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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WORLD WIDE ACTIVITIES

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Minitube is a registered trademark of Minitüb GmbH, Germany.
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.

Minitube International offers you specialized training programs, courses and technology transfer. In close cooperation with renowned research institutions 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.

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
CEO
COLLECTION OF STALLION SEMEN

Hannover artificial vagina

Equine artificial vagina Hannover with valve, inner liner (100 cm), 3 rubber rings, leather handle  
REF. : 11220/0145

Accessories

Inner liner (1) for model Hannover, rubber, with roll-up ends, sterilisable  
long version. 100 cm  
REF. : 11222/0002  
short version. 70 cm  
REF. : 11222/0003

Disposable inner liner (2), width approx. 21 cm, roll with approx. 200 m; „sensitive“: smooth and resistant material  
REF. : 11222/0120

Warming bag (3) for collection glass, protects the semen from low temperature and UV radiation  
REF. : 11225/0026

Warming bag made of neoprene, blue (without illustration)  
REF. : 11225/0027

Rubber band (4) for model Hannover  
REF. : 11222/0007

Small valve (5) for model Hannover  
REF. : 5011222/0005

Disposable inner liner, fits model Hannover/Colorado with built-in filter, 10/package (without illustration)  
REF. : 11232/0420

Semen collection bottle  
200 ml, sterilisable plastic, 100/package  
REF. : 11231/0200

Coupling nut for 200 ml semen bottle, 25/package (not shown)  
REF. : 11231/0301

Leather handle for model Hannover  
REF. : 11222/0008

Missouri artificial vagina

Equine artificial vagina Missouri, double latex liner with valve and leather casing, adapter and collection bottle, length: approx. 55 cm  
REF. : 11245/0000

Accessories

Disposable inner liner „AV-Liner“  
With built-in filter and collection pouch, for model Missouri (no collection bottle needed), 10/package  
REF. : 11245/0420

without filter, for model Missouri, 25/package (without illustration)  
REF. : 11245/0450

without filter, fits models Hannover, Colorado and Missouri, 10/package (without illustration)  
REF. : 11232/0440
Colorado artificial vagina

Equine artificial vagina Colorado, complete with 2 inner rubber liners (tubular and conical), 10 rubber bands, 2 clamps, 25 disposable inner liners, 25 semen bottles, 25 coupling nuts, 25 nylon filters and warming bag

REF. : 11230/0000

Accessories

Disposable inner liner (1), plastic, width 30 cm, roll with approx. 200 m; „sensitive“: smooth and resistant material

REF. : 11232/0030

Disposable inner liner Colorado (2), 25/package

REF. : 11232/0110

Disposable inner liner Colorado (3), Artificial vagina shaped, 25/package

REF. : 11232/0102

Semen collection bottle Colorado (4), 200 ml, sterilised plastic, 100/package

REF. : 11231/0200

Coupling nut for 200 ml semen bottle, 100/package (without illustration)

REF. : 11231/0301

Semen filter Colorado (5), nylon, fits Colorado collection bottle, 25/package

REF. : 11231/0400

Accessories for semen collection

Vaseline, 1000 g

REF. : 11905/0100

Lubricating jelly Bengen, 1 l, water soluble

REF. : 11906/1000

Semen filter, non woven, 150 x 60 mm, 100/package

REF. : 11245/3100

Semen filter pouch, non-woven, 10/package

REF. : 11260/1000

Thermometer for artificial vagina,

Bimetal, nonbreakable, 0-100°C

REF. : 11027/0000

Mercury, 0-100°C, graduation 0.1°C

REF. : 11027/0100

Mercury, 0-200°C, graduation 0.1°C

REF. : 11027/0200

Semen collection glove, disposable, non spermicidal, different sizes (M/L/XL), 100/box

REF. : 11128/0055

Glove dispenser

REF. : 11128/0010
Hannover phantom for stallions

Adjustable in height and inclination, covered with reinforced synthetic material coating, well padded, contoured body style, includes bite belt. Size of the phantom fits for all breeds:
Body: 200 x 60 x 55 cm (W x H x D)
Height of the dummy: 1.30 m to approx. 1.70 m

Hannover phantom with hydraulic height adjustment of both legs. Hydraulic height adjustment ensures low fatigue operation. Both feet can be lifted or lowered about 40 cm either individually or together by means of a hand pump.

