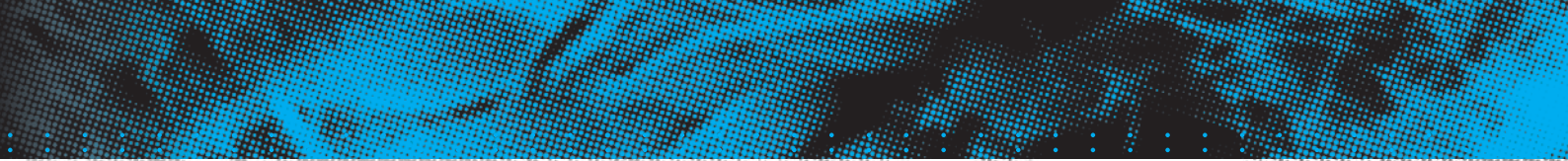




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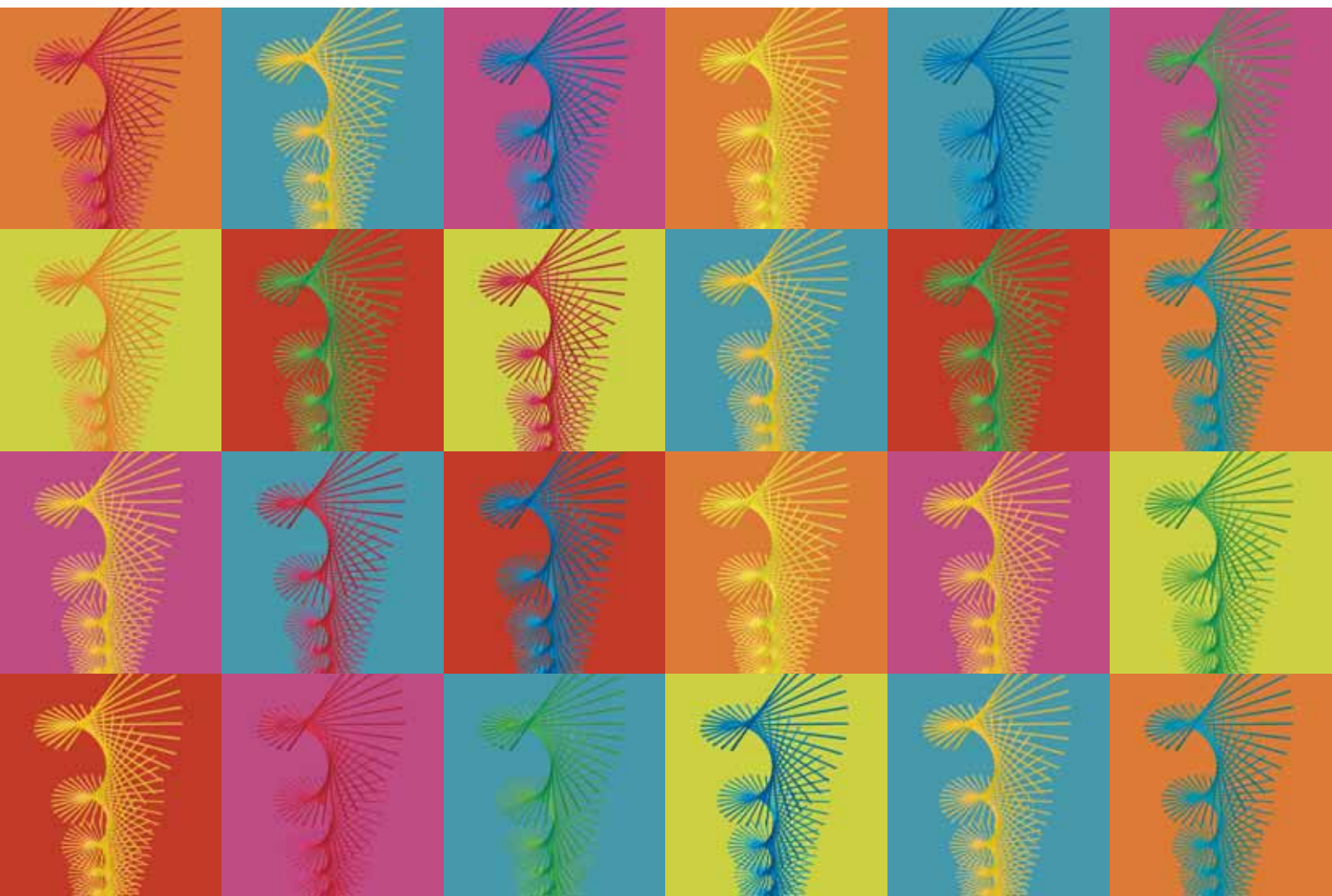
Minitüb

