

# reproduction technologies





## swine products



#### bovine products



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#### INSEMINATION TECHNOLOGY

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## **CRONOS**

#### Features:

- 1. New composition with special formulation.
- 2. New non sperm-toxic specific antibiotic component.
- 3. New automatic production lines in protective atmosphere.
- 4. Raw materials chosen among those having the highest quality standard according to high solubility pharmacopoeia (FU).
- 5. High anti-bacterial power (obtained with protective atmosphere).
- 6. Osmotic potential and controlled ionic balance
- 7. Quality control on raw materials and on any production batch in chemical and microbiological laboratories as well as in vitro.

#### Benefits:

- 1. Quick preparation of the solution.
- 2. Performance efficiency both for immediate use and after storage of the seminal material.
- 3. Easy microscopie examination during the check phases.
- 4. Warranty of package integrity and complete traceability of any production batch, from raw materials to packaging.
- 5. CRONOS is sterile packaged and has a 12 month guaranteed stability if stored at  $+2\,^{\circ}\text{C}$  to  $+8\,^{\circ}\text{C}$ , allowing for a better stock management.

#### Strength points:

- 1. Physiological cell metabolism of spermatozoa.
- 2. Optimisation of motility and vitality parameters of seminal material.
- 3. Improvement of fertilizing capacity over time.
- 4. Control of spermatozoa agglutination.

#### Excellent price/quality ratio





#### CRONOS: in vitro tests.

Tests were performed by the Medi Chimica research laboratory on a high number of samples that where compared with other commercially available extenders in order to highlight optaneid Cronos features. Picture 1 the statistic result of the motility averages detected on samples extended with Cronos and the ones detected on the compared extenders.

At the end of the tests Cronos showed motility and preservation percentages that are clearly higher in the middle term.

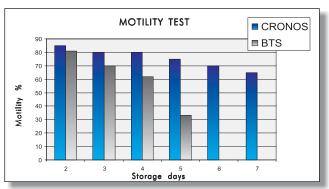


Figure 1

#### **CRONOS**

Code	Description
D40000	CRONOS extender for 1 lt.
D45000	CRONOS extender for 5 lt.
D45500	CRONOS extender for 10 lt.
D37000	CRONOS extender for 60 lt.
D38000	CRONOS extender for 160 lt.
D39000	CRONOS extender for 340 lt.



## SUS

#### Features:

- 1. New composition with special formulation.
- 2. New non sperm-toxic specific antibiotic component.
- 3. New automatic production line in protective atmosphere.
- 4. Analytic grade (FU) and high solubility raw materials.
- 5. High anti-bacterial power.
- 6. Osmotic potential and controlled ionic balance

#### Benefits:

- 1. Top level results even after 8 day storage
- 2. Clear, easy to prepare, foam free solution.
- 3. Quality control on raw materials and on any production batch in chemical and microbiologico laboratories as whell as in vitro.
- Warranty of package integrity and complete traceability of any production batch, from raw materials to packaging.
- 5. SUS is sterile packaged and has a 12 month guaranteed stability if stored at  $+2\,^{\circ}\text{C}$  to  $+8\,^{\circ}\text{C}$ , allowing for better stock management.
- 6. Improves boars management and optimises laboratory duties as its long fifetime allows activity planning.

#### Strength points:

- 1. Ideal protection of seminal material in summertime.
- 2. Physiological cell metabolism of spermatozoa.
- 3. Optimisation of motility and vitality parameters of seminal material.
- 4. Improvement of the fertilizing capacity even if semen is stored for many days.
- 5. Reduces spermatozoa agglutination.
- 6. Protects endometrial mucous.

Developed for use in large Artificial Insemination centres and in band managed farms, thank to its quality, efficiency and durability features.





#### SUS: field and in vitro tests.

Picture 1 reports the results of the comparision tests performed and shows the sperm motility percentage after each observation day. With SUS semen duration increases with no of bacterial charge development.

Field and in vitro tests that Sus performances exceed those of other extenders

Samples where evaluated through laboratory tests also for acrosine activity and for oocytes anchorage capacity.

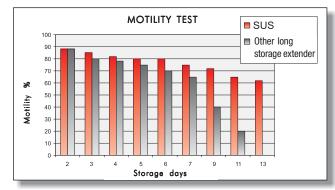


Figure 1

#### **SUS**

Description
SUS extender for 1 lt.
SUS extender for 5 lt.
SUS extender for 10 lt.
SUS extender for 60 lt.
SUS extender for 160 lt.



