

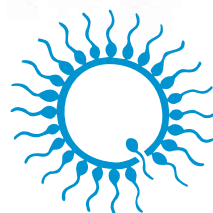


2010



Animal Reproduction Technology

Bovine



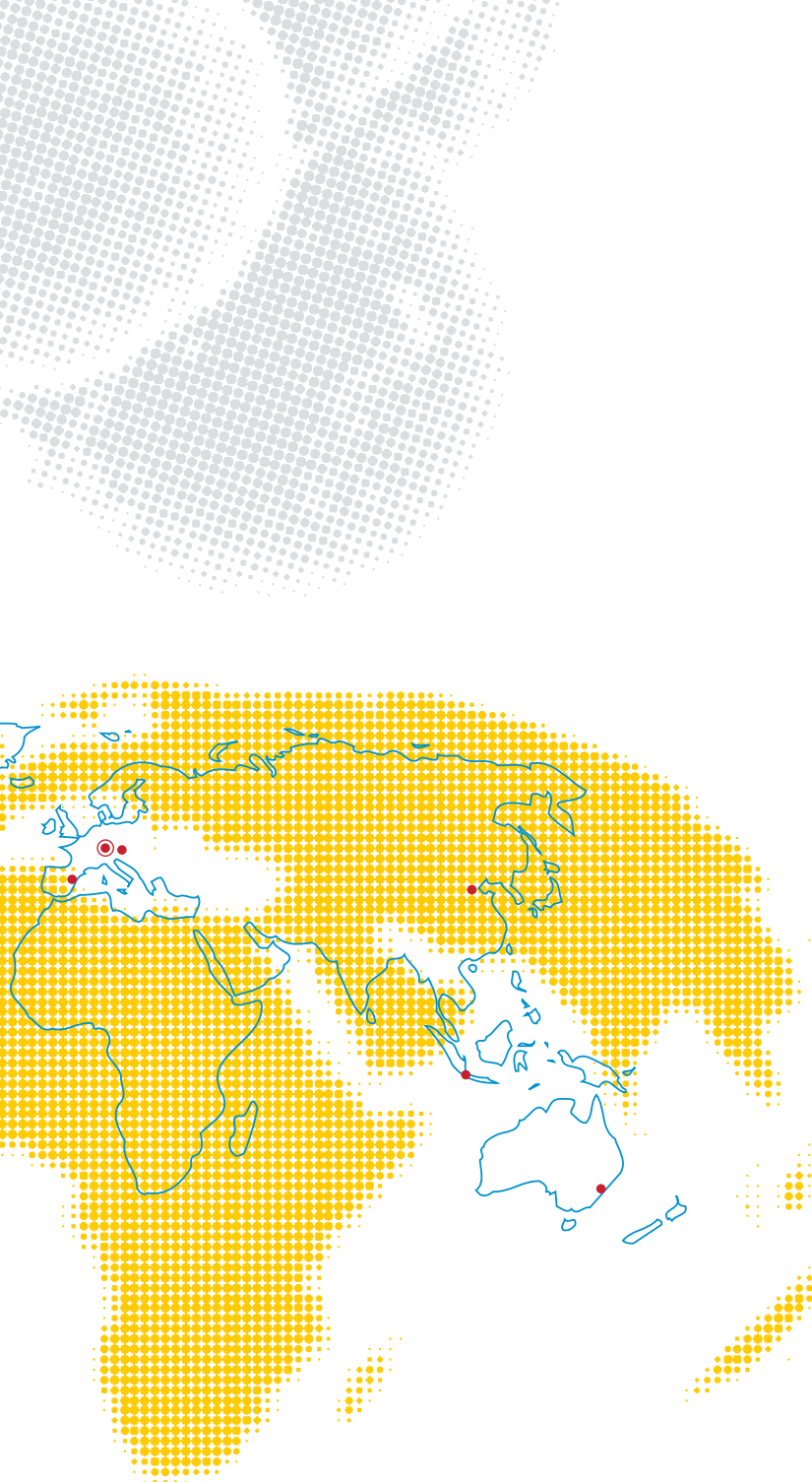
minitube



Innovative ideas, modern production techniques
and a keen appreciation of product quality are the basic
ingredients of our knowledge and your success.



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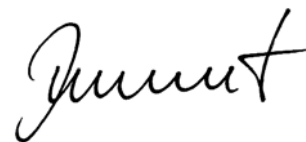
We need detailed knowledge of reproductive physiology in order to ensure that you are successful in the use of artificial insemination. Veterinarians and agro-scientists specialised in this field therefore, are responsible at Minitüb for product development and for consulting with our clients. The technical demands of semen processing and preservation also require knowledge and expertise in other fields, such as electronics, sensorics, mechanics, chemistry, cryobiology and many others. At Minitüb, these demands are met by specially-trained engineers and scientists.

For product development, our teams of veterinarians and engineers cooperate closely. Together, they offer all the knowledge and experience necessary to guarantee the best possible results.

With Minitüb of America's international centre for biotechnology in Wisconsin, USA, the Minitüb group relies on high capacity facilities for training and research. Here we conduct fundamental research concerning assisted reproduction technologies as well as applied research that leads to improved techniques in production, evaluation and conservation of semen and embryos. Important elements are furthermore biotechnical services for our customers, as well as training and technology transfer.

Originating in Tiefenbach, Bavaria, Minitüb has established its competence over many years in more than 100 different countries all over the world. With several companies, highly-trained local representatives, and multilingual professionals handling exports, we keep in contact with the international AI industry. Innovative ideas, modern production techniques and a keen appreciation of product quality are the basic ingredients of our knowledge and your success.

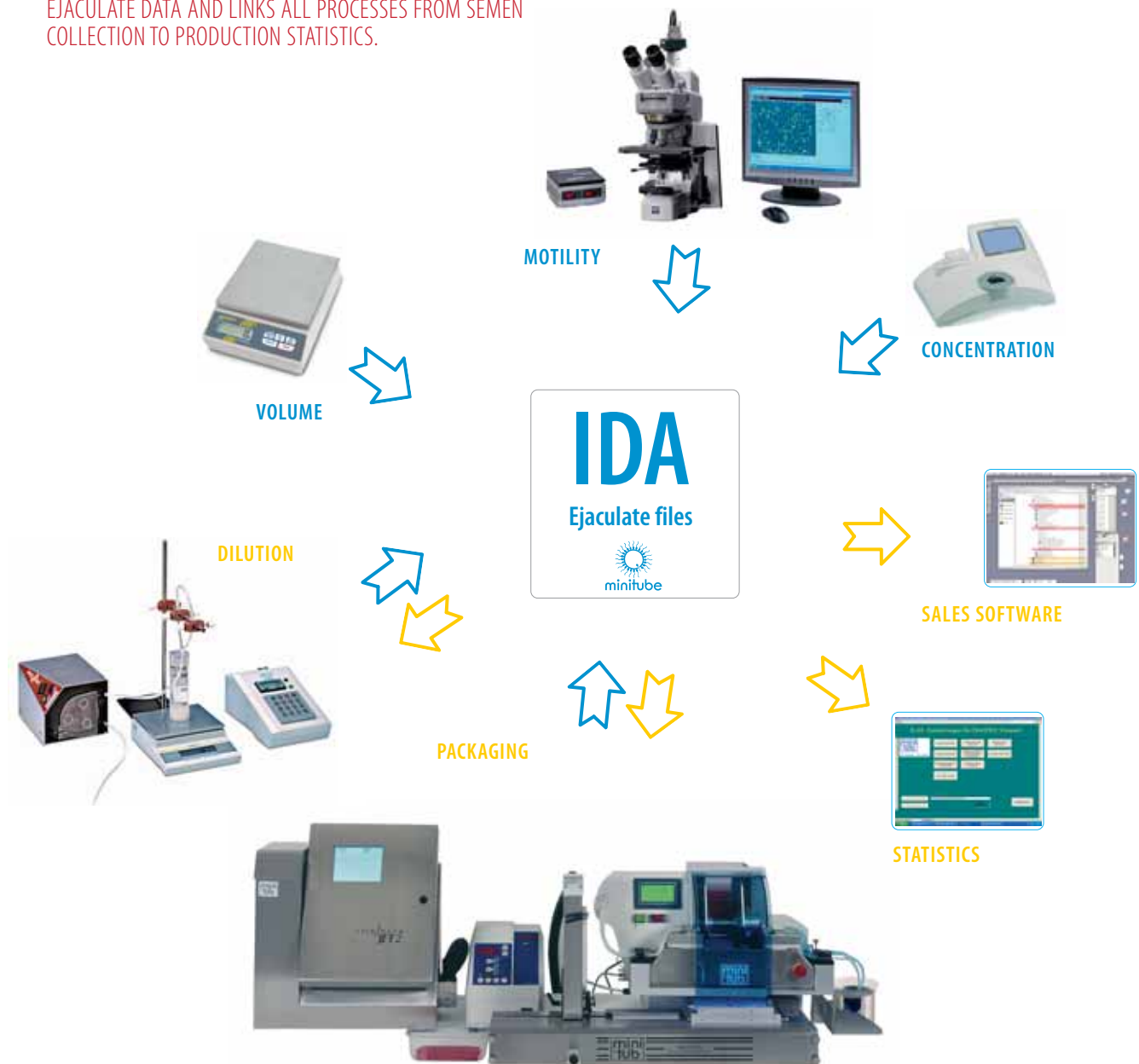
We thank you for your interest and your confidence placed in us.



DR. CHRISTIAN SIMMET
MANAGING DIRECTOR

IDA AND IDENT: MINITUBE SOFTWARE FOR THE BULL SEMEN LABORATORY

THE IDA LABORATORY SOFTWARE INTEGRATES ALL EJACULATE DATA AND LINKS ALL PROCESSES FROM SEMEN COLLECTION TO PRODUCTION STATISTICS.



