



# Leica RM2235

The Manual Rotary Microtome  
For Outstanding Durability, Precision and Comfort

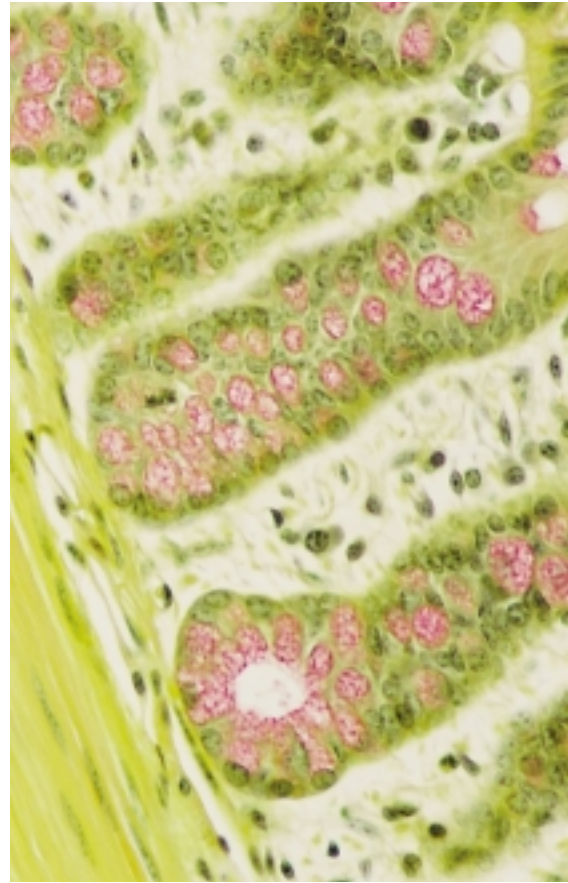
*Leica*  
MICROSYSTEMS

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

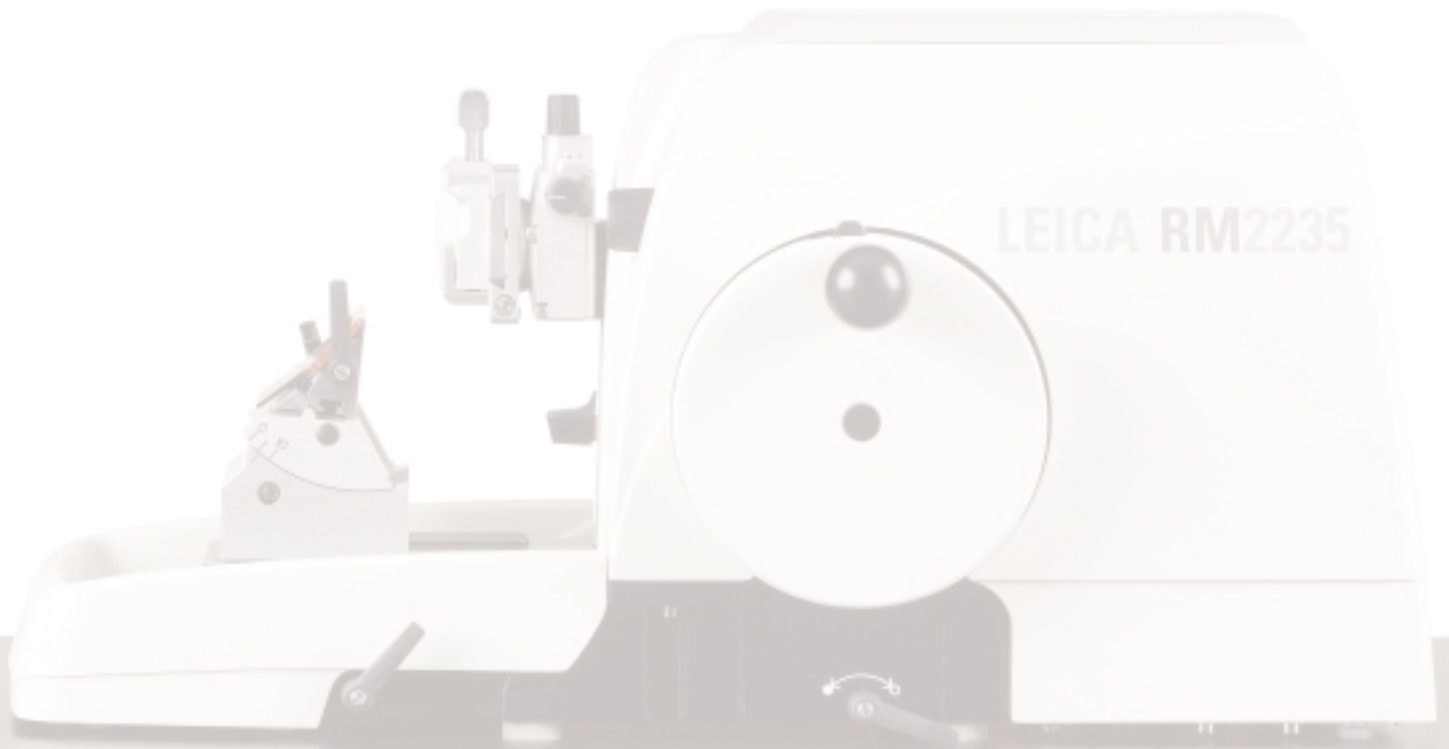
Durability is essential in a manual microtome and the Leica RM2235 can stand up to the workload requirements of even the busiest laboratories. The enhanced precision of the new accessories will add convenience to block to knife approach as well as specimen orientation.

