FERTILITY SOLUTIONS

THE SEMEN ANALYSIS EXPERTS ®

Sperm Wizard SPERMOCYTOMETER®

Fertility Solutions Inc.
4635 Richmond Rd., STE 100 * Cleveland OH 44128
phone: (216) 491-0030 * fax: (216) 491-0032
www.fertilitysolutions.com
Manufactured by Leja Products B.V Netherlands

See our website for the complete line of semen analysis quality control and training products.

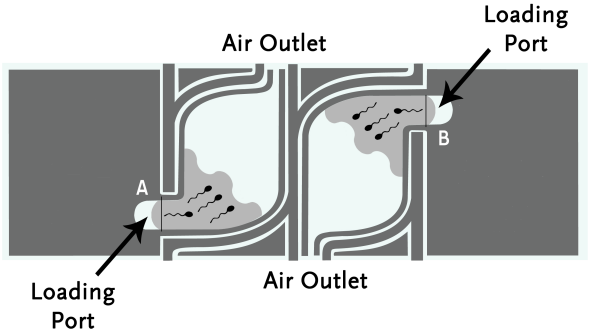
Requirements:

Microscope (phase contrast with 20X objective recommended) fitted with KR406B 10x10 eyepiece reticle (reticles.com)

Scaling Factor for objective and microscope (FSI Technical Bulletin "Scaling Factor Determination" available on our website)

Micropipetor with 6µL capacity and tips

Semen sample or QC

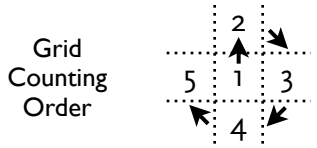


Loading the SPERMOCYTOMETER®:

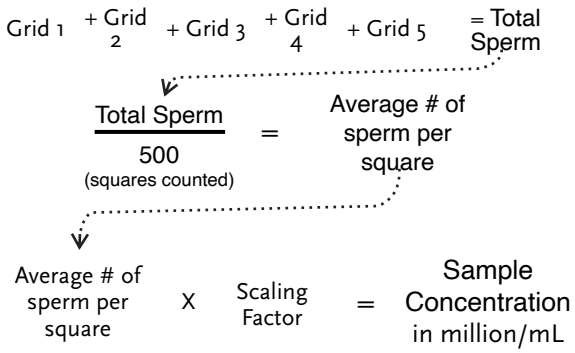
1. Mix semen well using vortex mixer, 2-3 pulses of 3-5 seconds each.
2. Slowly dispense ~6µL of sample into a chamber loading port (A or B) and observe filling. The chamber is filled when the sample reaches the air outlet. A small amount of seminal fluid volume may remain in loading area.
3. Position the SPERMOCYTOMETER® on the microscope stage so chamber is under the objective. Wait 1-2 minutes for the sample to settle until no drifting is observed.
4. Scan the chamber to verify the absence of clumping and air bubbles.

Counting Sperm:

1. Position the center of the chamber under the microscope objective.
2. Count the sperm in all 100 squares of the reticle grid using Sperm Counting Rules. Do not count partial grids.
3. Record the number of sperm in the grid.
4. Repeat steps 2 & 3 in four adjacent fields.



Calculate Sperm Concentration:



Additional Notes:

- For calculation examples, visit our website.
- Round cells and aggregation/agglutination also can be evaluated using this chamber.
- For semen analysis procedure including motility, call Technical Service: (216) 491-0030
- Mark each chamber after use with permanent marker to indicate it was used.

Sperm Counting Rules

- Analyze each square of the grid individually.
- Analyze all 100 squares in the grid and a minimum of 5 grids.
- Count only intact sperm with head and tail.
- Count sperm whose heads lie completely within the square and any heads that lie on the upper and left lines. Do not count tail-less heads, head-less tails or sperm whose heads lie on the lower and right lines.
- If the total number of sperm in 5 grids is less than 200, consider counting another aliquot to confirm.
- If a high sperm concentration makes counting difficult, dilute the semen and reload a new chamber.
- For post-vasectomy samples, examine entire chamber using your laboratory's procedure.

Troubleshooting:

Incomplete Chamber Load

Sample volume may be insufficient
Solution: check pipettor settings & calibration

Semen may have high viscosity or incomplete liquefaction
Solution: add chymotrypsin to semen, incubate and load new chamber

Clumping

Can result from incomplete mixing
Solution: mix thoroughly before loading

Sperm aggregation or agglutination may indicate an abnormal pathology.

Field suddenly shifts

Air may have been introduced in loading
Solution: load new chamber