



Leica EM CPD030

Critical Point Dryer
Controlled Specimen Drying

Living up to Life

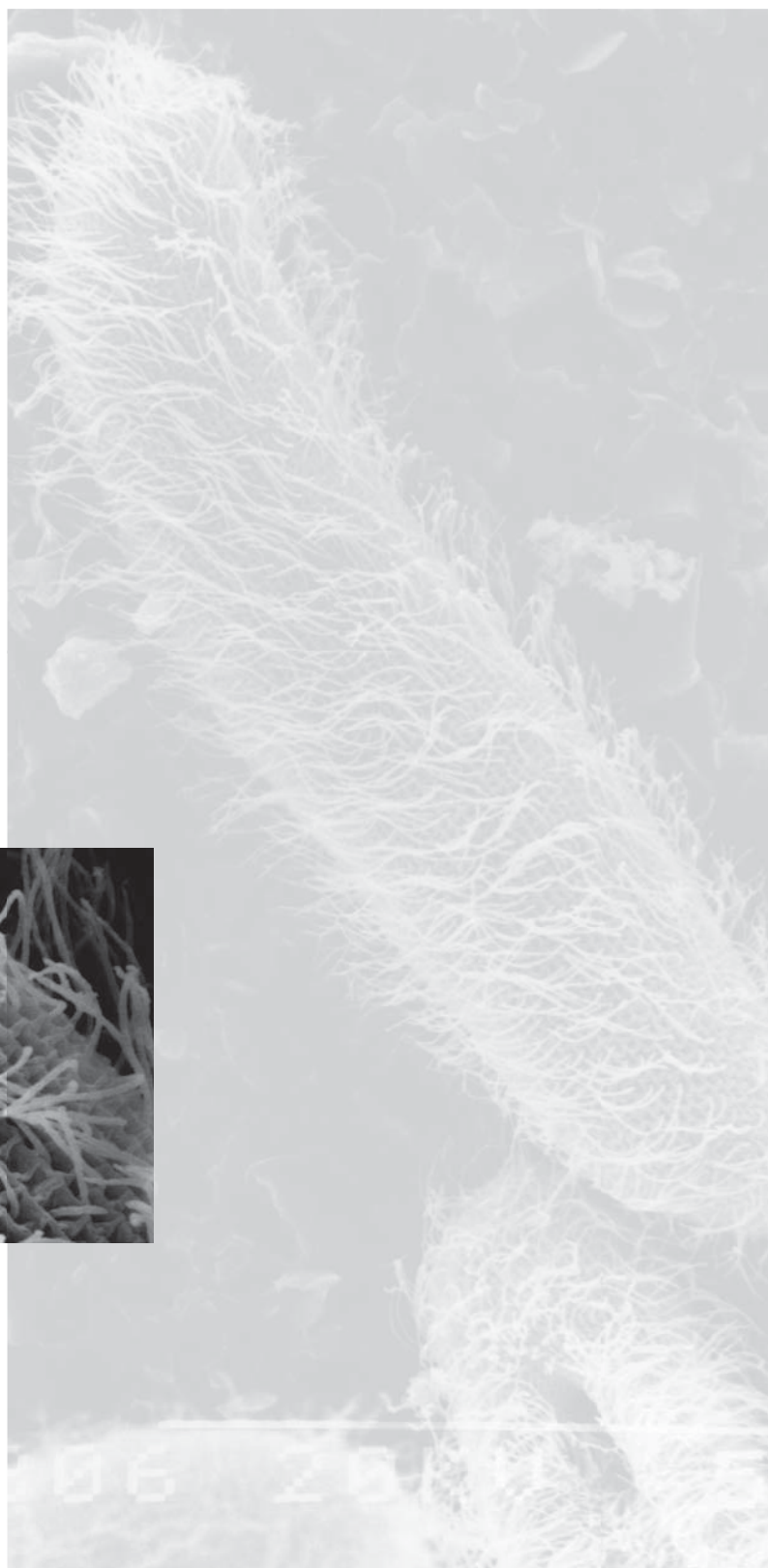
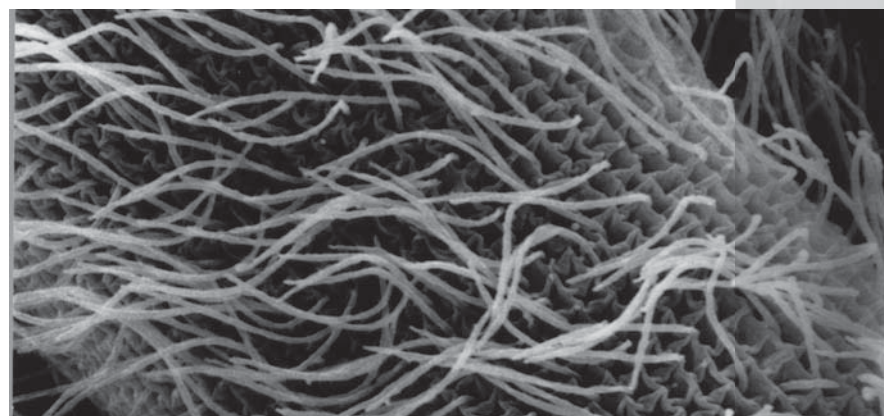
Critical Point Drying