Animal Reproduction Technology

Equine



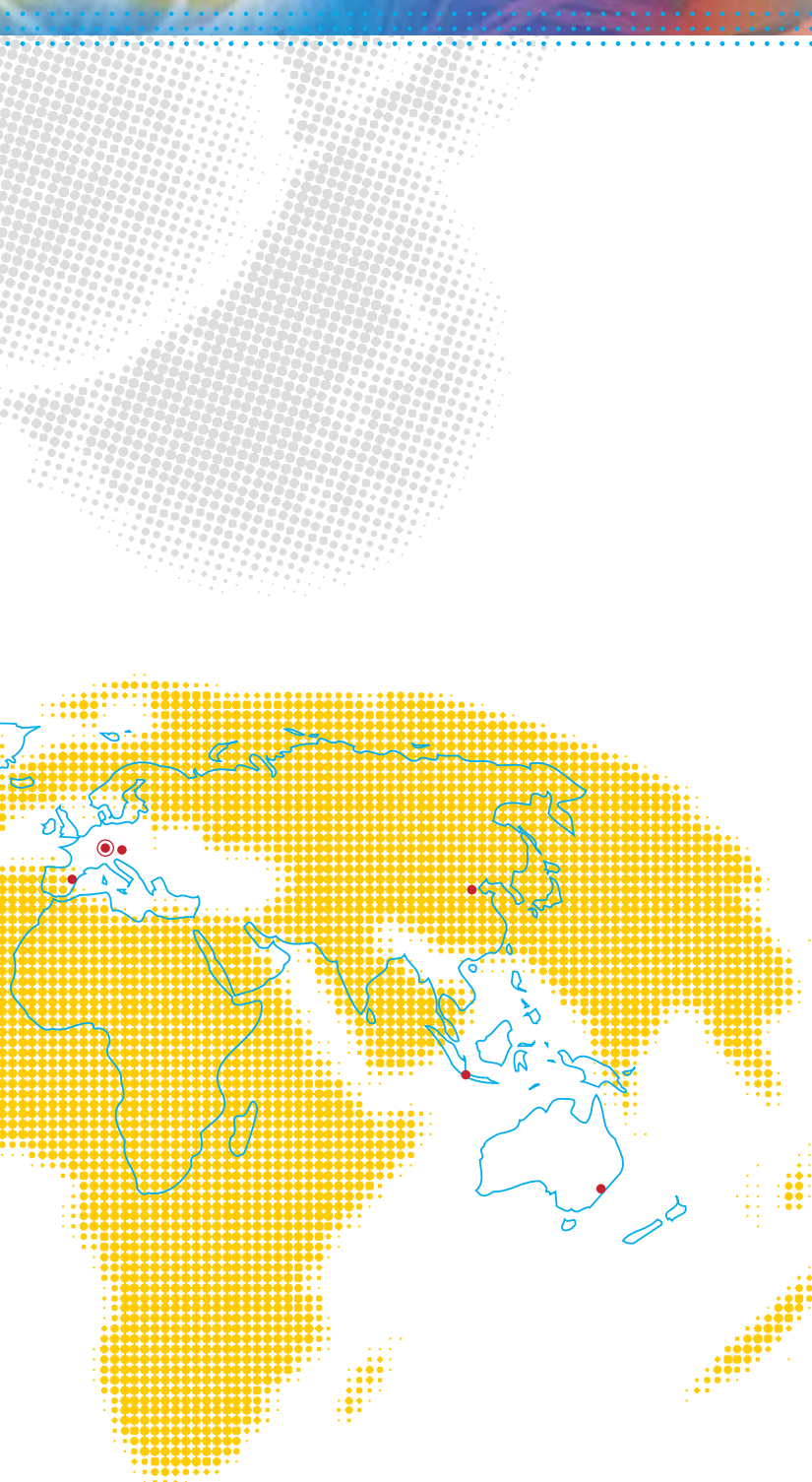
Our knowledge - Your success



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 Minitube 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

# COLLECTION OF STALLION SEMEN

## Hannover AV

**Equine artificial vagina Hannover**, complete, with leather handle, valve (11222/0005), inner rubber liner, rubber bands

REF. : 11220/0145

### Accessories

**Valve** for equine AV Hannover

REF. : 11222/0005

**Valve with faucet** for equine artificial vagina Hannover

REF. : 11222/0006

**Inner liner (1)** for Hannover AV, rubber, with roll-up ends, sterilizable

long version, 100 cm

REF. : 11222/0002

short version, 70 cm

REF. : 11222/0003

**Disposable inner liner (2)**, width 20 cm, roll with approx. 200 m, sensitive: smooth and very resistant material

REF. : 11222/0120

**Warming bag (3)** for collection glass, protects the semen from low temperature and UV radiation

REF. : 11225/0026

**Rubber band (4)** for equine AV Hannover

REF. : 11222/0001

**Disposable inner liner**, fits Hannover/Colorado vagina with built-in filter, 10/package

REF. : 11232/0420



## Missouri AV

**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**

(no collection bottle needed)

REF. : 11232/0430

**Without filter, open end**

REF. : 11232/0440



# COLLECTION OF STALLION SEMEN

## Colorado State University AV

**Equine artificial vagina Colorado SU**, complete with 2 inner rubber liners (tubular and conical), 10 rubber bands, 2 clamps, 25 disposable inner liners, 25 semen bottles, 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 very resistant material

REF. : 11232/0030

**Disposable inner liner Colorado (2)**, AV-shaped, 25/package, blue

REF. : 11232/0101

**Semen collection bottle Colorado (3)**, 300 ml, sterilizable plastic, with coupling nut, 25/package

REF. : 11231/0300

**Semen filter Colorado (4)**, nylon, fits Colorado collection bottle, 25/package

REF. : 11231/0400

**Disposable inner liner Colorado**, 25/package

REF. : 11232/0110

### Accessories

**Vaseline**, 1000 g REF. : 11905/0100

**Lubricating jelly Bengen**, 1 l, non spermicidal, water soluble REF. : 11906/1000

**Semen filter**, non woven, 150 x 60 mm, 100/package REF. : 11245/3100

**Equine 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, 100/box

REF. : 11128/0055



**Warming bag (5/6),**

Small, for 300 ml collection bottle REF. : 11225/0026

Large, blue REF. : 11231/0185

**Rubber inner liner for Colorado SU vagina (7),**

Tubular shape REF. : 11231/0103

Conical shape REF. : 11231/0101



# COLLECTION OF STALLION SEMEN

## **Hannover phantom for stallions :**

Adjustable in height and inclination, covered with reinforced plastic coating, well padded, contoured body style, includes bite belt.

Size of the phantom fits for all breeds:

Body: 200 x 60 x 55 cm (L x W x H)

Height of the dummy: 1.28 m to approx. 1.68 m

REF. : 11200/0000

**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

REF. : 11200/1000

## **Accessories**

**Cover for phantom**, plastic, collection side closed, with belts for attachment

REF. : 11200/2600

**Leather blanket for phantom for stallions**, collection side closed, with belts for attachment

REF. : 11200/2500

**Bite belt**

REF. : 11200/2100

**Stretch foil for protection of phantom**, length 300 m

REF. : 32000/0010



## **Lubricant miniLube™ :**

Sperm friendly lubricant, water soluble.

