

# Leica RM2255

Rotary Microtome for high-Performance Motorized and Manual Sectioning



Living up to Life

# The New Leica RM2255 Rotary Microtome

High-performance is an important factor when considering the quality of rotary microtomes. A modern microtome must also offer safety, ergonomy, efficiency, and economy. With this in mind, Leica Microsystems designs and manufactures microtomes that set new standards in today's laboratory.

The new fully automated Leica RM2255 microtome embodies the latest technological innovations in microtomy and perfectly harmonizes practical features with an ergonomic design and user safety. Its two-in-one design concept, which allows motorized as well as manual sectioning, provides reproducible, quality sections.

The Leica RM2255 is a blend of proven high-performance, precision microtome technology with all the added benefits customers expect from the market leader in microtomy. The attention to detail in this new microtome, part of the Leica RM2200 family of quality microtomes, represents another step in the advancement of innovative, useroriented microtomes.



LEICA RM2255

# High-Performance Motorized a

Leica

#### Fewer clamping levers

permit unencumbered access to the cutting area. The locking pins can also be moved from one side to the other and the levers can be repositioned after locking to further clear the work area.

### Ample storage space:

on an integrated storage tray provides plenty of space for your ancillary tools. For cool storage of specimen blocks right on the microtome, we recommend the optional cooling tray with unique cooling blocks.

### 📕 Knife holder E

is our most popular knife holder and accepts either high or low profile disposable blades. For enhanced safety, an integrated finger guard covers the entire blade, even during sectioning.

#### Control panel

with colored, raised keys, allows 'touch' control so all of the operator's attention can be fully focused on sectioning and section retrieval. The panel has adjustable inclination, a very small footprint, and can be positioned to the left or right of the instrument.





# nd Manual Sectioning Sets New Standards!

#### One-piece housing,

mbines ergonomics, aesthetics d ease-of-use while meeting the actical requirements of the lab. e one-piece housing, made from ecially resistant plastic, allows mfortable access to controls and t and easy cleaning.







#### Precise specimen orientation

sets new standards of precision in rotary microtomes. With the use of calibrated controls and visual aids, it is simple to adjust the specimen to an exact zero point or in measurable variables of up to 8° along the x-y axis.

#### Lateral knife holder adjustment

allows the use of the entire length of the blade without having to change the tension setting. Three predefined stop positions (left, center, right) that correspond to the width of a standard histology cassette may be used if desired.

### ■ Safe, smooth-running handwheel features a new ergonomic handle, a traditional lock that locks anywhere in the rotation, and a new easy access, quick-lock device to lock the specimen in the uppermost position. For motorized sectioning, the handwheel handle can be centered. Safety is Leica's number one priority.

#### Stable microtome base plate

was designed using the latest technology and materials to produce a robust, stable, yet lightweight support for the precision microtome mechanisms.

## **Proven Technology:**

# • Leica's patented gravitational force compensation system

makes rotating the handwheel extremely smooth and light, which is especially beneficial during manual sectioning applications.

#### Precise micrometer feed system

permits precision sectioning from 0.5  $\mu m$  to 100  $\mu m$  via the use of a stepper motor and low-maintenance, cross-roller bearings.

#### • Powerful sectioning motor

is rugged enough for sectioning most hard specimens without producing sectioning artifacts.

#### Specially designed electronics system

allows flexible operation of the instrument while providing precision control over the specimen advance and cutting speeds.

#### • Universal knife holder base

is compatible with all routine Leica RM2200 series microtome knife holder systems that require a base.

#### • One-hand operated universal cassette clamp

is definitely THE easiest way to clamp and remove specimens.

# Spacious, integrated section waste tray

onveniently prevents scattering of araffin debris. The section waste ray is securely held in position by a hagnet, but is easy to remove from he instrument for emptying and leaning.

# **Technical Specifications**

#### Section thickness:

Section thickness setting range: $0,5 - 100 \ \mu m$		Specimen orientation:	horizontal: 8°, vertical: 8°
Setting values:	from 0,5 μm – 5 μm in 0,5 μm-increments from 5 – 20 μm in 1 μm-increments from 20 – 60 μm in 5 μm-increments from 60 –100 μm in 10 μm-increments	Nominal supply voltages:	100 / 120 / 230 / 240 V AC ±10%
		Nominal frequency:	50/60 Hz
		Power draw:	340 VA
Trimming section		Dimensions basic instrument	
thickness setting range: Setting values: Object feed:	1 – 600 μm from 1 – 10 μm in 1 μm-increments from 10 – 20 μm in 2 μm-increments from 20 – 50 μm in 5 μm-increments	Width (including hand wheel)	413 mm
		Depth (including waste tray)	618 mm
		Height (with storage area on cover):	305 mm
	from 50 – 100 μm in 10 μm-increments	Weight (without accessories)	approx. 37 kg, approx. 81 lbs
	from 100 – 600 µm in 50 µm-increments 28 mm ±1 mm, feed motion via step motor	Dimensions control panel	
		WxDxH:	121 x 166 x 50 mm
Vertical specimen stroke:	70 mm	Weight:	approx. 0.66 kg, approx. 1.45 lbs
Sectioning modes:	4		
Specimen retraction:			
in manual operation:	5 – 100 μm in 5 μm-increments, can be turned off	Wide range of accessories on request. Technical specification subject to change. Certificates: CE. c-CSA-us	
in motorized operation:	varying with the sectioning		
Electric coorce food:	speed, can be turned off	Up-to-date development, production and quality control procedures certified under DIN EN ISO 9001 ensure biobest quality and reliability	
Sectioning speed:	$0,5 - 420 \text{ mm/s} \pm 10\%$	ander one en loo oor ensure nighest quality an	a ronasinay.

