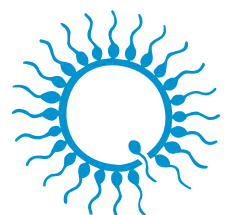




Animal Reproduction Technology

Equine



minitube

MINITUBE INTERNATIONAL

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, 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



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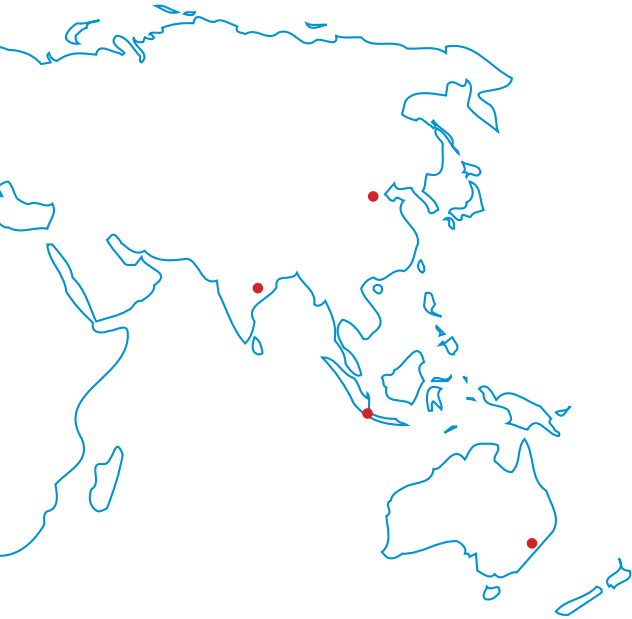
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Semen Collection

Hannover artificial vagina

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

Accessories

(2) **Inner liner** for Hannover AV, rubber, with roll-up ends, sterilisable
long version, 100 cm [REF. : 11222/0002](#)
short version, 70 cm [REF. : 11222/0003](#)

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

(4) **Warming bag** for collection glass, protects the semen from low temperature and UV radiation [REF. : 11225/0026](#)

(5) **Rubber band** for Hannover AV [REF. : 11222/0001](#)

Disposable inner liner, fits Hannover and Colorado AVs with built-in filter, 10/package [REF. : 11232/0420](#)

Semen collection bottle
 250 ml, glass [REF. : 11245/0006](#)

(6) **Leather handle** for Hannover AV [REF. : 11222/0008](#)



SEMEN COLLECTION

Colorado artificial vagina

(1) Equine artificial vagina Colorado, complete with 3 inner rubber liners (tubular, conical, straight), 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

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

REF. : [11232/0030](#)

(3) Disposable inner liner Colorado, 25/package

REF. : [11232/0110](#)

(4) Disposable inner liner Colorado, AV shaped, 25/package

REF. : [11232/0102](#)

(5) Semen collection bottle Colorado, 200 ml, disposable, 100/package

REF. : [11231/0200](#)

Coupling nut for 200 ml semen bottle, 100/package

REF. : [11231/0301](#)

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

REF. : [11231/0400](#)

Missouri artificial vagina

(1) Equine artificial vagina Missouri, double latex liner with valve and leather casing, adapter and collection bottle, length: approx. 50 cm

REF. : [11245/0000](#)

Accessories

Disposable inner liner „AV-Liner“

(2) With built-in filter and collection pouch, for Missouri AV (no collection bottle needed), 10/package

REF. : [11245/0420](#)

without filter, for Missouri AV, 25/package

REF. : [11245/0450](#)

without filter, fits Hannover, Colorado and Missouri AVs, 10/package

REF. : [11232/0440](#)



Warming bag

(7) Small, for 200 ml collection bottle

REF. : [11225/0026](#)

(8) Large, blue

REF. : [11231/0185](#)

Rubber inner liner for Colorado AV, tapered end for connection to the bottle

flared front end

REF. : [11231/0102](#)

(9) straight form

REF. : [11231/0101](#)

round form

REF. : [11231/0201](#)

Rubber inner liner for Colorado AV, tubular, flared ends

REF. : [11231/0103](#)



SEMEN COLLECTION

Accessories for semen collection

Vaseline, 1000 g REF. : 11905/0100

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

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

Semen filter pouch,
non-woven, 10/package REF. : 11260/1000

(2) Thermometer for artificial vagina,
Bimetal, non-breakable, 0-100°C REF. : 11027/0000
0-100°C, graduation 0.1°C REF. : 11027/0100
0-200°C, graduation 0.1°C REF. : 11027/0200

(3) Semen collection glove, disposable, non-spermicidal, different sizes
(M/L/XL), 100/box REF. : 11128/0055



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



SEMEN COLLECTION

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

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, 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

