



CANINE

assisted reproduction technology



minitube
our knowledge, your success

Together for progress in assisted reproduction



At Minitube, quality, service and innovation are at the heart of everything we do – ensuring solutions that truly meet your practical needs.

As a third-generation family business, Minitube's 50-year history is built on a foundation of stability and trust. In a world focused on short-term gains, we are committed to sustainable growth and **your enduring success**.

This long-term focus is rooted in **scientific precision**. Our integrated team of veterinarians, biologists and engineers does not just create products; they develop the standards you rely on. The same experts deliver our **industry-leading service**, offering you direct access to practical application support and scientific advice.

We do not leave **quality** to chance. We take full responsibility by manufacturing our core products in our own state-of-the-art, ISO-certified facilities. Our media production is GMP-certified, and our quality control is uncompromising. This **rigorous control** is your assurance of safety, reliability, and consistent results.

Looking ahead, we remain committed to **pushing boundaries** – developing advanced products, improving workflows, and delivering exceptional technical service – **to help you succeed**, just as we have for more than five decades.

Katharina Rohmüller
CEO





Minitube online media library:
Access all catalogs digitally,
available in multiple languages.

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1 SEMEN COLLECTION



■ Electro ejaculator

Electro ejaculator set, consisting of heavy-duty carrying case, main device with remote controller and transformer/charger. Does not include probes which need to be ordered separately. For veterinarian use only.

- Digital display and adjustment of the voltage in 0.5 volt steps
- Fully portable with remote control
- Pulse/pause ratio adjustable manually
- Power output with 4 different curves enabling balanced setting according to the animal's size and sensitivity
- Power supply: 115 V/60 Hz or 230 V/50 Hz

Electro ejaculator [1] 11900/0000

(↻ Accessories

Electro ejaculator probe

3/8", Ø 0.95 cm, length: 22 cm [2] 11900/0509

1/2", Ø 1.27 cm, length: 22 cm [3] 11900/0510

Semen collection set for electro ejaculator [4] 11900/0250



Canine collection system

This convenient collection system includes three color-coded funnels (red, white, and blue) and four semen collection vials (Ref. 17500/0202).

★ Product features

- Color-coded funnels to divide the different ejaculate fractions, which is useful for preventing unwanted bacteria and contamination by prostatic fluid
- Allows examination of the stud dog's penis during collection
- Spill-proof funnel design prevents accidents during collection
- Non-spermicidal materials are easy to clean, sterilize, and reuse
- Samples are immediately ready for analysis, centrifugation, or further processing

Canine collection system

for small breeds (height of funnel without spout: 5.5 cm) [1] **17500/0203**

for all breeds (height of funnel without spout: 7.5 cm) [2] **17500/0200**

🔗 Accessories

Semen collection vial, 15 ml, graduated, plastic, with lid, 17 x 120 mm, 50/bag [3] **17500/0202**

Semen collection and AI glove, blue, nitrile, extra sensitive, sperm safe, latex-free, powder-free, 100/box [4] **11128/0055**

size M **11128/0055**

size L **11128/0060**

size XL **11128/0065**

ReproJelly, non-spermicidal lubricant, water soluble, tube with 100 ml, resealable [5] **11907/0100**

US only: BioLube, non-spermicidal lubricant, 3 oz [6] **US17116/7000**

Alternative

Semen collection funnel, disposable, 100/box [7] **11521/0000**



2 SEMEN EVALUATION



AndroVision®

AndroVision® is a **highly precise, automated system for computer-assisted semen analysis**. It enables fast and accurate assessment of concentration and motility, analyzing up to 1000 cells per field. When combined with a fluorescence microscope, additional software modules expand the range of analysis options. The intuitive user interface makes operation simple: **just three clicks from start to result**.

★ Product features

- Real-time analysis of live images and video files
- Analysis of up to 4 fields within 20 seconds
- Highly efficient particle filter for accurate sperm identification
- Advanced image processing
- Lightmeter for illumination control
- Powerful algorithms, enhanced with artificial intelligence
- Predefined analysis profiles for many species
- Adjustable analysis parameters and customizable user profiles
- Comprehensive database with flexible reporting options
- Data export to MS Excel and other programs
- Languages: English, German, Spanish, Chinese, Portuguese, Russian, French
- Regular software updates and long-term expert support

AndroVision®, with PC and monitor 12500/0000

AndroVision®, with PC, touch screen, barcode scanner 12500/0001

AndroVision®, with laptop 12500/0010

☰ Optional software modules

Morphology and Morphometry 12500/1300

Measures length and width of the sperm head, head shape and midpiece asymmetry of each single sperm cell (acc. to Kruger). Results can be classified into a large range of morphological abnormalities. [1]

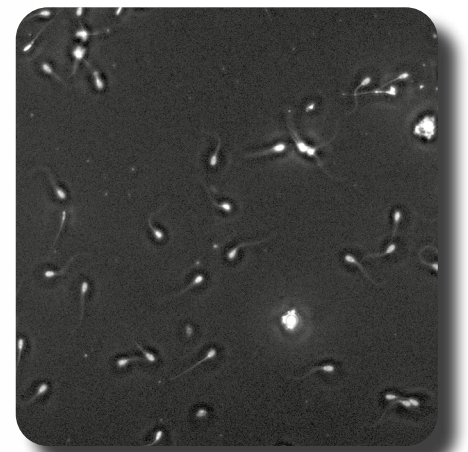
Dose Calculation 12500/1100

Automatic calculation of the number of doses that can be prepared from an ejaculate and of the volume of extender to add to the ejaculate.

Quality Control 12500/1200

Analysis of samples post thaw and in holding. Link to native ejaculate analysis.





+ High image quality

AndroVision® with MiniQube

Combines the industry's leading CASA software with an **innovative digital microscope** to deliver a modern, precise, and reproducible solution for semen analysis across multiple species. AndroVision® MiniQube saves valuable time, eliminates subjectivity, and provides reliable results at the touch of a button.

+ Your benefits

- Rapid, reliable analysis: Process up to 30 ejaculates per hour
- Unmatched measurement reproducibility: Standardized results across users, labs, and production days
- Low-maintenance design: Ready-to-use with minimal setup
- All-in-one compact system: Replaces multiple devices with a streamlined design, small footprint, and reduced cabling

AndroVision® MiniQube, w/o PC and monitor	12500/5000
AndroVision® MiniQube, with PC and monitor [1]	12500/5001
MiniQube for existing AndroVision® systems	12500/5005

🔗 Accessories

Controller HTi 50 [2]	12057/0100
Warming plate, 245 x 200 mm [3]	12057/0510
Disposable counting chamber Minitube, 20 µm, 4 chambers, 25/box	12050/0220
Single channel pipette, autoclavable, electronic, 0.1 - 1 ml, for sample preparation	12050/0516
Pipette tip 0.1 - 1 ml, 96/rack, 8 racks/box	12050/0513
Single channel pipette, autoclavable, adjustable, 0.5 - 10 ml µl, for loading counting chambers	12050/0515
Pipette tip 0.5 - 10 µl, 96/rack, 10 racks/box	12050/0531

★ Product features MiniQube

- Fully automatic autofocus: High image quality for every user and every analysis
- Heated and motorized stage: Stable, sperm-friendly temperature and fast, accurate sample positioning
- Unique, perfectly aligned optics (patent pending): Maintenance-free, no need for manual adjustments
- Digital light adjustment: Optimal clarity and contrast without manual intervention



+ Small footprint

AndroScope

AndroScope is a compact mobile CASA system based on AndroVision®. It is designed for rapid, accurate semen analysis across multiple species at any stage of production, transport, or insemination.