### **Technical features**

- Iso-osmotic and sperm friendly, supports the sperm cell viability
- Batches are tested for sperm compatibility
- Ideal viscosity
- Produced by Minitüb in a Hepa-filtered dedicated clean room

**Tube with 90 ml, resealable**

REF. : 17116/7000

**Gallon 3.8 l without dispenser**

REF. : 17116/7010

### **Accessory**

**Dispenser for gallon**

REF. : 17116/7011



# MICROSCOPY AND VOLUME MEASUREMENT

## : Phase contrast microscope CX 31 :

### Technical features

- 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
- 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



## : Laboratory scales :

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





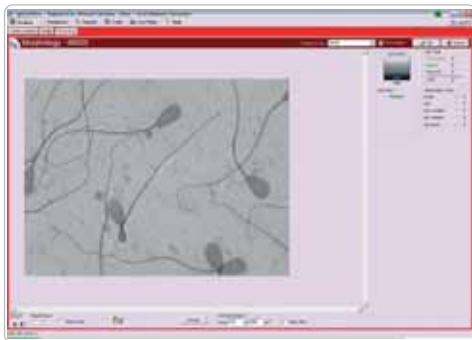
## Computerised motility analysis

### Your benefits

- **Precision:** Sperm Vision™ provides excellent cell recognition. A new particle filter collects sperm-like particles from the seminal plasma or egg yolk particles. Agglutinated cells are excluded from the analysis.
- **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.
- **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.
- **Viability Tool:** allows the automatic assessment of damaged/not damaged semen cells by using a fluorescence stain. Requires a microscope with fluorescence equipment.

The system includes the software, digital camera, as well as PC with complete accessories

REF. : 12049/0586



### 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 are used for analysis
- User-defined tolerance values and standard deviations
- Morphology tool with automatic semen recognition
- Optional viability tool
- Multi purpose evaluations with Sperm Vision™ reports; all analysis results can be printed out or can be exported to other programs (Excel, Word, html,...)
- Can be combined with a wide variety of microscopes

### Accessories

#### OLYMPUS CX 41 for Sperm Vision™

Phase contrast microscope with excellent image quality, phase achromatic objectives 10x, 20x, 40x, CASA objective 20x negative phase contrast, can be retrofit with a ScanStage or with fluorescence equipment

REF. : 12005/0041

#### ScanStage

Automated scanning microscope stage, controllable via Sperm Vision™ or joystick, heated, positioning precision:  $\pm 5 \mu\text{m}$ , suitable for different microscopes

REF. : 12048/0000

# PHOTOMETERS

## Photometer SpermaCue



The elegant and fast method for semen density evaluation. This photometer is exact, very easy to handle and provides the final result in less than one minute.

## Technical features

- Calibration for stallion semen
- No dilution of semen samples
- Digital display of the concentration in  $10^6$  sperm cells/ml
- Automatic zero measurement
- Control cuvette for verification of the photometer calibration
- Built-in batteries for wireless operation
- With 220 V transformer

REF. : 12300/0500

## Accessories

### Microcuvette for photometer SpermaCue

Precision made, may be used at the same time as pipette, test tube and cuvette, 50/package

REF. : 12300/0550

### Cleaning sticks for SpermaCue,

1 set with 5 sticks

REF. : 12300/1200

## Photometer SDM5



## Your benefits

- ergonomic design, large display, 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 ejaculate production data
- 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 SDM5**, for the determination of semen concentration and for dose calculation, with integrated printer

REF. : 12300/0005

**Photometer SDM5**, without printer

REF. : 12300/0007

## 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  $\mu$ l, 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



# MINITÜB STALLION SEMEN EXTENDERS

## : Gent extenders :

### ☀ Your benefits

- gent extender is 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
- contains antibiotics

<b>Gent extender</b> with egg yolk, ready to use, 45 ml,	
For cooled-transported semen	REF. : 13571/0045
For semen freezing, with glycerol	REF. : 13571/1045

**Gent for cooled-transported semen**, 100 ml REF. : 13571/0100



## : AndroMed®-E :

Liquid semen extender without animal proteins. Contains egg yolk substitutes and antibiotics. 25 ml concentrate for 125 ml diluent

REF. : 13573/0020

## : EquiPro® :

Contains specific, processed caseinates.

<b>Powder for 1 l</b> , with antibiotics	REF. : 13570/0202
<b>Powder for 1 l</b> , without antibiotics	REF. : 13570/0201
<b>Powder for 100 ml</b> , with antibiotics	REF. : 13570/0210
<b>Powder for 100 ml</b> , without antibiotics	REF. : 13570/0211
<b>Liquid</b> , 100 ml, with antibiotics	REF. : 13570/0301



## : Centrifugation Extender :

Also suitable for preparation of freezing extender, powder for 1 l REF. : 13565/0001

## : Cushion Fluid :

CushionFluid is a special medium used for gentle centrifugation of stallion spermatozoa. Because of its special mixture CushionFluid assures a considerably higher yield of sperm cells whereas the standard centrifugation method leads to a loss of about 10% and more of sperm cells. CushionFluid, 100 ml

REF. : 13580/0001

## : Water for Semen Extenders :

Bidistilled, sterilised, pyrogen-free	
1 l	REF. : 13570/1000
100 ml	REF. : 13570/1100



# PROCESSING OF STALLION SEMEN

## : Water Bath :

Electronic temperature control, stainless steel, with grid and lid.

7 l, inner dimensions:

240 x 210 x 140 mm (L x W x H)

REF. : [14078/0001](#)

10 l, inner dimensions:

350 x 210 x 140 mm (L x W x H)

REF. : [14079/0001](#)

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



## : Rolling Mixer RM5 :

For gentle, constant homogenization of semen doses in tubes.

Appropriate for use inside the refrigerator.

Dimensions: 430 x 180 mm (L x W)

REF. : [14340/0348](#)



## : Centrifuge :

With swing-out rotor for 4 x 100 ml, complete with buckets and 100 ml glass vials. Maximum rotations: 3900 min<sup>-1</sup> per minute, LCD-display, speed displayed in rpm and g (gravitational force or rcf)

REF. : [14602/0500](#)

Also available for 50 ml glass vials or Falcon tubes.