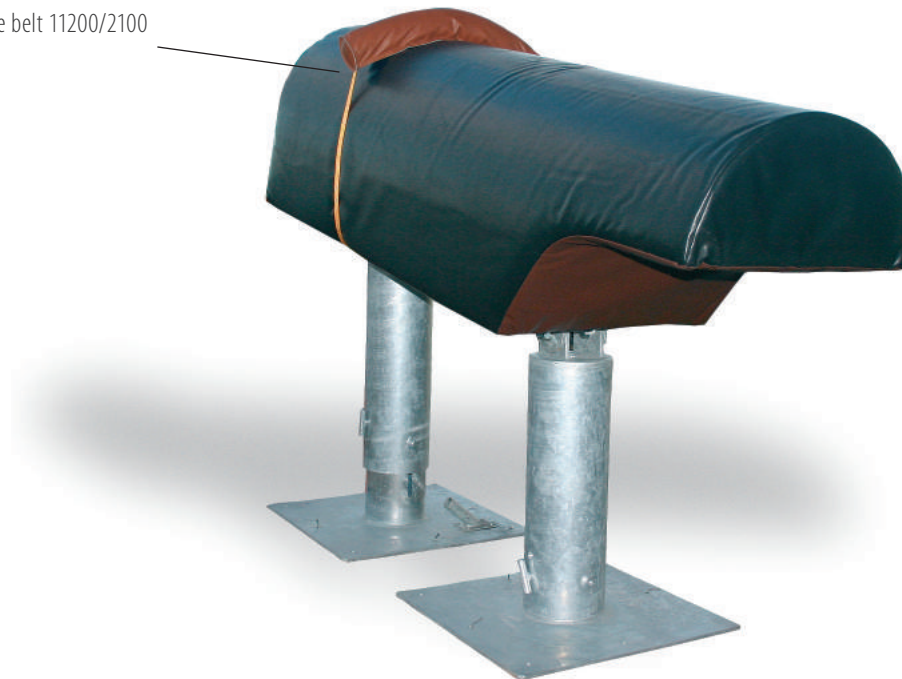
Bite belt

REF. : 11200/2100

Stretch foil for protection of phantom, length 300 m

REF. : 32000/0010

Bite belt 11200/2100



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 coat gloves, AI equipment and AVs

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

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

Dispenser for canister REF. : 11907/3100





Semen Evaluation

AndroVision®

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.

The AndroVision® 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 research, stallion semen QC and production labs.



AndroVision® software
with PC and accessories

REF. : [12500/0000](#)

AndroVision® camera
high speed colour camera

REF. : [12500/4200](#)

ANDROVISION® – MORE THAN CASA

AndroVision® software modules

Morphology and Morphometry

Interactive system for analysis of sperm morphology and morphometry. Identifies sperm in stained as well as 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.

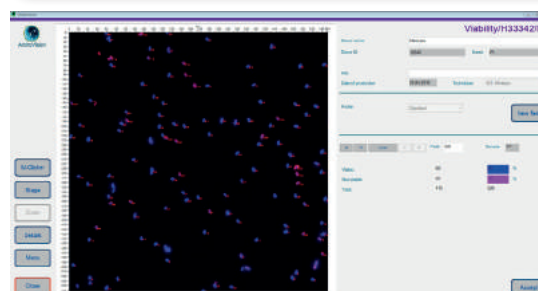
Module Morphology and Morphometry REF. : 12500/1300



Viability

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

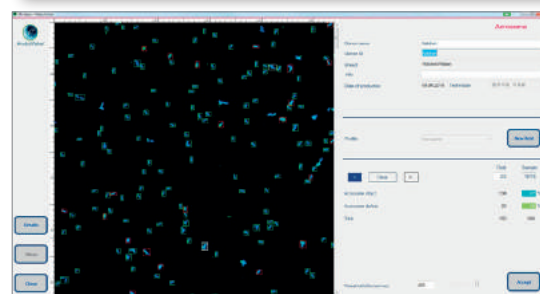
Module Viability* REF. : 12500/1400



Acrosome Integrity

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

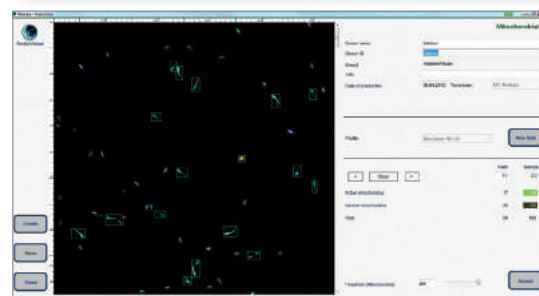
Module Acrosome Integrity* REF. : 12500/1600



Mitochondrial Activity

Automated count of percentage of sperm with active mitochondria, based on a double stain fluorescence assay.

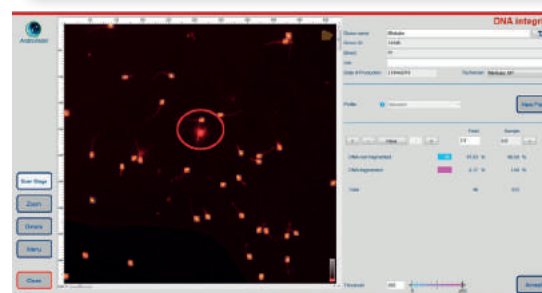
Module Mitochondrial Activity* REF. : 12500/1700



DNA Integrity

Automated reporting of the percentage of sperm with defective DNA based on the halo-technique combined with fluorescent staining.