## First class semen delivery bag





The SACCO bag revolutionised the Al industry and is the most effective genetic transfer method currently available.

#### Advantages of the new SACCO bag

- Designed to synchronise with the sows' natural physiological uterine contractions, thus avoiding any forced intake.
- Increases the semen dose shelf life thanks to the excellent surface-to-volume ratio, which reduces sperm cell degradation.
- Unique combination of two medical-grade, sperm-friendly, plastic layers (available both in aluminium and transparent material).
- Designed to be easily processed, labelled, transported and stored.
- More doses can be packed, loaded onto shipping containers and then stored in farms. Lower costs.
- Aseptically manufactured bag.
- Economically packaged in 500-piece rolls, resulting in lower shipping and storage costs.
- Possibility to customize the SACCO bag graphics, in order to show a better boar stud image to the final customer.

#### Transparent SACCO bag

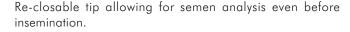
The transparent SACCO bag can be customized and is better in terms of quality of the plastic layers and cost-effectiveness.



Re-closable tip with easier opening: a unique feature of the new SACCO bag



SACCO system



User-friendly tip opening, easily connectable to the Medi Chimica catheters.

The SACCO bag is the most cutting-edge semen packaging system.





Available also in transparent version

#### **SACCO**

Code	Description
FM1001	SACCO bag trasparent roll
FM1003	SACCO bag trasparent single



#### High performance filling system





Front view of the CF800 packaging machine



High flow rate peristaltic pump for a lower stress of the seminal material



Detail of the SACCO handling system



All the functions of the CF800 machine are controlled through the ANCORA software: alarm management, label printing, management of the various packaging steps

#### Semen Agitator

It has been proven that the settling of sperm cells occurs in the extended volume, resulting in different concentrations of the doses being packaged. This difference is exacerbated as the volume of the final diluted ejaculate (or pooled ejaculate) increases. This agitation system, which was designed by MEDI CHIMICA, will continuously stir the diluted ejaculate during packaging. Months of testing carried out at our research stations determined the type and shape of the stirring paddle and the speed at which it has to operate to prevent damages to the suspended sperm cells.

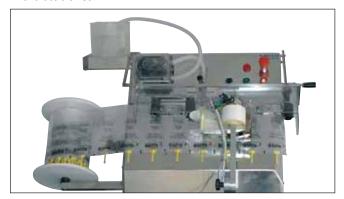
#### Automatic SACCO Filling System CF800

This compact machine sets the standard in Computer Controlled Filling Systems.

- It automatically fills, seals and labels the SACCO bags.
- · Sophisticated in design, the unit is simple and userfriendly.
- · A specific software (ANCORA) together with a Programmable Logic Controller (PLC) monitor the proper running of the system.
- Several safety mechanisms are built-in to automatically stop the system in the event of an abnormal cycle.
- The processing speed, which is up to 800 SACCO bags per hour, enables your laboratory to be efficient and to provide high performances.
- The interface to the ANCORA programme makes the production data available in real time to the sales and administration departments.
- The automation of semen production saves labour time and increases the product quality.
- Profitability is a must! Cost-effective production without any wastage thanks to the use of the SACCO bags for semen packaging.
- One can run the CF800 system and simultaneously perform other tasks while the SACCO bags are being processed.

Reliability is indispensable! Industrial design and high-quality technology ensure the consistency of your semen production.

• Our service team is always on call! Our technicians and engineers can be contacted via hotline and provide both on-centre and onsite assistance.



Processing speed: up to 800 SACCO bags per hour. CF800 is able to fill also different bags (IMV, ...)

CF800		
Code	Description	
CF8001	Automatic filling system CF800	
CF800PRI	Printer CF800	
CF800AS	Connection software ANCORA FILL	
CF800SIL	Silicon tube 10 mt	
CF800MAR	Marprene tube 10 mt	
CF800AG	Semen agitator	



## Semen packaging with high speed peristaltic pump





The new machine for semen packaging CF600 with high flow rate peristaltic pump and pneumatic pin positioning system within the SACCO bags.

Simple and reasonably priced, the System CF600 Machine fills and seals SACCO bags.

- The SACCO bags move one by one in front of the filling station. By simply pressing a convenient switch it is possible to automatically perform the filling and sealing cycle.
- •The bag filling operation uses a high flow rate peristaltic pump with a geared mini motor, designed to operate at best even in hardest conditions (average filling time: 2" to 3"). The filling speed and accuracy are ensured by a programmable timer and by the pneumatic pin positioning system.