Your benefits

- IDA introduces a high security level in your lab
- the whole process is standardized and optimized
- automatic integration of ejaculate parameters through interfaced hardware
- automatic data transmission to and from the straw printing and filling system
- IDA helps to save time and labour
- every step is documented and verifiable
- statistical analysis of all relevant production data
- IDA can easily be connected with other software applications
- IDA is a very user friendly software

IDA AND IDENT: MINITUBE SOFTWARE FOR THE BULL SEMEN LABORATORY

IDA is a flexible, multitasking and modular computer program, based on an Access data base. It automates and links ejaculate analysis including record keeping of thawing controls as well as extender dispensing and semen packaging in straws. The identification of each ejaculate can be entered manually, by barcode label or through a transponder. The ejaculate data file guarantees quick and precise ejaculate data management.

The connected lab equipment like scale, photometer or Sperm Vision™ transfer analysis data quickly and securely to the lab computer. Automatic calculation of extender quantities, automatic semen dilution by means of the Smart Dispenser and the data transfer to the filling machine greatly rationalize laboratory work. Production data is provided in real time for administration and sales. Due to the Access data base the connection is carried out comfortably.

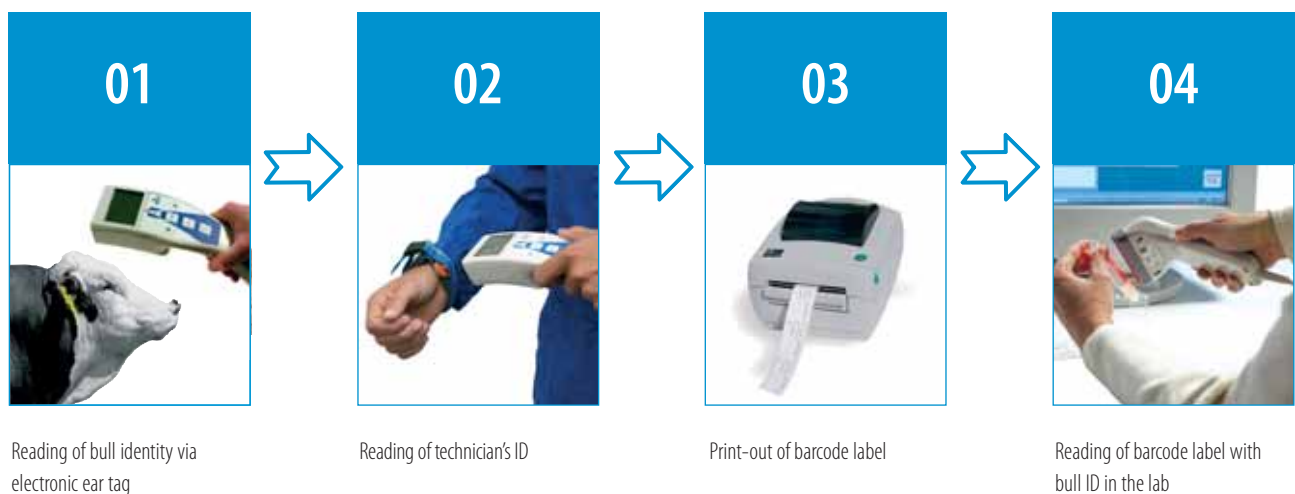
A special menu item provides evaluation and administration of bull and ejaculate data.

IDA is available in multiple languages.

REF. : 18500/0000



ELECTRONIC BULL IDENTIFICATION WITH IDENT

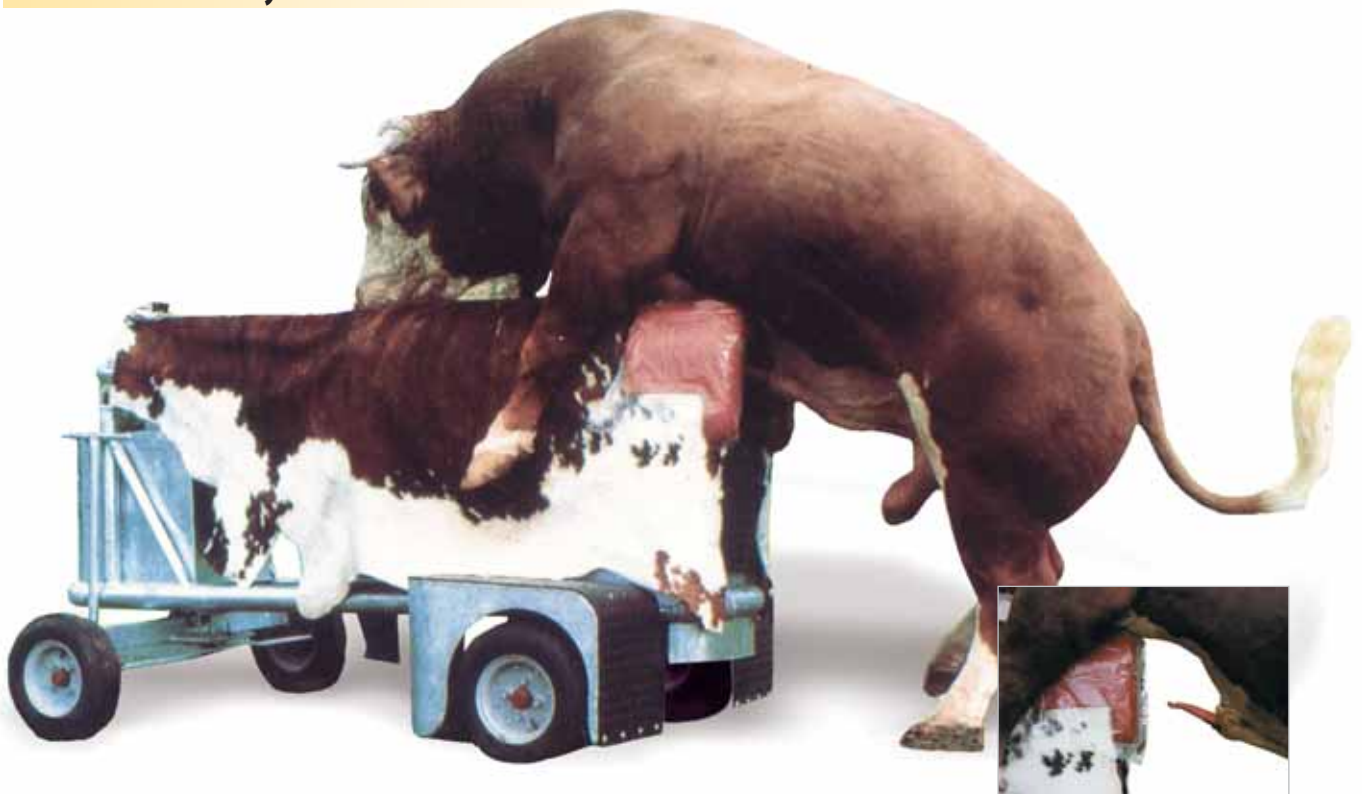


IDENT is available in addition to IDA or as an independent program: The software contains collection planning, the identification of bulls via electronic ear tags, the electronic identification of semen collection staff and the print-out of labels with bull identity, bar code and further information about the semen collection.

REF. : 18000/0015

BULL SEMEN COLLECTION

The Mobile Dummy Cow



Your benefits

- comfortable semen collection for the bull
- safe and easy operation
- optimal stimulation of the bull with controlled forward and backward movements
- minimum risk for the bull due to the separated, smooth hindquarters
- optimal hygiene due to the use of disposable sanitary covers (optional)

Product features

- Body made of rigid, zinc-coated steel
- High quality padding
- Cover made of reinforced PVC material
- Inside seat for the collector

Bovine Collection Dummy, mobile REF. : 11000/1000

Bovine Collection Dummy, stationary REF. : 11000/0500

Accessory

Disposable sanitary cover, 100/package, REF. : 11000/0200



BULL SEMEN COLLECTION

Bovine Artificial Vagina

Minitube offers bovine artificial vaginas in 4 different lengths to suit all kinds and sizes of bulls.

Casing with valve

20 cm	REF. : 11021/0020
30 cm	REF. : 11021/0033
35 cm	REF. : 11021/0035
41 cm	REF. : 11021/0041

Inner liner

smooth	REF. : 11022/0002
rough	REF. : 11022/0003

Director cone	REF. : 11024/0000
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Collection vial, glass, graduated, 15 ml	REF. : 11023/0015
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Warming bag, neoprene, long, blue	REF. : 11025/0058
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Warming bag, 18 cm, green	REF. : 11025/0018
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Warming bag, 35 cm, green	REF. : 11025/0035
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Rubber ring	REF. : 11022/0001
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Sterilizer Sterivar

Low pressure sterilizer, specially designed for artificial vaginas and accessories. Made of stainless steel, double wall with insulation. With pressure safety valve, timer, water drain, protection against overheating and insert for artificial vaginas for bulls.

Sterilizer Sterivar 230 V	REF. : 11050/0015
Sterilizer Sterivar 115 V	REF. : 11050/0014

Technical features

- Capacity: 15 artificial vaginas
- Temperature range: up to +100°C
- Pressure: max. 0.02 bar
- Inside dimensions: 750 x 400 mm Ø approx.
- Power supply: 230 V / 50 Hz or 115 V / 60 Hz
- Power consumption: 3500 W

Accessories

Roller base for STERIVAR	REF. : 11051/0000
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Sterivar insert for 15 latex cones	REF. : 11051/1015
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Spreader for inner liner, stainless steel	REF. : 11051/0550
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Additional accessories

Greasing stick	REF. : 11905/0050
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MiniLube, 3.8 l	REF. : 17116/7010
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Vaseline, 1 kg	REF. : 11905/0100
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Thermometer	REF. : 11027/0000
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Plastic collection vial	REF. : 11023/0018
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Tulip shape collection glass	REF. : 11023/0016
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Rubber stopper for vial	REF. : 11023/1590
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BULL SEMEN COLLECTION

Electro Ejaculator

Electro ejaculator set, consisting of heavy-duty carrying case, probe and control unit. Inbuilt battery and transformer/charger. Semen collection funnel with holding device and tube. Digital display and adjustment of the actual value in 0.5 volt steps. Fully portable with remote control. Semen collection is made easier, especially from older bulls that may be difficult to stimulate.