Module DNA Integrity* REF. : 12500/1800



* requires fluorescence microscope

MICROSCOPY AND VOLUME MEASUREMENT

Phase contrast microscope CX 43

- 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. : 12005/0041



Phase contrast microscope MBL

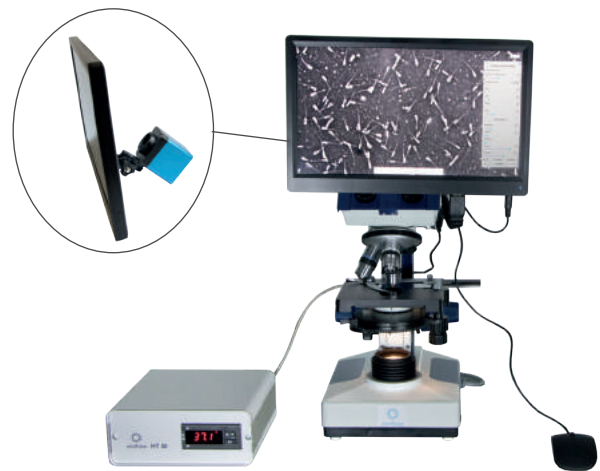
Functional microscope for semen analysis with phase achromatic objectives 10x, 40x, 100x. Heating system with temperature control unit HT 50 with digital temperature display and freely selectable temperature adjustment.

Binocular REF. : 12010/2000

Binocular, with ocular colour camera and monitor REF. : 12010/2100

Trinocular REF. : 12010/2103

Trinocular, with colour camera and monitor REF. : 12010/2101



Semen dyes

Spermac semen dye for morphological evaluation,
4 x 50 ml REF. : 15405/0000

Farely 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

- With 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 10^9 sperm cells/ml
- Optional: integrated printer for printout of ejaculate production data
- Serial and parallel interfaces for data transfer
- Large touch screen, easy to use

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](#)



Method Ram
21.01.2002
ID-Number S485054701
Density 2,54
Ejaculate volume 1,5 ml
Mixing 80%
Sperm/dose 120×10^6
Volume/dose 0,25
Number doses 22
Volume extender 4,5

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 μ l, autoclavable

REF. : [12425/4810](#)

Pipette tip yellow, 1000/package

REF. : [12425/9409](#)



Photometer SDM 1

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

- Calibration for equine semen
- Raw semen samples can be used without dilution
- LED light source provides stable output
- Cuvette is securely fixed in the correct measuring position
- Calibration is performed automatically with each sample measurement
- Power supply: with included mains adapter 100 - 240V or batteries

Accessories

Microcuvette for SDM 1, 100/box

REF. : [12300/1111](#)

Multispecies Software

for reprogramming to other species

REF. : [12300/0130](#)

Photometer SDM 1

REF. : [12300/0101](#)



Semen Extenders

EquiPlus

Balanced medium with specific purified caseinates for preservation of sperm activity up to 72 hours. Designed for 5°C storage and transport.

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 REF. : [13570/0250](#)



CHILLED SEMEN PROCESSING

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
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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.



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:

1. Part A: EquiPlus for centrifugation and predilution.
2. Part B: EquiPlus Freeze: liquid medium. The egg yolk-glycerol component is added before using.
3. Part C: Egg yolk-glycerol mixture.

REF. : [13570/0510](#)

EquiPlus Freeze 2-step without egg yolk

consists of two liquid fractions:

1. Part A: EquiPlus for centrifugation and predilution.
2. Part 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](#)





Lab Equipment and Supplies

Universal cabinet

for warming and sterilisation.

Temperature range: +30°C to +220°C.

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

32 l , 400 x 320 x 250 mm, 44 kg, 230 V	REF. : 14127/0032
32 l , 400 x 320 x 250 mm, 44 kg, 115 V	REF. : 14127/0033
53 l , 400 x 400 x 330 mm, 55 kg, 230 V	REF. : 14127/0053
53 l , 400 x 400 x 330 mm, 55 kg, 115 V	REF. : 14127/0054
108 l , 560 x 480 x 250 mm, 72 kg, 230 V	REF. : 14127/0108
108 l , 560 x 480 x 250 mm, 72 kg, 115 V	REF. : 14127/0109
256 l , 640 x 800 x 500 mm, 96 kg, 230 V	REF. : 14127/0256
256 l , 640 x 800 x 500 mm, 96 kg, 115 V	REF. : 14127/0257



Water bath

Electronic temperature control, stainless steel, with grid and lid

7 l , inner dimensions: 240 x 210 x 140 mm (W x H x D)	
230 V	REF. : 14078/0001
115 V	REF. : 14078/0002
10 l , inner dimensions: 350 x 210 x 140 mm (W x H x D)	
230 V	REF. : 14079/0001
115 V	REF. : 14079/0002



LAB EQUIPMENT AND SUPPLIES

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).

230 V	REF. : 14601/0000
115 V	REF. : 14601/0001



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)

230 V	REF. : 14340/0348
115 V	REF. : 14340/0349



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

230 V	REF. : 14703/0304
115 V	REF. : 14703/0305



Glass ware

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

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

LAB EQUIPMENT AND SUPPLIES

Plastic vials

Plastic vial with graduation and screw cap.

