instalare și la solicitare - obligatoriu. Servicii de mentenanță preventivă pe perioada de garanție. Documente confirmative: Manual de service si manual de utilizare in conformitate cu LEGEA Nr. 102 cu privire la dispozitivele medicale din 09.06.2017, capitolul 4 Articolul 14. P. 3. Ghid rapid al utilizatorului (max. 4 pagini A4), in limba de stat-obligatoriu."</p>	<p>"1. Să dețină reglaj fin al grosimii de secționare minim 0,5 – 100 μm.</p> <p>2. Plaja de alimentare orizontala 28 mm.</p> <p>3. Cursa verticala specimen 72 mm.</p> <p>4. Dotat cu posibilitate de retragere a specimenului la cursa de întoarcere, care poate fi oprită. Selectable between 5 – 250 μ, Default value: 40μ. Optional function that can be deactivated</p> <p>6. Grosime secțiune fasonare rapida 10 μm si 30 μm.</p> <p>7. Roata pivotanta integrată ce se poate bloca în orice poziție.</p> <p>8. Are orientare fină pe 2 X/Y +/- 8°.</p> <p>9. Deține adaptabilitate pentru fiecare clema de specimen.</p> <p>10. Suport combinat pentru lame, atât pentru cuțite cu profil lat, cit si pentru cuțite cu profil îngust. Blade Holder Type Two in One for high and low profile blades</p> <p>11. Tava detașabilă cu suport ergonomic pentru mână.</p> <p>12. Tava este amplasată sub suportul de cuțit pentru curățare ușoară.</p> <p>13. Va fi livrat standard cu: husa anti praf, 1 cutie (50buc) lame profil îngust, 1 sticlută cu ulei de ungere, 1 perie cu magnet, clemă universală pentru fixarea casetelor și clemă pentru fixare super casete. Anul de producere: minim 2023.</p> <p>Cerințe de certificare: Certificat CE sau declarație de conformitate CE cu anexele corespunzătoare pentru produsele oferite, valabil, copie confirmată prin semnătura și ștampila participantului și certificat IVD.</p> <p><b>Numar de inregistrare: DM000284044</b></p> <p>Termen de garanție: 36 luni</p> <p>Instalare, darea in exploatare, instruirea de către participantul câștigător - obligatoriu</p> <p>Training pentru utilizatori la instalare și la solicitare - obligatoriu. Servicii de mentenanță preventivă pe perioada de garanție. Documente confirmative: Manual de service si manual de utilizare in conformitate cu LEGEA Nr. 102 cu privire la dispozitivele medicale din 09.06.2017, capitolul 4 Articolul 14. P. 3. Ghid rapid al utilizatorului (max. 4 pagini A4), in limba de stat-obligatoriu."</p>

## SPECIFICATIONS

<b>Section thickness</b>	
Total range in (μ)	0,5- 100
Thickness settings in (μ):	0,5- 5 in increments of 0,5 5- 20 in increments of 1 20- 60 in increments of 5 60- 100 in increments of 10
<b>Trimming</b>	
Total range in (μ)	1- 600
Thickness settings in (μ)	1- 10 in increments of 1 10- 20 in increments of 2 20- 50 in increments of 5 50- 100 in increments of 10 100- 600 in increments of 50
Specimen feed (mm)	28 ± 1mm
Vertical stroke (mm)	72 ± 1mm for sectioning of mega-cassettes
User interface	7" capacitive touchscreen display
Operating modes	Rotational or Rocking (selectable)
<b>Specimen retraction</b>	
Total range (μ)	Selectable between 5 – 250 Default value: 40μ Optional function that can be deactivated
<b>Motorized coarse feed (μm/sec)</b>	
	300 (slow speed forward) 800 (fast speed forward) 1800 (superfast speed backwards) Additional function for forward/backward feed in step mode
Blade Holder Type	Two in One for high and low profile blades
Max. specimen size (mm)	68x48x15 (w x h x d) Super Cassete Clamp 68x48x15
Specimen orientation	± 8° horizontal and vertical Rotational capability: 360° Indication of 0-position by means of click (x and y)
<b>Power requirements</b>	
Consumption (VA)	100-240 VAC / 50-60Hz 40
<b>Dimensions</b>	
Width (mm)	465
Depth with tray (mm)	540
Height (mm)	298
Weight (kg)	33,9



M240-4002C



M240-4101



M240-2200



M240-2100

## ORDERING INFORMATION

**M240-01:** Microtome with knife carrier MR (for High and Low profile blades, lateral adjustment), quick release clamp.

**M240-02:** Microtome with knife carrier MR, (for High and Low profile blades, lateral adjustment), standard specimen clamp.