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.



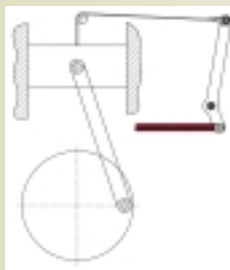
\* not supplied with basic instrument

### ■ Ergonomics and user safety

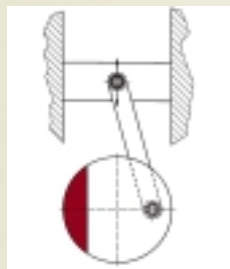
The smooth-running safety handwheel has an ergonomically shaped handle. A handwheel locking device for one-thumb operation locks the specimen head in the uppermost position, which is ideal for changing the specimen and/or blade. A second locking mechanism on the microtome base allows the object head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



# 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.

The companies of the Leica Microsystems Group operate internationally in four business segments, where we rank with the market leaders.

## ● 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.


## ● 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.

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

Australia:	Gladesville	Tel. +61 2 9879 9700	Fax +61 2 9817 8358
Austria:	Vienna	Tel. +43 1 486 80 50 0	Fax +43 1 486 80 50 30
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:	Rueil-Malmaison	Tel. +33 1 473 285 85	Fax +33 1 473 285 86
Germany:	Bensheim	Tel. +49 6251 136 0	Fax +49 6251 136 155
Italy:	Milan	Tel. +39 0257 486.1	Fax +39 0257 40 3273
Japan:	Tokyo	Tel. +81 3 5435 9600	Fax +81 3 5435 9615
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:	Sollentuna	Tel. +46 8 625 45 45	Fax +46 8 625 45 10
Switzerland:	Glattbrugg	Tel. +41 1 809 34 34	Fax +41 1 809 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 of Leica Microsystems  
in more than 100 countries.

 [www.histo-solutions.com](http://www.histo-solutions.com)

Leica Microsystems Inc.  
2345 Waukegan Road  
Bannockburn, IL 60015  
[www.leica-microsystems.com](http://www.leica-microsystems.com)

Telephone 847-405-0123  
Toll Free 800-248-0123  
Fax 847-405-0164  
In Canada call 800-205-3422

  
MICROSYSTEMS