



# Leica RM2255 Rotary Microtome

High-Performance Motorized  
and Manual Sectioning

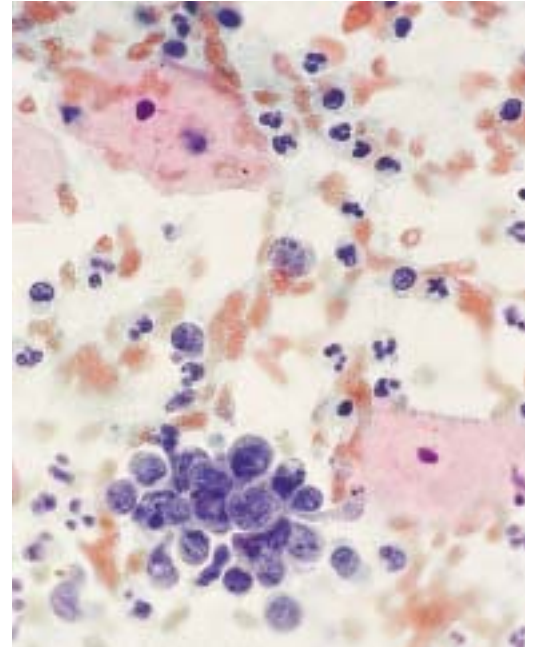
*Leica*  
MICROSYSTEMS

# 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, ergonomics, 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, user-oriented microtomes.



# High-Performance Motorized a

## ■ 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.

## ■ 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.

## ■ 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.



# and Manual Sectioning Sets New Standards!

## One-piece housing,

combines ergonomics, aesthetics and ease-of-use while meeting the practical requirements of the lab. The one-piece housing, made from especially resistant plastic, allows comfortable access to controls and fast 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.

## ■ Spacious, integrated section waste tray

conveniently prevents scattering of paraffin debris. The section waste tray is securely held in position by a magnet, but is easy to remove from the instrument for emptying and cleaning.

## 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  $\mu\text{m}$  to 100  $\mu\text{m}$  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.

# Technical Specifications

## Section thickness:

Section thickness setting range:	0,5 – 100 $\mu\text{m}$
Setting values:	from 0,5 $\mu\text{m}$ – 5 $\mu\text{m}$ in 0,5 $\mu\text{m}$ -increments from 5 – 20 $\mu\text{m}$ in 1 $\mu\text{m}$ -increments from 20 – 60 $\mu\text{m}$ in 5 $\mu\text{m}$ -increments from 60 – 100 $\mu\text{m}$ in 10 $\mu\text{m}$ -increments

## Trimming section

thickness setting range:	1 – 600 $\mu\text{m}$
Setting values:	from 1 – 10 $\mu\text{m}$ in 1 $\mu\text{m}$ -increments from 10 – 20 $\mu\text{m}$ in 2 $\mu\text{m}$ -increments from 20 – 50 $\mu\text{m}$ in 5 $\mu\text{m}$ -increments from 50 – 100 $\mu\text{m}$ in 10 $\mu\text{m}$ -increments from 100 – 600 $\mu\text{m}$ in 50 $\mu\text{m}$ -increments

<b>Object feed:</b>	28 mm $\pm$ 1 mm, feed motion via step motor
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<b>Vertical specimen stroke:</b>	70 mm
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<b>Sectioning modes:</b>	4
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## Specimen retraction:

in manual operation:	5 – 100 $\mu\text{m}$ in 5 $\mu\text{m}$ -increments, can be turned off
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in motorized operation:	varying with the sectioning speed, can be turned off
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<b>Electric coarse feed:</b>	300 $\mu\text{m}/\text{s}$ und 900 $\mu\text{m}/\text{s}$
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<b>Sectioning speed:</b>	0,5 – 420 mm/s $\pm$ 10%
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<b>Maximum specimen size (L x H x W):</b>	50 x 60 x 40 mm
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<b>Specimen orientation:</b>	horizontal: 8°, vertical: 8°
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<b>Nominal supply voltages:</b>	100 / 120 / 230 / 240 V AC $\pm$ 10%
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<b>Nominal frequency:</b>	50/60 Hz
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<b>Power draw:</b>	340 VA
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## Dimensions basic instrument

Width (including hand wheel)	413 mm
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Depth (including waste tray)	618 mm
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Height (with storage area on cover):	305 mm
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Weight (without accessories)	approx. 37 kg, approx. 81 lbs
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## Dimensions control panel

WxDxH:	121 x 166 x 50 mm
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Weight:	approx. 0.66 kg, approx. 1.45 lbs
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Wide range of accessories on request.  
Technical specification subject to change.  
Certificates: CE, c-CSA-us

Up-to-date development, production and quality control procedures certified under DIN EN ISO 9001 ensure highest quality and reliability.

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



# Leica Microsystems – the brand for outstanding products

Leica Microsystems' mission is to be the world's first-choice provider of innovative solutions to our customers' needs for vision, measurement, lithography and analysis of microstructures.

Leica, the leading brand for microscopes and scientific instruments, developed from five brand names, all with a long tradition: Wild, Leitz, Reichert, Jung and Cambridge Instruments. Yet Leica symbolizes innovation as well as tradition.

## Leica Microsystems – an international company with a strong network of customer services

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in more than 100 countries.

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### ● Microscopy Systems

Our expertise in microscopy is the basis for all our solutions for visualization, measurement and analysis of microstructures in life sciences and industry. With confocal laser technology and image analysis systems, we provide three-dimensional viewing facilities and offer new solutions for cytogenetics, pathology and materials sciences.

### ● Specimen Preparation


We provide comprehensive systems and services for clinical histo- and cytopathology applications, biomedical research and industrial quality assurance. Our product range includes instruments, systems and consumables for tissue infiltration and embedding, microtomes and cryostats as well as automated stainers and coverslippers.

### ● Medical Equipment

Innovative technologies in our surgical microscopes offer new therapeutic approaches in microsurgery. With automated instruments for ophthalmology, we enable new diagnostic methods to be applied.

### ● Semiconductor Equipment

Our automated, leading-edge measurement and inspection systems and our E-beam lithography systems make us the first choice supplier for semiconductor manufacturers all over the world.

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