**M240-03:** Microtome with knife carrier ME (for High and Low profile blades, no lateral adjustment), quick release clamp.

**M240-04:** Microtome with knife carrier ME, (for High and Low profile blades, no lateral adjustment), standard specimen clamp.

## OPTIONAL ACCESSORIES

**M240-1000:** Fixed specimen head

**M240-1100:** Orienting specimen head

**M240-2100:** Standard specimen clamp 55x50 mm

**M240-2200:** Universal specimen clamp (Quick Release Clamp)

**M240-4002C:** Knife carrier for disposable blades, model MR

**M240-4101:** Knife carrier for disposable blades, model ME

**M240-4201:** Knife carrier for standard knives, model MN

**M240-4301:** Knife carrier for standard knives, model MC

## Especialidades Médicas Myr S.L.

ISO 9001 / 13485 certified company

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Local Distributor. Contact information.

# Myr

Devoted to Histology

## SEMI-AUTOMATED ROTARY MICROTOME

# M-240

The Cut at its Finest



## SEMI-AUTOMATED ROTARY MICROTOME

# M-240

The M-240 microtome from **Myr** uses state-of-the-art technology and embodies the company's commitment to quality and excellence in the microtomy.

It provides the operational convenience and the stability required for outstanding sectioning in routine, research and industry applications.



### USER FRIENDLY INTERFACE

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.

All required parameters and functions are available on the main screen: section mode, section and trimming thickness, section counter, section sum, remaining travel, retraction and coarse feed, memory function.

### MEMORY FUNCTION

MEM key for higher productivity, to retrieve previous cuttings settings when working with uniform paraffin blocks. By simply pressing a key, the specimen moves into the stored MEM position.

Additional safety feature available to change the specimen safely by adding an extra "safety distance" to the position stored in memory.

### SPACIOUS 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.

### SMOOTH AND ERGONOMIC HANDWHEEL

The handwheel is perfectly balanced thanks to an innovating counterweight system and can be locked in any angular position.

Cutting can be done by turning the handwheel clockwise or counterclockwise.

Smooth-working handwheel to minimize user fatigue.

### SPECIMEN ORIENTING HEAD

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.

### QUICK RELEASE SPECIMEN CLAMP

Cutting-edge design of the specimen clamp that prevents building up of dirt and facilitates operations with the microtome.

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



### MOTORIZED SPECIMEN FEED

Precise, motorized coarse feed in two modes, continuous and step.

In continuous mode, speed is selectable between slow and fast to ensure a controlled specimen approach.

### KNIFE CARRIER SYSTEM

Blade holder slides sideways in both directions allowing the use of the entire cutting edge. It accepts low- and high-profile blades.

All blade holders are equipped with finger guard for safety reasons.



**M-240****M-250****SPECIFICATIONS****Section thickness**

Total range in (μ)	0,5 - 100	0,5 - 100
Thickness settings in (μ)	0,5 - 5 in increments of 0,5 5 - 20 in increments of 1 20 - 60 in increments of 5 60 - 100 in increments of 10	0,5 - 5 in increments of 0,5 5 - 20 in increments of 1 20 - 60 in increments of 5 60 - 100 in increments of 10

**Trimming**

Total range in (μ)	1 - 600	1 - 600
Thickness settings in (μ)	1 - 10 in increments of 1 10 - 20 in increments of 2 20 - 50 in increments of 5 50 - 100 in increments of 10 100 - 600 in increments of 50	1 - 10 in increments of 1 10 - 20 in increments of 2 20 - 50 in increments of 5 50 - 100 in increments of 10 100 - 600 in increments of 50

<b>Specimen feed (mm)</b>	28 ± 1mm	28 ± 1mm
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<b>Vertical stroke (mm)</b>	72 ± 1mm for sectioning of mega-cassettes	72 ± 1mm for sectioning of mega-cassettes
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<b>User interface</b>	7" capacitive touchscreen display	7" capacitive touchscreen display
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<b>Operating modes</b>	Manual: Rotational and Rocking	Manual: Rotational and Rocking Motorized: Interval, Single, Continuous and Multi Stroke
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<b>Specimen retraction</b>		
Total range (μ)	Selectable between 5 – 250 Default value: 40μ Optional function that can be deactivated	Selectable between 5 – 250 Default value: 40μ Optional function that can be deactivated