REF. : [14602/0575](#)



## : Shaker Vibramax :

Platform with 2 fixation devices and non-slip rubber pad. Includes timer.

Shaking frequency: 150 - 1350 cycles /min

Area of platform: 220 x 220 mm

REF. : [14703/0304](#)



# PROCESSING OF STALLION SEMEN

## Glass Ware :

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

Please ask for a detailed list of our glass ware



## Plastic vials for Storage of Semen or Dilutor :

Semen vial, with graduation and screw cap.

30 ml	REF. : <a href="#">17231/0030</a>
50 ml	REF. : <a href="#">17231/0051</a>
13 ml, with cap, sterile	REF. : <a href="#">17230/6001</a>

Semen vial, 13 ml, round bottom, caps see below REF. : [17230/6000](#)

Semen vial, 12 ml, conical bottom, caps see below REF. : [17230/7000](#)



	Screw cap for semen vial, 13 ml	Coloured plates for white screw cap (17230/6054)	Push cap for semen vial, 12 ml
red	REF. : <a href="#">17230/6055</a>	REF. : <a href="#">17230/6065</a>	REF. : <a href="#">17230/7103</a>
blue	REF. : <a href="#">17230/6056</a>	REF. : <a href="#">17230/6066</a>	
green	REF. : <a href="#">17230/6058</a>	REF. : <a href="#">17230/6068</a>	
white	REF. : <a href="#">17230/6054</a>		
violet	REF. : <a href="#">17230/6057</a>		REF. : <a href="#">17230/7108</a>
yellow	REF. : <a href="#">17230/6059</a>	REF. : <a href="#">17230/6069</a>	REF. : <a href="#">17230/7106</a>
black			REF. : <a href="#">17230/7102</a>

Rack for 20 semen tubes 12/13 ml	REF. : <a href="#">17230/9384</a>
Rack for 20 semen tubes 30 ml	REF. : <a href="#">17231/9384</a>
Rack for 24 test tubes of 18mm, with numbers	REF. : <a href="#">14076/0005</a>

## Semen Bags for Storage :

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

Volume 60 ml	REF. : <a href="#">17224/0250</a>
Volume 120 ml	REF. : <a href="#">17224/0500</a>
Volume 350 ml	REF. : <a href="#">17224/1000</a>



# TRANSPORT OF CHILLED SEMEN

## 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 1 cup-style isothermalizer, 1 sterilised plastic cup with lid, 1 ballast bag, and 2 coolant cans

REF. : 17220/0000

#### Equitainer® tube style

Complete with 1 tube-style isothermalizer, 6 50 ml tubes, and 2 coolant cans

REF. : 17220/0100

### Accessories

#### Coolant can

REF. : 17221/0120

#### Thermo bag

REF. : 17221/0130

#### Isothermalizer cup style, for 240 ml cup

REF. : 17221/0140

#### Isothermalizer tube style, for two 50 ml tubes

REF. : 17221/0150

#### Inner plastic cup, 240 ml, graduated, with lid

REF. : 17221/0240

## Neopor Transport Box

Minitüb transport box, made of highly insulating Neopor. Complete with 2 ice-packs, 2 syringes (20 ml) and outer shipping carton

REF. : 17229/0002



# INSEMINATION OF MARES

## : Universal Pipettes :

### Your benefits

- suitable for fresh and frozen semen
- 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 (adapter for macrotube REF. : 13441/0300)

Length: 57 cm

5/package REF. : 17209/0005

1/package, sterilised REF. : 17209/0001

**Deep IUI Universal 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 IUI 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