Power supply: 115 V/ 60 Hz or 230 V/ 50 Hz.

Set with electro ejaculator, case and cables REF. : 11900/0000

Accessories

Probe 2.5" REF. : 11900/0025

Probe 2" REF. : 11900/0022

Probe 1" REF. : 11900/0020

Semen connection funnel REF. : 11900/0250



Warming Cabinet 700

Product features

- Suitable for artificial vaginas and accessories
- Casing and interior made of stainless steel
- Electronic control of temperature and air circulation
- Timer with functions for heating time and delay
- Temperature range: +30°C up to +250°C

REF. : 14135/0400

Technical features

- Volume: 416 l
- 2 insert racks
- Dimensions (w x h x d):
 - inside: 1 040 x 800 x 500 mm
 - outside: 1 190 x 1080 x 650 mm
- Power supply: 115 V/ 60 Hz or 230 V/ 50 Hz
- Power consumption: 1 800 W



We offer many different models and sizes of warming cabinets, also hand-through models.

Computerised Motility Analysis

Your benefits

- **Precision:** Sperm Vision™ provides excellent sperm cell recognition and a highly precise sperm count.
- **Optimized process:** Sperm Vision™ standardizes evaluation and calculation criteria, which significantly improves the accuracy of motility and concentration analysis. The calculated "security margin" for spermatozoa per dose can be lowered considerably.
- **Morphology:** The user has got the possibility of a comfortable, fast morphology evaluation. Besides motility, sperm velocity, linearity and hyperactivity, morphological criteria can optionally account for the calculation of the extender volume.
- **Viability:** this tool automatically assesses damaged/not damaged semen cells by using a fluorescence stain. Requires a microscope with fluorescence equipment.
- **Individual settings:** The user can individually define which criteria and ponderation account for the dose calculation.
- **Documentation:** Pictures and complete films, as well as all analyse data are archived. Thus Sperm Vision™ allows retrospective monitoring to demonstrate the quality of each frozen or delivered semen dose.



Accessories

Zeiss Axioscope A1

Phase contrast microscope with ergonomic support and base plate, excellent image quality, phase achromat objective 10x can be retrofit with a ScanStage or with fluorescence equipment.

REF. : 12008/0040

CASA Objective

10x negative phase contrast

REF. : 12006/0232

ScanStage

Automated scanning microscope stage, heated, positioning precision: $\pm 5 \mu\text{m}$, suitable for different microscopes

REF. : 125208/3115

Technical features

- Real time and simultaneous motility and concentration assessment
- Rapid analysis: 7 measuring fields in 7 seconds
- Comparative measurements of up to 16 fields with average value calculation
- Motility parameters DCL, DAP, DSL, VCL, VAP, VSL, LIN, WOB, STR, BCF, AOC, ALH
- User-defined tolerance values and standard deviations
- Morphology tool with automatic sperm recognition
- Viability tool for SYBR 14/PI dye
- Hoechst dye evaluation live/dead
- Compatible with IDA/ILAS; multi purpose evaluations with Sperm Vision™ reports; all analysis results can be printed out or exported to other programs (Excel, Word, HTML...)
- Can be combined with a wide variety of microscopes

SpermVision™ Professional system includes software, digital camera, PC with complete accessories

REF. : 12520/3502

Alternative to SpermVision® Professional:

Sperm Vision™ Production

this CASA system is tailored for the production lab and includes a standard microscope. It provides proven parameter settings for the analysis of one species (can be upgraded). A semen analysis report is integrated.

REF. : 12520/7000

MICROSCOPY

Phase Contrast Microscope CX 31

- Infinity optic system: sharp images over the complete field
- Phase achromatic optics with universal condenser
- Heated original microscope stage with temperature control unit HT 200 with additional warming plate and two digital temperature displays
- Temperature freely selectable
- Ergonomic design of the support
- Phase achromatic objectives 10x, 20x, 40x, 100x
- 6 V/30 W halogen light

Binocular REF. : [12004/0331](#)

With photo tube REF. : [12004/0431](#)



Phase Contrast Microscope MBL 2000

Functional microscope for semen analysis with phase achromatic objectives 10x, 40x, 100x, heating system with temperature control unit HT50 with digital temperature display and freely selectable temperature adjustment

Binocular REF. : [12010/2000](#)

With ocular video, camera and monitor REF. : [12010/2100](#)



Semen Dyes

Spermac, semen dye for morphological evaluation, 4 x 50 ml REF. : [15405/0000](#)

Farelly stain, consisting of 3 components, 250 ml each REF. : [15405/0026](#)

Eosin G, solution for supravital staining, 50 ml REF. : [15405/0025](#)

Nigrosin, solution for supravital staining, 50 ml REF. : [15405/0029](#)



PHOTOMETER SDM6

Photometer SDM6

Your benefits

- large touch screen, easy handling
- programs for the determination of sperm concentration of bull, boar, stallion, ram and buck semen
- automatic calculation of extender volume and number of doses
- display of semen concentration in 10^9 sperm cells/ml
- optional: integrated printer for printout of production data per ejaculate
- serial and parallel interfaces for data transfer

Technical features

- Spectral range: 340 - 578 nm
- Filter: 546 nm
- Halogen lamp
- Use of 10 mm macro cuvettes
- Analysis time: 2 seconds/sample
- Power supply: 230 V/ 50 Hz or 110 V/60 Hz



Photometer SDM6, for the determination of semen concentration and for dose calculation, with integrated printer

REF. : [12300/0006](#)

Photometer SDM6, without printer

REF. : [12300/0008](#)

Accessories

Paper for printer

REF. : [12300/0311](#)

Macro cuvette, 4 ml, 100/package

REF. : [12301/0003](#)

NaCl solution, 0.9 %, 1 l

REF. : [12301/4667](#)

Dispenser 0.5 - 5 ml for NaCl solution

REF. : [12428/1815](#)

Varipette 10 - 100 μ l, with digital display

REF. : [12425/4810](#)

Pipette tip yellow, 1 000/package

REF. : [12425/9409](#)

Automatic diluter-dispenser for precise sample preparation and concentration measurement. Use of disposable syringes for semen sampling
Power supply: 110 - 220 V

REF. : [12421/0503](#)



BULL SEMEN DILUTION

Semen Extenders

Andromed®

- Egg yolk free medium for frozen and liquid bovine semen
- High fertility rates without ingredients of animal origin
- No risk of microbiological contamination
- Easy to prepare, time saving

Andromed® 200 ml, for a total of 1 litre of extender, with antibiotic formula according to EC requirements

REF. : 13503/0200

Andromed® CSS,

one-step, 200 ml, without antibiotics

REF. : 13503/1200

Andromed® CSS,

two-step extender, 100 ml, fraction 1

REF. : 13503/1250

Andromed® CSS,

two-step extender, 100 ml, fraction 2

REF. : 13503/1251

Triladyl® Since decades one of the most successful extenders for bull semen freezing in the world. Used for one-step semen processing at room temperature, it stands for constantly optimal results of your bull population, even when using highly diluted ejaculates.

Triladyl® 250 g, for a total of 1250 g of extender, with antibiotic formula according to EC requirements

REF. : 13500/0250

Triladyl®, CSS, 250 g, without antibiotics

REF. : 13500/1250

Biladyl® The two step extender based on the proven Triladyl® formula, according to the CSS-requirements (Certified Semen Services). Consisting of fractions A, B and cocktail AB for the production of a total of 1 000 g extender.

Biladyl®, fraction A

REF. : 13500/0004

Biladyl®, fraction B, with glycerol

REF. : 13500/0006

Antibiotic supplement for 2-step extender Antibiotic formula in powder according to CSS protocol, contains 300 mg Gentamicin, 60 mg Tylosin, 180 mg Lincomycin, 360 mg Spectinomycin.

REF. : 13500/0005

Antibiotic supplement for 1-step extender, Antibiotic formula in powder according to CSS protocol, contains: 550 mg Gentamicin, 110 mg Tylosin, 330 mg Lincomycin and 660 mg Spectinomycin.

REF. : 13504/9000



BULL SEMEN DILUTION

Magnetic Stirrer

Magnetic stirrer, without heater, 14 W REF. : 14230/0000

Magnetic stirrer, with heater and connection for contact thermometer, 620 W

115 V/ 60 Hz REF. : 14235/0731

230 V/ 50 Hz REF. : 14235/0732

Accessories

Contact thermometer,
for magnetic stirrer, electronic REF. : 14235/7320

Support for thermometer REF. : 14235/7323

Stirring bars

25 mm REF. : 14240/7125

30 mm REF. : 14240/7130

40 mm REF. : 14240/7140

50 mm REF. : 14240/7150



Smart Dispenser

- The automatic, electronically controlled dispensing system for bull semen extender adds security to your process
- Maximum degree of precision in terms of dispensed extender volume (± 1 g) allows very precise sperm cell numbers per dose
- Operation as stand-alone unit or interfaced with IDA or other software
- Power supply: 115 V/ 60 Hz or 230 V/ 50 Hz

Smart Dispenser for bull semen production, control unit with balance

REF. : 13200/0700

Pump for Smart Dispenser,
with stand, tubing and sinker

REF. : 13200/0790

Water Baths

Water bath with temperature control and water circulation

stainless steel, capacity: 45 l, with insert racks for 20 diluent bottles and 72 semen collection vials

inner dimensions (l x w x h): 590 x 350 x 220 mm

230 V, 50 Hz, 2 800 W

REF. : 14082/0600

Water bath with temperature control, stainless steel, capacity: 10 l

inner dimensions (l x w x h): 350 x 210 x 140 mm

Power supply: 115 V/ 60 Hz or 230 V/ 50 Hz, 1 200 W

REF. : 14079/0001



COLD HANDLING CABINET

Cold Handling Cabinet

Spacious cold handling cabinet made of stainless steel for semen processing at working temperature +5°C. Timer for automatic defrosting cycle. Cover made of acrylic glass. Installed on heavy duty rolls

available in 2 sizes:

	working area (cm - W x D)	outside dimensions (cm - W x D x H)	230 V	115 V
approx.				
large	200 x 90	221 x 114 x 128	REF. : 14335/0403	REF. : 14335/0400
standard	200 x 67	216 x 91 x 127	REF. : 14335/0401	REF. : 14335/0398

Shorter, custom made versions are available.