★ Product features

- Equipped with a professional high-speed camera and a robust focus adjustment for precise evaluation of semen motility and concentration
- The heating unit in the analysis area reaches +37°C within a few seconds, providing optimal temperature conditions
- Analyze fresh, chilled, or frozen-thawed semen
- Follow the analysis live on the screen and generate PDF reports with key parameters clearly mapped
- Connect AndroScope to any Windows 10+ PC, laptop, or tablet via USB 3.0 for offline analysis using the installed software
- Alternatively, use the free AndroScope App (available for Android and iOS) on your smartphone for fully mobile CASA analysis
- Perform real-time analysis in the App and enjoy smooth live video streaming to your smartphone via the WiFi station
- The WiFi station creates a dedicated wireless network and can be powered by a wall outlet or portable power bank
- Intuitive interface requires minimal training while delivering reliable results
- Robust carry case provides optimal protection during transport and contains everything needed for semen analysis

AndroScope [1] incl. transport case and accessories 12500/3000

AndroScope Package: AndroScope, WiFi station, mobile warming unit, transport case and accessories 12500/3100

🔗 Accessories

Disposable counting chamber Minitube, 20 µm, 4 chambers, 25/box 12050/0220

Test tube 2 ml with cap, 250/bag 14602/0904

Disposable capillary tube, 100/bag 15404/0100

Micro fiber rod, length 124 mm, 100/bag 12510/0106

Single channel pipette, autoclavable, electronic, 0.1 - 1 ml, for sample preparation 12050/0516

Pipette tip 0.1 - 1 ml, 96/rack, 8 racks/box 12050/0513

For mobile operation on smartphone: AndroScope WiFi station [2] 12500/3010

Recommended for sample preparation: Mobile warming unit, for 6 reaction vials and 1 slide [3] 12057/6000



AndroScope App

Available for free on Google Play and App Store.



Sperm Vision® SAR

Highly efficient, flexible, and sophisticated digital tool for evaluating sperm cells in small animal reproduction. Concentration, motility, morphology, and viability can all be accurately assessed, making Sperm Vision® SAR an essential tool for everything from donor evaluation to semen processing.

The user interface is straightforward, easy to use and can be customized through the preference menu to suit individual needs. Sperm Vision® SAR ensures evaluation integrity of both new and archived records through a multilevel, password-protected operational system. These features, along with many others, make Sperm Vision® SAR ideal for small animal reproductive specialists.



System includes

- Sperm Vision® SAR software
- Rapid scan digital camera
- Zeiss Axiolab microscope with 10x and 40x phase objectives, turret condenser, phototube C-mount, and integrated heated stage
- LD A-Plan 20x PH1 negative phase objective
- PC with integrated LCD monitor
- Temperature control unit for heated stage with warming plate

Sperm Vision® SAR **12520/5000**

Optional upgrades

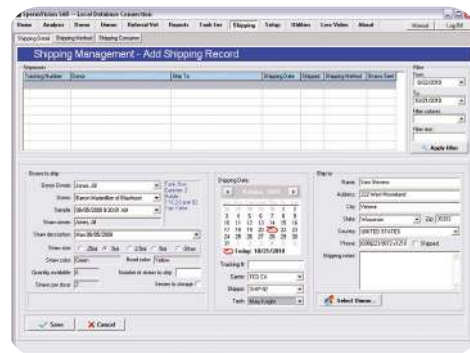
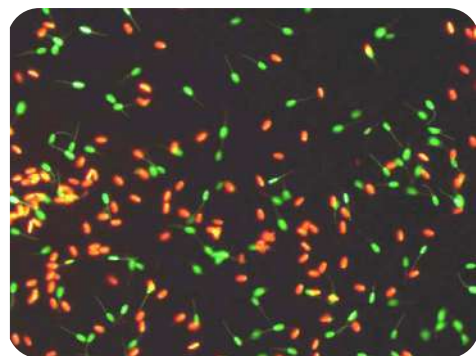
Upgrade to Research Version of Sperm Vision®; **12520/5010**
includes comparative analysis report module, tank management module, all sperm motion characteristics, user defined settings

Comparative analysis report module for SAR; **12520/5020**
allows for quick comparison of data from multiple ejaculates or evaluations of the same ejaculate over time; includes software, license, and USB hardware lock

Semen tank inventory management module for SAR; **12520/5030**
allows semen inventory to be entered and tracked across multiple tanks; includes software, license, and USB hardware lock

Viability and fluorescence microscope upgrade for SAR*; **12520/6080**
includes high-resolution color camera, Zeiss C-mount adapter, Zeiss Axiolab A1 fluorescence LED light source, filter set and two-port camera adapter

* Research Version upgrade required.



Our recommendation

Adjustable pipettors (page 08) with electronic mixing for precise, evaluation-ready dilutions.

Semen evaluation

Microscopy supplies

Microscope slide, 75 x 25 mm, 50/box [1]	15400/2400
Cover glass, 18 x 18 mm, 100/box [2]	15401/0990
Immersion oil, 8 ml [3]	12000/0101
Lens cleaning tissue, 90 x 72 mm, 500/package [4]	15230/9100



Counting chambers (hemocytometers)

Thoma new	15150/4771
Neubauer improved	15152/4421



Pipettor

Single channel pipette, autoclavable	
adjustable, 10 - 100 µl [1]	12425/4810
adjustable, 100 - 1000 µl [2]	12427/3132
Pipette tip	
10 - 200 µl, yellow, 1000/bag	12425/9409
2 - 200 µl, 96/rack, 10 racks/box	12425/9500
100 - 1000 µl, 500/bag	12425/4901
100 - 1000 µl, 96/rack, 10 racks/box	12425/4902



Photometer SDM 1

- Calibrated for six different species, including porcine, bovine, equine, canine, caprine and ovine
- Raw semen samples can be used without dilution
- Semen concentration is displayed in 10⁶ sperm/ml
- Electrical connection: with included mains adapter 100-240 V or batteries

SDM 1 photometer (multispecies) [1]	12300/0200
Microcuvette for SDM 1, 100/box, disposable [2]	12300/1111



Proven accuracy

SDM 1 is a compact, highly precise photometer for measuring sperm concentration. Cleaning is simple, maintenance is minimal.



Phase contrast microscope CX 43

- Phase achromat optics with universal condenser
- Heated microscope stage with temperature control unit HTi 200 and additional warming plate (180 x 180 mm)
- Integrated LED illumination
- Ergonomic design

Phase contrast microscope CX 43, with phototube (trinocular), objectives 20x, 40x [1] **12005/0042**

Shelf system for HTi control units and small warming plates (1 pcs.) [2] **12057/0080**



Wide range of microscopes and accessories available



Phase contrast microscope MBL

Functional microscope for semen analysis with heating system and control unit for freely adjustable temperature.