Provided with a switch for manual or automatic operation selection, the CF600 can be operated by pressing a button located on the right side of the device, that automatically allows to fill and seal the bags.

- Nothing but the hose or tube touches the fluid, eliminating the risk of the pump contaminating the fluid, or the fluid contaminating the pump.
- As one bag is filled, the one in front is sealed.
- This efficient system enables the operator to package the semen doses with a single work station, reducing the amount of semen handling. The unit is mainly in stainless steel for easy cleaning.
- The practical output is over 550 doses per hour, depending on both the operator and laboratory procedures.
- The CF600 machine is simple to install, easy to use, and quick to maintain, it is the hot new technology
- The CF600 is able to fill also different bags (IMV, ..)

# Economic and Rational choise for medium-sized Boar Studs



Peristaltic head pump mod. 500



Electronic check of weld temperature, filling timer and AUTO switch

- 1. Completely made in stainless steel
- 2. Ready for packaging in 15 seconds
- 3. No wasted bags from the beginning to the end of production
- 4. Electronic check of weld temperature



#### **CF600**

Code	Description
CF6001	Manual SACCO System CF600
CF800SIL	Silicone tube Ø 9.6 mm - 10 mt
CF800MAR	Silicon tube Ø 9.6 mm - 10 mt



## Semen packaging with peristaltic pump





#### The New machine for semen packaging CF400 with peristaltic pump

Simple and reasonably priced, the System CF400 Machine fills and seals SACCO bags.

- The SACCO bags move one by one in front of the filling station.
- The bag filling operation uses a peristaltic pump with a geared mini motor, designed to operate at best even in hardest conditions.
- Nothing but the hose or tube touches the fluid, eliminating the risk of the pump contaminating the fluid, or the fluid contaminating the pump.
- The semen flow is controlled by a timer.
- As one bag is filled, the one in front is sealed.
- This efficient system enables the operator to package the semen doses with a single work station, reducing the amount of semen handling. The unit is mainly in stainless steel for easy cleaning.
- The practical output is approx. 380 to 400 doses per hour, depending on both the operator and laboratory procedures.
- The CF400 machine is simple to install, easy to use, and quick to maintain, it is a hot new technology.
- The CF400 is able to fill also different bags (IMV, ..)

#### Compact, Fast, Economic

The New machine for semen packaging CF400 with peristaltic pump



Peristaltic head pump mod. 300

Electronic check of weld temperature

- 1. Completely made in stainless steel
- 2. Ready to package in 15 seconds
- 3. Peristaltic pump also available with timer (optional)
- 4. No wasted bags from start to finish production
- 5. Electronic check of weld temperature
- 6. The economic and rational choice for medium and small dimension Boar Stud
- 7. Available with timer to improve operator's comfort, speed and dosing accuracy.



#### **CF400**

Code	Description
CF4001	Manual SACCO System CF400
WM300	Peristaltic head pump mod. 300
CF400SIL64	Silicon tube Ø 6,4 mm — 10 mt
CF400SIL80	Silicon tube Ø 8,0 mm — 10 mt
CF400TEMP	Timer Switch for Pump



#### Sperm quality analysis software ACCURACY, REPEATABILITY, OBJECTIVE RESULTS







Welcome and setup page



The Sperm Analysis System MIRROR allows for fast and accurate analysis of swine sperms. It overcomes the shortcomings of traditional tests, which are time-consuming and inconvenient, and is a proper alternative to manual analysis. This product is suitable both for the ordinary analysis of sperms in boar studs and for research purposes.

The instrument applies modern computing and image processing techniques to the swine sperm quality tests.

It is the only analysis system that can be easily and economically adapted to the optical systems your laboratory is

equipped with.

An economical, quick and rational solution that can be regarded as a real breakthrough as far as sperm motility analysis is concerned.

Whether you require basic counts and motilities or detailed analysis of sperm motion, MIRROR provides you with the results you need. The results relating to motile, progressively motile and static sperm, which are accurate and repeatable, include the concentrations and percentages.



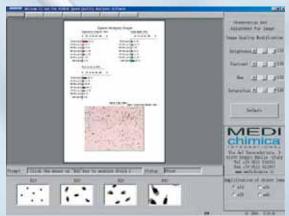
Sperm analysis report

The main functions of this instrument include:

- Quantitative analysis relating to total sperm cell number, sperm density, vitality and movable sperm percentage;
- Analysis of sperm movement and speed as well as movement track:
- All static and dynamic parameters relating to sperm can be obtained in compliance with the WHO standards;

- All data obtained trough analysis, bar charts referring to sperm velocity and vitality and sperm movement tracks can be easily printed out;
- The analysis results can be stored on a computer and can be easily backed-up, referred to or deleted;
- Swine test records can be easily stored, copied, queried and deleted. Dynamic sperm images can be recorded on a videotape for further analysis;
- The whole system can instantly provide clinicians and researchers with an audio-visual analysis method and, at the same time, it can instruct the production of frozen sperms through the automatic calculation function of the software;
- Errors of optical parts can be removed automatically;
- Virtual grids can be added to a sperm image and selected parts of a picture can be zoomed in.

