# Leica DM E

## Compound Microscope System

Great discoveries begin with vision.

Leica
MICROSYSTEMS

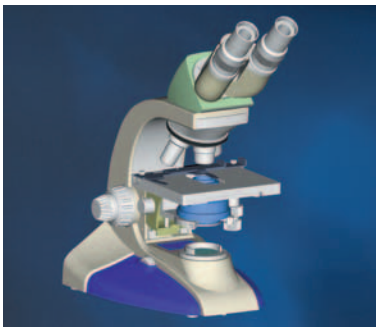
# Systems. Solutions. Leica.

**The Vision for the Next Generation**

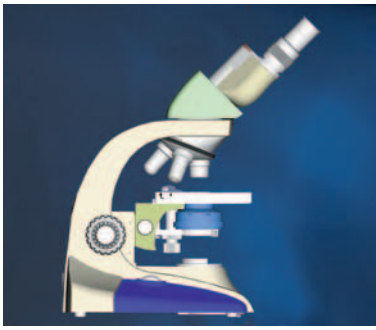
With Leica Microsystems, designing microscopes all about vision. It's about the visionary engineers who work together with educators, scientists, and microscopists around the world to develop a more advanced, user-friendly, high-performance compound microscope. And it's about creating the best possible vision for microscope users, so they can see, learn and discover new worlds under the best conditions. The Leica DM E seamlessly combines these visions.

Solidly built upon a trusted design that Leica users have come to expect, the Leica DM E introduces exclusive features that make microscopic investigations easier and more accurate; features like the high efficiency, long-life illumination system that brings bright, intense light to specimens; or the voltage sensing power supply that provides consistent voltage regardless of fluctuation. Leica's advanced ergonomic design brings components like these - and many more - into one system to provide comfortable, relaxed usage and easy specimen manipulation.

Leica Microsystems builds this 21st century microscope upon a company heritage dating back to 1847, as the first company to mass produce a modern microscope. Since then Leica has consistently remained at the forefront of research and development. Leica's visionary "system solution" philosophy treats each customer as an individual with specific application, research, and performance requirements.

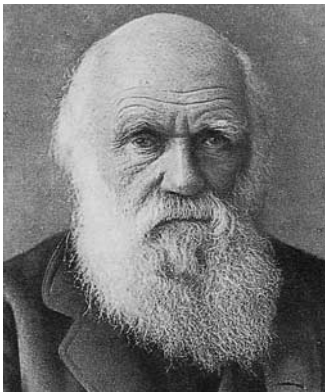


Precision engineering



Precision design

**Great discoveries begin with vision.**



## Charles Darwin
1809–1882

An English naturalist, Darwin developed the theory of natural selection, which suggests that the origin and diversification of species result from the gradual accumulation of individual adaptations. His visionary studies led to the theory of evolution.


LEICA DME
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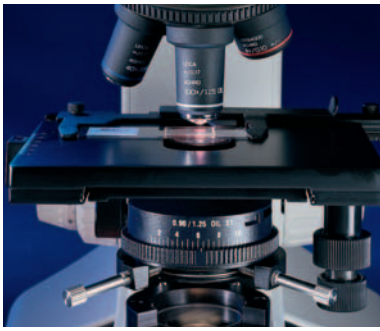
# Superior Illumination

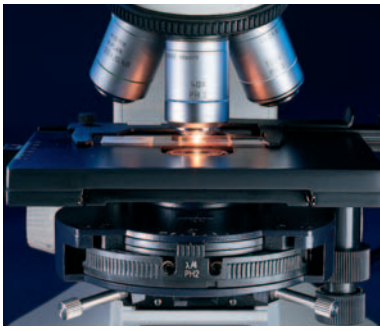
**The vision to illuminate brightly and clearly.**

To study, examine, and discover, Leica provides the illumination to see clearly. The Leica DM E's illumination system is efficiently designed for high light intensity and features:

- A voltage-sensing power supply optimizes light intensity regardless of voltage fluctuations and is designed to meet international safety standards to facilitate usage anywhere in the world
- Illumination is easily upgradeable with interchangeable 20W and 35W lamps
- The DM E's lamp life is 20 times longer than other microscopes, which saves money and time in replacing bulbs over the life of the microscope
- An easily-removed diffuser can provide more than 400% additional light, which makes the DM E the brightest in its class
- The system's wide dynamic range provides comfortable viewing for a variety of applications, including darkfield, brightfield, polarization, phase contrast, and photomicrography
- An illuminated intensity control system signals users when the microscope has been left on, which saves lamp life
- An angled lamp door prevents the door from accidentally breaking
- Koehler illumination (optional) allows exacting techniques such as phase contrast and photomicrography