Phase contrast microscope MBL 2000

binocular, heated stage, HTi 50, objectives 10x, 40x, 100x **12010/3000**

binocular, heated stage, HTi 50, objectives 10x, 40x, 100x, with camera and monitor [1] **12010/3050**

Phase contrast microscope MBL 2100

trinocular, heated stage, HTi 50, objective 20x **12010/3103**

trinocular, heated stage, HTi 200, objective 20x, with camera and monitor **12010/3101**

Digital color camera for microscopes, with integrated image display software [2] **12110/1600**

Monitor 11.6" with HDMI input [3] **12110/1610**



HTi control units

Modern control for highly precise heating.



Semen evaluation

Semen stains

Spermact, stain for morphology analysis, 4 x 50 ml [1] **15405/0000**

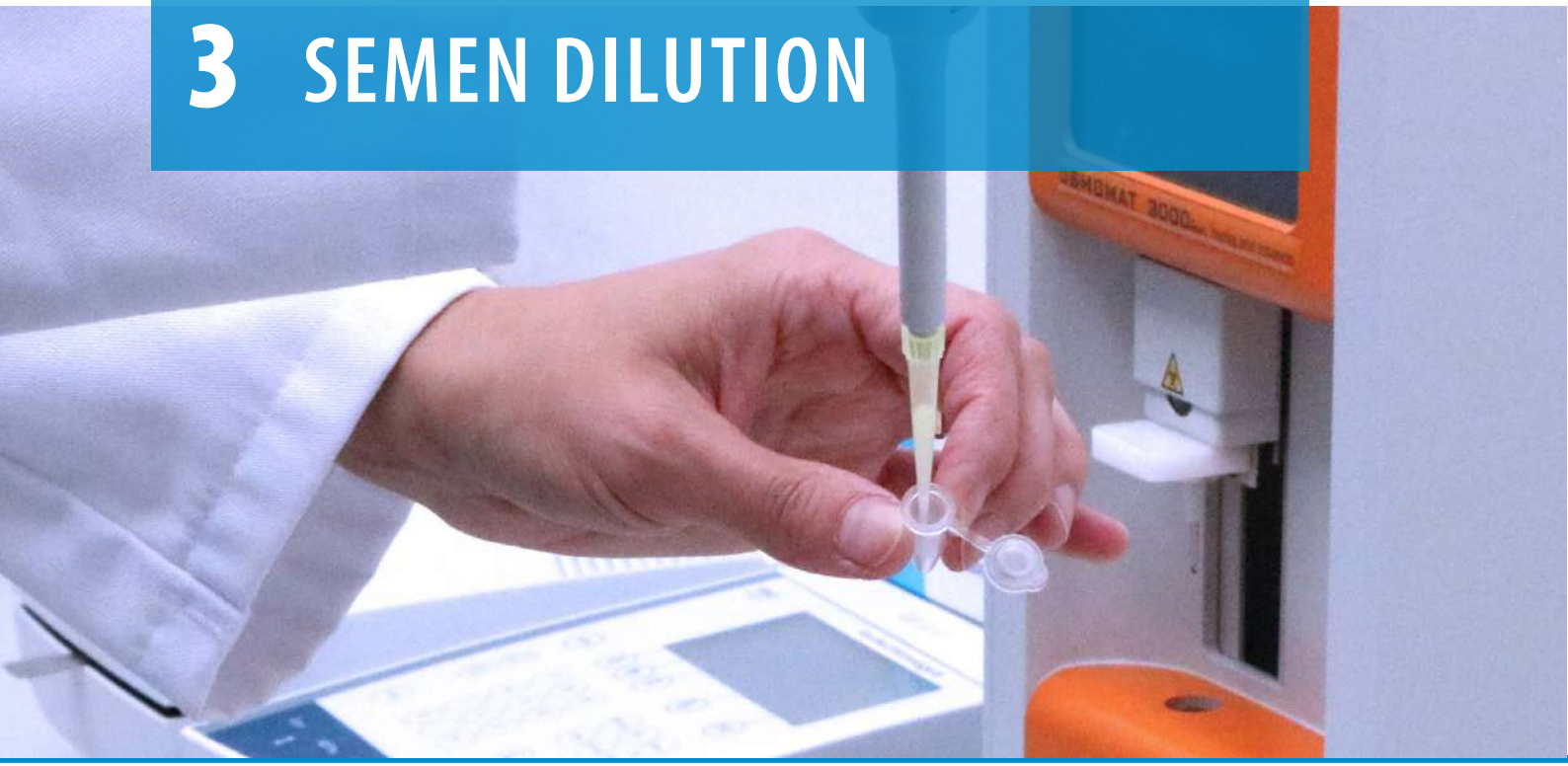
Farely stain, for morphology analysis, 3 x 250 ml [2] **15405/0026**

Eosin G, 2% solution for supravital staining, 50 ml [3] **15405/0025**

Nigrosin, 4% solution for supravital staining, 50 ml [4] **15405/0029**



3 SEMEN DILUTION



Water bath

- Electronic temperature control, stainless steel, with grid and lid
- Working temperature range: minimum 5°C above ambient up to +100°C (depending on ambient pressure)
- Intuitive 3.5" color graphic display with touch screen
- Inner dimensions: 267 x 200 x 207 mm (L x H x D)
- Outer dimensions: 349 x 378 x 289 mm (L x H x D)

Water bath, 10 l

230 V	14079/0001
110 V	14079/0002



Different sizes of water baths available



Centrifuge Minitube

- With swing out rotor
- Complete with buckets for vials: 4 x 100 ml/4 x 50 ml/4 x 15 ml
- Speed in g (RCF) and rpm: max. speed 4000 rpm/2200 x g
- Memory: 100 programs
- Dimensions: 380 x 300 x 490 mm (W x H x D)

Centrifuge Minitube

230 V	14601/0000
110 V	14601/0001



CaniPlus semen extenders

Extender media are essential for semen preservation and accurate analysis. They supply vital nutrients and protective components that help **maintain sperm motility and fertility**, ensuring optimal insemination outcomes. Whether semen is processed fresh, chilled, or frozen, selecting the correct extender is critical for effective preparation, dilution, storage, and transport.

CaniPlus provides a trusted, high-performance range of canine semen extenders used by professionals worldwide. Our **strict quality control** and the **exclusive use of pure, certified ingredients** ensure safe, reliable products.