Technical features

- Optionally with hydraulic height adjustment
- Height of refrigerated area: 500 mm (340 mm below acrylic cover in the front)
- Digital temperature controller
- 4 electric connectors in the working area
- 50 mm openings on each side for cables
- Power supply: 230 V/ 50 Hz or 115 V/ 60 Hz
- Power consumption: approx. 450 W



Minitube CombiSystem

for optimal efficiency in the bull semen laboratory: the combination of the filling and sealing machine MPP Quattro or MPP Uno with the MiniJet printer

Your benefits

- perfect automatic integration of semen processing: filling, sealing and printing in one system and one step
- convertible from 0.5 ml to 0.25 ml straws and vice versa, without changing any part
- fully electronic control of all components
- semen level control and automatic stop of straw supply at the end of the ejaculate
- both devices, the filling and sealing machine MPP Quattro and the MiniJet printer may also be separated and operated individually, at any time
- includes software with bull data files, can be combined with IDA laboratory software (see page 5)
- requires no extra control unit, only standard PC
- fully certified according to European norms

CombiSystem, composed of MPP Quattro and MiniJet, complete set

REF. : [13018/0002](#)

CombiSystem, composed of MPP Uno and MiniJet, complete set

REF. : [13017/0002](#)



CombiSystem, composed of MPP Quattro and MiniJet printer

AUTOMATIC FILLING & SEALING OF STRAWS

MPP Quattro

Fully automatic filling and sealing machine for 0.25 and 0.5 ml semen straws.

Your benefits

- up to 4 straws are filled and sealed per cycle. Number of straws can be freely selected: 1, 2, 3 or 4 straws at a time.
- modern touch-screen monitor for software control and display. Easy to operate, with color coded display. Continuous display of number of filled straws, machine status, straw size.
- touch screen guided conversion from and to 0.5/0.25 ml straws without exchange or replacement of any parts.
- the filling and sealing area is completely closed, fully hygienic and safety conditions are guaranteed.
- optimal control by the operator: processing of 4 straws at a time can easily be observed.

- very quick exchange of blocks with 4 filling and suction nozzles between ejaculates.
- dual ejaculate control through built-in adjustable balance and sensor at the filling tube: automatic switch from 4 needle filling to 1 needle filling when the built-in balance indicates that the reservoir holding the ejaculate is almost empty.

Practically no semen is wasted and the ejaculate is used up to the very last drop.

Technical features

- Machine can be operated at room temperature and in cold room or cabinet.
- Exchangeable hopper: hopper holds either 2 200 0.25 ml straws or 1300 0.5 ml straws.
- Capacity: 15 000 straws/hour
- No wearing parts. Very easy and quick cleaning.
- Can be included into the Minitube CombiSystem with the latest MiniJet printer model Leibinger.
- Power supply: 110 V /60 Hz or 230 V /50-60 Hz, as defined according to project needs.

MPP Quattro, complete

REF. : 13018/0000



Accessories

Straw dish, stackable

REF. : 13012/0003

Filling block with 4 nozzles

for 0.25 ml straws

REF. : 13018/0013

for 0.5 ml straws

REF. : 13018/0018

Suction block with 4 nozzles

for 0.25 ml straws

REF. : 13018/0022

for 0.5 ml straws

REF. : 13018/0027

Fixing unit for filling and suction blocks, stackable, stainless steel

REF. : 13017/0050

Washer for 0.25 ml and 0.5 ml nozzles, 5 000/bag

REF. : 13021/3001

Filling/suction tubing, 380 mm, sperm friendly material (silicone), bevelled edge, 100/aluminum foil bag

REF. : 13021/3800

Disposable semen cone, 100/bag

REF. : 13018/0100

AUTOMATIC FILLING & SEALING OF STRAWS

MPP Uno

Automatic filling and sealing machine for 0.25 and 0.5 ml straws

Your benefits

- the MPP Uno seals and fills 1 straw per cycle. Therefore the machine is ideal for handling small volumes of valuable ejaculates. The sealing is performed by ultrasound.
- conversion between 0.25 ml straws and 0.5 ml straws without exchanging any parts within only a few minutes. The exchangeable hoppers hold either 2 200 straws of 0.25 ml or about 1 300 straws of 0.5 ml.
- a very compact device which requires minor space. The vacuum pump and the pressure controller are integrated in the device. The ultrasonic generator is integrated in an external casing that can be mounted at a distance of up to 2.5 m. ON/OFF switch directly on the machine.
- the filling and sealing area is completely closed: Best hygienic and safety conditions are therefore fully guaranteed. Optimal control by the user: the filling process is performed right in front of the user, who can easily observe the procedure.

Technical features

- Capacity approx. 4 000 straws/hour
- No wearing parts. Very fast and easy cleaning.
- Machine dimensions: 370 x 460 x 320 mm (W x D x H)
+ ultrasound generator
- Power supply: 110 V / 60 Hz or 230 V / 50 Hz

Accessories

Exchangeable straw hopper REF. : [13017/0005](#)

Filling nozzle 0.25 ml REF. : [13017/0012](#)

Suction nozzle 0.25 ml REF. : [13017/0022](#)

Filling nozzle 0.5 ml REF. : [13017/0017](#)

Suction nozzle 0.5 ml REF. : [13017/0027](#)

Washer, 5 000/bag REF. : [13021/3001](#)

Filling tubing, 100/bag REF. : [13021/3800](#)

MPP Uno, complete REF. : [13017/0000](#)



PRINTING MACHINES FOR SEMEN STRAWS

MiniJet

Professional printing system for 0.25 ml and 0.5 ml straws

Your benefits

- combines excellent print quality with high print speed
- suitable for all types of semen straws
- Minitube software with clear and user-friendly menus
- exchangeable hopper fits for both straw sizes
- easily adjustable print head position
- change of the transport belt without tools
- remote maintenance via teleservice possible
- no gear pump is used for generating the pressure in the ink circuit, therefore no abraded particles are ageing the ink
- the ink nozzle is automatically closed when the printer is switched off, thus avoiding its blockage caused by dried ink. Steady once per day tuning of ink viscosity guarantees optimal start-up conditions
- low operational costs: the ink tank is only refilled instead of replacing it altogether
- ink run time is not limited by electronic timer
- the inkjet printer is equipped with a touch screen for direct input of system commands and display for diagnosis purposes
- Microsoft Access Database for easy data conversion to and from customer specific databases
- interface to IDA laboratory software

Each system consists of

- Inkjet printing unit Leibinger, state of the art computer with accessories and Minitube software
- Transport unit for straws with exchangeable hopper
- Control unit for electronics and power supply of the transport unit

Technical features

- Capacity: approx. 20 000 straws per hour
- Character size 1.4 mm to 5 mm
- Printing of barcodes and logos
- Bold print option
- Immediately non-abrasive print
- Adaptable for the CombiSystem
- Power supply: 110 V / 60 Hz or 230 V / 50-60 Hz as defined by project needs

MiniJet with Inkjet System Leibinger,
complete

REF. : 13034/0001

The MiniJet printer can be combined with the filling and sealing machine MPP Quattro or MPP Uno to a CombiSystem.

The printer is also available as a TwinJet system for printing 2 lines on each straw.



PRINTING MACHINES FOR SEMEN STRAWS

EasyCoder 2.0

The innovation in semen laboratories: printing of straws without ink, now with new software

Your benefits

- unmatched neat and clear printing on 0.5 and 0.25 ml straws
- up to 3 lines with a total of about 200 characters, even on Ministraws
- printing of barcode signs, logos and specific characters
- immediately non-abrasive print
- control via PC by a clear and user-friendly Minitube software
- sequential numbers can be printed on straws
- adjustable character fonts and graduations from micro to macro
- freely eligible number of lines and of printing positions
- clean and odourless working without ink and without solvents
- easy handling, little maintenance required
- easy and quick conversion between different straw sizes

EasyCoder printer 2.0, complete REF. : [13038/0000](#)

EasyCoder software upgrade to version 2.0 REF. : [18800/0001](#)



Technical features

- Thermal transfer printer with automatic straw supply
- Output: 3 600 straws per hour
- Windows based Minitüb software with data base for storing names and numbers
- Data transfer by serial port or USB adapter (included)
- Individual composition of printing lines possible, different configurations can be stored in memory
- Dimensions (l x w x h): 690 x 370 x 310 mm (PC not included)
- Power supply: 110-230 V AC, 50/60 Hz

Accessories

Color ribbon for straw printer EasyCoder

black	REF. : 13038/0010
gold	REF. : 13038/0012
red	REF. : 13038/0015
silver	REF. : 13038/0017

THE MINITUBE SYSTEM

The Minitube Straw

Minitube straws can be used in many ways: for frozen semen preservation as well as for the production of fresh semen. During the last years, the use of fresh semen in the bovine AI industry has increased and become more important, especially as a tool to meet the high demand for top bulls. The original Minitüb with two sealing balls provides fundamental advantages for both preservation methods:

- Gas-tight and hygienic seal of both straw ends with sealing balls
- No waste of semen due to sperm cells trapped in the cotton plug
- Reduced number of semen cells per dose
- Maximum use and maximum profit of top bulls

Minitube straw, 65 mm/0.3 ml, clear REF. : 13401/0065



ASP 65R – Filling & Sealing Machine for Minitubes

Technical features

- Fully automatic packaging of bull semen in Minitubes
- Use of only one sterilizable filling nozzle with hose and sinker per ejaculate
- Capacity: approx. 8 000 straws per hour
- Power supply: 230 V/ 50 Hz

REF. : 13001/0165

Accessories

Filling nozzle for ASP, with silicone tubing and sinker REF. : 13001/1010

Suction nozzle for ASP REF. : 13001/1020

Washer for ASP filling and suction nozzle, 1 000/ package REF. : 13001/1000

Nitrogen gas module for liquid semen production, flushes each Minitube with nitrogen gas immediately before filling, thus ensuring that the bubble within the filled and sealed semen straw contains only nitrogen. Increases longevity of liquid semen providing anaerobic conditions.