Accessories

Cover for phantom, synthetic material, collection side closed, with belts for attachment
REF. : 11200/2601

Leather blanket for phantom for stallions, collection side closed, with belts for attachment
REF. : 11200/2501

Bite belt
REF. : 11200/2100

Stretch foil for protection of phantom, length 300 m
REF. : 32000/0010

Lubricant ReproJelly

Non spermicidal lubricant, water soluble

- Iso-osmotic and sperm friendly, supports the sperm cell viability
- Batches are tested for sperm compatibility
- Ideal viscosity to better coat gloves, AI equipment and instruments

Tube with 100 ml, resealable
REF. : 11907/0100

3.0 l canister, without dispenser
REF. : 11907/3000

Dispenser for canister
REF. : 11907/3100
Integrated sperm functionality analysis

This highly efficient automated system for computerised semen analysis stands out for the integration of the classic CASA analysis with more advanced assays for sperm functionality. Concentration and motility as well as sperm integrity and viability can be assessed accurately and quickly with up to 1000 cells per field, making AndroVision® the perfect tool for the objective and complete semen evaluation. All images and data are stored for later review. AndroVision® can be seamlessly integrated with the IDEE laboratory processing software. The user interface is straightforward and easy to understand. An analysis report can be generated as a hard copy print or a digitized file. These features and more make AndroVision® the ideal choice for semen assessment in a research and production lab.

**AndroVision® software**
with PC and accessories

**AndroVision® camera**
high speed colour camera

**AndroVision® software modules**

**Morphology and Morphometry:**
Interactive system for analysis of sperm morphology and morphometry. Identifies sperm of stained and unstained samples and measures length and width of the sperm head, head shape and midpiece asymmetry of each single sperm cell (acc. to Krüger). Results can be classified into a large range of morphologic abnormalities.

Module Morphology & Morphometry  REF. :  12500/1300

**Viability:**
Automated count of the percentage of membrane intact sperm, based on a double stain fluorescence assay.

Module Viability*  REF. :  12500/1400

**Acrosome Integrity:**
Automated count of percentage of sperm with damaged acrosome, based on a double stain fluorescence assay.

Module Acrosome Integrity*  REF. :  12500/1600

**Activity of Mitochondria:**
Automated count of percentage of sperm with active Mitochondria, based on a double stain fluorescence assay.

Module Activity of Mitochondria*  REF. :  12500/1700

* requires fluorescence microscope
**Phase contrast microscope CX 31**

**Technical features**

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

with phototube (trinocular), with objectives 10x, 20x, 40x  
  Ref. : 12004/0631

**Phase contrast microscope MBL 2000**

Functional microscope for semen analysis with phase achromatic objectives 10x, 40x, 100x. Heating system with temperature control unit HT 50 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

Fareelly stain for morphological evaluation, 3 x 250 ml  
  Ref. : 15405/0026

Eosin G solution for supravital staining, 50 ml  
  Ref. : 15405/0025

Nigrosin solution for supravital staining, 50 ml  
  Ref. : 15405/0029

**Laboratory scale**

Precision scale for the determination of the ejaculate volume, weighing range max. 2000 g, resolution 0.1 g, weighing pan 130 x 130 mm  
  Ref. : 14295/0444
**PHOTOMETRY**

**Photometer SDM6**

**Your benefits**
- Touch screen operated, large display
- Programs for the determination of sperm concentration of stallion, bull, boar, ram and buck semen
- Automatic calculation of extender volume and number of doses
- Display of semen concentration in 10⁹ sperm cells/ml
- Optional: integrated printer for printout of production data of 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 determination of semen concentration and for dose calculation, with integrated printer  
**REF.**: 12300/0006

**Photometer SDM6**, without printer  
**REF.**: 12300/0008

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**Photometer SDM 1**

The SDM 1 is a compact, highly accurate photometer developed for measuring sperm cell concentrations. It can be calibrated for equine, porcine, bovine, canine and small ruminant species. Cleaning is simple, maintenance is minimal. The semen concentration is displayed in million sperm cells/ml.

**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

**Pipette** 10-100 µl, with digital display  
**REF.**: 12425/4810

**Pipette tip yellow**, 1000/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

**Accessory**

**Multispecies software** for reprogramming to other species  
**REF.**: 12300/0130

**Microcuvette for SDM 1**, 100/box  
**REF.**: 12300/1111
MINITUBE STALLION SEMEN EXTENDERS
CHILLED SEMEN PROCESSING

**EquiPlus**
Balanced medium with specific purified caseinates for preservation of sperm activity up to 72 hours.

- **Powder for 1 l, with antibiotics**  REF. : 13570/0202
- **Powder for 1 l, without antibiotics**  REF. : 13570/0201
- **Powder for 100 ml, with antibiotics**  REF. : 13570/0210
- **Powder for 100 ml, without antibiotics**  REF. : 13570/0240
- **Liquid. 100 ml, with antibiotics**  REF. : 13570/0301
- **Liquid. 200 ml, with antibiotics and fungicide**  REF. : 13570/0253

**Gent**
for fresh semen, with egg yolk and antibiotics, ready to use

- **45 ml**  REF. : 13571/0045
- **100 ml**  REF. : 13571/0100

**CushionFluid**
for gentle centrifugation of stallion spermatozoa. Assures a higher yield of sperm cells as compared to standard centrifugation.