Critical or Koehler illumination



Phase contrast

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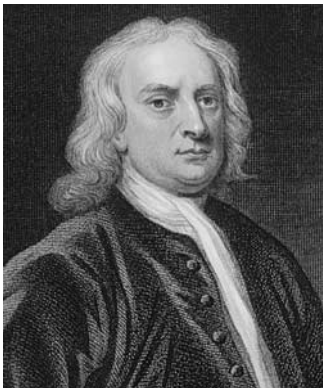
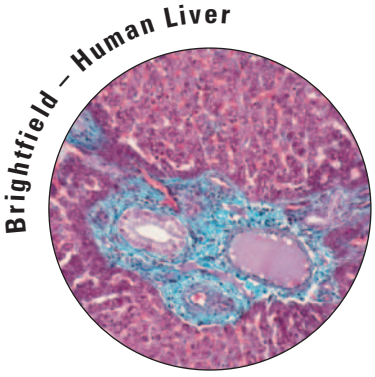
**Great discoveries begin with vision.**



## Sir Isaac Newton
1642–1727

Considered by many the greatest scientist of all time, Newton made great progress in the study of light, discovering that white light is composed of every color in the spectrum.

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# Maximum Image Quality

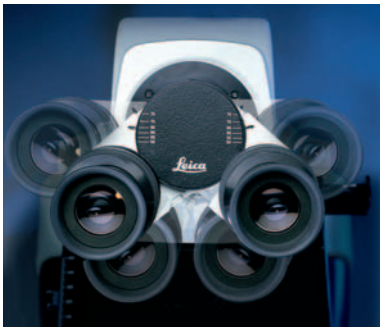
**The vision to incorporate superior optics**

The Leica DM E's high-performance optical system is truly unique. Most predominant is the infinity-corrected optical system, which Leica pioneered. Infinity optics provide brilliant, high contrast imaging quality, complete optical compatibility with higher-performance Leica microscopes, and the option to add accessories without affecting the microscope's magnification.

The microscope's binocular and trinocular viewing bodies feature a Seidentopf design, which allows adjustment for interpupilary distance without refocusing. Standard C achromatic objectives provide high quality contrast, color, and flatness at an economical price. Optical features also include:

- A combination of precision-engineered objectives and nosepiece, which provide unmatched parfocality and parcentration from objective to objective
- Standard widefield 10x eyepiece for the most comfortable field of view
- Eyepieces accommodate 21mm reticles for a variety of measuring and counting applications
- 10x eyepiece is available with folding rubber eyeguards and pointer; 15x eyepiece also available
- 4x, 10x, 40x and 100x objective magnifications are standard
- Higher performance optics are also available
- Standard pre-centered condenser eliminates improper microscope set-up
- 1.25 NA condenser aperture allows oil immersion applications

Upgradeable to higher level optics



Adjustable for different users

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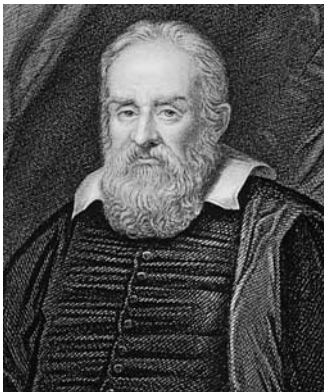
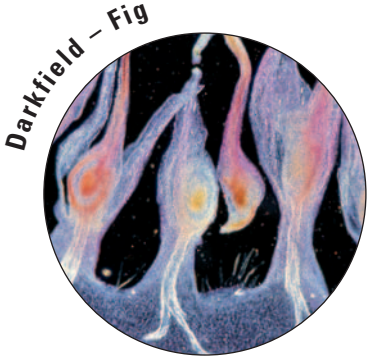
**Great discoveries begin with vision.**



## Galileo Galilei
1564–1642

A mathematician, scientist, and astronomer, Galileo's vision led him to adapt a telescope to view small objects. He is credited with inventing the first microscope.

