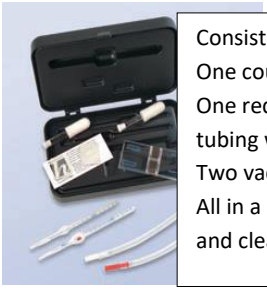
# HAEMACYTOMETERS, COUNTING CHAMBER AND SPECIALIST SLIDES

**Introduction**

Carrying out a cell count is an exacting task. The most essential element in ensuring that the count is accurate is to have a counting chamber and cover slip that conforms to the highest standard of dimensional accuracy. Without this the result can be unreliable. LO-Laboroptik's haemacytometers comply rigidly with DIN 12 847 Standard , which sets down in precise detail the specification of the counting chambers, cover glasses, and dilution pipettes. With our decades of manufacturing experience, all our counting chambers and slides are manufactured to strict quality controls and are individually checked, packed and boxed to ensure the highest levels of performance. We carry a range of Haemacytometer rulings, as well as specialist chambers such as the Dunn Chemotaxis, most of which are available ex-stock. Haemacytometers are available as sets, with pipettes and cover glasses or as individual items, supplied packaged with just the cover glasses. Single cell or Double cell chambers are available for some of the rulings and the Haemacytometers are generally available with or without metallizing.

**Haemacytometers sets**

**Counting chambers**



Consist of:
One counting chamber Two cover glasses
One red cell and one white cell pipette with tubing with mouthpieces
Two vacuum bulb pipette holders
All in a plastic case with instructions on use and cleaning

Consists of:
One counting chamber as specified.Two cover glasses



## Accuracy to DIN12 847

The following points illustrate the very high demands of scientific accuracy imposed by the DIN 12 847 standard
a) Cell depth over ruled areas must be accurate to ± 2%.
b) Cover glass support platforms must be ground and polished optically flat and co-planar with ruled area.
c) Gap between cover glass and platform does not vary from the stated depth by more than ± 2%.

## How are our chambers constructed?

The Cell Counting Chamber is made from a single piece of thermal and shock-resistant glass. An H-shaped moat forms either one or two counting areas, or plateau. Each plateau features an etched grid or ruling. The ruled surface is either 0.1mm or 0.2mm below the cover glass limiting the volume of $1mm^2$ of blood or fluid to $0.1mm^3$ or $0.2mm^3$ respectively. Contact of the flat, polished cover glass surfaces with the cover glass supports produces an exact volume of fluid over the counting area. The difference in surface tension characteristics between the polished surface on the chamber and the cover glass assures smooth capillarity for precise loading and even cell distribution.

## Metallised coating (Bright-line)

The advantages of a counting chamber with a metallised central platform have been proved over many years. Unlike an ordinary chamber on which lines are ruled directly on glass, the lines of a metallised chamber are ruled through a semi-transparent film of metal. Under the microscope the lines show up bright against a darker, neutral grey background and by shifting the contrast the grid can be viewed as either light or dark. There are other advantages with a metallised chamber. Filling is easier, the blood cells being evenly distributed and clearly defined against the darker background. Microscope adjustments are less critical and the greater contrast between the lines and the background results in rapid identification of boundary line cells. Thickness of the metal film is kept within rigid limits assuring light transmission of the correct value. After coating the chamber is heated and annealed to harden the metal and bond it to the glass surface. The metallised area needs no special care beyond that given to an ordinary counting chamber though sodium hypochlorite should not be used as a disinfectant

- Haemocytometers made to the very demanding tolerances in DIN 12 847 standard
- Optional metallized coating on many chambers
- Precisely polished surfaces for easy filling and accurate depths
- Wide selection of specialist chambers manufactured to exact and dependable sizes