- **100 ml**  REF. : 13580/0001

**Centrifugation medium**
Powder for 1 l transparent EDTA glucose solution  REF. : 13565/0001

**Water for semen extenders**
Bidistilled, sterilised, pyrogen-free

- **1 l**  REF. : 13570/1000
- **100 ml**  REF. : 13570/1100

Minitube extenders are produced according to highest quality standards. All components are from constantly excellent, controlled sources. Each extender batch is tested for its chemical, microbiological, physical and biological properties. Certificates are available upon request.
MINITUBE STALLION SEMEN EXTENDERS
CRYOPRESERVATION OF SEMEN

EquiPlus Freeze
Media for the cryopreservation of stallion semen

❖ Your Benefits

• Ready to use and easy to handle
• Not necessary to add pure water
• Can be transported at ambient temperatures up to +25°C
• Available as 1-step (filling at ambient temperature) or 2-step type (filling at 5°C)

EquiPlus Freeze 1-step with egg yolk
Two liquid components: 95 ml medium and 5 ml egg yolk-glycerol mixture

Ref. : 13570/0410

EquiPlus Freeze 1-step without egg yolk
One liquid component: Medium with glycerol. Addition of 2 ml freshly filtered egg yolk by the user

Ref. : 13570/0420

EquiPlus Freeze 2-step with egg yolk
consists of three liquid components:
2. Component B: EquiPlus Freeze: liquid medium. The egg yolk-glycerol component is added before using.
3. Component C: Egg yolk-glycerol mixture.

Ref. : 13570/0510

EquiPlus Freeze 2-step without egg yolk
consists of two liquid fractions:
2. Component B: EquiPlus Freeze contains glycerol: the operator adds 4 ml of fresh egg yolk before using.

Ref. : 13570/0520

Gent extender
Freezing extender with egg yolk, glycerol and antibiotics, ready to use

45 ml

Ref. : 13571/1045
PROCESSING AND PACKAGING OF STALLION SEMEN

**Water bath**

Electronic temperature control, stainless steel, with grid and lid

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Inner dimensions</th>
<th>Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 l</td>
<td>240 x 210 x 140 mm (W x H x D)</td>
<td>: 14078/0001</td>
</tr>
<tr>
<td>10 l</td>
<td>350 x 210 x 140 mm (W x H x D)</td>
<td>: 14079/0001</td>
</tr>
</tbody>
</table>

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

**Centrifuge Minitube**

with swing out rotor for 4 buckets. Delivered with buckets for three different vial sizes: 100 ml (1 vial/bucket), 50 ml (1 vial/bucket) and 15 ml (2 vials/bucket).

Speed range: 500-4000 RPM (equates up to 2200 g). Speed can be shown as RPM or RCF (relative centrifugal force, „g“).

Programmable (10 different setups).

**Rolling mixer RM5**

for gentle, constant homogenization of semen doses in tubes. Appropriate for use inside the refrigerator.

Dimensions: 430 x 180 mm (W x H)

**Shaker**

Platform with two fixation devices and non-slip rubber pad, includes timer

Shaking frequency: 150-1350 cycles/min

Area of platform: 220 x 220 mm
Glass ware

Measuring pipettes, graduated cylinders, beakers, dispensers, test tubes, Erlenmeyer flasks etc.

Please ask for a detailed list of our lab glass ware!

Plastic vials

Plastic vial with graduation and screw cap.

- 30 ml  
  Ref. : 17231/0030
- 50 ml  
  Ref. : 17220/0017
- Sterile, 13 ml, with cap  
  Ref. : 17230/6001
- Plastic vial, 13 ml, round bottom  
  Ref. : 17230/6000

Screw cap for plastic vial, 13 ml

- red  
  Ref. : 17230/6055
- blue  
  Ref. : 17230/6056
- green  
  Ref. : 17230/6058
- white  
  Ref. : 17230/6054
- violet  
  Ref. : 17230/6057
- yellow  
  Ref. : 17230/6059

Rack for 20 plastic vials 12/13 ml, acrylic glass  
Ref. : 17230/9384
Rack for 20 plastic vials 30 ml, acrylic glass  
Ref. : 17231/9384
Rack for 24 test vials of 18 mm, stainless steel, with numbers  
Ref. : 14076/0005

Sterile bags

with incorporated wire and write-on tag, 100/package

- Volume 60 ml  
  Ref. : 17224/0250
- Volume 120 ml  
  Ref. : 17224/0500
- Volume 350 ml  
  Ref. : 17224/1000