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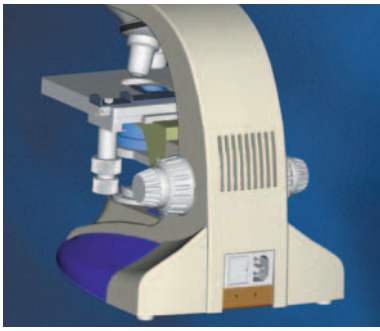
# Designed for Durability

**The vision to create durable components**

From top to bottom, the Leica DM E is built to last and is also built for high-performance, with the best quality materials going into every component. All-glass optics provide sharp, high-contrast images; brass core focus controls are comfortable and responsive; and a cast aluminum stand minimizes vibration for durability and fatigue-free, stable operation. Other unique design elements include:

- The ball bearing and spring-lock design provides self-adjusting tension that prevents stage drift for the life of the microscope
- Tamper-proof objectives reduce replacement cost
- Rear-facing nosepiece allows easy access to the specimen and prevents collision with objectives
- Factory-set focus stop prevents slide breakage
- Built-in blue filter prevents filter loss
- Spring-loaded high-magnification objectives prevent slides from breaking
- 360° rotatable viewing body with constant focus facilitates microscope sharing and storage
- Multi-function cord wrap provides convenient storage for the electrical cord, and locks cord into place



Engineered for durability

Cord wrap

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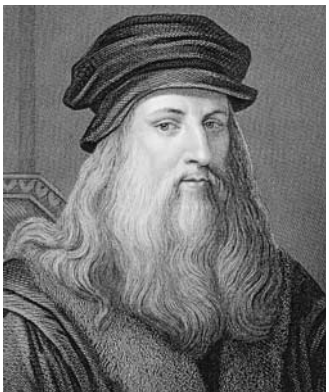
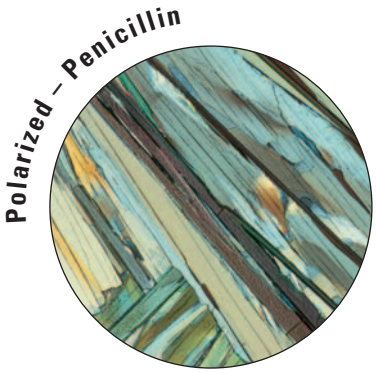
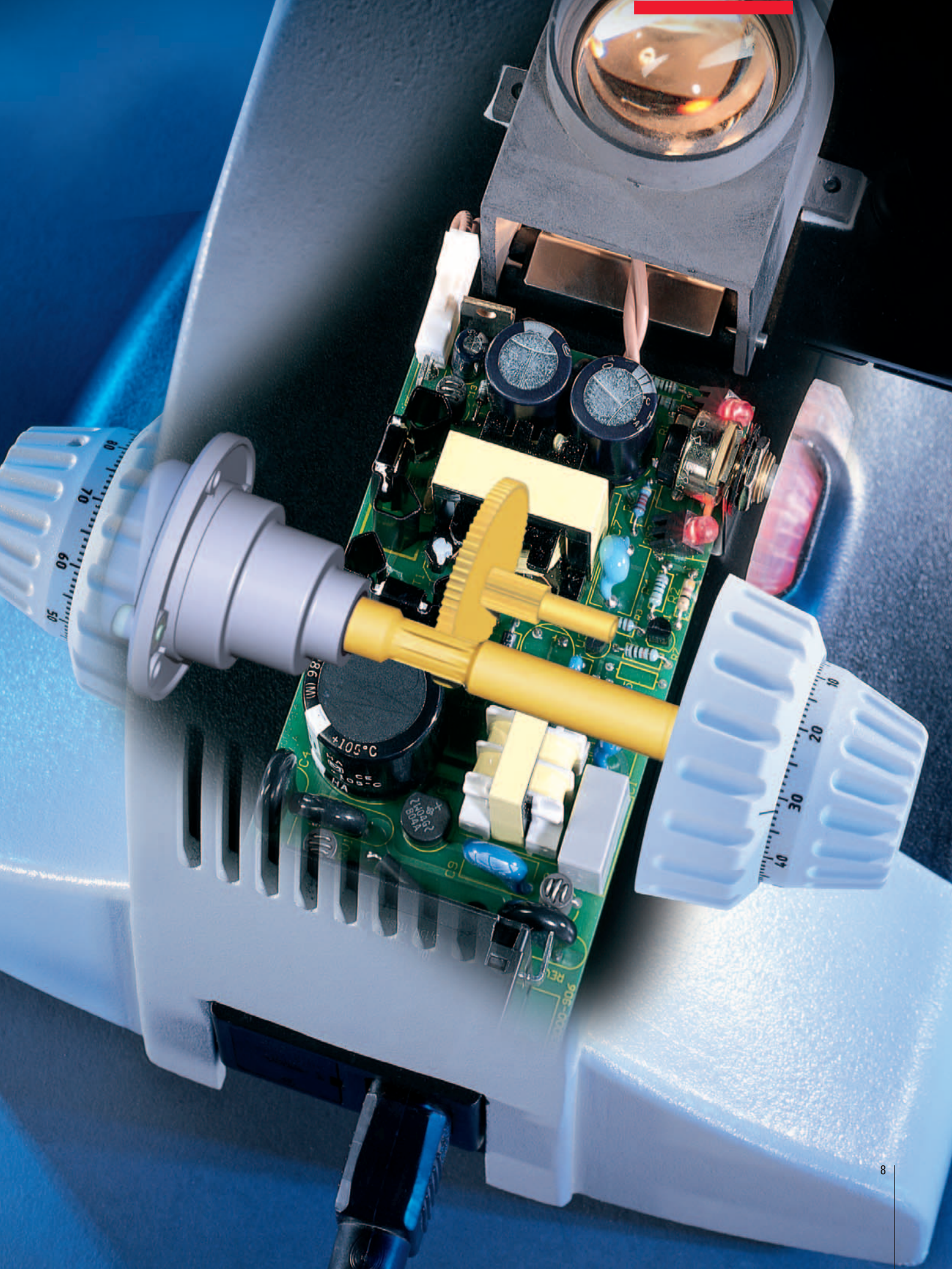
**Great discoveries begin with vision.**