30 ml, 50/package REF. : 17231/0030

50 ml, 25/package REF. : 17220/0017

Sterile, 13 ml, with cap, 100/package REF. : 17230/6001

Plastic vial, 13 ml, round bottom, 100/package REF. : 17230/6000

Screw cap for 13 ml plastic vial, 1000/package

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

1 ml, 100/package REF. : 19801/0001

2 ml, 100/package REF. : 19801/0002

5 ml, 100/package REF. : 19801/0005

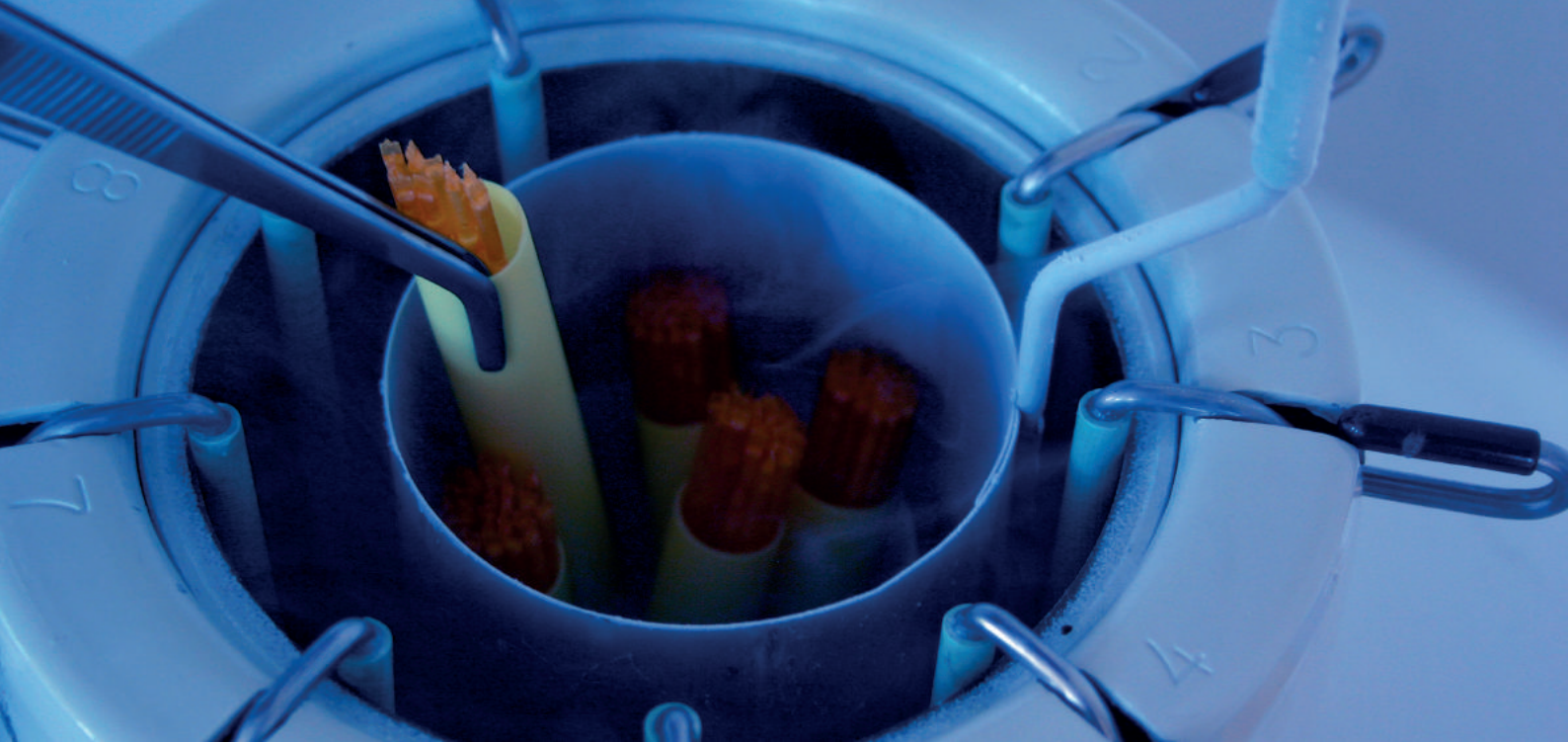
10 ml, 100/package REF. : 19801/0010

20 ml, 100/package REF. : 19801/0020

30 ml, 500/package REF. : 19801/0063

50 ml, 300/package REF. : 19801/0060





Straw Processing and Freezing

Semen straws

Colour	Medium Straw 0.5 ml	EcoStraw 0.5 ml
Transparent	13408/0010	13408/3010
Red - transparent	13408/0044	13408/3044
Green - transparent	13408/0054	13408/3054
Blue - transparent	13408/0064	13408/3064
Grey - transparent	13408/0074	13408/3074
Yellow - transparent	13408/0094	13408/3094
Pink	13408/0100	13408/3100
Turquoise	13408/0130	13408/3130
Orange	13408/0140	13408/3140
Orange - transparent	13408/0144	13408/3144
Pistachio green	13408/0200	13408/3200
Pistachio green - transparent	13408/0204	13408/3204
White	13408/0210	13408/3210



*Straws can also be delivered pre-printed.
Please ask for the Minitube printing service!*

PRINTING OF SEMEN STRAWS

Macrotubes

2.5 ml, length: 140 mm [REF. : 13441/0133](#)

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

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

Sealing balls for macrotubes:

Metal or glass, available in many different colours.