The whole analysis procedure is fast and can provide an important scientific basis for animal breeding tests.



Sperm analysis graph

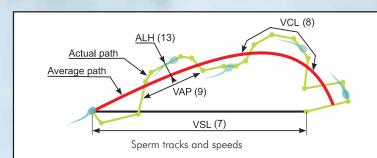
#### Communication with any database

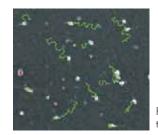
The analysis results obtained through MIRROR can be imported into other database systems. Medi Chimica International has combined the MIRROR software with its own integrated management system of the boar stud "ANCORA". By using both programmes, it is possible to standardize the quality of the semen being produced and to provide complete traceability of the semen lots being packed and distributed.



## Sperm quality analysis software ACCURACY, REPEATABILITY, OBJECTIVE RESULTS







Real time sperm tracks and speeds

ı		PARAMETER	DESCRIPTION
	1	Total Number of Sperms (TNS)	The total number of sperm cells in the analyzed vision fields
	2	Number of Movable Sperms (NMS)	The total number of movable sperm cells in the analyzed vision fields
	3	$\begin{array}{ll} \text{Motile Sperm Percentage} \\ \text{(MSP)} \end{array}$	NMS divided by TNS then multiplied by 100
	4	Live Sperm Percentage	Number of live sperm cells identified by chromos-copy divided by total sperm cells then multiplied by 100
ı	5	Sperm Density	The number of sperm cells in a unit volume (number/ml)
	6	Total Sperm	The total number of sperm cells in an injection; it is equal to sperm density by sperm volume.
	7	Progressive Velocity (VSL)	The straight distance a sperm cell moved divided by the time spent (unit: µm/s)
	8	Track Velocity (VCL)	The length of an actual track a sperm cell moved divided by the time spent (unit: $\mu$ m/s)
	9	Path Velocity (VAP)	The length of an average path divided by the time spent (unit: $\mu$ m/s)
	10	Linearity (LIN)	VSL/VCL
	11	Straightness (STR)	VSL/VAP
	12	Wobble (WOB)	VAP/VCL
	13	Lateral Amplitude (ALH)	The maximum distance between the actual track and the average path of a sperm cell (unit: $\mu$ m)
	14	Mean Angle Degree (MAD)	Sum of the absolute value of an angle between two line segments on an actual sperm track divided by the time spent
	15	Beat Frequency (BCF)	Total times the actual track and the average path were crossed by a sperm cell divided by time spent (unit: times/s)
	16	Total number of sperm cells in straight line mode	When VSL/VCL>C, that sperm is said to be moving in a straight line mode
	17	Total number of sperm cells in curve mode	When VSL/VCL <c, a="" be="" curve="" in="" is="" line="" mode<="" moving="" said="" sperm="" th="" that="" to=""></c,>

NOTE: C is an empirical value derived from numerous clinical experiments.

# The property of the control of the c

- 1. Sperm analysis report n.2
- 2. Result velocity
- 3. Input case

#### Software Optimized for Use with MC Chamber Slide 10



The software of the MIRROR Analyzer optimizes the use of the MC Chamber Slide 10 to give you the fastest analysis speed, thanks to easy on-stage loading and pre-programmed stage positions for each chamber. The Leja slide is proven to be non-toxic to boar sperm, accurate and cost-effective for use with our analyzer; all manufactured lots are tested in vivo on boar sperm for quality.

No time is wasted during the analysis process; the layout of the MC Chamber Slide 10, whose "entry ports" are located along the right edge of the slide itself, allows for a quick preparation of the sample to be analysed.

- Chamber depth accuracy was dramatically improved by 50% through precise production methods and quality control.
- Lastly, the slide doubled the number of analyses per chamber, reducing the cost per analysis, and making it a cost-effective option.