Disposable syringes

all plastic, sterilised, in sizes from 1 ml to 50 ml

- 10 ml, 100/package  
  Ref. : 19801/0010
- 20 ml, 100/package  
  Ref. : 19801/0020
- 30 ml, 500/package  
  Ref. : 19801/0063
- 50 ml, 300/package  
  Ref. : 19801/0060
**Goblets**

Plastic containers for the storage of straws, available in different sizes and colours:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Color</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 mm</td>
<td>white</td>
<td>16965/6071</td>
</tr>
<tr>
<td>10 mm</td>
<td>white</td>
<td>16912/0133</td>
</tr>
<tr>
<td>13 mm</td>
<td>white</td>
<td>16913/0133</td>
</tr>
<tr>
<td>13 mm</td>
<td>blue</td>
<td>16913/1133</td>
</tr>
<tr>
<td>13 mm</td>
<td>red</td>
<td>16913/3133</td>
</tr>
<tr>
<td>13 mm</td>
<td>pistachio</td>
<td>16913/4133</td>
</tr>
<tr>
<td>13 mm</td>
<td>yellow</td>
<td>16913/5133</td>
</tr>
<tr>
<td>35 mm</td>
<td>white</td>
<td>16935/0135</td>
</tr>
<tr>
<td>65 mm</td>
<td>white</td>
<td>16965/0133</td>
</tr>
</tbody>
</table>

Goblet hexagonal for 36 of the 0.5 ml or 80 of the 0.25 ml straws (without illustration)

**0.25 ml and 0.5 ml semen straws**

In many different colors.

**Macrotubes**

<table>
<thead>
<tr>
<th>Volume: 2.5 ml, length: 140 mm</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume: 4 ml, length: 240 mm</td>
<td>13441/0240</td>
</tr>
<tr>
<td>Volume: 5 ml, length: 280 mm</td>
<td>13441/0280</td>
</tr>
</tbody>
</table>

Sealing balls for macrotubes: Metal or glass, in many different colours available.

Straws can also be delivered preprinted. Please ask for the Minitube printing service!
EasyCoder

Printing of straws without ink

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 gradations from micro to macro
- Freely eligible number of lines and of printing positions
- Clean and odourless working without ink and solvents
- Easy handling, little maintenance required
- Easy and quick conversion between different straw sizes

EasyCoder printer, complete  REF. : 13038/0000

Technical features

- Thermal transfer printer with automatic straw supply
- Output: 3600 straws per hour
- Windows based Minitube 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 (W x H x D): 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
FILLING & SEALING OF STRAWS

**MPP Uno**

Automatic filling and sealing machine for 0.25 and 0.5 ml straws

**Your benefits**

- Sealing and filling of one straw per cycle
- Capacity of the exchangeable hopper: approx. 1300 straws 0.5 ml
- Compact device, low space requirement, integrated vacuum pump and pressure controller; ultrasound generator integrated in external casing, mounting at a distance of up to 2.5 m possible
- Best hygienic and safety conditions due to a closed filling and sealing area
- Also suitable for 0.25 ml straws (very easy exchange)

MPP Uno, complete  REF. : 13017/0000

**Technical features**

- Capacity: approx. 4235 straws/hour
- No wearing parts. Very fast and easy cleaning
- Machine dimensions: 460 x 320 x 410 mm (W x H x D)
  + ultrasound generator
- Power supply: 110 V/60 Hz or 230 V/50 Hz

**Accessories**

<table>
<thead>
<tr>
<th>Item</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchangeable straw hopper</td>
<td>13017/0005</td>
</tr>
<tr>
<td>Filling nozzle 0.5 ml</td>
<td>13017/0017</td>
</tr>
<tr>
<td>Suction nozzle 0.5 ml</td>
<td>13017/0027</td>
</tr>
<tr>
<td>Washer, 5000/bag</td>
<td>13021/3001</td>
</tr>
<tr>
<td>Filling tubing, 100/bag</td>
<td>13021/3800</td>
</tr>
<tr>
<td>Semen cone, 200 ml, 100/bag</td>
<td>13018/0100</td>
</tr>
</tbody>
</table>

**Semiautomatic filling and sealing System SFS 133**

for 0.5 ml straws. The straws are filled and sealed 6 by 6. Safe and hygienic sealing system with beads. The air bubble is created automatically. Output: approx. 2000/hour

REF. : 13133/0133

<table>
<thead>
<tr>
<th>Item</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum pump, adjustable valve and manometer</td>
<td>13133/0267</td>
</tr>
<tr>
<td>Loading block, with rack and 10 magazines for 36 straws each</td>
<td>13133/0005</td>
</tr>
</tbody>
</table>

**Accessories**

<table>
<thead>
<tr>
<th>Item</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealing beads, glass (various colours)</td>
<td>13400/0xxx</td>
</tr>
<tr>
<td>Sealing beads, metal</td>
<td>13400/9900</td>
</tr>
<tr>
<td>Support for semen cone</td>
<td>5013018/0932</td>
</tr>
</tbody>
</table>
IceCube

IceCube 14S: computer controlled freezer, with comfortable data input and automatic recording of the freezing curve.