CaniPlus Chill ST

- Short-term culture medium for canine semen (≤ 5 days)
- Ideal for short-term shipping
- Animal protein free

CaniPlus Chill ST, 20 ml [1]

13700/0040

CaniPlus Chill LT

- Long-term culture medium for canine semen (≤ 10 days)
- Ideal for international and domestic shipping
- Animal protein free

CaniPlus Chill LT, 20 ml [2]

13700/0045

CaniPlus Freeze One-step

- One-step culture medium for freezing canine semen
- Requires addition of fresh egg yolk
- Contains glycerol

CaniPlus Freeze One-step, 20 ml [3]

13700/0060

CaniPlus Freeze Two-step

- Two-step culture medium for freezing canine semen
- Requires addition of fresh egg yolk
- Fraction B contains glycerol

CaniPlus Freeze Two-step, 20 ml [4]

13700/0065

CaniPlus AI

- Culture medium for thawing canine semen and for artificial insemination (AI)
- Contains motility enhancing ingredients
- Ideal for all AI, especially when using poor quality or low volume semen
- Animal protein free

CaniPlus AI, 20 ml [5]

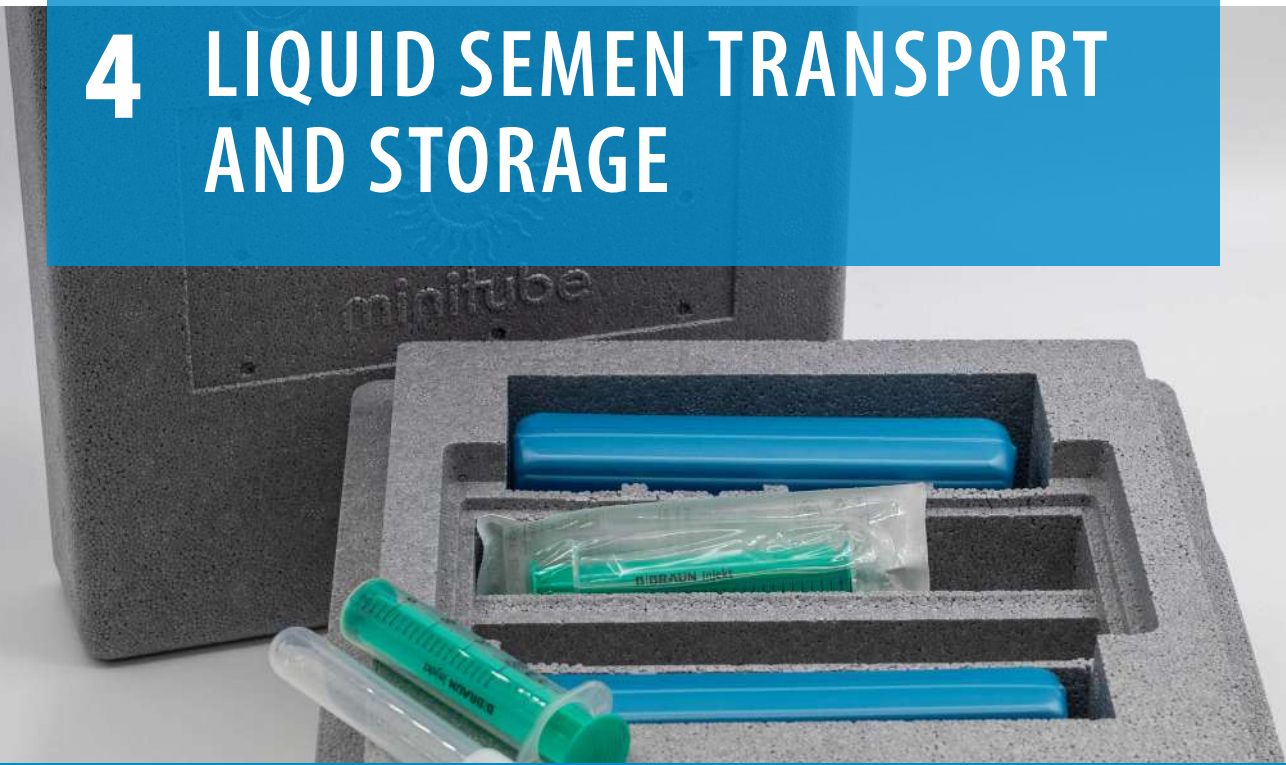
13700/0070



High preservation performance

CaniPlus extenders protect the sperm cells from damage caused by temperature variations during storage and shipping.

4 LIQUID SEMEN TRANSPORT AND STORAGE



Jute transport box

- Sustainable, space-saving, and functional packaging solution
- Inlays made of Jute, a naturally renewable raw material, are 100% compostable
- Holds constant temperature for up to 30 hours
- Includes cardboard box, Jute inlays, 2 cool packs and 2 plastic tubes (50 ml)
- Outer dimensions: 200 x 185 x 200 mm (W x D x H)



Jute transport box

17229/0001

Neopor transport box

- Made of highly insulating Neopor
- Holds constant temperature for up to 45 hours
- Outer dimensions: 290 x 290 x 180 mm (W x D x H)
- Version with accessories [1] includes cardboard box, 2 cool packs, 5 ml syringe, 10 ml syringe, 2 protecting caps for syringe, 2 plastic tubes (13 ml), 1 vial (50 ml)



Neopor transport box

with accessories [1]

17229/0005

without accessories [2]

17229/0006

Styrofoam transport box

- Designed to maintain chilled canine semen at approx. 4°C (± approx. 3°C) inside the container for approx. 45 hours based on an ambient temperature of +22°C
- Includes ultra-dense Styrofoam container, cardboard container cover, 2 ice packs (re-freezable), 2 buffer tubes for semen or extender (13 ml), 2 conical bottom tubes (50 ml) as protector for 13 ml tubes, 5 ml syringe, 10 ml syringe
- Outer dimensions: 310 mm x 310 mm x 190 mm (W x D x H)

Styrofoam transport box

17229/0010



Product only for sale
in the US and Canada

Plastic vials

Plastic vial, 13 ml, with graduation, round bottom

with screw cap, sterilized, 100/bag [1] 17230/6001

without cap, 100/bag 17230/6000

Screw cap, for 13 ml plastic vial, 1000/bag [2]

white 17230/6054

red 17230/6055

blue 17230/6056

violet 17230/6057

green 17230/6058

yellow 17230/6059

Test tube 2.0 ml with cap, 250/package [3] 14602/0904

Tube, 50 ml, red cap, flat/conical base, graduated, sterilized, 25/bag, 300/box 17220/0017

Centrifuge tube, 50 ml, red cap, graduated, 25/bag, 500/box [4] 14602/0825

US only: Centrifuge tube, 50 ml, green screw cap [5] US14607/0056

US only: Centrifuge tube, Falcon brand, 15 ml, graduated, plastic, with lid, racked, 50/package US17500/0201



