



# Leica EM GP

## **Grid Plunger**

Automatic Plunge Freezing with Bare Grid Technique

Living up to Life

*Leica*  
MICROSYSTEMS

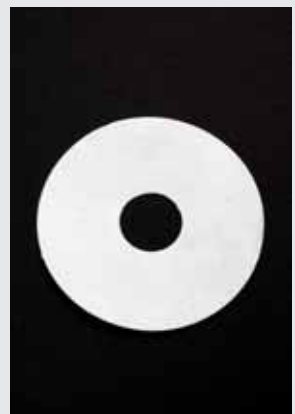
# Leica EM GP Plunge Freezer

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



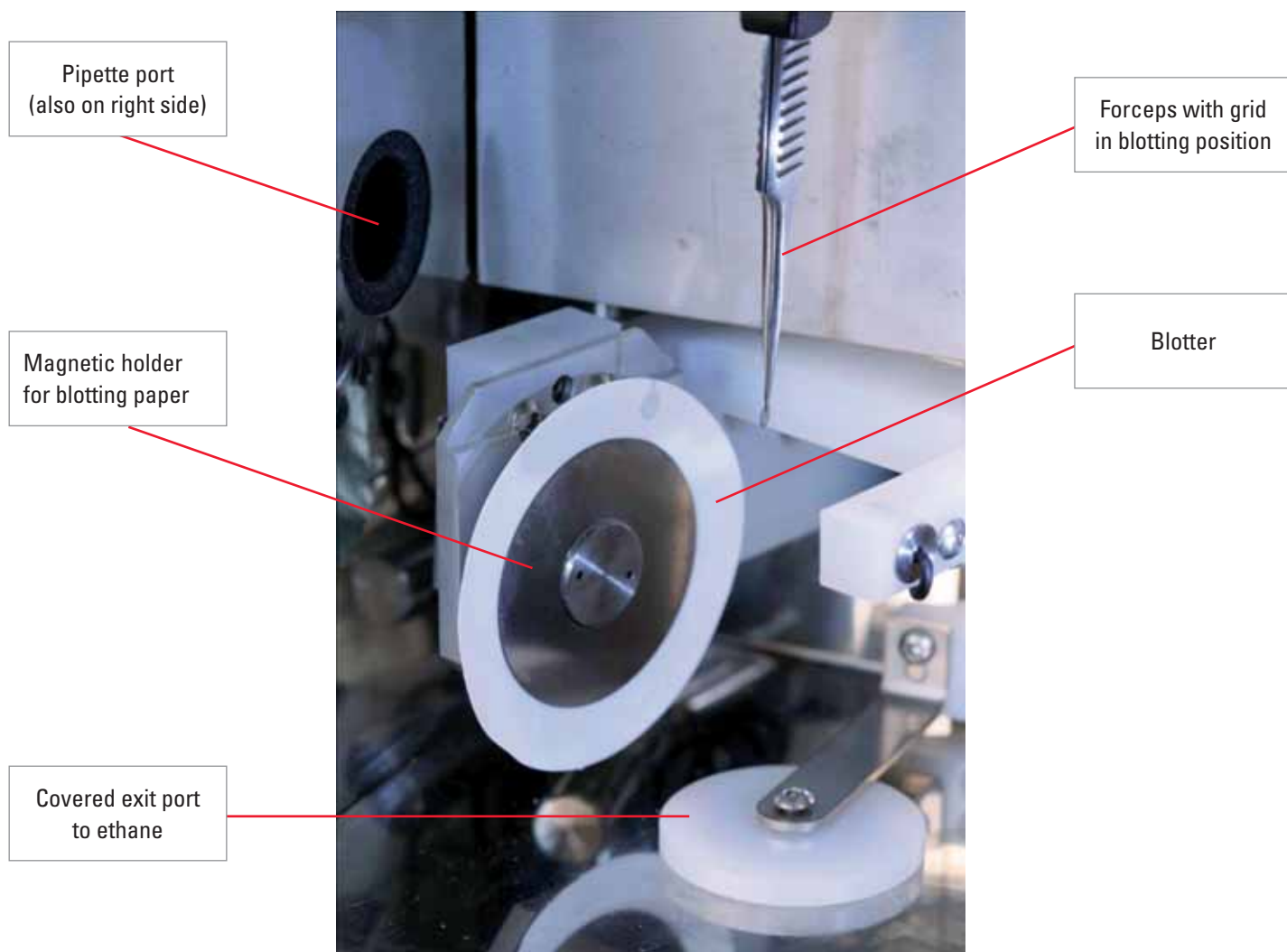
Leica Design by Werner Hölbl

# Preparation



## Automatic or manual preparation

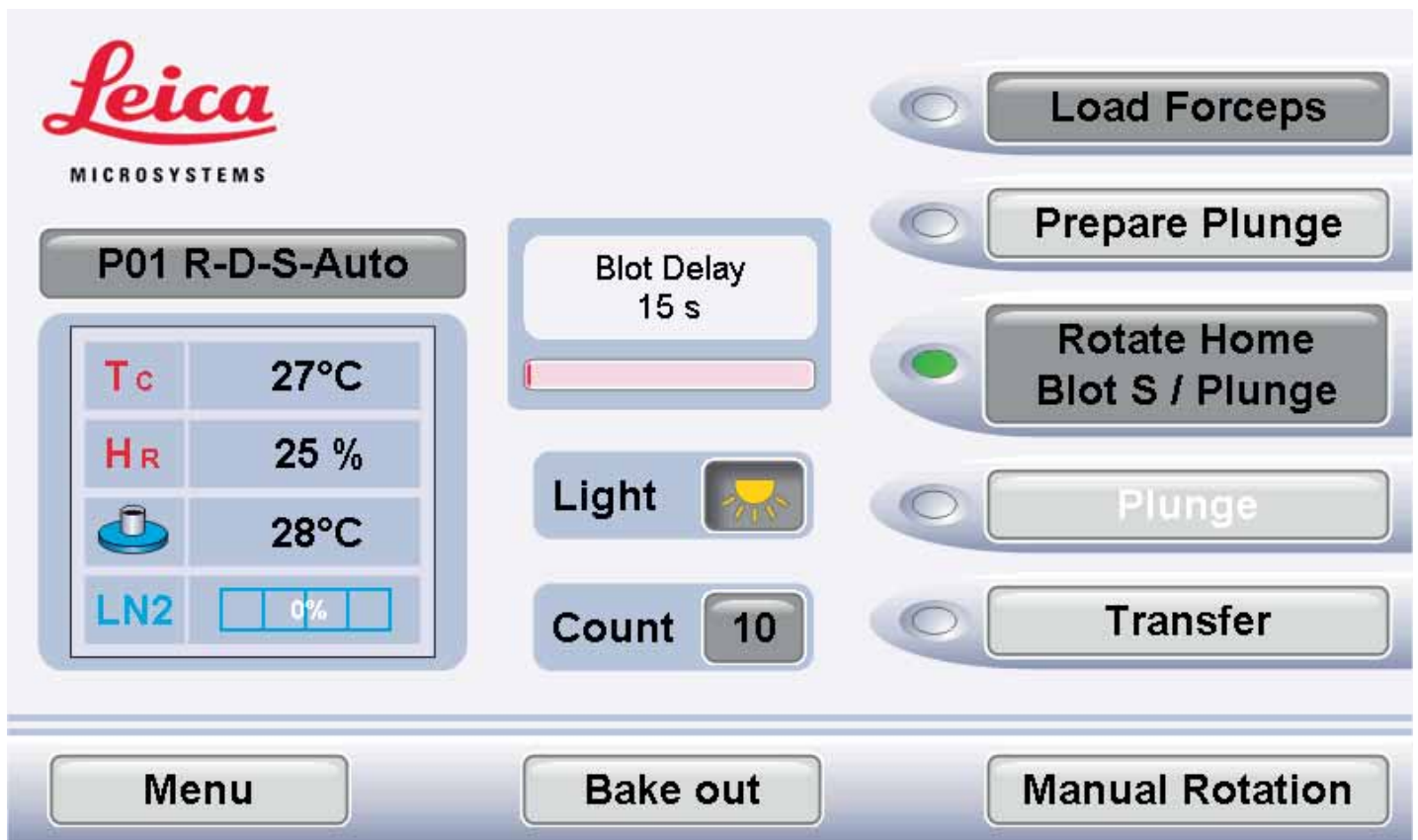
- The Leica EM GP plunge freezes samples into liquid ethane after removing excess fluid by automatic blotting. This is the **bare grid technique**.
- Prior to freezing the sample is maintained in a temperature and humidity controlled environmental chamber, adjustable between +4° and +60°C and room humidity 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 LN<sub>2</sub> 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



“With the user, for the user”

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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.

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## • 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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