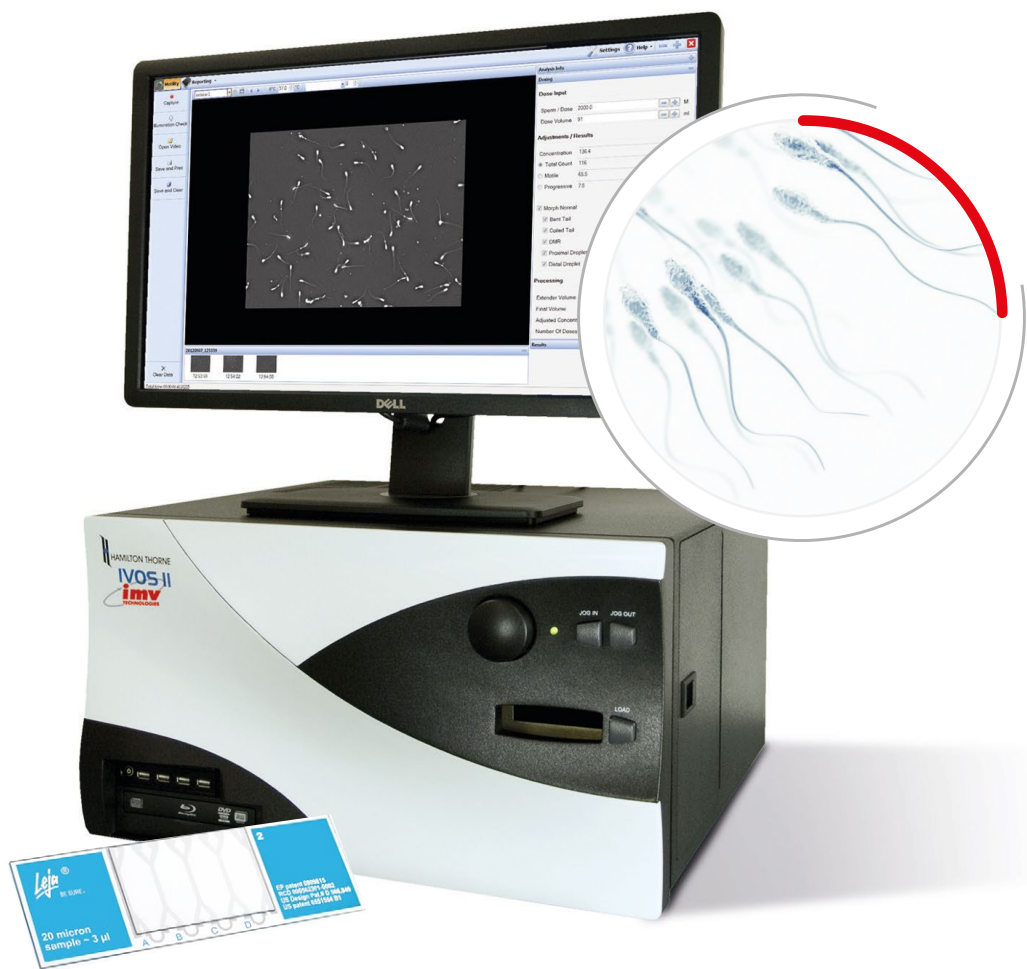


IVOS II



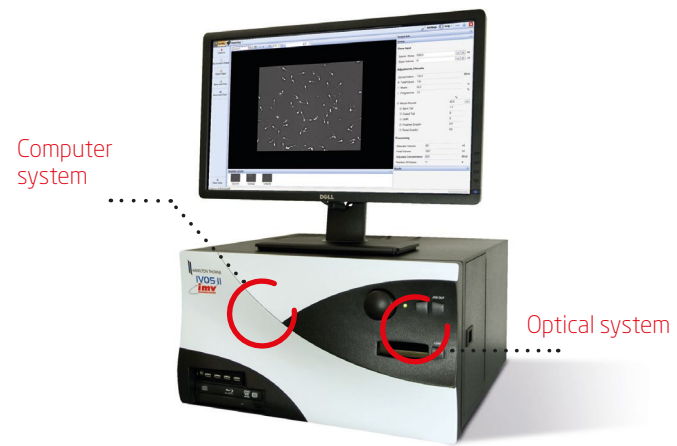
IVOS II AND LEJA
SYNERGY FOR PERFORMANCE

Choose simplicity and speed

IVOS II™ is the fastest, most ergonomic system. IVOS II has been used in more than 30 countries since 2012.

All-in-one design

IVOS II combines advanced digital analysis software with negative phase microscopy and stage automation, all in one unit.

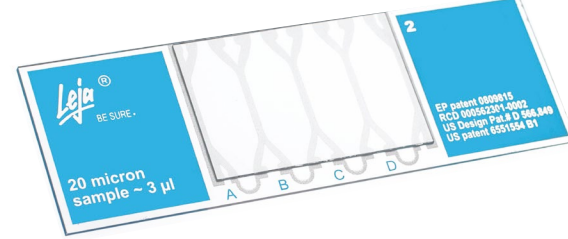


The internal optical system is protected from light and temperature, environmental conditions that could impact the analysis.

Standardized procedures

Leja® calibrated slides make the standardization of sperm evaluation protocols easy:

- Guaranteed **constant chamber depth**
- **Repeatable** results facilitated by **chamber shape and capillarity**
- Non-toxic, specialized material and industrial processes ensure **optical quality**



The powerful and intuitive CASA

The software is available in eight languages and can be used for all species. It is fully customizable and can easily be adapted to any evaluation protocol.