Liquid semen transport
and storage

Disposable syringes

Disposable syringe, Luer mount, all plastic, sterilized

1 ml, 100/package 19801/0001

2 ml, 100/package 19801/0002

5 ml, 100/package 19801/0005

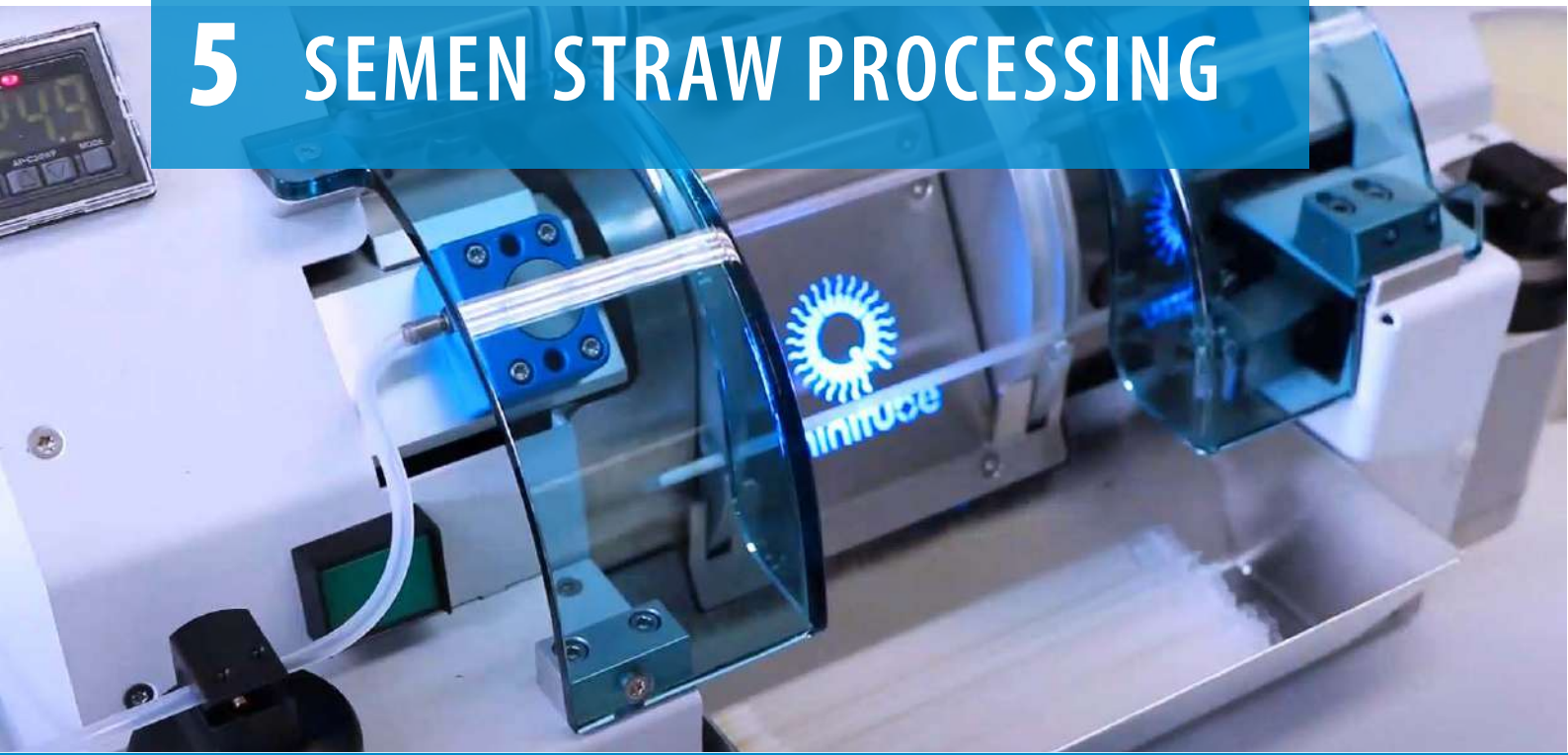
10 ml, 100/package 19801/0010

20 ml, 100/package 19801/0020

50 ml, 30/package 19801/0060



5 SEMEN STRAW PROCESSING



Semen straws

For over 30 years, Minitube straws have been used worldwide as a standard for the freezing of semen. Minitube's rigorous quality control processes, advanced production techniques, and careful material selection ensure a reliable product that consistently exceeds industry standards.

EcoStraws feature a wick with a shorter inner wick section that **absorbs 3 to 4% fewer sperm** than the corresponding symmetrical wick of standard semen straws. They are ideal for overnight equilibration of semen at refrigerated temperatures. EcoStraws are used in the same way as standard semen straws.



Semen straws are also available in a 0.25 ml size and can be pre-printed upon request.

	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 - transparent	13408/0144	13408/3144
beige - transparent	---	13408/3184
pistachio - transparent	13408/0204	13408/3204
white	13408/0210	13408/3210

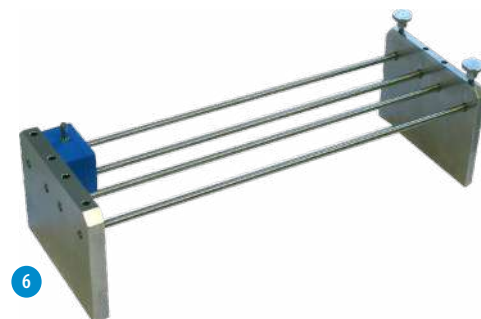
MPP Uno

Seals and fills 1 straw per cycle – ideal for handling small volumes.



★ Product features

- Automatic filling and sealing machine for 0.25 and 0.5 ml straws
- Capacity: approx. 4000 straws/hour
- Fast, tool-free conversion between 0.25 and 0.5 ml straws and vice versa (1–2 minutes)
- Exchangeable hopper, capacity: 2400 MiniStraws (0.25 ml) or 1200 medium straws (0.5 ml)
- Ultrasonic sealing unit, ultrasonic generator in an external casing that can be installed at up to 2.5 m (ON/OFF switch directly on the machine)
- Designed to provide ideal conditions for hygiene and safety
- Can be operated in cold room or cabinet or at room temperature as stand-alone or combined with MiniJet printer (CombiSystem)
- Very compact device which takes up little space; machine dimensions: 460 x 350 x 410 mm (W x H x D) plus ultrasonic generator
- Vacuum unit with integrated reservoir and automatic readjustment function; vacuum level can be easily modified via buttons
- PLC microprocessor control
- Power supply: 110 V/60 Hz or 230 V/50–60 Hz



MPP Uno, complete [1] 13017/0000

🔗 Accessories

Filling nozzle, for 0.5 ml straws [2] 13017/0017

Suction nozzle, for 0.5 ml straws [3] 13017/0027

Straw hopper, for 0.25 and 0.5 ml straws [4] 13018/0006

Washer, for 0.25 ml and 0.5 ml nozzles, 5000/bag 13021/3001

Filling and suction tubing, 380 mm, sperm-friendly material (silicone), angle cut edge, 100/aluminum foil bag 13021/3800

Disposable semen cone, 100/bag [5] 13018/0100

Fixing unit, for filling and suction blocks, stackable, stainless steel [6] 13017/0050

EasyCoder

Clean and odorless printing of straws without ink and solvent.



★ Product features

- Thermal transfer printer with automatic straw supply (output: up to 3600 straws per hour) for immediately abrasion-resistant print
- Unparalleled precise and clear printing on 0.5 and 0.25 ml straws; easy and quick conversion between different straw sizes
- Prints up to 3 lines per straw, including barcodes, logos, and special characters
- Control via PC by a clear and user-friendly Minitube software
- Easy handling, little maintenance required
- Dimensions (L x W x H): 660 x 370 x 310 mm (PC not included)
- Power supply: 110 V/50-60 Hz or 230 V/50-60 Hz

EasyCoder printer 13038/0000

Thermal transfer ribbon, black 13038/0010



MultiCoder

Quick and easy machine-readable labeling of lab items.