Technical features

- Temperature range: +40 to -180°C
- Freezing rates: 0.01 to 60°C/min
- Heating rates: 0.01 to 15°C/min
- Display accuracy: 0.01°C
- Temperature measurement via 2 Pt-100 resistance thermometers
- Capacity: approx. 900 x 0.5 ml straws per freezing cycle

Software for freezing programming and control, unlimited storage of programs and processed files, color graphic display of all temperature curves, wide possibility of parameter settings.
Dimensions: 570 x 500 x 520 mm (W x H x D), weight: 29 kg

IceCube 14S with 12” touch screen monitor and connector kit to be connected to computer and LN₂ pressure container

REF.: 16821/2000

IceCube 14S without monitor, with connector kit to be connected to computer and LN₂ pressure container

REF.: 16821/1000

Please ask for Embryo Freezing Equipment for the IceCube!

Accessories

Rack for Icecube 14S (1), for 36 straws
REF.: 16821/5036

Loading Device
REF.: 16821/5037

Handling rack for Icecube 14S (2)
REF.: 16821/5030

Spacer for IceCube (not shown)
REF.: 16821/5018

Liquid Nitrogen pressure container for IceCube 14S, 60 l
REF.: 16820/1900

Roller base for LN₂ pressure container
REF.: 16501/0204

Larger alternative:
IceCube 14M
Capacity: approx. 2300 x 0.5 ml straws

IceCube 14M without monitor
REF.: 16820/6000

IceCube 14M with touch monitor
REF.: 16820/7000

www.minitube.com
FREEZING OF STALLION SEMEN

**Freezing units**

The freezing units are compact and easy to handle. They are made of a styrofoambox of high quality, an inner container out of stainless steel and a floating rack. The stainless steel container is filled with liquid nitrogen. The rack keeps the needed distance between 0.5 ml or 0.25 ml straws during the first down phase, while it floats on liquid nitrogen. After that, the straws get manually immersed into the nitrogen. The freezing units are an easy but robust and effective solution for standard freezing in nitrogen vapour.

**Technical details**

- The distance between straws and liquid nitrogen level can be adjusted
- Fits 0.5 ml and 0.25 ml straws
- Low nitrogen consumption
- With high quality styrofoam chest and stainless steel inner box with working tray
- Transportable

**For 20 straws**

REF. : 15043/0636

**For 90 straws**

REF. : 15043/0736

**Accessories**

**Loading block for 90 straws floating rack** (without illustration)

REF. : 15043/0738

Additional rack
for freezing unit for 20 straws  REF. : 5015043/0600
for freezing unit for 90 straws  REF. : 5015043/0900
Neopor transport box

Minitube transport box, made of highly insulating Neopor, complete with two ice-packs, two syringes (20 ml) and outer shipping carton, holding optimal temperature for approx. 45 hours

REF. : 17229/0002

Equitainer

Your benefits

- A world-wide proven system for cooling, storage and transport of fresh stallion semen
- The warm semen is automatically and gently cooled down to the ideal storage temperature within 6 to 10 hours
- The desired temperature is reliably maintained for about 70 hours
- Very high level of protection against potential x-ray induced damage of the enclosed semen sample

Equitainer cup style
Complete with cup-style isothermalizer, sterilised plastic cup with lid, 2 ballast bags and 2 coolant cans

REF. : 17220/0010

Equitainer tube style
Complete with tube-style isothermalizer, to fit two 50 ml tubes, 6 x 50 ml tubes and 2 coolant cans

REF. : 17220/0015

Accessories

Coolant can (1) REF. : 17221/0120
Thermo bag (2) REF. : 17221/0130
Isothermalizer cup style (3) for 240 ml cup REF. : 17220/0011
Isothermalizer tube style (4) for two 50 ml tubes REF. : 17220/0016
Inner plastic cup (5), 240 ml, graduated, with lid REF. : 17221/0240
50 ml tubes (6) REF. : 17220/0017
TRANSPORT AND STORAGE OF STALLION SEMEN

One-Way-Shipper 3.0

Single use shipper; ensures a safe shipment of temperature-sensitive semen doses. IATA conform.
Static holding time: 4 days
Capacity: 200 x 0,25/100 x 0.5 ml straws, 3 liter
Weight: 4.5 kg