EasyCoder

Printing of straws without ink

Your benefits

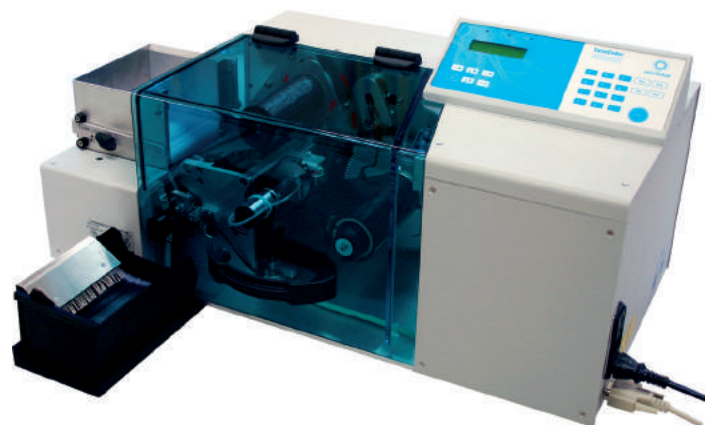
- Unmatched neat and clear printing on 0.5 and 0.25 ml straws
- Up to 3 lines with a total of about 200 characters, even on Ministraws
- Printing of barcode signs, logos and specific characters
- Immediately non-abrasive print
- Control via PC by a clear and user-friendly Minitube software
- Sequential numbers can be printed on straws
- Adjustable character fonts and graduations 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

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

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

[Colour ribbon for straw printer EasyCoder
black](#) [REF. : 13038/0010](#)



FILLING AND SEALING OF STRAWS

MPP Uno

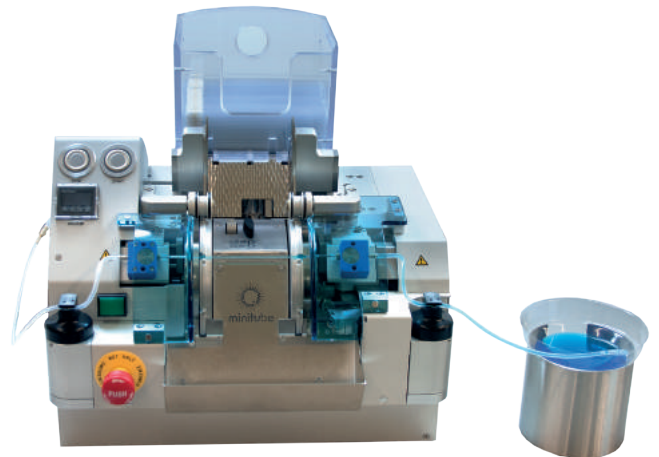
Automatic filling and sealing machine for 0.25 and 0.5 ml straws

Your benefits

- Conversion between 0.25 ml straws and 0.5 ml straws in only a few minutes
- Very compact device which requires minor space
- Best hygienic and safety conditions due to completely closed filling and sealing area

MPP Uno, complete

REF. : [13017/0000](#)



Technical features

- Capacity: approx. 4000 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

Straw hopper	REF. : 13018/0006
Filling nozzle 0.5 ml	REF. : 13017/0017
Suction nozzle 0.5 ml	REF. : 13017/0027
Washer, 2000/bag	REF. : 13021/3004
Filling tubing, 100/bag	REF. : 13021/3801
Semen cone, 200 ml, 100/bag	REF. : 13018/0100

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

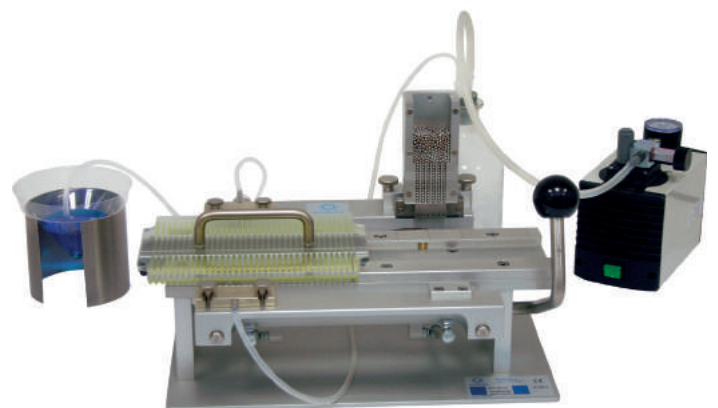
REF. : [13133/0267](#)

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
Support for semen cone	REF. : 5013018/0932



FREEZING OF STALLION SEMEN

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 freeze programming and control. Unlimited storage of programs and processed files, colour 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 connector kit for LN₂ pressure container

with 10" tablet, no PC required [REF. : 16821/3000](#)

with 12" touch screen monitor,
to connect to own PC or laptop [REF. : 16821/2000](#)

without screen, to connect to own PC or laptop [REF. : 16821/1000](#)

Accessories

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

Loading device for straw rack [REF. : 16821/5037](#)

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

(3) Spacer for IceCube 14S [REF. : 16821/5018](#)

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

Roller base for LN² pressure container [REF. : 16501/0204](#)

(4) Pliers for racks [REF. : 16821/5031](#)

Please ask for Embryo Freezing Equipment for the IceCube!



IceCube 14S with tablet

Larger alternative:

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

with 10" tablet [REF. : 16820/8000](#)

with 12" touch screen monitor [REF. : 16820/7000](#)

without screen [REF. : 16820/6000](#)



FREEZING OF STALLION SEMEN

Freezing units

The freezing units are compact and easy to handle. They are made of a styrofoam box of high quality, an inner container 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.