★ Product features

- High resolution inkjet printing
- Print head protection system (avoids drying out of ink)
- Wide variety of product carriers
- No tools needed for change of product carriers
- Pre-designed print layouts
- Loads excel files for printing
- Easy drag & drop editing of print layouts

+ Your benefits

- + Very versatile: print system can label most kinds of materials such as plastics, glass, or aluminum
- + Manually moveable slide and a unique, easy-to-use carrier system allow for a speedy work process
- + Easy printing of information on the smallest amount of space, including text, barcode, QR-Code, and logo

MultiCoder printer 13145/0000



Unique, flexible, versatile

Quick and easy print on a whole range of items: semen straws, goblets, cassettes, culture dishes, macrotubes, syringes, cryovials and many more.



■ Thermotransfer printer for labels

Portable printer for autoadhesive labels fitting 0.25 and 0.5 ml straws. With mains connection, cassette with labels, QWERTY-keyboard, software, driver, manual, USB cable, flash drive, hard-top case, lithium battery, power supply. Print resolution: 300 dpi, LCD Display.

Thermotransfer printer for labels 13138/2000

Cassette with 140 labels

for 0.25 ml straws 13138/2125

for 0.5 ml straws 13138/2150



■ CryoSealer

Manual sealer using ultrasound technology. Can be used for 0.25 and 0.5 ml straws. Ultrasound welding facilitates a perfect and uniform seal of each straw. Power supply: 100-240 V AC/50-60 Hz.

CryoSealer 13135/0000



■ Manual sealer

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

Manual sealer 13135/2500



■ Manual ball sealer

0.5 ml straws are individually sealed with balls.

Manual ball sealer 13136/0100

Sealing balls, 1000/package

glass, for 0.5 ml* 13400/0x00

metal, for 0.5 ml 13400/9900

* Various colors available.



■ Micropipettor

Micropipettor for loading and flushing straws. Offers easy, precise pipetting with volume control via a handling wheel. Includes a universal adapter compatible with straws of various diameters and all capillary tubes up to 1 ml.

Micropipettor 19022/0002



6 SEMEN FREEZING AND CRYOSTORAGE



Freezing units

Minitube freezing units are compact and easy to handle. They consist of a high-quality Styrofoam box, a stainless steel inner container, and a floating rack. The stainless steel container is filled with liquid nitrogen. During the first down phase, the rack maintains the necessary distance between 0.5 ml or 0.25 ml straws while floating on the liquid nitrogen. After that, the straws are manually immersed in the nitrogen.

- Distance between the straws and the liquid nitrogen level can be adjusted
- Units fit 0.5 ml and 0.25 ml straws
- Low nitrogen consumption
- High quality Styrofoam chest and stainless steel inner box
- Easy transport

Freezing unit

for 20 straws [1]	15043/0636
for 90 straws [2]	15043/0736

Accessories

Loading block for 90 straws floating rack	15043/0738
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Additional rack

for freezing unit for 20 straws [3]	5015043/0600
for freezing unit for 90 straws [4]	5015043/0900



Automatic freezer IceCube 14S

Computer controlled freezer, with comfortable data input and automatic recording of the freezing curve.

★ Product 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: max. 1080 x 0.25 ml or 0.5 ml straws per freezing cycle
- Software for freeze 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 connector kit for LN₂ pressure container

with 10" tablet [1]	16821/3000
with 12" touch screen monitor*	16821/2000
without screen*	16821/1000

↻ Accessories

Rack for IceCube 14S, for 36 straws [2]	16821/5036
Loading device for straw rack	16821/5037
Handling rack for IceCube 14S [3]	16821/5030
Spacer for IceCube 14S [4]	16821/5018
LN ₂ pressure container, 60 l	16820/1900
Roller base for LN ₂ pressure container	16501/0204
Pliers for racks [5]	16821/5031
Cryoprotective glove, length 38 cm [6]	
size L (10)	23830/0521
size XL (11)	23830/0522
Kit for cryoprotection "Bluebox", case containing one pair of cryoprotective gloves size L (10), a cryoprotective apron and safety goggles [7]	23830/0523

* To connect to own PC or laptop.



Goblets

Goblets [1]		
Ø 7.1 mm	white	16907/0071
Ø 10 mm	white*	16910/0010
Ø 13 mm	white*	16913/0133
Ø 35 mm	white	16935/0135
Ø 53 mm	white	16953/0133
Ø 65 mm	white	16965/0133
hexagonal	white	16970/0136

* Available in different colors.

Accessories

Goblet canes [2]	
for 2 x 7.1 mm goblets	16965/6171
for 2 x 10 mm and 9.2 mm goblets	16965/6000
for 2 x 13 mm goblets	16965/6013
Marking label for goblet canes, different colors	13422/00xx
Divider for goblets, 100/bag, 12 x 6.5 cm [3]	16967/0065
Identification rod, 140 mm length	
for 0.25 ml straw	16903/0210
for 0.5 ml straw	16903/1210
Stainless steel funnel for 65 mm goblets [4]	15004/0402

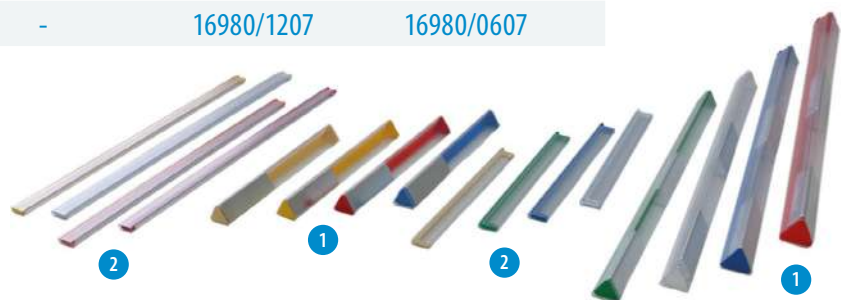


Cassettes for straw storage

	Triangular cassette [1]*		Flat cassette [2]**	
	long	short	long	short
green	16981/01351	16981/01201	16980/1201	16980/0601
blue	16981/01361	16981/01211	16980/1202	16980/0602
yellow	16981/01371	16981/01221	16980/1203	16980/0603
red	16981/01381	16981/01231	16980/1204	16980/0604
white	16981/01391	16981/01241	16980/1205	16980/0605
beige	16981/01401	16981/01251	16980/1206	16980/0606
orange	-	-	16980/1207	16980/0607

* For 10/20 straws 0.5 ml or 28/56 straws 0.25 ml.