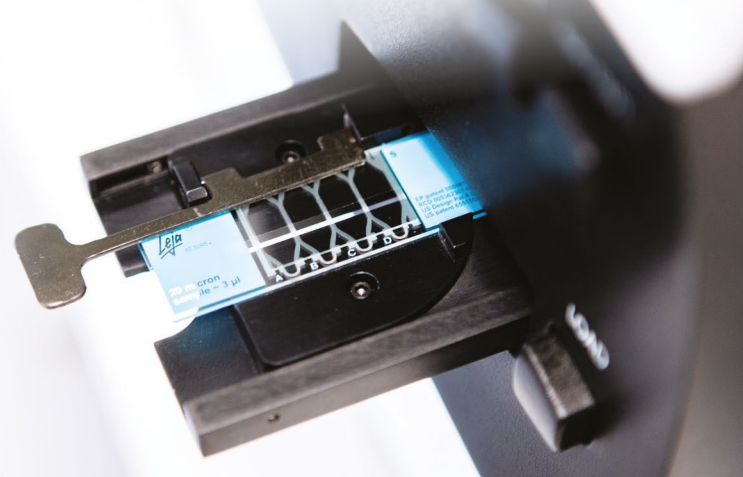
The positioning of the slide in IVOS II optical system, on an **automated stage**, provides optimal analysis conditions.

The operator can choose a predefined analysis configuration or create an unlimited number of custom configurations.

Many parameters are analyzed instantly and simultaneously. This intuitive software displays results in real time: **motility, progressive motility, concentration, kinetics, morphology, automated calculations needed for production** (number of doses, volume of extender).

The high-definition digital camera provides a high-quality **faithful image**.

The system boasts **automatic illumination control and live overlay views of spermatozoa to optimize capture** (blue head, red flagellum).



Maximize productivity and dose quality

Maximize number of produced doses

Each analysis reliably **maximizes doses produced per ejaculate** and lowers production costs.