Technical details

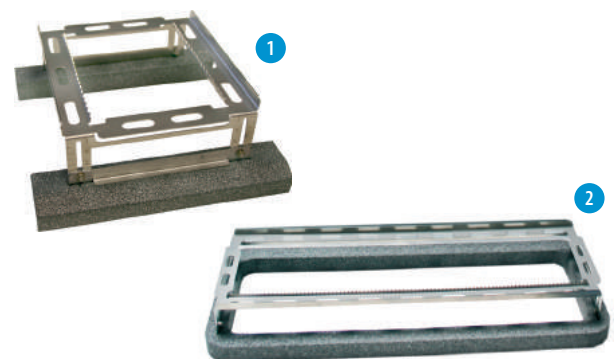
- The distance between straws and liquid nitrogen level can be adjusted
- Fits 0.5 ml and 0.25 ml straws
- Low nitrogen consumption
- High quality styrofoam chest and stainless steel inner box
- Transportable

For 20 straws [REF. : 15043/0636](#)
For 90 straws [REF. : 15043/0736](#)

Accessories

Loading block for 90 straws floating rack [REF. : 15043/0738](#)

Additional rack
(1) for freezing unit for 20 straws [REF. : 5015043/0600](#)
(2) for freezing unit for 90 straws [REF. : 5015043/0900](#)

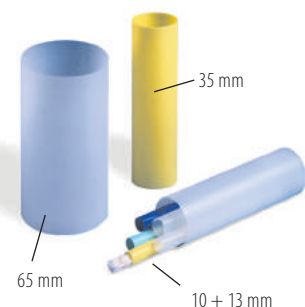


Goblets

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

Diameter	Colour	REF. :
7.1 mm	white	16965/6071
10 mm	white	16912/0133
13 mm	white	16913/0133
13 mm	blue	16913/1133
13 mm	red	16913/3133
13 mm	pistachio	16913/4133
13 mm	yellow	16913/5133
35 mm	white	16935/0135
65 mm	white	16965/0133

Goblet hexagonal for 36 of 0.5 ml or 80 of 0.25 ml straws
white [REF. : 16970/0136](#)





Semen Transport and Storage

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 litre

Weight: 4.5 kg

REF. : 16502/0003



SEMEN TRANSPORT AND STORAGE

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

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

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



SEMEN TRANSPORT AND STORAGE

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.



Insemination and Diagnostics

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

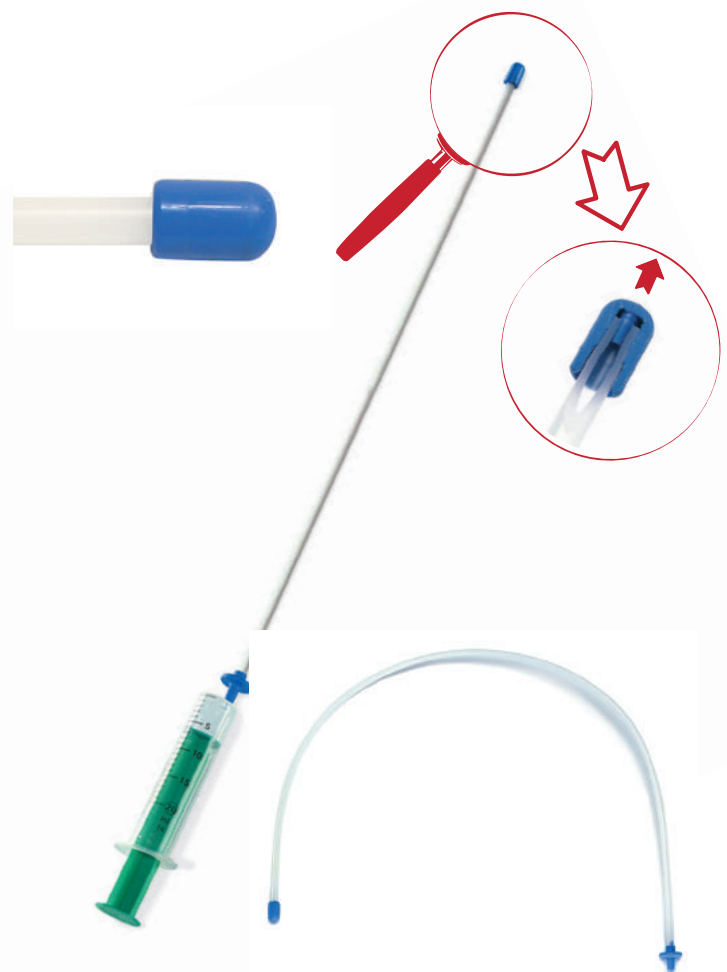
5/package REF. : 17209/1165

1/package, sterilised REF. : 17209/1265

Length: 75 cm

5/package REF. : 17209/1175

1/package, sterilised REF. : 17209/1275



INSEMINATION OF MARES

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



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.

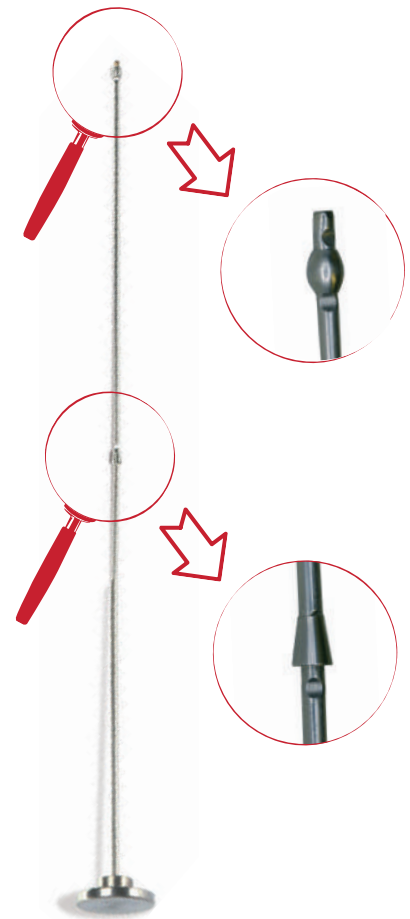
Stylet for pipettes

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 OF MARES

Insemination pipettes for liquid semen

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](#)



