

# The UltiMate™ Strategy to Provide Quality Sperm Product



UltiMate  
Sperm Analyzer

# Guarantee Quality Product and V

## AUTOMATION = The Core of the UltiMate Strategy



### AUTOMATION = SPEED

**6 fields analyzed in 12 seconds!!** The **UltiMate** provides the greatest speed available in a sperm analyzer. The programmable, heated stage moves from field to field, with no user intervention required once analysis begins.

### AUTOMATION = ACCURACY and REPEATABILITY

Automation means that **analysis technique doesn't vary from user to user**, an unwanted side effect that occurs with many external microscope systems. By maintaining consistent analysis parameters and sample positioning, your results are both accurate and repeatable.

### AUTOMATION = OBJECTIVE RESULTS

Subjective manual motility evaluations rely on human observation, resulting in variability. Objective motility assessment with the **UltiMate is unbiased by human conclusions.**

### AUTOMATION = EASE OF USE

**Everything is preprogrammed so there is little work to do for each sample.** Simply enter the ejaculate specific information, focus the image and press Start Scan. The **UltiMate** does the rest!

### AUTOMATION = SECURITY

Access to important setup data can be restricted from users without limiting the **UltiMate's** capabilities. The Log File lets you track any changes made to system settings. **Nothing is left to chance.**

### AUTOMATION = QUALITY PRODUCT

All these factors combine to help you distribute quality product to your customers. **Product you can guarantee and your customers can count on.**

### Leja 4-Chamber Slide for Swine Sperm Analysis



**The Leja 4-Chamber Slide is the result of four years of close collaboration between Hamilton Thorne and Leja.**

**The slide has undergone intensive toxicity trials and is proven to possess high accuracy in chamber depth.**

**The safe and cost-effective choice!**

# Win Your Customers' Confidence

## UltiMate CUSTOMIZATION for the Swine Industry

The **UltiMate** is a computerized swine sperm analysis workstation that works in sync with your current techniques of boar semen processing. It provides one efficient station that allows you to:



- Import ejaculate volume from an electronic scale
- Transfer boar information from bar code labels
- Measure total, motile and progressive sperm concentrations in billions/ml
- Assess morphology in “real-time” using the same sample
- Calculate doses based on required dose volume and your preferred method of adjustment (use alone or combined):
  - ▶ Morphology
  - ▶ Motility
  - ▶ Progressive Motility
- Print reports and export results to database compatible formats

## An Inside Look at the UltiMate Analyzer

There is more to the **UltiMate** than meets the eye! All the components needed to quickly and easily assess sperm concentration, motility and morphology are integrated into one workstation:

- Internal optical system featuring strobe illumination to produce superior sperm imaging - **the microscope is inside!**
- Automated heated stage for maintenance of sample at 37°C
- Stage “jog” buttons for easy and repeatable positioning of sample
- Connections for electronic scale and bar code reader to make data input a breeze
- High speed Pentium computer running Windows® NT with the power to analyze sperm in just seconds
- Ability to network to other laboratory computers



## UltiMate Sperm Analyzer for Swine

# Real-Time Morphology for Real-Time Processing

The Real-Time Morphology feature of the **UltiMate** lets you classify sperm as normal or abnormal based on gross morphology (droplets, tail, head, etc.).

- Statistical counting program to save time with confidence
- User-defined categories of abnormal and maximum accepted values of each
- Minimum number normal sperm required
- Automatic tally of technician's count of normal and abnormal sperm
- Real-Time Morphology results combined with motility results
- Automatic sample rejection if accepted values are not met
- Ability to use morphology, motility and progressive values to adjust dose
- Use in combination with HT heat immobilization probe for even faster processing



## Line Speed Performance and Validated Accuracy

The **UltiMate** has not only been put to the test at commercial line speed production but has also been rigorously validated by industry experts. The evaluations showed:

- High throughput of ejaculate samples
- Quick, objective and standardized analysis
- Repeatable results
- Accurate concentrations

**With over 15 years in the business of sperm analysis, we are committed to you.**

Hamilton Thorne Research is committed to providing superior customer support. We encourage user feedback in our on-going research & development efforts in the swine industry.

## Versatile Data Management

### HDATA ASCII Export

- Export data to spreadsheet, database or other ASCII-compatible programs
- Track and trend data for each boar
- Establish threshold criteria for rejecting an individual boar within a genetic line

### Swine Report Filing

- Custom design three of your own one-page reports
- Store exact replicas of analysis reports as computer files



*Often Imitated, Never Duplicated*

**HAMILTON THORNE BIOSCIENCES**

100 Cummings Center, Suite 465E, Beverly, MA 01915-6101 USA  
978-921-2050, 800-323-0503, Fax: 978-921-0250  
sales@hamiltonthorne.com, www.hamiltonthorne.com/research/