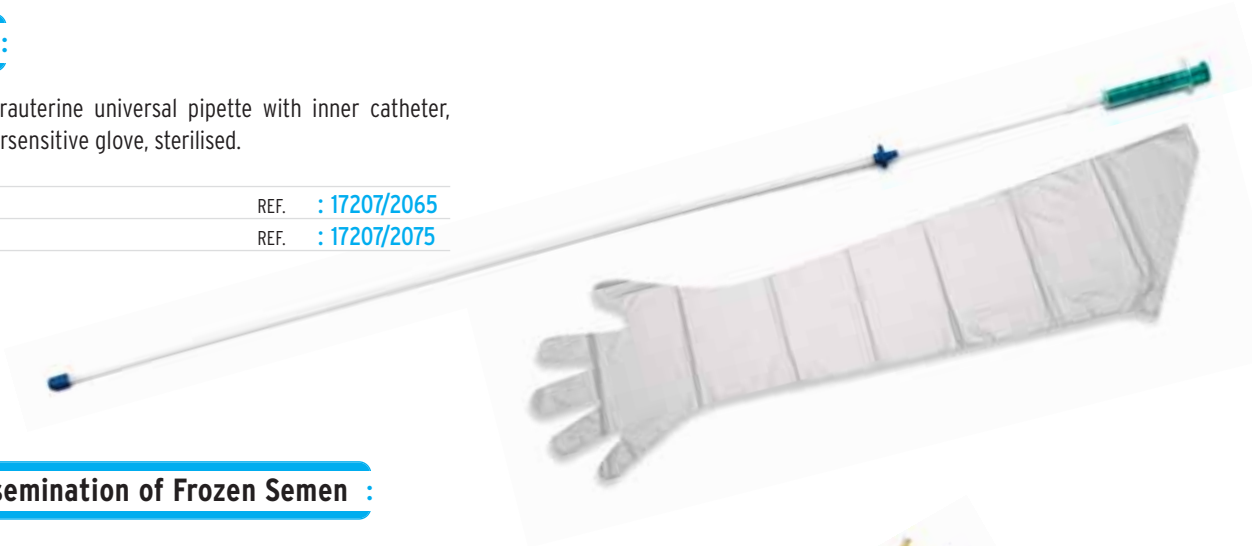


# INSEMINATION OF MARES

## : Deep IUI 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



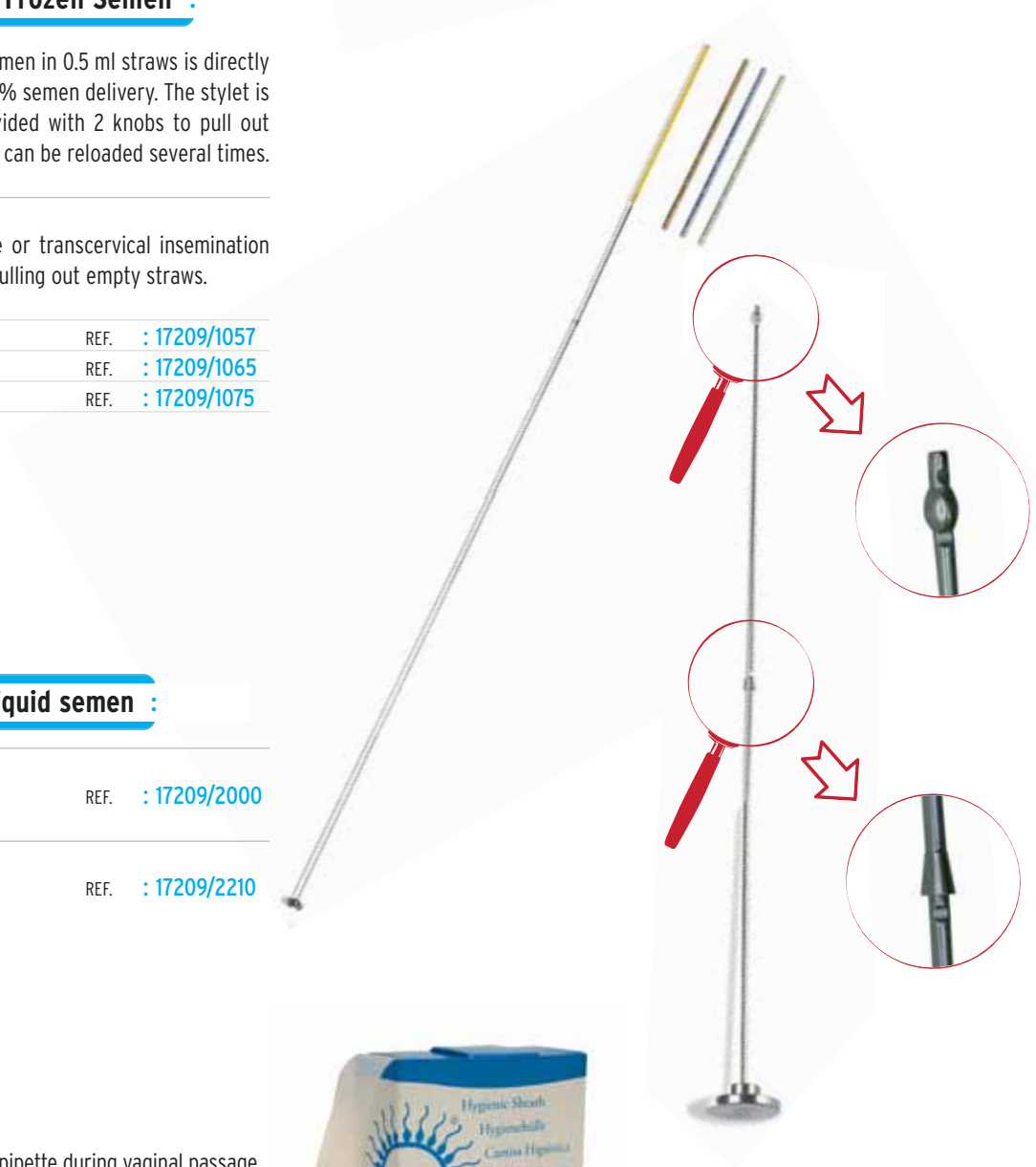
## : Stylet for Insemination of Frozen Semen :

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, with 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 :

Length: 60 cm, rounded tip, 25/bag, fits luer syringe

REF. : 17209/2000

With tubing, 1/bag, sterile

REF. : 17209/2210

## : Hygienic Sheaths :

Disposable sheath to protect ET or AI pipette during vaginal passage, length: 62,5 cm (70/roll)

REF. : 17209/5070





# INSEMINATION OF MARES

## : 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. For use in combination with Uterus Culture Swab.

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: 45 cm

REF. : 17210/0000

**LED-light**, flexible neck, battery operated (up to 250 h), clip for fixing, length: 160 mm

REF. : 17210/0010



## : AI-Kit for Mares :

The sterilised, ready-to-use package contains an insemination glove, an insemination pipette and a 20 ml disposable syringe

REF. : 17207/1000

## : Metal Case :

With lid and handles for sterilization and transport of speculum and cervical forceps, 560 x 230 x 120 mm (L x W x H)

REF. : 17215/0149

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

**Cervical forceps** according to Götze with light source, 54 cm

REF. : 17212/0055

**Cervical forceps** according to Götze, 54 cm REF. : 17212/0054



# INSEMINATION OF MARES

## : Thawing Devices :

### MT 35/42

- With electronic control
- LED's for control and temperature indication
- Central, built-in thawing chamber with lift
- Temperature setting: +38°C, other settings available
- Accuracy:  $\pm 0.2^{\circ}\text{C}$
- Power supply: 12 V DC (car battery)

REF. : 17043/3542



### CITO

- Rugged construction made of ABS plastic
- Hinged lid with cover seal
- Thawing chamber with lift
- Constant thawing rate of +38°C through thermostatic control
- LEDs for indicating the activation of heating cycle and temperature
- Accuracy:  $\pm 0.2^{\circ}\text{C}$
- Power supply: 12 V DC (car battery)

REF. : 17040/3542



## Accessory

Transformer for thawing device MT and CITO, for 12 V/ 220 V

REF. : 17165/1395

## : Insemination gloves :

### Shoulder length,

5 fingers, 100/package, sensitive, blue REF. : 17080/0005

### Sensitive,

transparent, 50/box, neck fixation REF. : 17080/0150

### Supersensitive,

5 fingers, transparent, 100/package REF. : 17080/0050



# ENDOSCOPIC INSEMINATION OF MARES

## **The Minitube Equine AI Endoscope :**

Our endoscope is available in different lengths. We recommend a length between 1.4 m and 2.0 m.