MiniCutter

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

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



Thawing device

- 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: $\pm 0.2^{\circ}\text{C}$
- Power supply: 12 V DC (car battery)

MT 30/54 [REF. : 17044/0038](#)

Transformer for thawing device MT
for 12 V/220 V [REF. : 17165/1395](#)



Insemination gloves

(1) Sensitive
green, 5 finger, shoulder length, 100/box [REF. : 17080/0015](#)

(2) Super-sensitive
transparent, 100/box [REF. : 17080/0050](#)

Single packed,
sterilised, 50/package [REF. : 17080/0250](#)



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 sterilised.

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



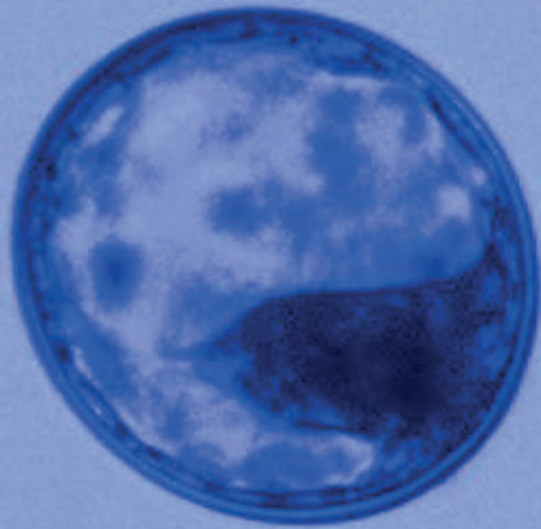
Biopsy forceps, 66 cm length (not shown) REF. : 17214/5066

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





Equine Embryo Transfer

Embryo flushing catheters for mares

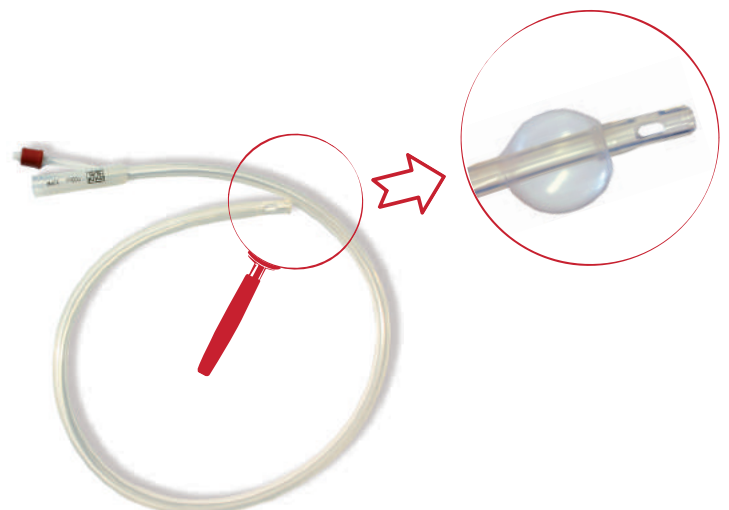
Made of silicone, sterilisable, length approx. 90 cm, Foley end, 2 large front ports, open ended, 100 ml balloon, sterilised.

The balloon, when inflated, facilitates tight closure of the cervix. All sizes allow high flow of flushing media in combination with high-flow Y-junction.

CH 28 [REF. : 19009/0027](#)

CH 32 [REF. : 19009/0032](#)

CH 36 [REF. : 19009/0036](#)



EQUINE EMBRYO TRANSFER

Flushing tubing

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

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

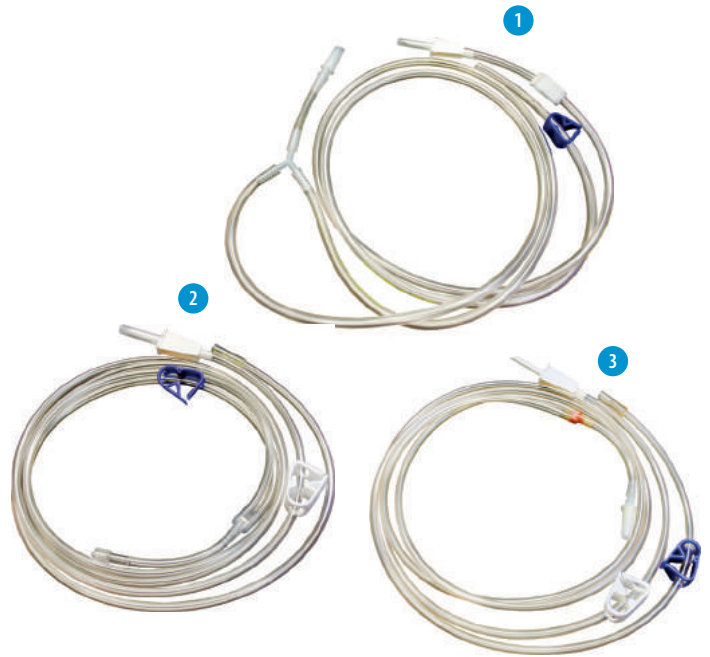
Standard Y-junction tubing:

(2) Luer end REF. : 19011/0100

(3) Foley end REF. : 19011/0200

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

REF. : 19009/1238



EmSafe and EmGuard - Filters for embryo collection

Your benefits

- 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
- An integrated search dish engraved with a grid makes it easy to search and find embryos

- All-in-one filter and search dish
- Excess fluid is controlled and removed through outlet tubing with attached thumb clamp
- Connection to all types of Y-tubing is possible

EmSafe

EmSafe is ideal for both large and small embryos. The filter system automatically holds a minimum level of 60 ml rinsing fluid in the dish. An angled filter mesh provides an **optimal flow-through rate** and the air vent in the lid is secured by a filter.

