



# Leica RM2235

The Manual Rotary Microtome For Outstanding Durability,  
Precision and Comfort

Living up to Life

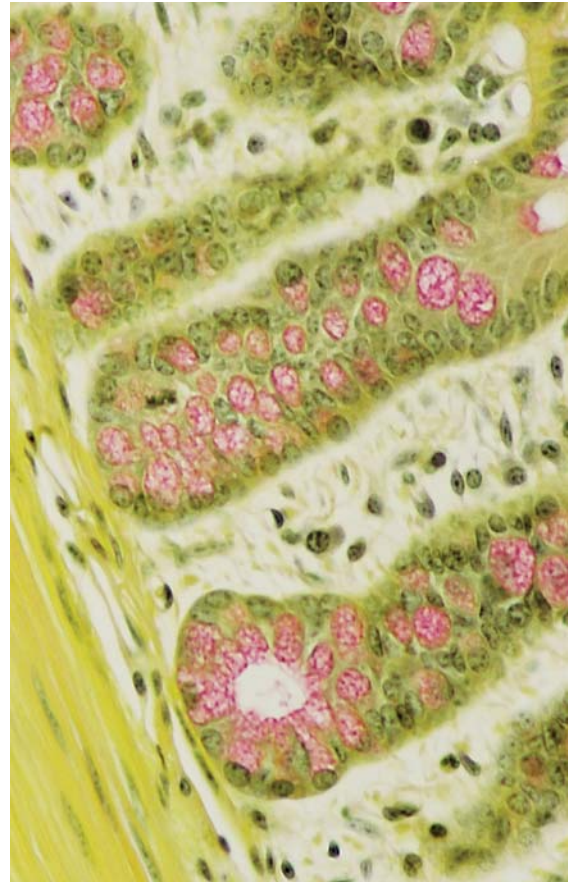
**Leica**  
MICROSYSTEMS

# As Durable as Ever, Enhanced Precision and Comfort Like Never Before: The New Leica RM2235

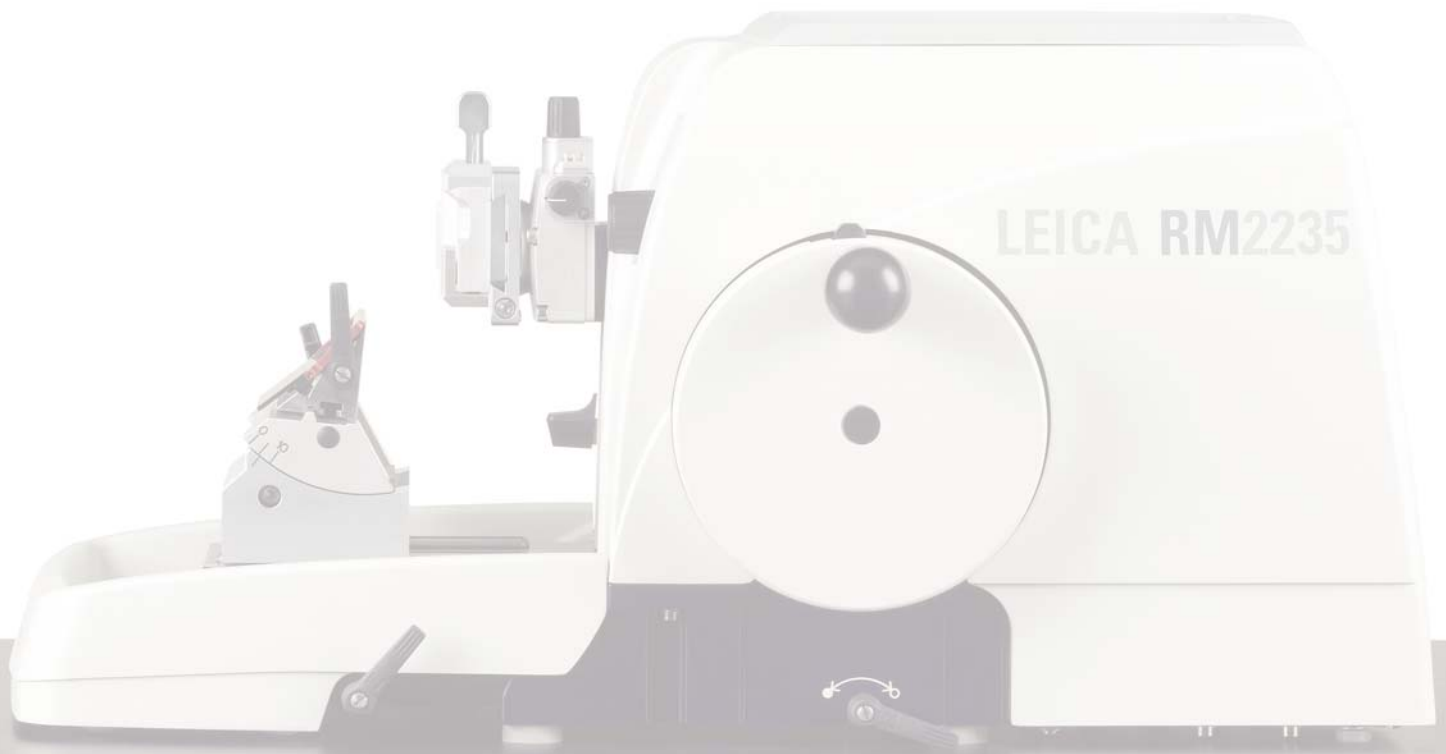
Durability is essential in a manual microtome and the Leica RM2235 can stand up to the workload requirements of even the busiest laboratories. The enhanced precision of the new accessories will add convenience to block to knife approach as well as specimen orientation.