REF. : 13001/2000



SEMIAUTOMATIC STRAW PROCESSING

Semiautomatic System SFS 133

For 0.25 ml and 0.5 ml straws

Semiautomatic Filling & Sealing Machine SFS 133 , with vacuum bottle, filling and suction head for 0.5 ml straws	REF. : 13133/0133
for 0.25 ml straws	REF. : 13133/0135

Low density vacuum pump , 30-60 Hg, with manometer and valve	
230 V/50 Hz	REF. : 13133/0267
115 V/50 Hz	REF. : 13133/0268

Cartridge loading device with loading block and 10 cartridges for 36 straws	
0.5 ml	REF. : 13133/0005
0.25 ml	REF. : 13133/0025



Technical features

- Straws are filled and sealed 6 by 6
- Sealing is done securely and hygienically with metal or glass sealing balls
- The glass sealing balls are available in different colors
- An air bubble of 1 cm is automatically produced in each straw
- Capacity: approx. 2 000 straws/hour

AHDR/HDR Printers

For 0.5 or 0.25 ml straws and Minitubes, with counter.
Capacity: approx. 7 200 straws/hour

AHDR , automatic	REF. : 13142/1000
HDR (without motor)	REF. : 13140/0000

Set of alpha-numerical characters	
for 0.5 ml straws and Minitubes	REF. : 13052/0000
for 0.25 ml straws	REF. : 13052/0010

Printing ink ER , 40 ml	
red	REF. : 13056/0032
black	REF. : 13056/0033
yellow	REF. : 13056/0207
green	REF. : 13056/0327
blue	REF. : 13056/0210

Thinner for ER printing ink , 1 000 ml	REF. : 13056/9000
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Doublestick tape	REF. : 13050/0010
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MINITUBE SEMEN STRAWS



For over 25 years, the Minitube 0.25 ml and 0.5 ml semen straws have been used worldwide as a standard for the freezing of semen from bulls, stallions, boars, and many other species. Minitube's quality control process, production techniques, and material selection ensure for a reliable product that consistently exceeds industry standards. Minitube straws are available in a variety of transparent colors.

EcoStraws feature a plug with a shorter inner wick section that absorbs 3 - 4 % fewer sperm cells than the corresponding symmetrical plugs of standard semen straws. They are ideal for overnight equilibration of semen at refrigerated temperatures.

EcoStraws are used in exactly the same way as standard semen straws:

- identical processes for filling,
- identical processes for sealing,
- identical processes for printing,
- identical processes for insemination.

















































































EcoStraw



Your benefits

- Better utilization of available sperm cells per ejaculate because fewer sperm cells are lost in the plug
- Yield a larger number of semen straws per ejaculate
- Better use of valuable genetics without adding additional costs
- Ideal for overnight equilibration and fresh semen preservation

MINITUBE SEMEN STRAWS

Color	Mini straw 0.25 ml	EcoStraw 0.25 ml	Medium straw 0.5 ml	EcoStraw 0.5 ml
transparent	 REF. : 13407/0010	 REF. : 13407/3010	 REF. : 13408/0010	 REF. : 13408/3010
red	 REF. : 13407/0040	 REF. : 13407/3040	 REF. : ---	 REF. : ---
red - transparent	 REF. : 13407/0044	 REF. : 13407/3044	 REF. : 13408/0044	 REF. : 13408/3044
green	 REF. : 13407/0050	 REF. : 13407/3050	 REF. : ---	 REF. : ---
green - transparent	 REF. : 13407/0054	 REF. : 13407/3054	 REF. : 13408/0054	 REF. : 13408/3054
blue - transparent	 REF. : 13407/0064	 REF. : 13407/3064	 REF. : 13408/0064	 REF. : 13408/3064
grey	 REF. : 13407/0070	 REF. : 13407/3070	 REF. : ---	 REF. : ---
grey - transparent	 REF. : 13407/0074	 REF. : 13407/3074	 REF. : 13408/0074	 REF. : 13408/3074
purple	 REF. : 13407/0080	 REF. : 13407/3080	 REF. : ---	 REF. : ---
yellow	 REF. : 13407/0090	 REF. : 13407/3090	 REF. : ---	 REF. : ---
yellow - transparent	 REF. : 13407/0094	 REF. : 13407/3094	 REF. : 13408/0094	 REF. : 13408/3094
pink	 REF. : 13407/0100	 REF. : 13407/3100	 REF. : 13408/0100	 REF. : 13408/3100
turquoise	 REF. : 13407/0130	 REF. : 13407/3130	 REF. : 13408/0130	 REF. : 13408/3130
orange	 REF. : 13407/0140	 REF. : 13407/3140	 REF. : 13408/0140	 REF. : 13408/3140
orange - transparent	 REF. : 13407/0144	 REF. : 13407/3144	 REF. : ---	 REF. : ---
salmon	 REF. : 13407/0160	 REF. : 13407/3160	 REF. : ---	 REF. : ---
beige	 REF. : 13407/0180	 REF. : 13407/3180	 REF. : ---	 REF. : ---
pistachio green	 REF. : 13407/0200	 REF. : 13407/3200	 REF. : 13408/0200	 REF. : ---
pistachio green transparent	 REF. : 13407/0204	 REF. : 13407/3204	 REF. : ---	 REF. : 13408/3204
white	 REF. : ---	 REF. : ---	 REF. : 13408/0210	 REF. : 13408/3210

BULL SEMEN FREEZING

TurboFreezer™

Your benefits

- standardized semen freezing curves independent of straw position
- uniform post-thaw quality of the semen
- user defined freezing programs
- ergonomic and easy handling of racks and straws in ample freezing chamber
- high throughput provides outstanding economy

REF. : 16811/0000

Benefits over traditional freezing machines for semen:

Semen freezing in conventional freezers suffers from unpredictable cold and warm spots distributed throughout the freezing chamber.

- The TurboFreezer™ provides a uniform chamber temperature due to its aerodynamic design and the unidirectional horizontal gas flow.
- The freezing pattern of each single straw is precisely controlled by instant removal of crystallization energy.
- A homogenous gas flow is provided over the complete height and length of the stacks of straw racks.

Technical features

- Highly insulated body with stainless steel cover
- Quadruple LN₂ injection ports
- Conditioning plenum separated from the freezing chamber
- 2 fan blocks with 4 fans each for homogenous LN₂ dispersion and precision air flow throughout the chamber
- Programmable controller
- Ample space available to unload racks and transfer straws into goblets inside the freezing chamber
- Electric connection: 220 V
- Outer dimension: 190 x 108 x 86 cm (W x H x D)
- Chamber size: 145 x 41 x 32 cm (W x H x D)
- LN₂ consumption: approx. 18 liters of LN₂/cycle
- Required LN₂ pressure: 1.3 - 1.5 bar

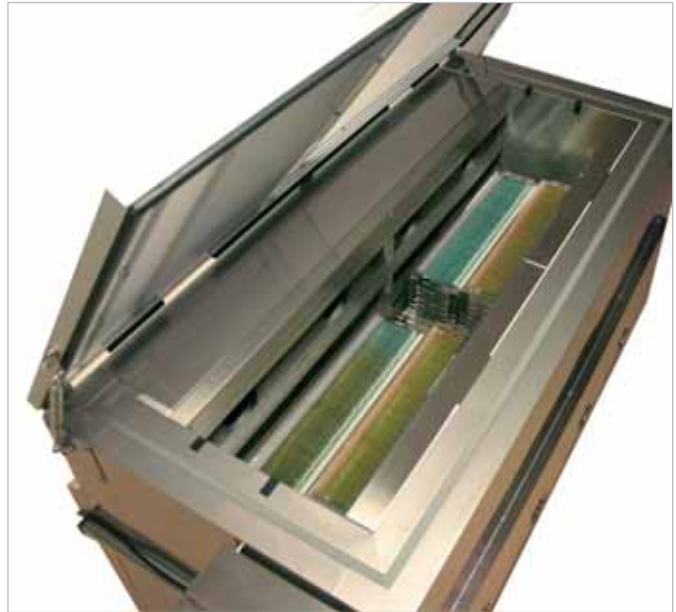
Accessories

Freezing racks with new design, streamlined for optimal vapor flow rate:

New style freezing rack for 175 mini straws 0.25	REF. : 15040/0175
Loading block for mini straw rack	REF. : 15041/0175
New style freezing rack for 100 medium straws 0.5	REF. : 15040/0100
Loading block for medium straw rack	REF. : 15041/0100



BULL SEMEN FREEZING



The low nitrogen consumption per freezing cycle combined with high through-put of straws per cycle provides an outstanding economic freezing performance in labour and LN₂ consumption.

Dual operation lid: inserted sliding covers for low impact loading and unloading of racks. Complete cover opens supported by air pressure cylinder.

Ample space available to unload racks and transfer straws into goblets inside the freezing chamber.

