

Leica EM GP

Grid Plunger

Automatic Plunge Freezing with Bare Grid Technique

Living up to Life

Leica
MICROSYSTEMS

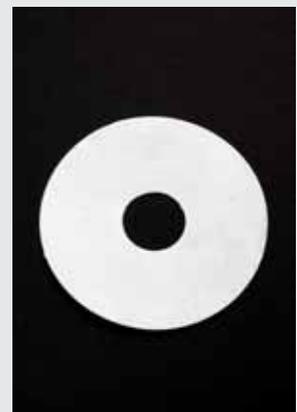
Leica EM GP Plunge Freezer

The New Leica EM GP Plunge Freezer has been designed for all EM laboratories with a need to view vitrified samples in the cryo-TEM, including **biological research, virology, protein crystallography, pharmaceutical research and testing, cosmetic companies and industrial laboratories:**

to prepare samples as diverse as viruses and macromolecules to paint, for vitreous freezing of solutions, suspensions and emulsions in both aqueous and inorganic solvents.

Comfortable and ergonomic observation

- Complete procedure can be viewed via a stereomicroscope for controlled observation of all processes
- LED illumination into the chamber and down to the Dewar enhances observation



Observation



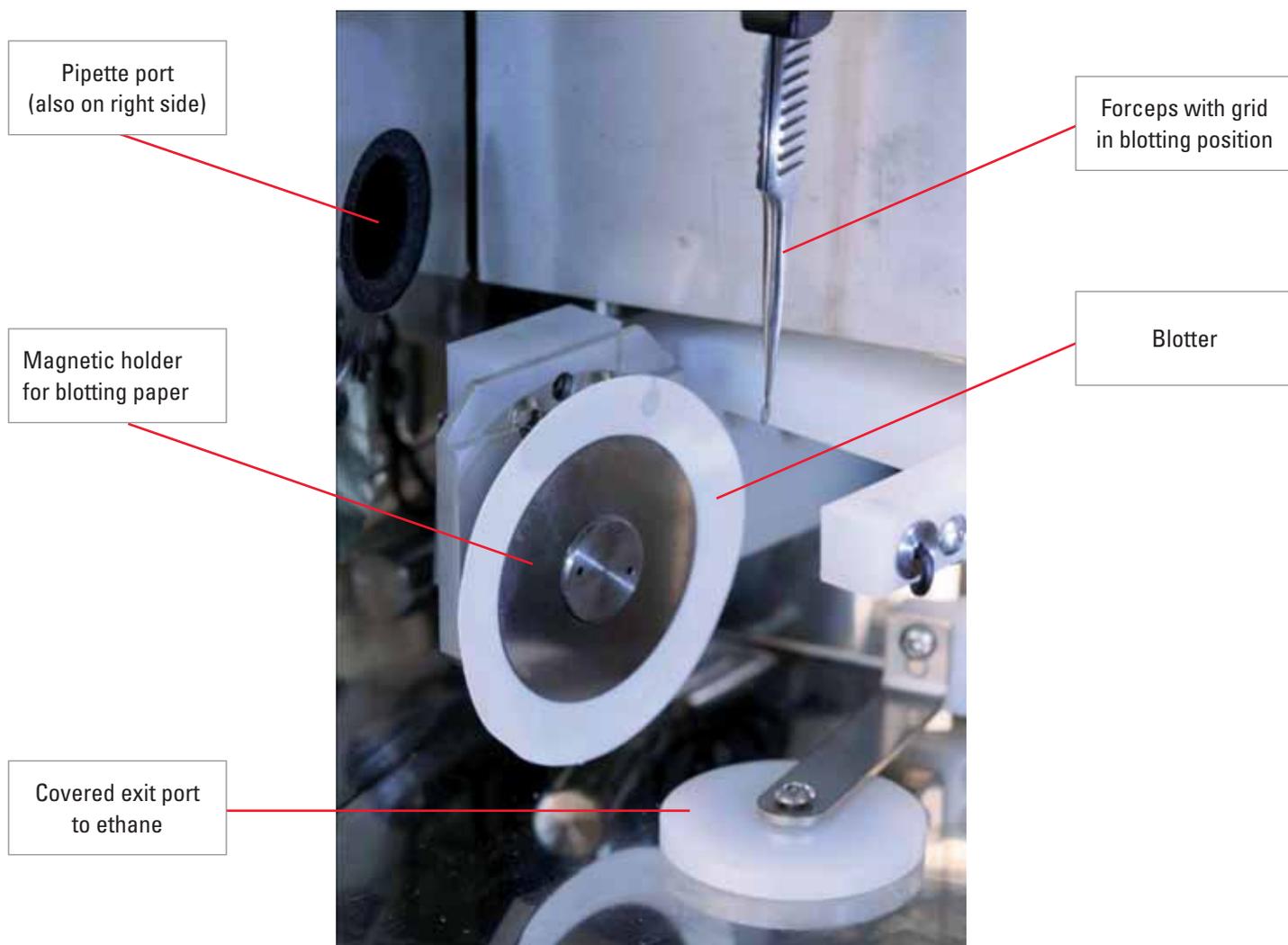
Leica Design by Werner Hölbl

Preparation



Automatic or manual preparation

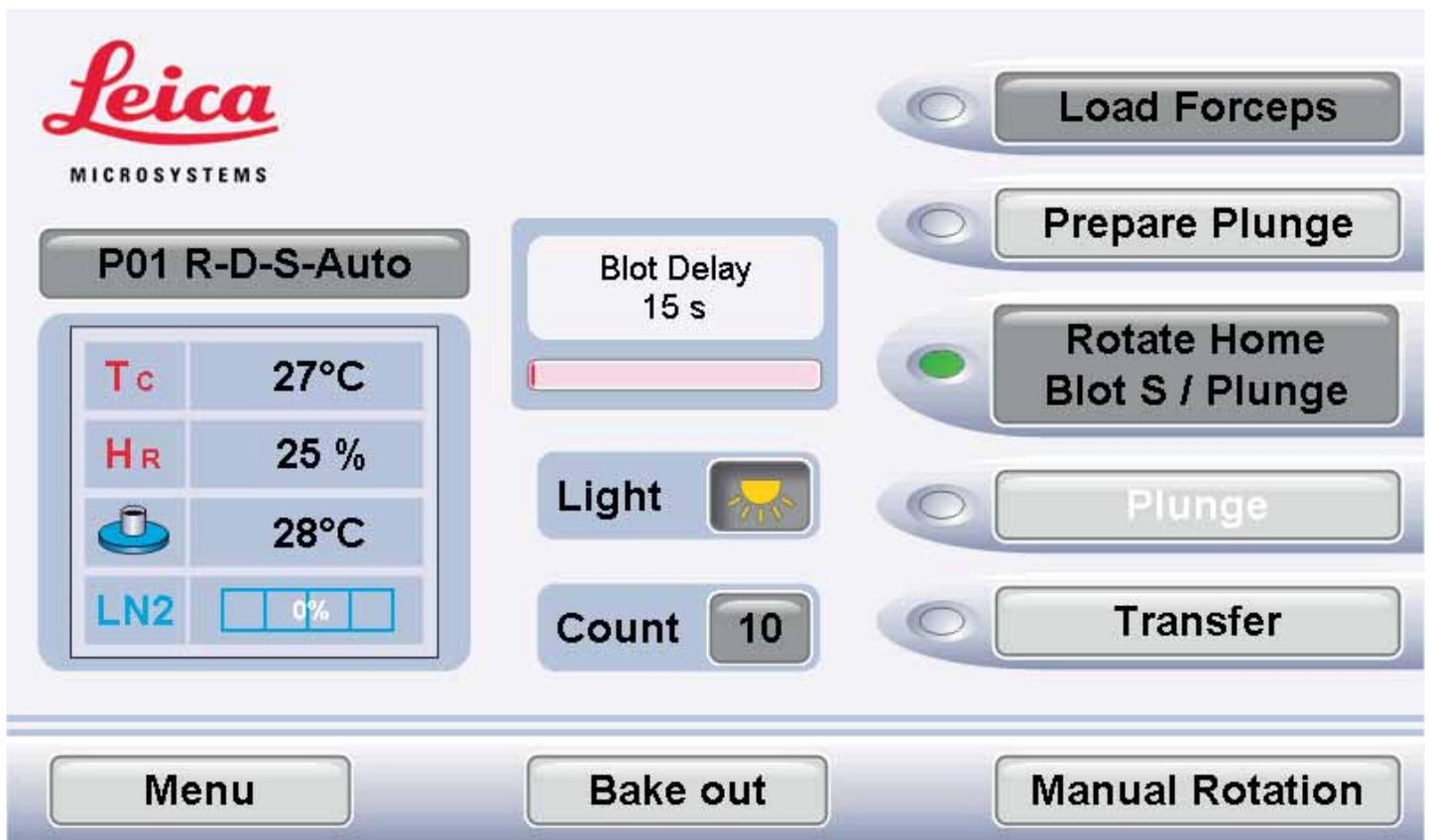
- The Leica EM GP plunge freezes samples into liquid ethane after removing excess fluid by automatic blotting. This is the **bare grid technique**.
- Prior to freezing the sample is maintained in a temperature and humidity controlled environmental chamber, adjustable between +4° and +60°C and room humidity to 99 %.
- Grids can be blotted automatically or manually if desired
- Single sided blotting prevents damage to films
- Manual (motorised) or automatic (programmed) 180° grid rotation allows blotting from either side of the grid
- Start of the process can be initiated via touch screen or footswitch



Operation

Easy Operation

- Operation is via touch screen control with all adjustable parameters visible
- Programme library is available with storage capabilities for all working parameters including temperature, humidity, blotting time, drain time, count down time, grid rotation and grid transfer position,
- For safety, an alarm signals when either the secondary cryogen is too warm or the LN₂ level is too low
- At the end of a run the instrument has a bake-out cycle for both the environmental chamber and Dewar
- Optional trolley for increased mobility



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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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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

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