<b>Motorized coarse feed (μm/sec)</b>	300 (slow speed forward) 800 (fast speed forward) 1800 (superfast speed backwards) Additional function for forward/ backward feed in step mode	300 (slow speed forward) 800 (fast speed forward) 1800 (superfast speed backwards) Additional function for forward/ backward feed in step mode
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<b>Sectioning speed</b>		0,5 - 450 mm/sec
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<b>Blade holder type</b>	Two in One for high and low profile blades	Two in One for high and low profile blades
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<b>Max. specimen size (mm)</b>	50x60x40 (w x h x d) Super Cassete Clamp 68x48x15	50x60x40 (w x h x d) Super Cassete Clamp 68x48x15
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<b>Specimen orientation</b>	± 8º horizontal and vertical Rotational capability: 360º Indication of 0-position by means of click (x and y)	± 8º horizontal and vertical Rotational capability: 360º Indication of 0-position by means of click (x and y)
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<b>Power requirements</b>	100-240 VAC / 50-60Hz	100-240 VAC / 50-60Hz
Consumption (VA)	40	100

<b>Dimensions</b>		
Width (mm)	465	465
Depth with tray (mm)	540	540
Height (mm)	298	298
Weight (kg)	33,9	39

Do you want to know more about us?

**Myr**

Devoted to Histology ■

**AUTOMATED AND SEMI-AUTOMATED  
ROTARY MICROTOMES**

The Cut at its Finest

**Contact Us****Especialidades Médicas Myr S.L.**

ISO 9001 / 13485 certified company  
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**Myr**

## OUR MICROTOMES

# M-240 and M-250

The M-240 and M-250 microtome's use state-of-the-art technology and embody the company's commitment to quality and excellence in the microtomy. It provides the operational convenience and stability required for outstanding sectioning in routine, research and industry applications.

## GENERAL FEATURES

### USER FRIENDLY INTERFACE

Full-colour TFT 7" display with PCAD (projected capacitive) touchscreen. The size and tilt of the display allow an easy and effortless selection of the parameters and increased user safety. All required parameters and functions are available on the main screen.



### KNIFE CARRIER SYSTEM

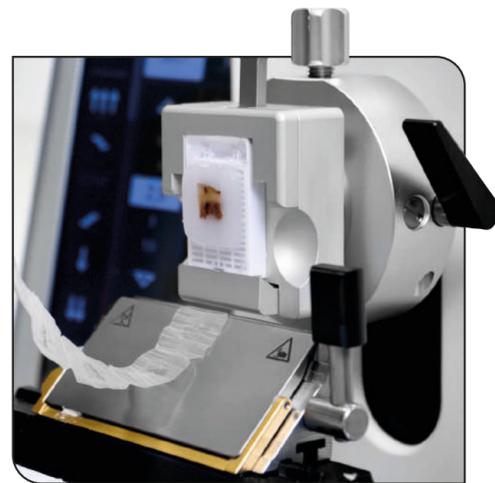
Blade holder slides sideways in both directions allowing the use of the entire cutting edge. It accepts low- and high-profile blades. All blade holders are equipped with finger guard for safety reasons.

### MOTORIZED SPECIMEN FEED

Motorized coarse feed modes of operation, continuous and by step, can be accessible through the touchscreen. In continuous mode, speed is selectable between slow and fast to ensure a controlled specimen approach. For rapid movement to the home position, integrated superfast backwards speed.

### SPECIMEN ORIENTING HEAD

Indication of 0-position in x and y direction by palpable "click" for the precise alignment of the specimen. The 360° rotational capability of the specimen clamp and 8° mobility range along the x and y-axis of the orienting specimen head enables higher precision and alignment.



### SPACIOUS WASTE TRAY

High volume waste tray (1.7 Liters) with special antistatic coating that prevents paraffin adhesion and minimizes the cleaning time. Additional design includes a surface for arm rest and an area on the top of the instrument for tool storage.

### EXCLUSIVE M-250 FEATURES

#### LATERAL BUTTON

Embedded in the left side of the automatic microtome for speed/start-stop functions. It is possible to adjust the cutting speed while the motorized cutting is running.

#### ELECTRONIC BRAKE

Once the automatic sectioning mode is paused, the electronic brake automatically activates, or alternatively, when sectioning manually, it can be activated by pressing the brake key on the touchscreen.

#### EXTERNAL PANEL

The entire touch screen functions are integrated into the external control panel for higher adaptability to technicians' preferences.

**Optionally available.**

#### FOOTSWITCH

**Optionally available.**

### SMOOTH AND ERGONOMIC HANDWHEEL

The handwheel is perfectly balanced thanks to an innovative counterweight system and can be locked in any angular position. Cutting can be done by turning the handwheel clockwise or counterclockwise, and its motion smoothness minimizes user's fatigue.