BULL SEMEN FREEZING

Storage Systems for Straws

Goblets

diameter	color	REF.	
10 mm	white	REF.	: 16912/0133
13 mm	white	REF.	: 16913/0133
13 mm	blue	REF.	: 16913/1133
13 mm	red	REF.	: 16913/3133
13 mm	pistachio - green	REF.	: 16913/4133
13 mm	yellow	REF.	: 16913/5133
35 mm	white	REF.	: 16935/0135
65 mm	white	REF.	: 16965/0133

Goblet canes,

for 2 x 10 mm Goblets	REF.	: 16965/6000
for 2 x 13 mm Goblets	REF.	: 16965/6013

Marker sticks for goblet canes, different colors

REF. : 13422/00xx

Divider for goblets, 100/bag

12 cm	REF.	: 16967/0065
24 cm	REF.	: 16967/0066

Identification rod

0.25 ml	REF.	: 16903/0210
0.50 ml	REF.	: 16903/1210

Funnel for filling large goblets

REF. : 15004/0402

Cassettes

Short and long triangular cassettes for 20/40 Minitubes or 10/20 straws 0.5 ml or 28/56 straws 0.25 ml

Short and long flat cassettes for 6/12 Minitubes or 3/6 straws 0.5 ml or 6/12 straws 0.25 ml



	triangular cassette		flat cassette	
	long	short	long	short
green	REF. : 16981/0135	REF. : 16981/0120	REF. : 16980/1201	REF. : 16980/0601
blue	REF. : 16981/0136	REF. : 16981/0121	REF. : 16980/1202	REF. : 16980/0602
yellow	REF. : 16981/0137	REF. : 16981/0122	REF. : 16980/1203	REF. : 16980/0603
red	REF. : 16981/0138	REF. : 16981/0123	REF. : 16980/1204	REF. : 16980/0604
white	REF. : 16981/0139	REF. : 16981/0124	REF. : 16980/1205	REF. : 16980/0605
beige	REF. : 16981/0140	REF. : 16981/0125	REF. : 16980/1206	REF. : 16980/0606

BOVINE ARTIFICIAL INSEMINATION

QuickLock 2000

- All instrument with best available length: only 1 cm of the sheath length is required for fixation
- Universally suitable for all kinds of straws and sheaths. The straw is automatically guided into the optimal position in the QuickLock 2000 tube
- Comfortable working through ergonomic design: also suitable for smaller hands due to smaller distance between the thumb plate and the fingertip
- Simple cleaning: the handle is made of only one piece. Sterilization in the autoclave (up to 120°C) is possible
- No loose parts, the plunger is secured against sliding out
- Suitable for all types of straws and sheaths

QuickLock Classic

- Small handle with very easy sheath fixation and release
- Universal for all types of straws and sheaths
- All parts made of sterilisable plastic or stainless steel
- No loose parts, plunger can not slide out



Universal Sheaths

- Suitable for all types of semen straws
- Absolutely tight fit with all types of straw
- Gentle insemination due to a soft shape of the tip
- 50/bag, 1 000 box
- transparent adapters for better visual control of straw position

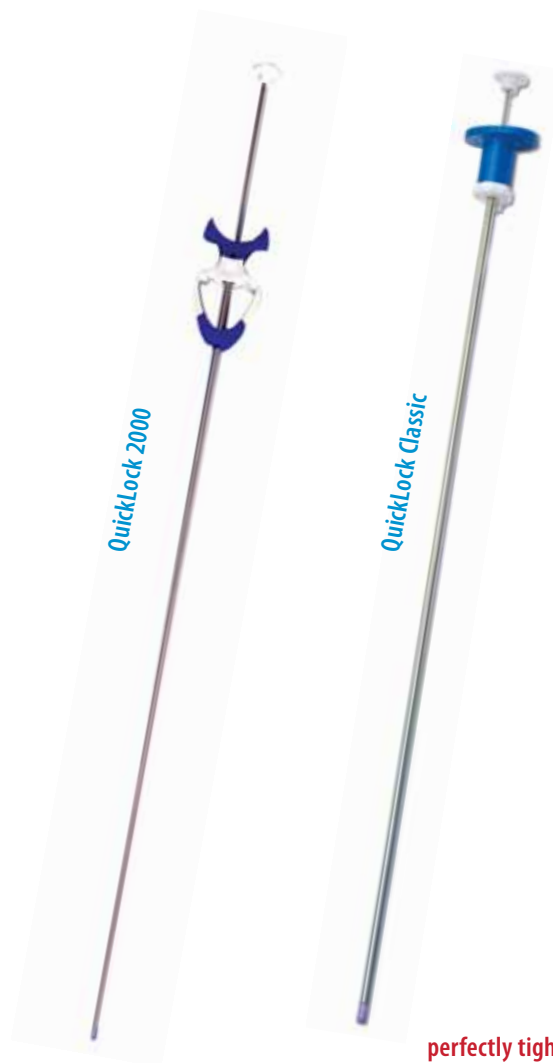
QuickLock 2000 REF. : 17026/0000

QuickLock Classic REF. : 17025/0000

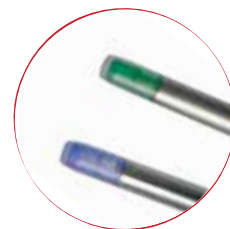
Universal sheath split (transparent-green) REF. : 17007/0001

Universal sheath non split (transparent-blue) REF. : 17007/0000

Hygienic sheaths, 100/roll REF. : 17028/0100



perfectly tight fit



BOVINE ARTIFICIAL INSEMINATION

Thawing Unit

- Electronic temperature control
- Control and temperature indication by LEDs
- Central, built-in thawing chamber with lift
- Accuracy: $\pm 0.2^{\circ}\text{C}$
- Power supply: 12 V DC (car battery)

MT 35/42: set to $+38^{\circ}\text{C}$ REF. : [17043/3542](#)

MT 47/54: set to $+50^{\circ}\text{C}$ REF. : [17045/0150](#)

Other temperature settings upon demand

Accessories

Thermometer for thawing devices REF. : [17049/0000](#)

Transformer for 110 - 230 V REF. : [17165/1395](#)



Insemination Kit

Insemination kit complete: heavy duty ABS case, electronic thawing unit MT 35/42, QuickLock, 100 Universal sheaths, MiniLube lubricant, speculum Varikon, 1 box AI gloves, MiniCutter, tweezers and clamp

REF. : [17050/0060](#)

Components also available individually

Insemination case REF. : [17050/0001](#)

Insemination glove, 100/box REF. : [17080/0005](#)

Varikon speculum REF. : [17064/0380](#)

Straw tweezers, angular shape REF. : [17060/0000](#)

MiniLube, 90 ml REF. : [17116/7000](#)

MiniCutter REF. : [17062/0010](#)

Clamp REF. : [17063/0000](#)

Not included in kit:

Transformer for thawing unit REF. : [17165/1395](#)

Hygienic cover for Varikon REF. : [17064/1600](#)



BOVINE ARTIFICIAL INSEMINATION

MiniCutter

Your benefits

- Ergonomic shape
- Precise cut of 0.25 and 0.5 ml straws
- Easy to keep clean

MiniCutter for straws

REF. : 17062/0010



Deep I.U. Insemination

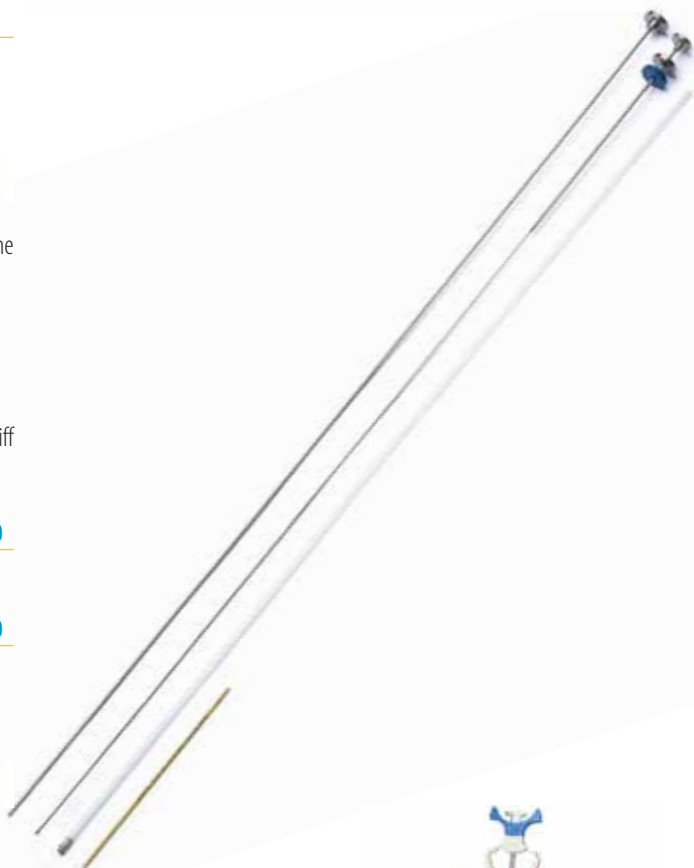
- Long, flexible sheath and mandrin for insemination deep inside the uterine horn
- Metal tip of the sheath for easy palpation and exact fit with the straw
- Extra introduction mandrin for penetrating the cervix
- Also suitable for embryo transfer

DIUI bovine inseminator set, consisting of flexible A.I. mandrin, stiff introduction mandrin, finger support and fixation rings

REF. : 17015/0000

DIUI bovine sheath, split, for 0.25 ml straws,
10/package

REF. : 17015/0650



QuickLock Heater

battery operated, with charger and carrying strap

Your benefits

- AI guns are transported at a constant temperature
- thawed semen will not lose temperature in pre-warmed QuickLock AI gun
- very robust material, easy to clean bag can be washed in a washing machine
- strap allows different ways of carrying the bag
- rechargeable battery, works for approx. 8 hours
- battery charger can be connected in the car (12 V DC) or to the wall socket (220 V AC)
- temperature setting : +35°C, other values optional

QuickLock heater, complete

REF. : 17028/0200

Accessory

Disposable plastic bag to protect the inside,
100/bag

REF. : 17028/0201



SUPEROVULATION AND BOVIPRO™ EMBRYO MEDIA

BoviPRO™ – Media for Bovine Embryo Transfer

- Formulated and manufactured by Minitube of America
- Dedicated clean room manufacturing
- Quality control of every media batch in our own lab with bovine IVP embryos
- Gas-tight packaging for longer shelf life
- Convenient package sizes

Recovery Media

Media for Bovine Embryo Transfer

A complete formulation containing Zwitterionic buffer solution, BSA or PVA, Kanamycin and Gentamycin.