** For 3/6 straws 0.5 ml or 6/12 straws 0.25 ml.



Cryostorage container

- With 6 canisters 279 x 41 mm
- Normal working duration: 175 days
- Neck opening: 55 mm
- Overall height: 690 mm
- Capacity: 3732 x 0.5 ml straws
- Full weight: 42 kg

MVE Cryo container ET 35, volume: 36 l

16503/3606



Further cryostorage container options



Vapor Shipper

- 1 canister 278 x 67 mm
- Static holding time: 19 days
- Static evaporation rate: 0.23 l/day
- Capacity: 938 x 0.25 ml/440 x 0.5 ml straws (1 level bulk)
- Neck opening: 70 mm
- Height: 500 mm
- Diameter: 220 mm

MVE Vapor Shipper SC 4/2 V, volume: 4.1 l [1]

16504/2001

- 1 canister 278 x 46 mm
- Static holding time: 26 days
- Static evaporation rate: 0.19 l/day
- Capacity: 452 x 0.25 ml or 210 x 0.5 ml straws
- Neck opening: 50 mm
- Height: 500 mm
- Diameter: 220 mm

MVE Vapor Shipper SC 4/3 V, volume: 4.5 l [2]

16504/3001

Protective shipping container, for Vapor Shipper, made of plastic, IATA compliant [3]

16504/3010



CryoCube™ Dry Shipper

- One-way shipper
- 1 canister 127 x 35 mm
- Static holding time: 5 days
- Capacity: 182 x 0.25 or 88 x 0.5 ml straws
- Neck opening: 35 mm
- Height: 305 mm
- Diameter: 305 mm

CryoCube™ Dry Shipper

16505/0100



7 INSEMINATION AND DIAGNOSTICS



MAVIC canine vaginal AI catheter

- Designed to mimic the natural breeding process
- Available in three sizes to accommodate a variety of breeds
- Stainless steel spine with protective sheath to enhance rigidity
- Luer lock injection port with reflux check valve
- Inflatable balloon to prevent unwanted backflow of semen
- Balloon equipped with monitoring pilot and Luer lock check valve

MAVIC AI catheter, sterilized, single use, 1/package

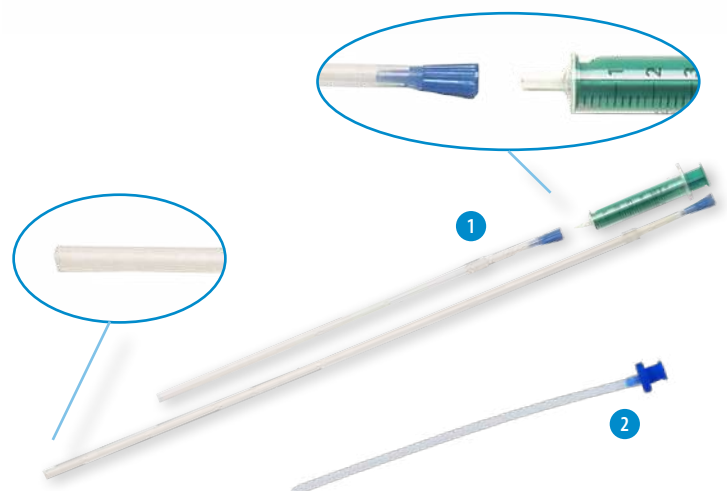
large , CH 36, for large to giant sized dogs, length: 400 mm, with 10 ml syringe [1]	17500/0055
medium , CH 18, for small to medium sized dogs, length: 250 mm, with 5 ml syringe [2]	17500/0050
small , CH 18, for toy and small sized dogs, length: 120 mm, with 5 ml syringe [3]	17500/0052



AI pipette for dogs

Rigid plastic pipette with piece of tubing and Luer adapter.

AI pipette [1]	
length: 22 cm, 20/package	17500/0010
length: 22 cm, 1/package, sterilized	17500/0020
length: 44 cm, 10/package	17500/0045
length: 44 cm, 1/package, sterilized	17500/0040
Semen transfer adapter for syringe,	17229/0020
length: 13 cm, 10/bag [2]	





MiniThaw thawing unit

- Variable temperature setting (ambient to +50°C)
- Digital display of current temperature
- Straw lift has three compartments and allows thawing of up to 10 straws at a time (0.5 ml or 0.25 ml)
- Connects to on-board 12-24 V socket and to mains 110-230 V socket via USB-C cable or adapter
- Robust and easy to handle

MiniThaw with USB-C cable [1] 17048/0001

Accessories

USB car adapter to connect to on-board 12-24 V socket 17048/0420

USB mains converter to connect to mains 110-230 V socket 17048/0430

Base for MiniThaw, metal [2] 17048/0005

Digital timer, magnetic, battery included [3] 17048/0006

Power bank, for mobile use of the MiniThaw, provides power for up to 15 hours [4] 17048/0410



MiniCutter

- Precise cutting of 0.25 and 0.5 ml straws
- Facilitates straight cut at exactly the right length, which helps to avoid semen loss
- Ergonomic shape
- Easy to keep clean

MiniCutter for straws 17062/0010



Semen collection and AI glove

Semen collection and AI glove, blue, nitrile, extra sensitive, sperm safe, latex-free, powder-free, 100/box

size M	11128/0055
size L	11128/0060
size XL	11128/0065



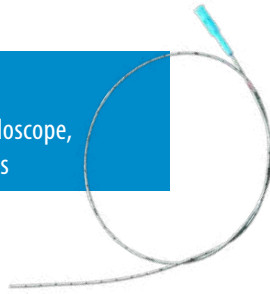
Transcervical insemination (TCI)

Transcervical insemination (TCI) is a method of introducing sperm directly into the uterus by catheterizing the cervix.

A stiff **endoscope** is introduced into the vagina to locate the cervix. A **catheter**, placed in the working channel of the endoscope is advanced through the cervix into the uterus to deposit the semen there.

By connecting the endoscope to a **light source**, a **camera** and **monitor**, it is possible not only to locate the cervix for TCI, but also to visualize and evaluate the mucosa for breeding management.

TCI catheter
placed in the working channel of the endoscope,
used to deposit the semen into the uterus



Endoscope
used to catheterize the cervix



Camera control unit with light source
attached to the endoscope to monitor the
procedure on a screen



Accessories for all endoscopes

High-resolution color monitor	18000/0191
Manual insufflation pump with pilot balloon	17505/0010
<i>US only:</i> Cleaning brush for endoscopes	
fits up to working channel CH5	US17505/0011
fits up to working channel CH8	US17505/0012



FlexiLock TCI endoscope set

- Unique coupling system combines HD camera and LED light into one streamlined hand piece, providing ergonomic and lightweight operation
- Clearer image, due to significantly more optical fibers than most fiber-optic endoscopes
- Rigid design available with dual angled side ports

FlexiLock TCI endoscope , length 35 cm, working channel CH 8 [1]	17505/0203
FlexiScope hand piece , full HD camera and integrated LED illumination, for FlexiLock endoscope, requires CCU [2]	17505/0216
FlexiVision® 100 camera control unit (CCU) , required for FlexiScope hand piece and camera head full HD Zoom, USB for full HD photo capturing, to be connected to a monitor [3]	17505/0221



Traditional TCI endoscope set

- Angular optical eyepiece, autoclavable
- Dual right-angled side ports
- Easy access to the cervix and uterus in dogs of all sizes, also toy breeds
- Working channel (CH 5) enables insertion of instruments under direct visualization for insemination, biopsy and flushing



