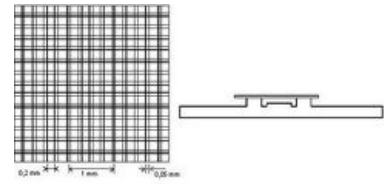


# Burker chamber

**Bürker's chamber** is a special glass slide. It is used when determining the number of red or white blood cells.

## Dimensions of Bürker's chamber

- **Depth** is 0,1 mm.
- **The grid** is formed by a system of *small squares* (with side  $a=0.05$  mm, the volume of the space bounded by this type of square is therefore  $1/4000 \text{ mm}^3$ ) and *large squares* (with side  $a=0.2$  mm, the volume of the space bounded by this type of square is i.e.  $1/250 \text{ mm}^3$ ).



Burker chamber

## Principles of using the Bürker chamber

- Drop the Blood onto the edge of the coverslip with a Pasteur pipette and let it flow into the chamber (do not drip directly into the chamber!).
- When determining the number of erythrocytes , we subtract the number in 80 small squares..
- When determining the number of leukocytes , we subtract the number in 50 large squares.

## Links

### Related articles

- Determination of the number of cells, their viability and metabolic activity

### Source

- Institute of Pathological Physiology of the Faculty of Medicine, Charles University in Pilsen (<http://patofyziologie.lfp.cuni.cz/>)
- Own notes on practical exercises in Physiology, Institute of Physiology 1.LF UK in Prague, winter semester 2013/2014