REF. : 16502/0003

Vapor shipper

SC 4/2. 1 canister, 278 x 67 mm, capacity: 3.6 l liquid nitrogen, approx. 880 x 0.5 ml semen straws or 90 macrotubes, static holding time: 13 days, neck opening: 70 mm, total height: 468 mm, weight (full): 9.1 kg, IATA conform

REF. : 16504/2001

SC 4/3. 1 canister, 278 x 46 mm, capacity: 4.3 l liquid nitrogen, approx. 420 x 0.5 ml semen straws or 30 macrotubes, static holding time: 21 days, neck opening: 51 mm, total height: 492 mm, weight (full): 9.5 kg, IATA conform

REF. : 16504/3001

Protective shipping container for Vapor Shipper, made of plastic, IATA conform

REF. : 16504/3010

Cryogenic containers for storage

MVE storage container ET20, 6 canisters, 279 x 41 mm, capacity: 20.7 l liquid nitrogen, 1758 0.5 ml semen straws; normal working-duration: 113 days; neck opening: 55 mm, total height: 627 mm, weight (full): 26 kg

REF. : 16503/2056

MVE storage container ET35, 6 canisters, 279 x 41 mm, capacity: 36 l liquid nitrogen, approx. 1758 0.5 ml semen straws; normal working-duration: 182 days; neck opening: 55 mm, total height: 679 mm, weight (full): 42 kg

REF. : 16503/3606

MVE storage container ET40-10, 10 canisters, 279 x 71 mm, capacity: 39 l liquid nitrogen, approx. 10000 0.5 ml semen straws; normal working-duration: 59 days; neck opening: 127 mm, total height: 670 mm, weight (full): 45 kg

REF. : 16503/3710

Other capacity/size on request.
STERILISATION

Steriliser STERIVAR

Low pressure steriliser 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 grid.

Technical features

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

REF. : 11050/0015

Accessory

Roller base for STERIVAR

REF. : 11051/0000

Warming cabinet

for warming and sterilisation.
Temperature range: +30°C to +220°C. 230 V 50/60 Hz

Various sizes available.
(Dimensions inside, W x H x D)

32 l, 400 x 320 x 250 mm, 44 kg  REF. : 14127/0032
53 l, 400 x 400 x 330 mm, 55 kg  REF. : 14127/0053
108 l, 560 x 480 x 250 mm, 72 kg  REF. : 14127/0108
256 l, 640 x 800 x 500 mm, 96 kg  REF. : 14127/0256
Universal pipettes:

Your benefits

- Suitable for liquid and frozen-thawed semen in straws
- Smooth round tip for gentle introduction
- Flexible shaft facilitates handling
- Precision tooled tip with inner cone for 0.5 ml straws to allow direct position of semen into the uterus and to ensure 100% semen delivery
- The reload system: if used with the A. I. stylet for 0.5 ml straws, the same pipette can be reloaded with consecutive straws in situ
- Finger handle with adapter to fit syringe and macrotube straw

Length: 57 cm
5/package  REF. : 17209/0005
1/package, sterilised  REF. : 17209/0001

Long pipette with very flexible shaft for deep intrauterine insemination.

Length: 65 cm
5/package  REF. : 17209/1165
1/package, sterilised  REF. : 17209/1265

Length: 75 cm
5/package  REF. : 17209/1175
1/package, sterilised  REF. : 17209/1275

Deep intrauterine insemination pipette with inner catheter

For deep intrauterine insemination with small volumes of liquid semen, if straws can not be used. The pipette is provided with an inner catheter to reduce the volume of the channel where the semen has to pass through.

Length: 65 cm
5/package  REF. : 17207/1165
1/package, sterilised  REF. : 17207/1265

Length: 75 cm
5/package  REF. : 17207/1175
1/package, sterilised  REF. : 17207/1275
INSEMINATION OF MARES

Deep intrauterine kit
includes deep intrauterine universal pipette with inner catheter, 5 ml syringe, supersensitive glove, sterilised.

Length: 65 cm  REF. : 17207/2065
Length: 75 cm  REF. : 17207/2075

Stylet for insemination of frozen semen
With Universal Pipette plus stylet, semen in 0.5 ml straws is directly placed into the uterus, ensuring 100 % semen delivery. The stylet is made of stainless steel and is provided with 2 knobs to pull out empty straws, thus the same pipette can be reloaded several times.

Stylet for pipettes
Flexible stylet for deep intrauterine or transcervical insemination with 0.5 ml straws and 2 knobs for pulling out empty straws.