### **Sterility proof!**

All parts of the endoscope which can come in contact with the genital tract of the mare are exchangeable. Approximately 15 minutes are necessary in order to make the endoscope a sterile instrument for the next insemination.

The Minitube Endoscope for insemination is a video endoscope with high resolution CCD-video sensor.

REF. : 23700/1200



## **EndoCenter for Equine AI Endoscope :**

**High resolution TFT monitor**, air-/water-pump, stand, 150 W Xenonlight source

REF. : 23700/1240

**EndoCenter with transport case**

REF. : 23700/1250

### **Consumables**

**Hygienic cover set**, for endoscope, single packed, sterilised

REF. : 23700/1201

**Long semen straw**, with cotton plug, approx. 200 cm long, fits in the working channel of the endoscope, sterilised

Diameter 3 mm REF. : 23700/1204

Diameter 2 mm REF. : 23700/1203

**Inner tubing**, to transfer chilled semen, diameter 3 mm, length: approx. 200 cm, sterilised, with adapter for syringe

REF. : 23700/1208

**Stylet**, for emptying content of straws

REF. : 17207/0010

## **Why Endoscopic Insemination?**

A successful fertilization, especially when working with small amounts of semen, can be supported by the endoscopic method: With the assistance of the endoscope, small volumes can be deposited under visual control at the utero-tubal junction. The endoscope allows a great reduction of sperm cells in the dose, without endangering the fertility success. This is of special interest for highly demanded stallions or for stallions with limited sperm availability.



# STERILISATION

## : 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 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. : [11050/0000](#)



### Accessory

Roller base for STERIVAR

REF. : [11051/0000](#)



## : Warming Cabinet/Sterilizer :

Volume 53 l, temperature range: +30°C to +220°C. Inner dimensions: 400 x 400 x 330 cm (L x W x H), 230 V / 50 Hz, weight: 35 kg

REF. : [14127/0053](#)

### other sizes available

32 l	REF. : <a href="#">14127/0032</a>
108 l	REF. : <a href="#">14127/0256</a>



# FREEZING OF STALLION SEMEN

## : Automatic Filling and Sealing Machine 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 2200 straws of 0.25 ml or about 1300 straws of 0.5 ml.
- the very compact device which requires minor space. The vacuum pump and the pressure controller are integrated in the device. The ultrasound generator is integrated in an external casing that can be mounted at a distance of up to 2.5 m. The ON/OFF switch is directly placed 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. 4.200 straws/hour
- No wearing parts. Very fast and easy cleaning
- Machine dimensions: 370 x 460 x 320 mm (L x W x H) + ultrasound generator
- Power supply: 110 V / 60 Hz or 230 V / 50 Hz

**MPP Uno, complete**

REF. : [13017/0000](#)

### Accessories

<b>Exchangeable straw hopper</b>	REF. : <a href="#">13017/0005</a>
<b>Filling nozzle 0.25 ml</b>	REF. : <a href="#">13017/0012</a>
<b>Suction nozzle 0.25 ml</b>	REF. : <a href="#">13017/0022</a>
<b>Filling nozzle 0.5 ml</b>	REF. : <a href="#">13017/0017</a>
<b>Suction nozzle 0.5 ml</b>	REF. : <a href="#">13017/0027</a>
<b>Washer, 5000/bag</b>	REF. : <a href="#">13021/3000</a>
<b>Filling tubing, 100/bag</b>	REF. : <a href="#">13021/3800</a>
<b>Semen cone, 200 ml, 100/bag</b>	REF. : <a href="#">13018/0100</a>



# FREEZING OF STALLION SEMEN

## : 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

**Vacuum pump**, with adjustable valve and manometer REF. : 13133/0267

**Loading block**, with rack and 10 magazines for 36 straws each REF. : 13133/0005

### Accessories

**Sealing beads**, glass (various colours) REF. : 13400/0xxx

**Sealing beads**, metal REF. : 13400/9900

**Conical semen glass**, 150 ml, graduated REF. : 13133/5000



## : EasyCoder 2.0 :

The reliable printer now with new software

Thermal transfer printer for semen straws with automatic straw feeder. Unmatched clean and clear, non-abrasive print. Prints up to 3 lines per straw, even with barcodes, logos and specific characters. Sequential numbers can be printed on straws, too. Very simple handling, only little maintenance required.

### Technical features

- Thermal transfer printer with automatic straw supply
- Output: 3600 straws per hour
- Windows based Minitüb software with data base for storing names and numbers
- Individual composition of printing lines possible, different configurations can be stored in memory
- Dimensions: 690 x 370 x 310 mm (L x W x H; PC not included)
- Power supply: 110-230 V / 50-60 Hz

REF. : 13038/0000

### Accessories

**Color band for straw printer Easy Coder**, 200 m/roll, black REF. : 13038/0010

Other colours available: gold, red, silver for a perfect looking straw

**USB-Serial cable** REF. : 13038/0011



# FREEZING OF STALLION SEMEN

## IceCube :

**IceCube 14S, computer controlled freezer**, with comfortable data input and automatically 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: 540 x 420 x 520 mm (L x W x H), 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-A** 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**, for 36 straws REF. : [16821/5036](#)

**Handling rack for Icecube 14S** REF. : [16821/5030](#)

**Spacer for IceCube** REF. : [16821/5018](#)

**Liquid Nitrogen pressure container for Icecube 14S**, 60 l REF. : [16820/1900](#)

**Roller base for LN2-pressure container** REF. : [16821/5035](#)

### Larger alternative:

#### IceCube 14M

Capacity: approx. 2300 x 0.5 ml straws per freezing cycle

**Icecube 14M-A** without monitor REF. : [16820/6000](#)

**Icecube 14M-B** with touch monitor REF. : [16820/7000](#)



# FREEZING OF STALLION SEMEN

## : Floating Freeze Rack :

### Your benefits

- simple but effective standardisation of vapor freezing
- automatic plunging of straws
- the distance between straws and liquid nitrogen level can be adjusted
- fits macrotubes, 0.5 ml and 0.25 ml straws
- with high quality styrofoam chest and stainless steel inner box with working tray