(1) EmSafe filter REF. : 19010/6000

EmGuard

Due to its **shallow design**, the EmGuard filter system is perfectly suited for use with all microscopes even when the working distance is limited. Embryos are easily found with the aid of the highly visible grid.

(2) EmGuard filter REF. : 19010/1000



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 ID-Sticks, 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

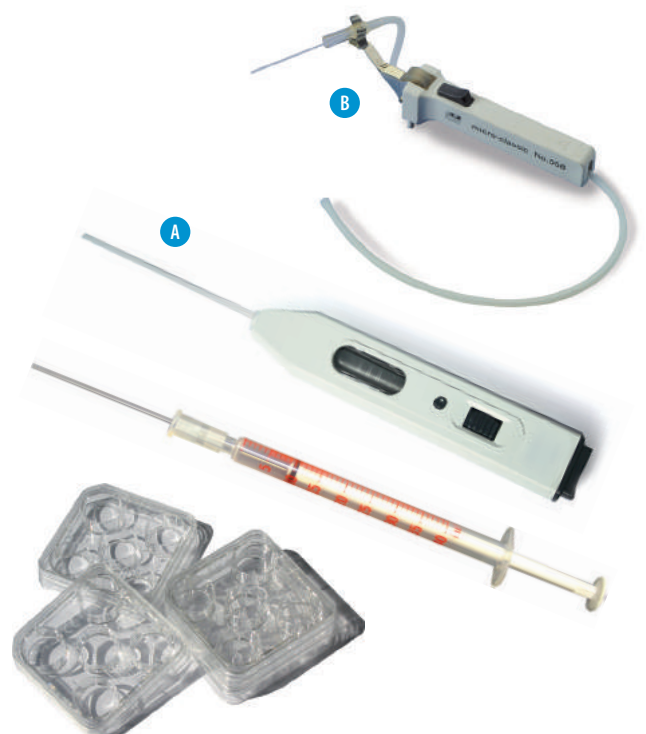
20 µl REF. : 19022/0020

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 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](#)

with photo tube

REF. : [12014/1000](#)

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

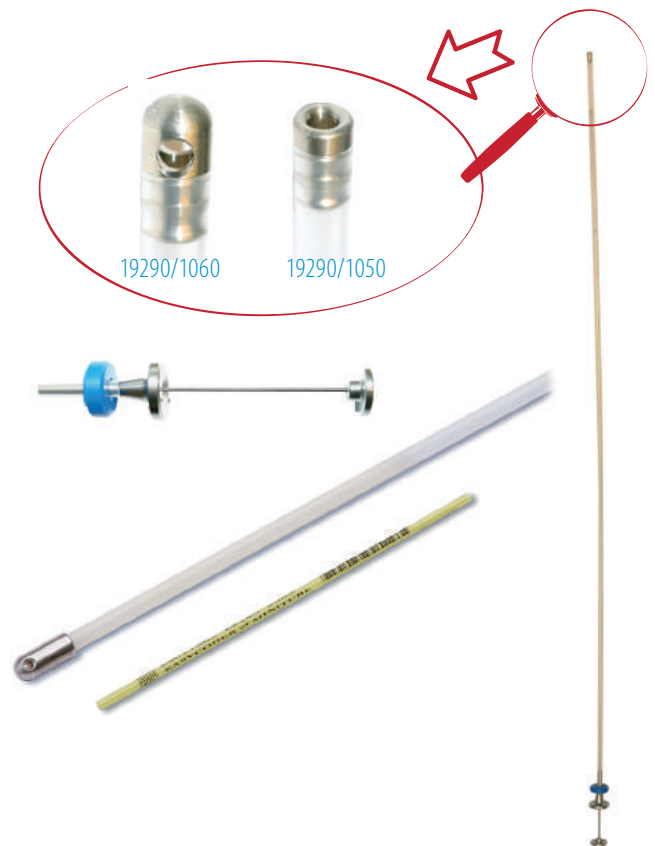
REF. : [19290/1048](#)

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

REF. : [19290/1066](#)



Equine Embryo Transfer

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](#)

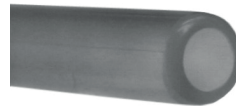
Sheath for equine ET/AI, with 0.25 ml straws, side opening, for usage with stylet 17015/0100, sterilised, individually packaged, 10/bag [REF. : 17015/0660](#)



Embryo transfer > day 8

ET/AI Pipette, rounded ends, fits luer syringe, sterilised, 1/bag, length 65 cm

[REF. : 19290/1101](#)



Straws

0.5 ml straw, clear, sterilised

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, sterilised, 10/package

with ID rod seal in many bright colours	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!



Minitüb is an ISO 9001:2015 certified company.