Length: 57 cm  REF. : 17209/1057
Length: 65 cm  REF. : 17209/1065
Length: 75 cm  REF. : 17209/1075

Insemination pipettes for liquid semen
(without illustration)

Length: 60 cm, rounded tip, 25/bag, fits luer syringe  REF. : 17209/2000

With tubing, 1/bag, sterilised  REF. : 17209/2210

Length: 65 cm, larger diameter, 25/bag, fits luer syringe  REF. : 19290/1105

Hygienic sheath
Disposable sheath to protect ET or AI pipette during uterine passage, length: 62.5 cm (70/roll)  REF. : 17209/5070

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INSEMINATION OF MARES

Thawing devices

MT 30/54
- Electronic temperature control
- Central, built-in thawing chamber with lift
- Temperature setting: +38°C, also available with 35°C, 37°C and 50°C
- LEDs for indicating the activation of heating cycle and temperature
- Accuracy: ±0.2°C
- Power supply: 12 V DC (car battery)

REF. : 17044/0038

Accessories

Transformer for thawing device MT
for 12 V/220 V

REF. : 17165/1395

Insemination gloves

Sensitive (1)
green, 5 finger, shoulder length, 100/box

REF. : 17080/0015

Super-sensitive (2)
transparent, 100/box

REF. : 17080/0050

Single packed,
sterile, 50/package

REF. : 17080/0250
Embryo flushing catheters for mares

Made of silicone, CH 28, length approx. 90 cm, autoclavable, 100 ml balloon, sterilised
REF. : 19009/0027

Made of silicone, CH 32, length approx. 90 cm, autoclavable, 100 ml balloon, sterilised
REF. : 19009/0032

Made of silicone, CH 36, length approx. 90 cm, autoclavable, 100 ml balloon, sterilised
REF. : 19009/0036

Flushing tubing

Disposable Y-junction tubing with clamps, to be used in combination with any catheter and inline filter, sterilised (gamma irradiated), 1/bag, tubing made of very smooth and flexible material, end for filter connection without extra adapter

High flow Y-junction tubing (1) REF. : 19009/0040

Standard Y-junction tubing:
Luer end (2) REF. : 19011/0100
Foley end (3) REF. : 19011/0200

Luer adapter for CH 28-38 catheters and for foley catheters REF. : 19009/1238

EmSafe filter

Your benefits

- All-in-one filter and search dish
- Angled filter mesh, assuring smooth flow-through
- Filter mesh cannot get dry as it remains in contact with fluid
- Secure fixation of the lid during collection and easy to open after collection
- Air vent of the lid secured by filter
- Integrated search dish facilitates evaluation of the embryo in the EmSafe
- Cup holds a minimum of 60 ml of fluid level
- Transparent cup allows to find bigger embryos without microscope
- Excess fluid is controlled and removed through outlet tubing with attached thumb clamp

EmSafe filter for embryo recovery with integrated petri dish with grid, mesh size 65 μ, sterilised REF. : 19010/6000
EQUINE EMBRYO TRANSFER

Media for flushing and holding

EquiFlush
Ready for use, contains buffers, BSA or PVA and antibiotic

With BSA, 2 liters  REF. : 19982/6202
With PVA, 2 liters  REF. : 19982/6212

EquiHold
Applicable for
- holding embryos at ambient conditions
- transporting embryos
- washing and rinsing embryos
- loading embryos for transfer to recipient animal

Contains buffers, glucose, pyruvate, BSA, amino acids, growth factors and antibiotic

3 x 5 ml vials  REF. : 19982/6250

Vitrification

Equine VIT-Kit
Vitrification is a proven method for cryopreservation of Equine embryos. The VIT-Kit for equine embryos contains everything needed for vitrification of three equine embryos: Equilibration Medium (3 x VS1, 3 x VS2, 3 x VS3), 3 x Diluent, 1 x Syringe 1 ml, 3 x Pipette tip, 4 x 5-Well dish, 10 x 0.25 ml sterile Straws, 10 x 0.5 ml sterile Straws, 3 x IDSticks, 1 x 10 mm Goblet cane, 3 x 10 mm Goblets

REF. : 19982/6251

Handling of embryos

Micropipettor, for handling of embryos. Easy and precise pipetting by handling wheel, for all sizes of capillary tubes up to 1 ml

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

Glass capillary tube, 250/package

10 μl  REF. : 19022/0010
20 μl  REF. : 19022/0020
50 μl  REF. : 19022/0050

Steripette for embryo handling, 55 mm length, sterilised, 50/package  REF. : 19025/0050

Disposable syringe 1 ml luer end, sterilised  REF. : 19025/0000

Embryo culture dish with lid, sterilised, 5 wells, rounded well edges, shallow wells for easy handling, 4/bag (not shown)  REF. : 19021/0001
**EQUINE EMBRYO TRANSFER**