## BLADE HOLDERS AND CLAMPS



## ORDERING INFORMATION

**M250-01** Microtome with knife carrier MR  
**M240-01** (for High and Low profile blades, lateral adjustment), quick release clamp.

**M250-02** Microtome with knife carrier MR,  
**M240-02** (for High and Low profile blades, lateral adjustment), standard specimen clamp.

**M250-03** Microtome with knife carrier ME  
**M240-03** (for High and Low profile blades, lateral adjustment), quick release clamp.

**M250-04** Microtome with knife carrier ME,  
**M240-04** (for High and Low profile blades, lateral adjustment), standard specimen clamp.

## OPTIONAL ACCESSORIES

- M250-1000:** Footswitch
- M250-2000:** External control panel
- M240-1000:** Fixed specimen head
- M240-1100:** Orienting specimen head
- M240-2100:** Standard specimen clamp 55x50 mm
- M240-2200:** Universal specimen clamp (Quick Release Clamp)
- M240-4002C:** Knife carrier for disposable blades, model MR
- M240-4101:** Knife carrier for disposable blades, model ME
- M240-4201:** Knife carrier for standard knives, model MN
- M240-4301:** Knife carrier for standard knives, model MC

## ESSENTIAL ACCESSORIES

### DISPOSABLE BLADES



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

REF.	Description	Edge angle	length x height x thickness
MCUT-3508	Disposable microtome blades (low profile)	35°	80 x 8 x 0,25 mm
MCUT-3514	Disposable microtome blades (high profile)	35°	80 x 14 x 0,25 mm



Especialidades Médicas **Myr** S.L



## EC Declaration of Conformity / *Declaración de Conformidad CE*

Manufacturer / *Fabricante*

**Especialidades Médicas MYR S.L.**

C/ Lleida 17-23 - 43712 Llorenç del Penedès - Tarragona - Spain

We declare under our own responsibility that the product / *Declaramos bajo nuestra responsabilidad que el producto*

### **Microtome M-240 / *Microtomo M-240***

meets all the requirements of the following European Directives that are applicable  
*cumple todos los requisitos aplicables de las siguientes Directivas Europeas*

<b>98/79/EC:</b>	In Vitro Diagnostic Devices Directive Classification: General IVD (Other), neither listed in Annex II of IVD 98/79/EC nor IVDs for self-testing purpose
<b>2014/30/EU:</b>	Electromagnetic Compatibility (EMC) Directive
<b>2014/35/EU:</b>	Low Voltage Directive
<b>2011/65/EU:</b>	Restriction of the Use of Hazardous Substances in electrical and electronic equipments (RoHS) Directive

The product is designed and manufactured according to the relevant parts of the following International Standards  
*El producto está diseñado y fabricado de acuerdo con las partes relevantes de los siguientes estándares*

<b>IEC 61010-1: 2010 + A1:2016</b>	<b>IEC 61010-2-101: 2015</b>
<b>EN 61326-1: 2013</b>	<b>EN 61326-2-6: 2013</b>
<b>EN ISO 14971: 2012</b>	

In addition, the following standards are applied:

*Además, la empresa trabaja de acuerdo con las siguientes normas:*

<b>ISO 9001-2015:</b>	Quality Management system
<b>ISO 13485-2016:</b>	Medical Devices - Quality Management system

Llorenç del Penedès, 19/06/2019

**Francisco Ruiz Robles**  
Managing Director / *Director General*

# Certificate

**AENOR** has issued an IQNET recognized certificate that the organization:

**ESPECIALIDADES MEDICAS MYR, S.L.**

**CL LLEIDA, 17-23.  
43712 - LLORENÇ DEL PENEDES  
(TARRAGONA)**

has implemented and maintains a/an  
**Medical devices – Quality Management Systems**

for the following scope:

**Design, development and production of machines for preparation of all types of human tissues for in vitro diagnostic.**

which fulfils the requirements of the following standard

**ISO 13485:2016**

*First issued on: 2014-03-28 Last issued: 2023-03-28 Validity date: 2026-03-28*

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: **ES-GS-0002/2014**



**Alex Stoichitoiu**  
President of IQNET



**Rafael GARCÍA MEIRO**  
CEO

**AENOR**  
Confía

This attestation is directly linked to the IQNET Member's original certificate and shall not be used as a stand-alone document.

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Colombia **ICS** Bosnia and Herzegovina **Inspecta Sertifointi Oy** Finland **INTECO** Costa Rica **IRAM** Argentina **JQA** Japan **KFQ** Korea  
**LSQA** Uruguay **MIRTEC** Greece **MSZT** Hungary **Nemko AS** Norway **NSAI** Ireland **NYCE-SIGE** México **PCBC** Poland **Quality Austria**  
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