## Leonardo da Vinci
1452–1519

A world renowned artist and scientist, da Vinci's visionary observations and sketches pioneered the study of human anatomy and paved the way for future discoveries in the medical field.





# Comfortable Operation

**The vision to provide comfort and convenience**

Leica has developed an advanced ergonomic design that includes easy-to-reach controls and a compact size. The DM E also allows easy manipulation of specimens and cuts down on required desk and storage space. The focus and stage systems offer the ultimate in ease of use and long-life performance. The DM Series focus system with its maintenance-free design, is one of the highlights of the DM E microscope.
Other features include:

- Durable, solid brass core focus knobs provide inertia for fatigue-free focusing
- Rotatable achromat objective sleeves; the magnification always faces forward
- Ergonomic 45° or 30° viewing angle provides comfort
- Rotatable viewing bodies give flexible alignment of the viewing position and save space on storage
- Fine and coarse focus drives and stage drive are set low so that the arms and hands rest comfortably to minimize wrist movement
- Left- or right-handed mechanical stages
- Polymer handrests provide more comfort for the arm and hand than the cool surrounding metal; dark color throughout hides scratches and dirt
- A calibrated stage provides easy recording of coordinates
- Removable stage fingers accommodate different size slides

Ergonomically designed

Multi viewing systems

**The vision to include all the extras**

The Leica DM E's additional features provide a harmonized microscope system. The modular design provides versatility and convenience with components for different applications. The DM E is completely upgradeable and compatible with a wide range of Leica DM accessories. The microscope's stylish design is inviting and aesthetically pleasing.

Other features that complement the Leica DM E include:

- Polarization, darkfield, and phase contrast accessories
- Video, digital, and photomicrography accessories for documentation and classroom viewing
- Multi-viewing accessories for shared viewing and higher education teaching

Leica video and digital solutions

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# 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 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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|---|---|---|---|
| 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 47 32 85 85 | Fax +33 1 47 32 85 86 |
| Germany: | Bensheim | Tel. +49 6251 136 0 | Fax +49 6251 136 155 |
| Italy: | Milan | Tel. +39 0257 486.1 | Fax +39 0257 40 3475 |
| Japan: | Tokyo | Tel. + 81 3 5421 2800 | Fax +81 3 5421 2896 |
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| 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 |
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and representatives of Leica Microsystems in more than 100 countries.

The companies of the Leica Microsystems Group operate internationally in three 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.



Winner 2005

Innovationspreis der deutschen Wirtschaft
The World's First Innovation Award

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