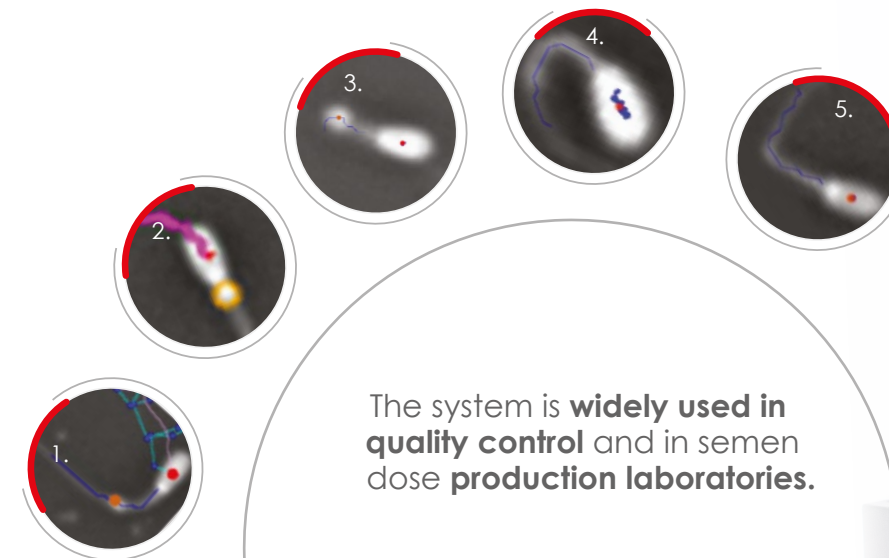
Data from the software can be used to exclude the worst performing males from affecting a herd's fertility.

IVOS II software gets advanced algorithms that allows to avoid artifacts (such as egg yolk particles) involved in sperm evaluation and improve repeatability.

Automated morphology analysis

Five types of problems can be identified with the IVOS II: **distal droplets** (1), **proximal droplets** (2), **distal midpiece reflexes** (3), **coiled tails** (4), and **bent tails** (5).

The software also calculates spermatozoa morphometric values such as length, width, perimeter, head surface and more.



The system is **widely used in quality control** and in semen dose **production laboratories**.

Known for being the **fastest on the market**, it is the tool of choice to maximize productivity and dose quality.

Data management and traceability

Data export is flexible, allowing operators to select the parameters to export. Data can be extracted in universally supported **ASCII format**, or in user-created **custom templates**. A period, an animal, or a genetic line can be reported.

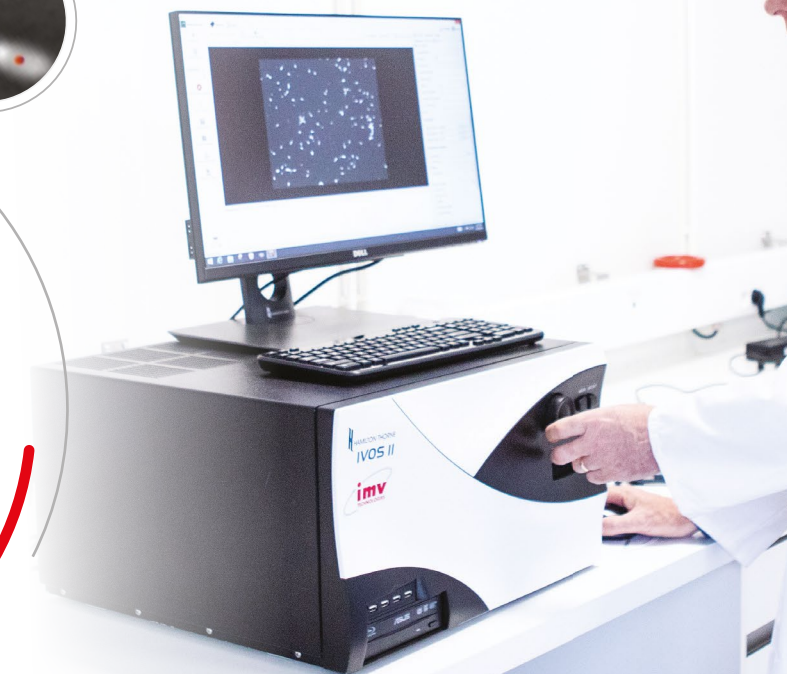
Data can also be exported to **integrated laboratory software programs** such as eSMILE, in real time. Other connect accessory devices such as scale can be connected to IVOS II. This flexibility ensures traceability and accuracy.