Critical point drying is an efficient method for drying delicate samples. It preserves the surface structure of a specimen which could otherwise be damaged due to surface tension when changing from the liquid to gaseous state.

The Leica EM CPD030 gently dries specimens of a biological nature such as pollen, tissue, plants, insects, etc. as well as industrial samples for MEMS (Micro Electro Mechanical Systems) applications.

Before drying, many biological samples are commonly prepared through fixation and dehydration. The Leica EM TP is an ideal instrument for such methods. It provides safe and automatic processing for follow-on critical point drying.

After drying, the SEM specimens are coated with a metal such as gold, platinum or palladium to make their surfaces electrically conductive. Leica offers a range of high quality coating systems such as the EM SCD005, EM SCD050, EM SCD500 and the EM MED020 best suited for these processes.



Key Features

- Vapor Compression Refrigeration System for low CO₂ consumption
- Top loading system with safety screw-on cover, ideal for fast and easy specimen insertion
- Controlled specimen drying for best results
- Approved specimen pressure chamber guarantees absolutely safe operation
- Excellent visibility of the immersed specimen during the CP process both from above and from the front
- Adjustable heating parameters for gentle specimen treatment
- Integrated automatic cooling/heating system
- Gas flow measuring device for precise release of gaseous CO₂ after critical point drying
- Magnetic stirrer for better and faster mixing of transitional fluids
- Conveniently arranged control and display elements
- Space saving design with integrated control and supply units
- Wide selection of accessories



Accessories

① Specimen transfer container

For transferring specimens immersed in transitional fluid, such as acetone or ethanol, to the pressure chamber of the critical point dryer. The container has a bottom opening mechanism for the CO₂ exchange process.



② Specimen baskets (10 mesh/cm²)

Five baskets with cover designed to fit in the specimen transfer container for the subsequent critical point drying process.



③ Specimen baskets (20 mesh/cm²)

Wire mesh specimen basket with a screw-on cover designed to fit the cover slip holding basket for sample transfer.



④ Universal specimen container

Specimen container with nine numbered chambers ideal for routine work with a large number of different samples. For small specimens, wire netting can be replaced with filter gauze or filter paper.



⑤ Cover slip container

Specimen container for cover slips and 20 mesh baskets for transferring and processing specimens immersed in transitional fluid to the pressure chamber of the critical point dryer. The container has a top opening mechanism for the CO₂ exchange process.



⑥ Holder for cover slips

Cover slip holder with inserts which can be easily integrated into the cover slip holding basket for processing.



⑦ Holder for grids

Six slotted specimen holder for grids. Ideal for drying specimens applied to film-coated grids.



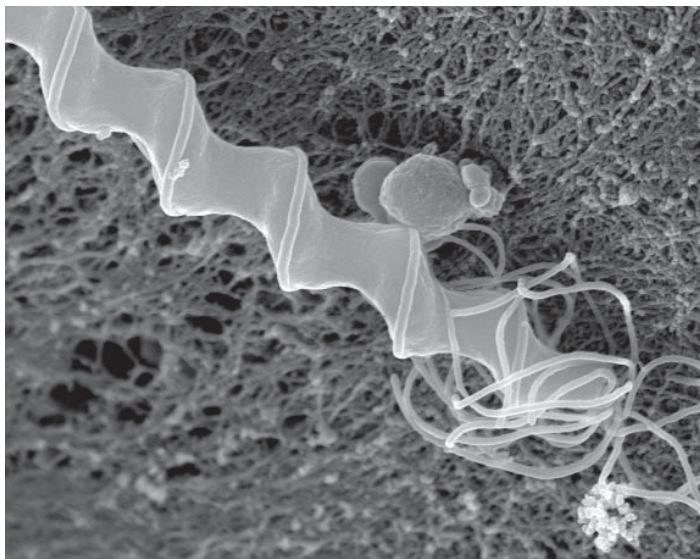
⑧ Holder for filter discs

Specimen holder for six filter discs. Ideal for small specimens such as bacteria, viruses, microorganisms, etc.