- Process-Patented purified and enriched BSA
- No additives required
- Gas-tight package – prevents oxidation and change in pH
- 3-way port configuration

With BSA, 1 litre	REF. : 19982/1100
With BSA, 2 litres	REF. : 19982/1102
With PVA, 1 litre	REF. : 19982/1106
With PVA, 2 litres	REF. : 19982/1108

BoviPRO™ Filter Rinse

Without protein or surfactant. Contains Zwitterionic buffer with Kanamycin and Gentamycin. Used to rinse embryos from embryo filters.

85 ml	REF. : 19982/1150
1 litre	REF. : 19982/1151

Holding Medium

A multiple application medium for:

- Holding in vivo or in vitro derived embryos at room temperature in atmospheric air
- Washing and rinsing embryos
- Loading embryos for transfer to recipients

BoviPRO™ Holding Medium

Zwitterion-buffered solution containing D-glucose, Napyruvate, 0.4 % BSA, amino acids, growth factors, vitamins, Kanamycin and Gentamycin. 3-Tube pack, 10 ml/tube

REF. : 19982/1250

PLUSET®

FSH for superovulation in bovine, for 1 treatment. Each box contains vials of freeze dried product with: 500 IU FSH and 500 IU LH each, and 20 ml diluent q.s.

REF. : 19600/0010



EMBRYO MEDIA: BOVIPRO™

Cryopreservation Media

Media for conventional slow-rate freezing of embryos. BoviPRO™ cryopreservation solutions contain a Zwitterion-buffered solution with 0.1 M sucrose, D-glucose, Na-pyruvate, 0.4% BSA, amino acids, growth factors, vitamins and antibiotics (Kanamycin and Gentamycin).

BoviPRO™ Ethylene Glycol with Sucrose

For direct transfer after thawing. Includes 1.5 M ethylene glycol. 3-Tube pack, 10 ml/tube

REF. : 19982/1302

BoviPRO™ Glycerol with Sucrose

For conventional freezing and rehydration post-thaw. Includes 10% glycerol. 3-Tube pack, 10 ml/tube

REF. : 19982/1303



Thaw / Rehydration Media

Media for thawing, rehydration, and warming cryopreserved embryos.

BoviPRO™ Embryo Rehydration Kit

Solutions A, B and C each contain a Zwitterion-buffered solution with D-glucose, Na-pyruvate, 0.4% BSA, amino acids, growth factors, vitamins, Kanamycin and Gentamycin.

A: 5% Glycerol + 0.5 M sucrose

B: 2.5% Glycerol + 0.5 M sucrose

C: 0.0% Glycerol + 0.5 M sucrose

Kit includes 10 ml tube of each

REF. : 19982/1404



BoviPRO™ Sucrose Solution

3-Tube pack, 10 ml/tube

REF. : 19982/1405



EMBRYO COLLECTION

Flushing Catheters

Silicone Catheters, 650 mm length (26"), 20 - 30 ml inflation cuff, high-volume recovery ports, Luer activated valve. Gamma irradiated, 1/bag

2 way, Luer Lock

CH 12	REF. : 19982/0100
CH 14	REF. : 19982/0101
CH 16	REF. : 19982/0102
CH 18	REF. : 19982/0103
CH 20	REF. : 19982/0104

2 way, Foley end

CH 12	REF. : 19982/0110
CH 16	REF. : 19982/0113
CH 18	REF. : 19982/0111
CH 20	REF. : 19982/0112

3 way, Foley end

CH 16	REF. : 19982/0120
CH 18	REF. : 19982/0121
CH 20	REF. : 19982/0122

Lampeter stainless steel tip catheter with 8 ports, Luer activated valve, 1/bag

CH 15	REF. : 19006/0015
CH 18	REF. : 19006/0017

Neustadt Aisch/Rüsch catheter with 4 ports, air pressure control bulb, 2/bag

CH 15	REF. : 19004/0015
CH 18	REF. : 19004/0018

Cervix dilator, all stainless steel, fully autoclavable. Facilitates introduction of embryo collection catheter

REF. : 19001/1000



EMBRYO COLLECTION

Miniflush™ Filter

The patented Minitube embryo recovery system

Your benefits

- Embryo filter and grided search dish in one unit
- Chances of losing an embryo are greatly reduced as they are recovered directly into the Miniflush™ dish
- Large filter area for high flow rates
- Automatic maintenance of a minimum fluid level of 20 ml in the filter. Embryos are never outside of the medium
- Suitable for closed flushing systems and syringe collection method
- Vertical filtering surface minimizes the chance of a plugged filter
- Molded from transparent Polystyrene for maximum optical clarity

Product features

- effective filter size: diameter 73 mm
- mesh size/open area 44 µl/ 33%
- sterilized (gamma irradiated)
- disposable

REF. : 19222/2000

Accessories

Bag for Miniflush™ filter, insulated

REF. : 19010/1100



Flushing Tubings

Disposable Y-junction tubing with clamps, to be used in combination with any catheter and inline filter. Sterilized (gamma irradiated), 1/bag. Tubing made of very smooth, flexible material. End for filter connection requires no extra adapter

Luer end

REF. : 19011/0000

Foley end

REF. : 19011/0001



EMBRYO EVALUATION

Stereo Microscopes

Zoom stereo microscope, 20x eye pieces. Total magnification from 13.4x to 90x. Working distance 92 mm approx. With incident and transmitted light source. 110 – 240 V / 50 – 60 Hz

REF. : [12025/0033](#)

Stereo zoom microscope MSZ 5600, total magnification from 7x to 45x, eye-pieces 10x, transmitted light source

REF. : [12011/0000](#)



Temperature Control

Heated stage for stereo microscope

REF. : [12055/0003](#)

Control unit HT 50 for heated stage

REF. : [12055/0050](#)



Bead bath

Temperature controlled incubator for sample tubes or straws of different sizes (up to 15 mm diameter), with steel balls inside for secure fixation. Temperature range between ambient and +55°C. Requires a control unit HT 50 S, HT 300 or HT 400 W

Bead bath

REF. : [12055/5000](#)

Controller HT 50 S

REF. : [12055/0205](#)



Laboratory Heating Plate

Heated Area: 470 x 260 mm. Preset temperature (37°C), with integrated control unit and external power supply.

REF. : [12055/0010](#)



EMBRYO EVALUATION AND GENDER DETERMINATION

Gender Determination of Bovine Embryos

SEX-Y™, with components to identify 10 bovine embryos by fluorescent dye.
No need for PCR

New procedure for sexing bovine embryos

SEX-Y™ contains a molecular probe, known as Bov-Y that recognizes a specific site found only on the DNA of the Y chromosome. To identify the embryo's sex, a biopsy is taken from the embryo. This group of cells is then treated with the Bov-Y probe. If the embryo is a male, the Bov-Y probe attaches directly to the DNA of the Y chromosome and produces a fluorescent signal seen as a bright "dot" under a fluorescent microscope. If the embryo is female, there is no Y chromosome present, so there is no attachment of the Bov-Y probe, and no fluorescent signal is observed.

Your benefits

- Simple: the procedure is different, and much easier to carry out than other available methods for sexing:
 - six easy steps to get the result
 - no PCR amplification (incl. electrophoresis)
 - no gel or colour reactions
- Fast: results in less than one hour!
- Convenient: only little laboratory equipment is necessary. All you need is:
 - a micromanipulation set up for taking the biopsy
 - a normal or inverted microscope with fluorescent set up
 - 2 incubators (only small stage incubator or heating plate, respectively)
- Reliable: as the probe binds only to male bovine DNA, an exact result is available within a short period of time



SEX-Y™ KIT, for 10 bovine embryos

REF. : [19982/5010](#)

Inverted microscope Zeiss Axiovert 40CFL, with incident light fluorescence module, filters DAPI and CY3, phase contrast objectives PH 10x, PH 40x, HPX120 illumination

REF. : [12040/0040](#)

Micromanipulation unit, includes 2 micromanipulators, 1 microinjector and 1 pneumatic injector

REF. : [19386/0000](#)

Consumables for embryo biopsy available

EMBRYO HANDLING

Micropipettor: easy and precise pipetting by handling wheel, for all sizes of capillary tubes up to 1 ml

Model A	REF. : 19022/0000
Model B	REF. : 19022/0002

Steripette for embryo handling, 55 mm individually packed, sterilized, 50/package, for use with 1 ml insulin syringe

REF. : 19025/0055

Glass pipette for embryo handling, silicone treated (240°C), 100/package.