**Floating freeze rack** includes styrofoam chest, stainless steel inserts and rack for 36 x 5 ml macrotubes

REF. : [15043/0036](#)

**Adapter** for 72 2.5 ml macrotubes

REF. : [15043/0136](#)

**Adapter** for 100 0.5 ml straws

REF. : [15043/0236](#)

**Adapter** for 150 0.25 ml straws

REF. : [15043/0336](#)

#### Loading device

for 0.5 ml straws

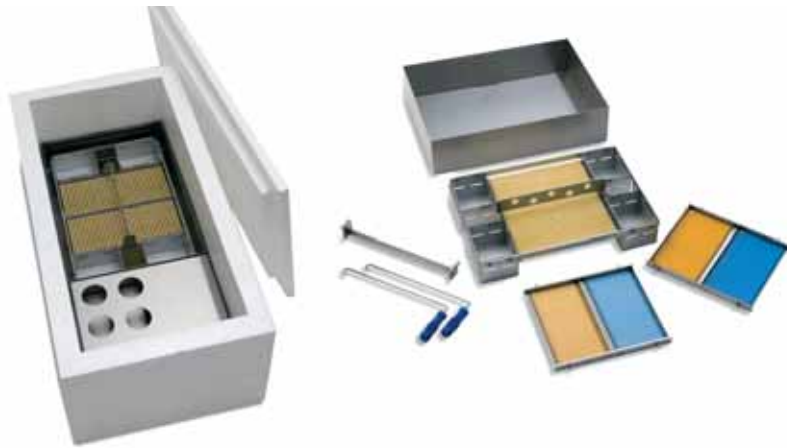
REF. : [15043/0436](#)

for 0.25 ml straws

REF. : [15043/0536](#)

## Vapor Freezing – The simple way

The amount of liquid nitrogen to be filled into the styrofoam box doesn't need to be exact, since the rack automatically floats on the correct height over the liquid nitrogen level for 20 minutes. It then descends due to its own weight and the straws are automatically plunged into the liquid nitrogen. With this method, vapor freezing is finally becoming more standardized.



## : Goblets :

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

Diameter	Color	REF.
10 mm	white	<a href="#">16912/0133</a>
13 mm	white	<a href="#">16913/0133</a>
	blue	<a href="#">16913/1133</a>
	red	<a href="#">16913/3133</a>
	pistachio	<a href="#">16913/4133</a>
	yellow	<a href="#">16913/5133</a>
35 mm	white	<a href="#">16935/0135</a>
65 mm	white	<a href="#">16965/0133</a>



## : 0.25 ml and 0.5 ml Semen Straws :

Available in many different colors.

## : Macrotubes :

**Volume: 4 ml**, length: 240 mm REF. : [13441/0240](#)

**Volume: 5 ml**, length: 280 mm REF. : [13441/0280](#)

Sealing balls for macrotubes, metal or glass, in many different colors. Straws and macrotubes can also be delivered preprinted.





# FREEZING OF STALLION SEMEN

## : Cryogenic Containers for Storage :

**MVE storage container SC 20/20**, 6 canisters, 279 x 38 mm, capacity: 20.5 l liquid nitrogen, approx. 1480 0.5 ml semen straws or 190 macrotubes, normal working-duration: 142 days, neck opening: 51 mm, total height: 652 mm, weight (full): 28.3 kg

REF. : 16520/2006

**MVE storage container SC 33/26**, 6 canisters, 279 x 38 mm, capacity: 33 l liquid nitrogen, approx. 1480 0.5 ml semen straws or 190 macrotubes, normal working- duration: 182 days, neck opening: 51 mm, total height: 657 mm, weight (full): 42.4 kg

REF. : 16533/2606

**MVE storage container XC 43/28**, 6 canisters, 279 x 56 mm, capacity: 42,2 l liquid nitrogen, approx. 3500 0.5 ml semen straws or 400 macrotubes, normal working-duration: 193 days, neck opening: 70 mm, total height: 670 mm, weight (full): 50.5 kg

REF. : 16543/2806



## : Cryodrum 3.0 :

ensures a safe shipment of temperature-sensitive semen doses by using Liquid Nitrogen. Liquid Nitrogen capacity: 3.0 litres, operating hold time: up to 4 days, depending on use and handling conditions, weight (full): 4.5 kg. Meets the requirements of IATA rules

Capacity: 200 straws 0.25 ml  
100 straws 0.50 ml

REF. : 16502/0003



## : MVE „Vapor Shipper“ :

**SC 2/1**, 1 canister, capacity: 1.5 l liquid nitrogen, approx. 80 x 0.5 ml semen straws, static holding time: 8 days, neck opening: 35 mm, total height: 343 mm, weight (full): 4 kg

REF. : 16502/2001

**SC 4/2**, 1 canister, capacity: 3.6 l liquid nitrogen, approx. 440 x 0.5 ml semen straws or 120 macrotubes, static holding time: 14 days, neck opening: 70 mm, total height: 468 mm, weight (full): 8.1 kg

REF. : 16504/2001

**SC 4/3**, 1 canister, capacity: 4.3 l liquid nitrogen, approx. 210 x 0.5 ml semen straws or 30 macrotubes, static holding time: 21 days, neck opening: 51 mm, total height: 492 mm, weight (full): 9.3 kg

REF. : 16504/3001

**Protecting shipping box**, for „Vapor Shipper“, made of plastic

REF. : 16504/3010



# EQUINE EMBRYO TRANSFER

## : Embryo Flushing Catheters for Mares :

**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

**Made of plastic**, CH 28, length 1200 mm, 100 ml balloon, sterilised

REF. : 19009/0028

**Made of plastic**, CH 38, length 1500 mm, 100 ml balloon, sterilised

REF. : 19009/0038

**Luer adapter** for CH 28 - 38 catheters and for foley catheters

REF. : 19009/1238

## : 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, flexible material. End for filter connection without extra adapter.