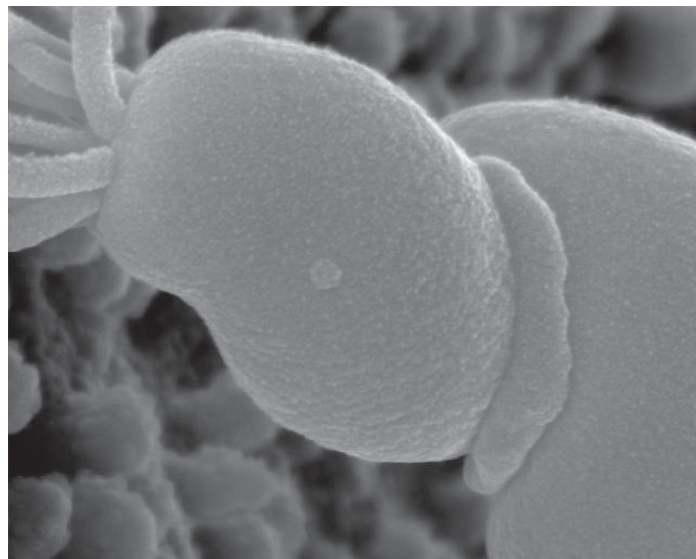


Gentle Specimen Drying

of biological specimens...

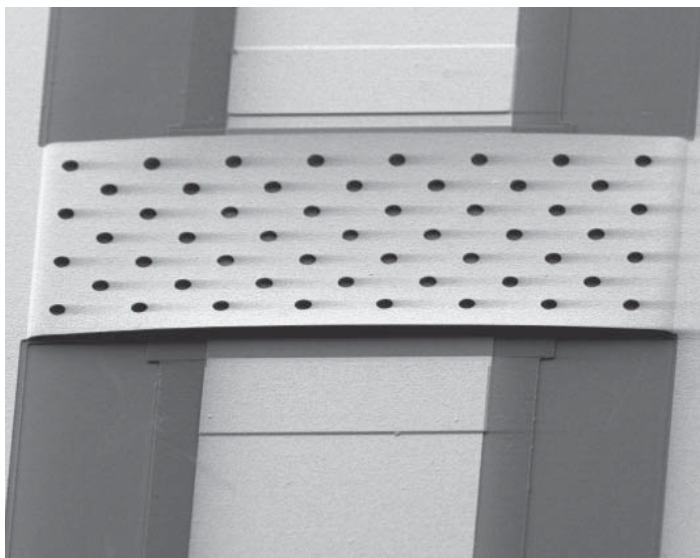


Biopsy of dog gastric mucosa with *Helicobacter salomonis*.
Courtesy of Prof. M. H. Stoffel, University of Bern

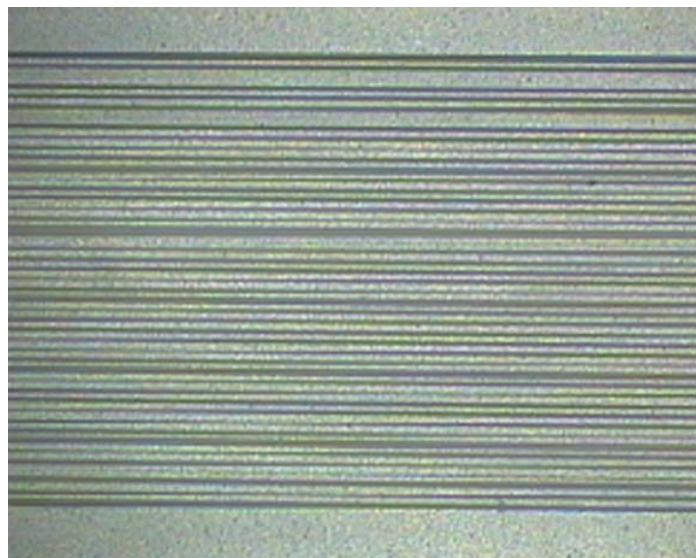


Biopsy of dog gastric mucosa with *Helicobacter bizzozeronii*.
Courtesy of Prof. M. H. Stoffel, University of Bern

... and samples for industrial processes.



Microwave switch



Lamella of Si-wafer

“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.**

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:	Rueil-Malmaison	Tel. +33 1 47 32 85 85	Fax +33 1 47 32 85 86
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