Traditional TCI endoscope [1]	17505/0101
Camera head full HD Zoom, focal length 14.25-28 mm, for traditional TCI endoscope, requires CCU [2]	17505/0211
LED high-performance light source, 180 W [3]	23700/3200
Fibre optic light cable, Ø 3.5 mm, length 3000 mm [4]	23700/3250
FlexiVision® 100 camera control unit (CCU), required for FlexiScope hand piece and camera head full HD Zoom, USB for full HD photo capturing, to be connected to a monitor [5]	17505/0221

Transcervical catheters

- Clear markings every centimeter with additional indicators every 5 cm
- Supple material reinforced by a removable stylet for easy insertion
- Adapter for syringe included
- Single packed

TC cannulas with single port (70 cm), eye is 0.5 cm from tip to prevent blockage	
CH 4	17500/0004
CH 5	17500/0005
CH 6	17500/0006
CH 8	17500/0008
TC cannulas with dual port (70 cm), additional eye (approx. 2 cm from tip and rotated 60°)	
CH 4	17500/0024
CH 5	17500/0025
CH 6	17500/0026
CH 8	17500/0028



+

Painless and non-invasive

Endoscopic transcervical insemination offers the advantage of achieving the same or better results without the need for general anesthesia or surgery.

■ TCI shunt system

The Minitube shunt system for transcervical insemination is a dual-purpose endoscopic tool. It eliminates vaginal air loss around the endoscope during insufflation by creating an airtight seal. The shunt system also acts as a stabilizing platform for the endoscope during the procedure.

Shunt system contains: Stainless steel shunt, silicone catheter 55 mm, silicone catheter 105 mm, O-rings, syringe 50 ml, manual.

TCI shunt system	
for TCI FlexiLock endoscope	17500/0060
for traditional TCI endoscope	17500/0065
Shunt catheter	
55 mm	17500/0062
105 mm	17500/0064
150 mm (for scopes >35 cm)	17500/0067
250 mm (for scopes >40 cm)	17500/0068
Seal-ring for Shunt FlexiLock endoscope	17500/0061
O-ring for Shunt traditional endoscope	17500/0066



Shunt system applied to FlexiLock endoscope

■ Vaginal specula set Hannover

- Vaginal specula set of 3 different sizes: diameter 8 mm, 10 mm and 15 mm; length 150 mm
- Blunt obturator included
- Light source (3.5 V Halogen)
- Handle with charger for light source
- Scratch-resistant rotatable loupe, 1.6x magnification
- Stainless steel

Vaginal specula set Hannover [1], requires handle and light source 17500/0120

(↻ Accessories

Handle for vaginal specula set, charging of the battery via USB [2] 17500/0125

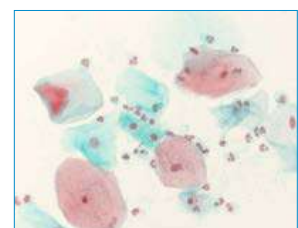
Halogen light source for vaginal specula set, scratch-resistant rotatable loupe, 1.6x magnification, 3.5 V [3] 17500/0130



■ Shorr staining solution

Shorr staining solution for examining presence of cornification in epithelial cells of the female dog.

Shorr staining solution, 500 ml 15405/0080



Canine culture swab

Canine culture swab with introduction pipette, length: approx. 320 mm, disposable, individually packaged, sterilized, 10/bag.

Canine culture swab 17500/0350



Bertha, canine AI training model

Anatomically correct AI training female dog (Labrador) with silicone internals. Beginners can practice inseminations on the model in a lifelike situation before moving on to real animals. Training success is achieved more easily and quickly, and injury to live animals is prevented.

★ Product features

- Compact and lightweight training model for easy transport and cleaning
- Several gynecological procedures can be trained, such as examination of the genital tract, vaginal insemination and endoscopic examination and insemination
- Scope of delivery: dog model, uterus in estrus with secondary folds and cervix (can be catheterized), pelvis, kidneys, vena cephalica, blood reservoir
- Measurements: 85 x 72 x 25 cm (H x L x W)
- Weight: 9 kg

Bertha, canine AI training model 22400/5100



Lubricant

ReproJelly, non-spermicidal lubricant, water soluble

tube with 100 ml, resealable [1] 11907/0100

1 l bottle, resealable [2] 11907/1000

3 l canister, without dispenser [3] 11907/3000

Dispenser for ReproJelly canister 11907/3100

US only: BioLube, non-spermicidal lubricant, 3 oz [4] US17116/7000



ReproJelly lubricant

Iso-osmotic and sperm friendly, supports the sperm cell viability. Ideal viscosity for optimal coating of gloves, AI equipment, and instruments.

■ Ultrasound scanner Minitube 3.0 Plus

Portable ultrasound scanner for multi-species obstetrical measurements with accurate automatic calculation of gestation days.

- Includes 11" tablet, power supply, carrying strap, ReproJelly lubricant, and charger, all housed in a heavy-duty case
- Compatible with any Android device with USB-C port
- Supports multiple scanning modes, including B-mode, dual B-mode, M-mode, PW, and CF color Doppler with automatic parameter calculations
- Built-in battery provides extended operation (up to 6 hours) with fast charging (2-3 hours)
- Large, glare-free display ensures clear visualization of anatomical structures in all lighting conditions
- Compact, lightweight, and IPX7 waterproof

Ultrasound scanner Minitube 3.0 Plus [1] 23500/2005

Micro-convex probe, 8.2 MHz [2] 23500/2108



■ Progesterone test device

- For measuring progesterone in canine serum using a fluorescence enzyme immunoassay
- Throughput: 36 tests per hour
- Time to first result approx. 20 minutes
- Carousel holds up to 25 samples and test cups simultaneously
- Full ST test menu, random access, and continuous processing
- Simple touch screen interface
- Once samples and test cups are loaded, the operator can press start and walk away
- Supports bar-coded primary tube sampling
- Automatic or manual calibration with each sample measurement
- Dimensions and weight: 16 x 16 x 21 inches (W x D x H), 61 lbs

Tosoh AIA-360 progesterone test device 17507/9945



Product only for sale in the US and Canada

9 TRAINING AND EDUCATION



■ Training and education

Minitube offers specialized product training and educational seminars on assisted reproduction technologies worldwide. According to demand, individual and open seminars are offered that provide instruction in artificial insemination, transcervical insemination, semen analysis, semen processing, and more.

All training courses blend theoretical knowledge and practical experience. The latest technologies and practices are demonstrated with participants. Our instructors are well-respected experts in assisted animal reproduction.

The interactive workshops incorporate presentations, discussions, demonstrations, and practical exercises. Minitube training sessions offer useful troubleshooting tips, and trainees benefit from the "learning by doing" approach. Participants receive valuable documentation and a certificate of participation. Minitube training courses are flexible and available at Minitube premises, partner facilities, customer sites, and virtually.

We are happy to find the best training option for you.
Please contact us: seminar@minitube.de

Enhance your canine breeding skills with Minitube USA seminars

Minitube USA regularly hosts canine seminars, offering a blend of theoretical and practical lessons in a personal teaching environment.

- Semen Preservation, Breeding Management, and AI
- Transcervical Insemination (TCI)

For more information, contact us: caninesales@minitube.com





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