**Stereo microscope**

Magnification 10x to 70x, eye-pieces 10x, LED light source, light-/dark-field mirror, transmitted light illumination  
**REF. : 12014/0000**

**Accessories**

Heating stage for stereo microscope,  
180 x 180 mm  
**REF. : 12055/0003**

Control unit HT 50, for heating stage, adjustable temperature, digital display  
**REF. : 12055/0050**

**Embryo transfer with 0.5 ml straws**

*Sheath for equine embryo transfer*, front end opening, individually packaged, 10/package, sterilised  
**REF. : 19290/1050**

*Sheath for equine embryo transfer*, side openings, individually packaged, 10/package, sterilised  
**REF. : 19290/1060**

*Finger support and ring*, for use with sheath for equine ET and AI stylet 17209/1065  
**REF. : 19290/1048**

*Equine embryo transfer pipette*, metal tip with side opening, flexible, 1/package, disposable, sterilised, use with AI stylet 17209/1065  
**REF. : 19290/1065**

*Inner catheter* for equine embryo transfer pipette, to flush embryo into the uterus with approx. 2 ml volume, no need to load it into a straw (not shown)  
**REF. : 19290/1066**

**Stainless steel ET instrument**

*Sterilisable transfer instrument* for 0.5 ml straws, 1 side outlet, length 55 cm, screw-off tip  
**REF. : 19290/0000**
EQUINE EMBRYO TRANSFER

**Embryo transfer with 0.25 ml straws**

- **Deep intrauterine ET/AI set**
  - with finger support, stylet, fixation rings
  - **REF.**: 17015/0100

- **Sheath for equine ET/AI**, 0.25 ml straws, side opening, for usage with stylet 17015/0100, sterile, individually packaged, 10/bag
  - **REF.**: 17015/0660

**Embryo transfer > day 8**

- **ET/AI Pipette**, rounded ends, use with syringe, sterilised, 1/bag
  - **REF.**: 19290/1101

**Straws**

- **0.5 ml straw**, clear, gamma irradiated
  - with sealing ball, 1/package
    - **REF.**: 19043/0001
  - with sealing ball, 10/package
    - **REF.**: 19043/0010
  - without sealing ball, 1/package
    - **REF.**: 19043/1011
  - without sealing ball, 10/package
    - **REF.**: 19043/1010
  - length 90 mm, without wick, 10/package
    - **REF.**: 19044/9110

- **0.25 ml straw**, clear, gamma irradiated, 10/package
  - with ID rod seal in many bright colors
    - **REF.**: 19040/00XX
  - with sealing ball
    - **REF.**: 19041/0010
  - without seal
    - **REF.**: 19042/0010

**Hygienic sheath**

- **Disposable sheath** to protect ET or AI pipette during uterine passage, length: 62.5 cm (70/roll)
  - **REF.**: 17209/5070

You are interested in freezing of embryos, OPU, micro-manipulation and ICSI? Please ask our specialists!

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DIAGNOSTIC TOOLS

**Uterus culture swab**

consists of introduction pipette with pre-perforated cap for sampling without risk of contamination. Predetermined breaking point of the sample-protecting sheath. Includes two closing caps for transport of the swab to the lab. Swab may be inserted directly into AMIES transport medium to avoid dehydration of the sample. Individually packaged and gamma irradiated.

Swab with AMIES transport medium  **REF. : 17214/2951**
Swab without transport medium  **REF. : 17214/2950**

**Cytology brush**

for picking up cells of the uterus of mares to perform cytology smears for immediate evaluation.  **REF. : 17214/2960**

**Disposable speculum for mares**

made of cardboard, inside with reflecting aluminum coating, smooth front edge for gentle introduction, inner diameter: 3 cm, length: approx. 43 cm  **REF. : 17210/0000**

**LED-light**, battery operated (up to 250 h), with clip for fixing. Length: 96 mm  **REF. : 17210/0010**

**Metal case** with lid and handles for sterilisation and transport of speculum and cervical forceps, 560 x 230 x 120 mm (W x H x D)  **REF. : 17215/0149**

**Polansky speculum**  **REF. : 17210/4200**

**Cervical forceps** according to Götze

with lamp, 54 cm  **REF. : 17212/0055**

without lamp  **REF. : 17212/0054**

**Biopsy forceps**, 66 cm length (not shown)  **REF. : 17214/5066**

**Colostrum refractometer**

Determines the amount of immunoglobulin in the mare colostrum to ensure sufficient supply for the new born foal. Colostrum of good quality should be frozen for emergency use. Only one drop of colostrum is required for testing. No batteries, no consumables, easy handling. Case included.  **REF. : 24400/0150**

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