The new Leica RM2235 manual microtome provides unique user-friendliness, achieved through numerous new features, most of them patented, which have never before been offered in this class of microtome. The Leica RM2235 combines proven technology with well thought-out ergonomic details and the highest safety standards.

Working in comfort is not a luxury but a necessity. A relaxed, ergonomic working posture is a basic prerequisite for the high levels of speed, precision, and efficiency required in modern laboratories. Day after day, the new Leica RM2235 provides comfortable functionality without compromise. The RM2235 is the instrument of choice for all clinical histology and histopathology institutions where manual microtomes are preferred over motorized units.



Indiana University Histotechnology Program



# The New Approach to Manual Sectioning

## ■ Safety during sectioning

Safety is ensured by the integrated, red finger protection guard of the knife holder E that uniquely shields the blade edge. When used correctly the integrated finger protection guard rules out potential injuries because it can even remain on the blade edge during sectioning.

## ■ Convenient storage area

An integrated storage tray\* ensures that ancillary tools are on hand at all times. Alternatively a cooling plate with thermo element can be used for cold storage of specimen blocks either on top or on either side of the microtome.

## ■ Fatigue-free operation

Ergonomics and user comfort were prime considerations for the location of the coarse feed wheel, which is positioned close to the operator. The direction of the handwheel rotation to best suit your sectioning style can be specified at the time an order is placed. The mechanical trimming function, conveniently placed next to the coarse feed wheel, eliminates the need to turn the coarse feed wheel during trimming.

## ■ Spacious, magnetized section waste tray

The spacious section waste tray reliably collects sectioning debris. It is safely held in position by magnets, yet is easily removable for emptying and cleaning.



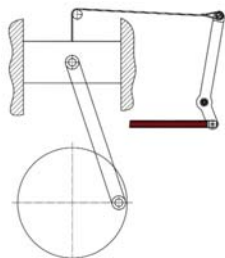
\* not supplied with basic instrument

### ■ Ergonomics and user safety

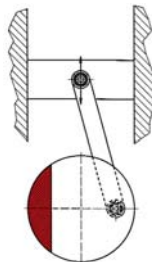
The smooth-running safety handwheel has an ergonomically shaped handle. A handwheel locking device for one-thumb operation locks the specimen head in the uppermost position, which is ideal for changing the specimen and/or blade. A second locking mechanism on the microtome base allows the object head to be locked in any position.