Decision support

With IVOS II, you can **set thresholds for minimum acceptable morphology, motility and progressive motility**. The operator is alerted if a minimum is not met.

IVOS II have information on cumulative, field and individual sperm. This allows user to make decisions about process.

Results obtained from evaluation can be used to make **husbandry decisions** which may improve sperm output. These may include changes to collection schedules or diet.



Training

IMV Technologies knows that training is important for making technology changes more successful.

Adopting a CASA system involves a change in procedures and requires that operators be fully trained.

This is all it takes to fully and quickly take advantage of all the benefits of IVOS II.

IMV shares its knowledge through theoretical and hands-on training sessions. Through the training, customers successfully implement their new equipment and new technologies around the world.

For IVOS II, IMV training programs include laboratory practices, basic sperm evaluation, laboratory decision-making, and equipment operation.



Choosing a CASA system

CASA systems reflect real technological progress

Last-generation CASA systems present many advantages over a photometer combined with a microscope.

Objective, standardized analyses

Used in production or quality control, CASA systems provide objective, reproducible measurements that require less human judgment.

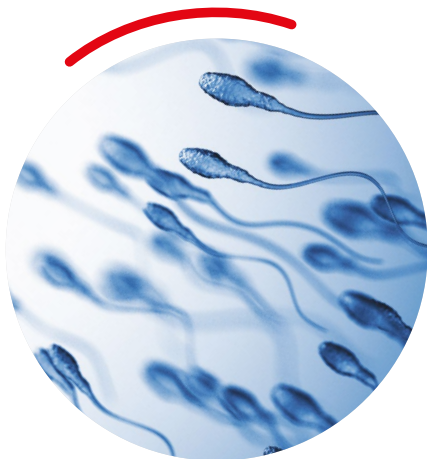
More detailed information

On top of measuring the concentration and motility of spermatozoa, CASA systems can also detect problems that affect the quality and preservation of semen.

They also provide better monitoring of analysis values, export data, and allow for perfect traceability.

Improved productivity

In standard semen production laboratories, CASA systems may improve time and maximize dose production.



IMV, always at your side

With its **team focused on support and training**, IMV helps you to make the most of all the benefits of the IVOS II.

Different solutions exist to help you optimize your analyses. **The international team** at IMV provides:

- On-site training
- Two-day seminars at IMV
- Remote support
- On-site technical supports
- Best practice tools and supports (protocols and recommendations)



Fluorescence option

- Analyze viability via membrane integrity
 - Viadent II software - 025456
 - Viadent stain (200 count) - 018441
- Analyze samples in unclear media (ex. milk or egg yolk)
 - Ident stain (200 count) - 018632
- Other fluorescent options are available, upon request

Product references

Hardware/Software

IVOS II: sperm analyzer - 024911

IVOS II Ident: Ident sperm analyzer - 024910

CEROS II - 024905

Software including:

Bovine sperm and other species analysis software - 024908

Equine sperm analysis software - 024906

Boar sperm analysis software - 024907

Consumables

4 chambers Leja slides 20 µm - 025107

8 chambers Leja slides 20 µm - 025108

Training

IVOS II installation and training (2 days) - 026346

IVOS II Ident and Viadent installation and training (3 days) - 026347

IVOS II technical support (1 day) - 026349

Further options

Sort II software to select subpopulations - 025454

Track II software to save individual spermatozoa data - 025455

Extras and added traceability

eSMILE BOAR - 025609

eSMILE BOVINE - 025606

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