REF. : 19026/0100

Adapter for glass pipette, for connecting with Luer syringe, sterilized

REF. : 19026/1100

Adapter for glass pipette, with tubing and mouth piece

REF. : 19026/2100

Embryo Culture Dish, with lid, sterilized, 5 wells, rounded well edges, mouse embryo batch tested

REF. : 19021/0001

Petri dish, plastic

diameter 35 mm	REF. : 19020/0035
diameter 94 mm	REF. : 19020/0094
diameter 145 mm	REF. : 19020/0145

Petri dish, plastic, with grid

diameter 65 mm	REF. : 19020/2065
diameter 94 mm	REF. : 19020/2094

0.25 ml straw, clear, gamma irradiated, 10/package, without seal

clear REF. : 19042/0010

yellow (direct transfer) REF. : 19042/1010

0.25 ml straw, clear, gamma irradiated, 10/package, with ID rod seal

white	REF. : 19040/0010
beige	REF. : 19040/0011
light yellow	REF. : 19040/0012
light blue	REF. : 19040/0013
red	REF. : 19040/0014
pink	REF. : 19040/0015
grey	REF. : 19040/0016
light green	REF. : 19040/0018
dark yellow	REF. : 19040/0020



EMBRYO HANDLING

0.25 ml straw, yellow transparent, gamma irradiated,
10/package, with ID rod

beige REF. : 19040/0111

light yellow REF. : 19040/0112

0.25 ml straw 133 mm, clear, gamma irradiated,
10/package, with sealing ball

REF. : 19041/0010

0.25 ml straw 90 mm, clear, sterilized, 10/package

white, with ID rod, many colors available REF. : 19040/9010

with sealing ball REF. : 19041/9010

ET ID rod, for sealing and identification of 0.25 ml straws,
100/package

white REF. : 19046/0010

beige REF. : 19046/0015

light yellow REF. : 19046/0020

light blue REF. : 19046/0025

red REF. : 19046/0030

pink REF. : 19046/0035

grey REF. : 19046/0040

light green REF. : 19046/0050

dark yellow REF. : 19046/0060

Pen for marking, very fine, alcohol permanent

silver REF. : 19045/0000

black REF. : 19045/0100

Manual sealer for straws, securely seals all kinds of straws by applying heat at the end of the straws. Also seals in liquid nitrogen vapour. Consists of a plier welding head adapted for straws and a control unit for varying heat level

REF. : 13135/2500

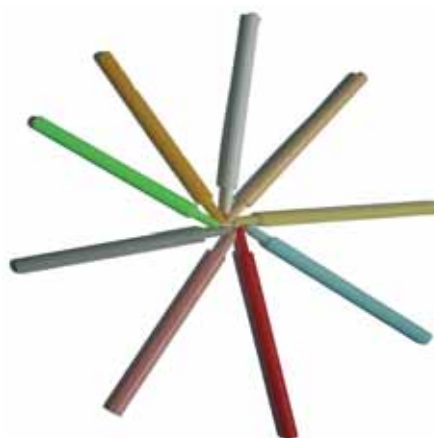
Ultraseal 21, manual straw sealer with ultrasonic sealing technology. Suitable for 0.25/0.5 ml and all other straws. User selected sealing times. Sealing without exposing straw content to heat. 115/230 V, 50 - 60 Hz

REF. : 13135/0220



Straw Label Printer, prints labels suitable for 0.25/0.5 ml straws and for ID rods. Battery operated and with optional 110/220V connection. Thermo transfer print, resolution 300 dpi, up to 3 line print

REF. : 13138/0000



EMBRYO AND OOCYTE TRANSPORT

Portable Incubators

for a safe transport of embryos and oocytes at a constant temperature

Your benefits

- constant temperature distribution due to the use of metal balls in the device
- easy and secure fixation of vials and straws
- absolutely dry and hygienic environment

Product features

- Freely selectable temperature setting (up to + 55°C)
- Electronic temperature control
- Digital temperature display
- Temperature precision: +/- 0.5°C
- Power supply: 12 V DC (car battery) or rechargeable dry battery

Portable incubator for transport of embryos/oocytes with digital temperature display, temperature range 0° C bis 40° Celsius

REF. : 19180/0002

Portable ET incubator

with electronic temperature control

REF. : 19180/0000

Accessories

Rechargeable dry battery, 12 V / 10 Ah,
capacity at +25°C: approx. 56 h.

REF. : 19180/1210

Charger for battery

REF. : 19180/1200

Power supply unit for ET transport unit, 230V

REF. : 17165/1395

Plastic vial 2 ml with screw cap

REF. : 19180/5002

Plastic vial 5 ml with screw cap

REF. : 19180/5006



Embryo Transport Kit

Your benefits

- Heavy duty – impact resistant
- Water resistant
- Airline approved – due to pressure relief valve that adjusts for rapid altitude changes during flight
- Electrical components isolated in metal enclosure

Technical specifications

- Outer dimensions: 43 x 24 x 34 cm
- Capacity of battery: 24 h
- Weight of kit: approx. 10 kg

Carrying case with dry battery and battery charger
holds temperature for 24 hours during transport.

REF. : 19180/2100

Portable ET incubator

REF. : 19180/0000



EMBRYO FREEZING

Freeze Control Embryo Freezer

Freeze Control embryo freezing systems are designed for practitioners. They use liquid nitrogen as the cooling medium, and heat control for regulating temperature. Each system consists of a cryobath, a controller and a carry case. Capacity 23 x 0.5 ml or 46 x 0.25 ml straws.

With controller CL 2200, 4 preinstalled programs, 1.5 litre cryobath, external power supply

REF. : [19406/2200](#)

With controller CL 5500, 8 preinstalled programs, 1.5 litre cryobath, inbuilt battery power pack

REF. : [19406/5500](#)

With controller CL 8 800, 16 preinstalled programmes, 3.8 litre cryobath, external power supply

REF. : [19406/8800](#)

External power pack for CL 2200/CL 8800

REF. : [19407/0000](#)



Vitrification Kit and VitSet

BoviPRO Vit-Kit™, contains all equipment for vitrification of embryos

REF. : [19982/1405](#)

VitSet, Set for vitrifying embryos or oocytes in straws

REF. : [19500/2000](#)



EMBRYO TRANSFER

Transfit Sheaths and Stylets

Transfit Lateral, sheath with metal tip and side opening, to be used with Ministraws, sterilized, 5/package

REF. : 19240/1005

Transfer stylet to be used with Transfit Lateral sheath

REF. : 19240/1000

Transfit Standard, sheath with round plastic tip, front opening, sterilized, 5/package

REF. : 19240/0005

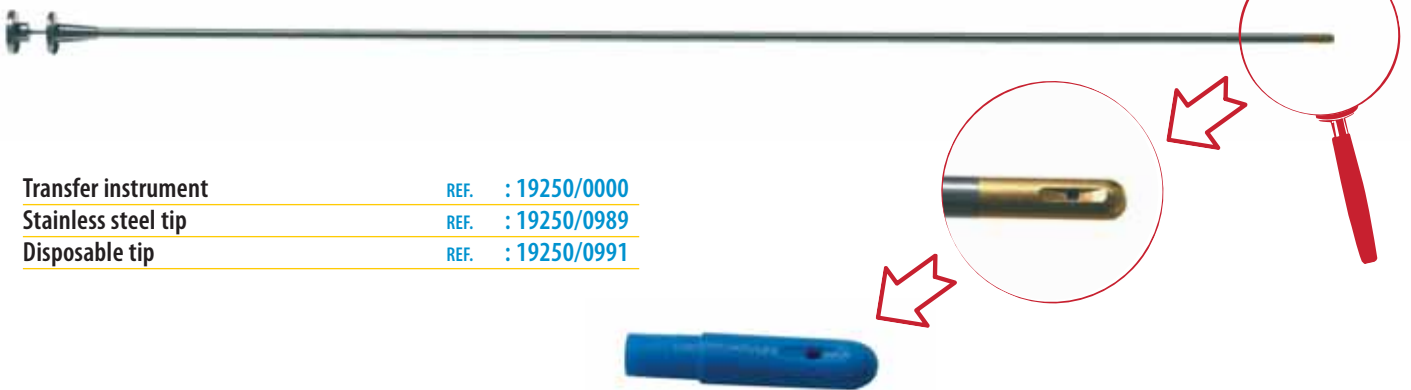
QuickLock ET, to be used with disposable Transfit sheaths, quick and secure fixation

REF. : 19240/0000



Stainless Steel ET Instrument MT

- Sterilizable transfer instrument to be used without sheaths, with removable tip made of gold plated stainless steel, 1 side outlet, ring for marking opening position
- Disposable tip for transfer instrument MT made of plastic, sterilized, individually wrapped, 100/box



Transfer instrument REF. : 19250/0000

Stainless steel tip REF. : 19250/0989

Disposable tip REF. : 19250/0991

Hygienic Sheaths

- Protection sheath
- Sanisheath rigid hygienic sheath with perforable cap

Protection sheath, 80/roll REF. : 19271/0080

Sanisheath, 25/package REF. : 19270/0025



DIAGNOSTICS

eProCheck®

Automated Progesterone Test for Effective Bovine Reproduction Management

Your benefits

- Analysis of the progesterone level in milk or blood serum samples proceeds fully automatically
- Automatic analysis and evaluation of samples takes a maximum of 19 minutes (up to 7 samples at a time)
- It is not necessary to supervise the analyzing process
- Stored data can be transferred to a PC and managed with the software eProManager, which is provided with the equipment.

eProCheck® REF. : [21800/0000](#)

Technical details

- Dimensions 36 x 23 x 27 cm
- Optimal operating temperature +18°C to +25°C
- Power supply 110 V to 220 V
- Weight 12 kg

Accessories

Testkits incl. test agents, sampling tubes and disposable pipettes

for 84 milk samples + 12 Standards	REF. : 21800/0096
for 72 milk samples + 6 Standards	REF. : 21800/0048
for 72 serum samples + 6 Standards	REF. : 21800/0196



Cytology Brush

Disposable set for collecting endometrical cells for cytology. For use in combination with uterus culture swab.

Cytology brush, single packed, sterile REF. : [17214/2960](#)



Endo Control Sampler

Effective and early detection of endometritis by evaluation of vaginal mucus.

Endo Control Sampler, single packed, sterile, single use REF. : [17075/0020](#)



Minitüb is an ISO 9001:2008 certified company.