### ■ The patented force balancing system

The RM2235 handwheel runs exceptionally smoothly because it has no balancing weight. Instead, the patented force balancing system uses a spring to compensate the forces generated during sectioning. The result: effortless operation and uniform handwheel rotation – producing much better sectioning results.



Leica-patented:  
Spring-based force  
balancing system



Conventional:  
Handwheel with  
balancing weight



### ■ Fast sectioning without specimen orientation

For applications where specimen orientation is not needed, a non-orienting fixture for specimen clamps is available as an optional accessory. The Super Mega cassette can clamp specimens up to a size of 46 x 66 x 10 mm (W x H x D).

### ■ Precision specimen orientation with clear zero reference point

This novel orientation mechanism sets new standards of precision and is very easy to operate. Calibrated controls make it easy to adjust a specimen to an exact zero position indicated by red pins or a measurable variable on the x/y axis for re-cuts.

### ■ Lateral knife holder adjustment

The entire width of the microtome blade can be used without having to release the blade clamping mechanism. Using the entire knife edge is cost effective, especially in laboratories with high specimen throughput. Three predefined stop positions (left, center, right) correspond to the width of a standard histology cassette.

### ■ A special accessory:

#### Chilled universal cassette clamp (UCC)

The UCC is kept cold by placing ice cubes or dry ice in a special compartment, which ensures that specimen blocks remain at cold temperatures throughout the entire sectioning process.

## Well thought-out and proven:

#### ● Knife holder base

universal knife holder base fits virtually all Leica knife holder systems.

● **Universal cassette clamp for single-hand operation**  
definitely THE easiest way to clamp/remove specimens.

● **Optimized microtome base plate**  
provides maximum rigidity – thanks to the latest technology and new lightweight materials.

● **One-piece housing**  
made from specially resistant plastic, without any edges where debris could accumulate, which reduces cleaning to a minimum.

● **Fewer clamping levers**  
makes the Leica RM2235 easier to use by providing improved access to the cutting area.

Leica

# Technical Specifications

## Section thickness

- Setting range: 1 – 60  $\mu\text{m}$
- Setting values: 1 – 10  $\mu\text{m}$  in 1  $\mu\text{m}$  increments  
10 – 20  $\mu\text{m}$  in 2  $\mu\text{m}$  increments  
20 – 60  $\mu\text{m}$  in 5  $\mu\text{m}$  increments

**Section thickness indication:** viewing window

**Coarse feed:** manual via coarse feed wheel

**Trim settings:** 10, 30  $\mu\text{m}$

**Total horizontal specimen feed:** approx. 30 mm

**Vertical stroke:** 70 mm

**Specimen retraction:** approx. 60  $\mu\text{m}$ , can be deactivated

**Maximum specimen size (W x H x D):** 50 x 66 x 30 mm

**Specimen orientation:** horizontal: 8°  
vertical: 8°

## Dimensions

- Width (including handwheel): 413 mm (16.26 in.)
- Depth (including section waste tray): 618 mm (24.33 in.)
- Height (with storage tray installed on housing): 305 mm (12.01 in.)
- Weight (without accessories): approx. 34 kg, 75 lbs

A wide range of accessories is available upon request.  
Technical specifications are subject to change without notice.  
Certifications: CE, c-CSA-us

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

## The Leica RM2235 features at a glance:

- Precision specimen orientation with zero point reference
- Compact, ergonomic overall design
- User safety integrated into all aspects of the instrument
- Ergonomically located coarse feed wheel for fatigue-free operation
- Extremely smooth-running handwheel due to patented force compensation system
- Two safety locking mechanisms on the handwheel
- Precise knife holder lateral adjustment ensures that the entire width of the blade edge can be used
- Cooling plate (optional)
- Single-handed operation specimen clamps
- Universal knife holder base for different knife holders
- Disposable blade holder with integrated safety finger protection guard
- Spacious magnetized section waste tray
- One-piece, easy-to-clean housing



# “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™ 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.**

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