Y-junction with high flow connector REF. : 19011/0010

Y-junction with spike connector REF. : 19011/0020

Standard Y-junction:

Luer end REF. : 19011/0000

Foley end REF. : 19011/0001

## : Miniflush™ :

The patented Minitube embryo recovery system, consisting of embryo filter and search dish. No transfer from filter cup to Petri dish necessary. Mesh size/open area 73 µ / 40 %, sterilised (gamma irradiated), disposable

REF. : 19010/2000

**Embryo transport vial**, with screw cap, sterilised, 5 ml, single packed

REF. : 19180/5006

**Embryo culture dish**, with lid, sterilised, 5 wells, rounded well edges, shallow wells for easy handling, 4/bag

REF. : 19021/0001



# EQUINE EMBRYO TRANSFER

## Media for Flushing and Holding :

**EquiPro™ recovery medium** with BSA and antibiotics, 3-way port configuration, 2 l bag

REF. : 19982/2102

### EquiPro™ Holding Medium

Zwitterion-buffered solution containing D-glucose, Na-pyruvate, 0.4 % BSA, amino acids, Kanamycin and Gentamicin

3-tube pack, 10 ml/tube

REF. : 19982/2250

**Especially formulated for horses!**



## Vitrification :

**EquiPro VitKit**, contains all equipment for vitrification of embryos

REF. : 19500/1200



## 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

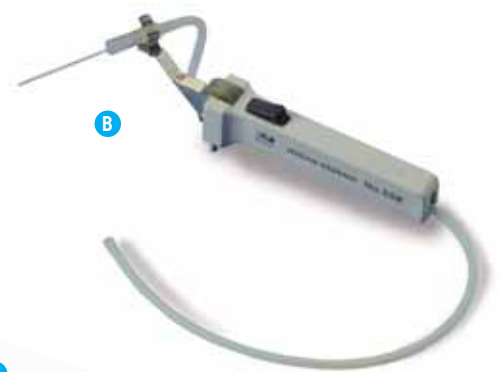
20 µl REF. : 19022/0020

50 µl REF. : 19022/0050

**Unopette**, for embryo handling, sterilised, 100/package, 20 µl REF. : 19025/0020

**Disposable syringe 1 ml**, luer end, sterilised, for embryo handling with Unopette REF. : 19025/0000

**Adapter for Unopette**, 100/bag REF. : 19025/0001



**You are interested in freezing of embryos, micro-manipulation and IVF? Please ask for our embryo transfer leaflets.**

# EQUINE EMBRYO TRANSFER

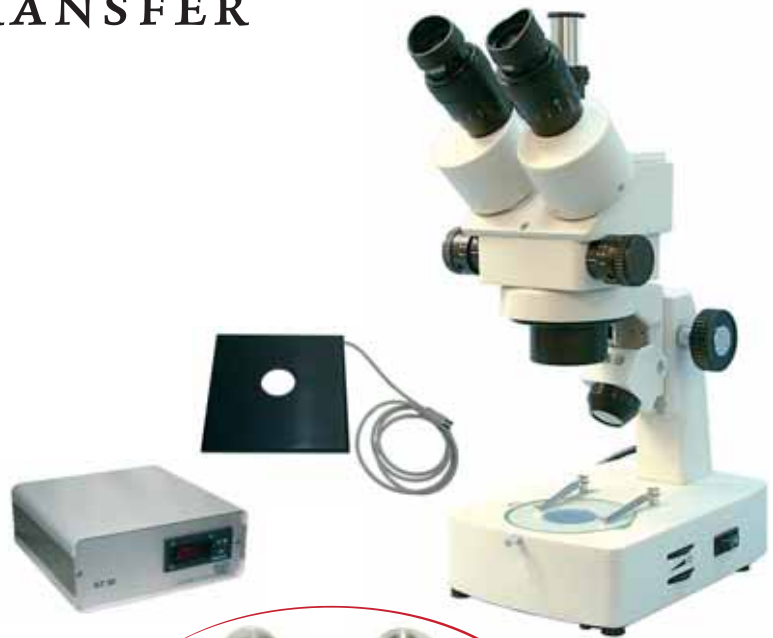
## Stereo Microscope MSZ 5400 :

Magnification 7x to 45x, eye-pieces 10x, transmitted light source REF. : 12015/5400

### 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 ET, front end opening, individually packaged, 10/package, sterilised REF. : 19290/1050

Sheath for equine ET, side opening, 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

Inner catheter for equine ET pipette, to flush embryo into the uterus with approx. 2 ml volume, no need to load it into a straw REF. : 19290/1066

Equine ET pipette, metal head with side openings, flexible, 1/package, sterilised, use with AI stylet 17209/1065 REF. : 19290/1065



## 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, 1/package, sterilised REF. : 17015/0660



## Stainless Steel ET Instrument :

Sterilizable transfer instrument for 0.5 ml straws, 1 side outlet length 55 cm, screw-off tip REF. : 19290/0000

## Hygienic Sheaths :

Disposable sheath to protect ET or AI pipette during uterine passage, length: 62,5 cm (70/roll) REF. : 17209/5070



# MARE AND FOAL CARE

## : Colostrum Refractometer :

For estimation of the amount of immunoglobulin in colostrum. To ensure sufficient supply for the new born foal. Useful to check if the mare has run milk prior to foaling or to control quality of colostrum that will be frozen for emergency use.

### Your benefits

- only one drop of colostrum is required for testing
- fits in a pocket (55 x 80 x 205 mm; L x W x H)
- modest weight: 180 g
- no batteries, no consumables necessary

REF. : 24400/0150



## : Resuscitation-Kit for Foals :

Replaces mouth-to-mouth resuscitation and therefore prevents from risk of contamination. Linear pump action ensures effective repeatable tidal volume delivery irrespective of user's hand size.

### Your benefits

- easy to handle
- compact and lightweight
- mask and endotracheal tube compatible

### Components of the kit

- Pump unit for foal resuscitator
- Resuscitation mask
- Aspiration mask

REF. : 23220/0000



### Accessory

**Supplemental O<sub>2</sub>-mask** for connection to Oxygen tanks for additional supply of Oxygen

REF. : 23220/0004