## The Leica RM2255 Features at a Glance:

- Compact, ergonomic design
- Ergonomically designed handwheel handle
- Smooth-running handwheel with integrated quick-lock mechanism for safety
- Enclosed micrometer feed mechanism
- Low-maintenance cross-roller bearings
- Two forward and backward coarse feed speeds
- Alternate trimming and sectioning modes, as indicated on the display
- Speed control through the cutting window for enhanced efficiency
- Automatic, variable specimen retraction, depending on sectioning speed
- Section thickness totalizer and section counter
- Intuitive control panel
- Integrated communication display
- Precise specimen orientation with zero point reference

- One-hand operated universal cassette clamp
- Completely new knife holder design with red colored knife guard

Maximum specimen size (L x H x W): 50 x 60 x 40 mm

- Precise lateral knife holder adjustment with click stop settings
- Spacious and easy-to-clean section waste tray
- Wide range of accessories



# "With the user, for the user" Leica Microsystems

Leica Microsystems operates globally in four divisions, where we rank with the market leaders.

## • Life Science Division

The Leica Microsystems Life Science Division supports the imaging needs of the scientific community with advanced innovation and technical expertise for the visualization, measurement, and analysis of microstructures. Our strong focus on understanding scientific applications puts Leica Microsystems' customers at the leading edge of science.

## • Industry Division

The Leica Microsystems Industry Division's focus is to support customers' pursuit of the highest quality end result. Leica Microsystems provide the best and most innovative imaging systems to see, measure, and analyze the microstructures in routine and research industrial applications, materials science, quality control, forensic science investigation, and educational applications.

### • Biosystems Division

The Leica Microsystems Biosystems Division brings histopathology labs and researchers the highest-quality, most comprehensive product range. From patient to pathologist, the range includes the ideal product for each histology step and high-productivity workflow solutions for the entire lab. With complete histology systems featuring innovative automation and Novocastra<sup>™</sup> reagents, Leica Microsystems creates better patient care through rapid turnaround, diagnostic confidence, and close customer collaboration.

## • Surgical Division

The Leica Microsystems Surgical Division's focus is to partner with and support surgeons and their care of patients with the highest-quality, most innovative surgical microscope technology today and into the future. The statement by Ernst Leitz in 1907, "with the user, for the user," describes the fruitful collaboration with end users and driving force of innovation at Leica Microsystems. We have developed five brand values to live up to this tradition: Pioneering, High-end Quality, Team Spirit, Dedication to Science, and Continuous Improvement. For us, living up to these values means: Living up to Life.

## Active worldwide

Australia:	North Ryde	Tel. +61 2 8870 3500	Fax +61 2 9878 1055
Austria:	Vienna	Tel. +43 1 486 80 50 0	Fax +43 1 486 80 50 30
Belgium:	Groot Bijgaarden	Tel. +32 2 790 98 50	Fax +32 2 790 98 68
Canada:	Richmond Hill/Ontario	Tel. +1 905 762 2000	Fax +1 905 762 8937
Denmark:	Herlev	Tel. +45 4454 0101	Fax +45 4454 0111
France:	Nanterre Cedex	Tel. +33 811 000 664	Fax +33 1 56 05 23 23
Germany:	Wetzlar	Tel. +49 64 41 29 40 00	Fax +49 64 41 29 41 55
Italy:	Milan	Tel. +39 02 574 861	Fax +39 02 574 03392
Japan:	Tokyo	Tel. +81 3 5421 2800	Fax +81 3 5421 2896
Korea:	Seoul	Tel. +82 2 514 65 43	Fax +82 2 514 65 48
Netherlands:	Rijswijk	Tel. +31 70 4132 100	Fax +31 70 4132 109
People's Rep. of China:	Hong Kong	Tel. +852 2564 6699	Fax +852 2564 4163
Portugal:	Lisbon	Tel. +351 21 388 9112	Fax +351 21 385 4668
Singapore		Tel. +65 6779 7823	Fax +65 6773 0628
Spain:	Barcelona	Tel. +34 93 494 95 30	Fax +34 93 494 95 32
Sweden:	Kista	Tel. +46 8 625 45 45	Fax +46 8 625 45 10
Switzerland:	Heerbrugg	Tel. +41 71 726 34 34	Fax +41 71 726 34 44
United Kingdom:	Milton Keynes	Tel. +44 1908 246 246	Fax +44 1908 609 992
USA:	Bannockburn/Illinois	Tel. +1 847 405 0123	Fax +1 847 405 0164

and representatives in more than 100 countries