#### **COMPONENTS AND ACCESSORIES**

Code	Name	Specification
MIR01	Computer	Pentium-IV 3.0G 80G 512M
MIR02	Monitor	17" Colored flat angle
MIR03	Printer	EPSON STYLUS C41SX Colour Injector 1440dpi
MIR04	Microscope	B2-223A Tri-Nocular Biomicroscope10X 20X 40X 100X
MIR05	Card	High-speed colour image collection card
MIR06	CCD Camera	Panasonic WV-CP240/G 470 lines Color Camera
MIR07	Softdog	USB
MIR08	Sperm Chamber	Ruby
H70601	Sperm Chamber	MC chamber slide monouse 10 $\mu$
MIR10	Software	Mirror Dynamic Analysis Software
MIR11	Software	Mirror Morphologic Analysis Software



## Boar stud management software





ANCORA is a flexible, multitalented and modular software. It automates ejaculate analysis, including record keeping of holding samples as well as of extender dispensing and semen packaging in tubes.

The identification of each ejaculate can be entered manually, by barcode label. The ejaculate data file guarantees a quick and precise ejaculate data management.

The connected lab equipment, such as the MIRROR Analysis System, transfer analysis data to the lab computer where calculations for further ejaculate processing are made.

Automatic semen dilution and data transfer to the packaging machine greatly rationalise laboratory work.

Production data is provided in real time for the administration and sales departments.

**ANCORA** software for the boar semen lab: automatic recording and integrated processing of ejaculate data (also semen pool data).

An interface connecting the software and the lab equipment allows for the transfer of data to the automatic packaging and labelling line (CF800 and other Medi Chimica models).

Analysis and administration of boar master data and production data. Data can be easily exported to other computer programmes through the Microsoft Access data base.

Almost any activity being carried out with relation to a Boar Stud can be kept track of. The numerous settings enable the recording of all the data you require.

#### Data entry options include:

- arrival/removal of boars
- genetic value
- veterinary treatments and vaccinations
- action plans (collections and treatments)
- actions carried out
- pen number
- management of the stocks and purchases of A.l. laboratory equipment (semen extenders, catheters, bags, etc.).
- financial data
- customer management
- etc.

#### Graphs

In addition to reports, the programme can generate numerous graphs. Almost any report or analysis can be shown in graph form.

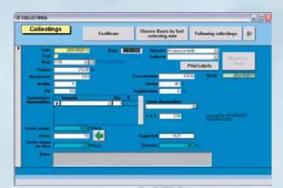
#### Export

Graphs and analyses can also be exported to other programmes like Excel, which is extremely useful when compiling reports.

Available also in a Pocket PC version for small boar studs



Boar card list



Collection report

#### TIME SAVING AND BETTER RESULTS

- ANCORA introduces a high safety level in your lab
- ANCORA allows savings in terms of time and labour costs
- The whole process is standardised and optimised
- Automatic integration of ejaculate parameters through interfaced equipment
- Automatic data transmission to the automatic packaging and labelling line
- Every step is documented and verifiable
- ANCORA is a very user-friendly software

#### TECHNICAL ADVANTAGES

- Organisation of work through a pre-established planning of the activities
- Identification of ejaculates inside the lab through bar-coded stickers and readers
- Automatic recording of all the parameters regarding ejaculates (identification, volume, concentration, motility, % live) and transfer to the collection room involving the whole team (no more human errors due to manual recordings)
- Direct access to the collections' history to secure the dilution decision
- Optimal calculation of the number of doses to be produced and automatic dilution (additional option)
- Easy statistics compilation allowing for the analysis of the different factors affecting the semen production of each animal and for the determination of the best conditions to exploit the animals themselves
- Safe computer access



Daily collection input data collection

ANCORA		
Code	Description	
760225	Software Ancora Pocket PC	
A15000	Software Ancora 2.0	
A20000	Software Ancora 6.2 multilanguage	



## ANCORA Fill and Printer





#### ANCORA FILL

User-friendly software for making customized prints on seminal material packages

The prints can be customized with the following data:

- · Name and logo of the boar stud
- Production date
- Boar code
- Genetic type
- Expiry date
- Production lot

ANCORA FILL can be perfectly used with the semen packaging machines CF800, CF600 and CF400, as well as with the heat-transfer printer produced by Medi Chimica International.



new!

#### PRINTER 2LP - 2BP - CF800

Desktop thermal label printer with peel-off system and internal power supply.

Label size: width 60 mm, height 1" inch min.

USB+RS232 serial interfaces.

Label end, label detection and head temperature sensors available.

Updating customer logo and most common barcodes printing: UPC-A, UPC-E, EAN8, EAN13, CODE39, ITF, CODABAR, CODE93, CODE128, CODE32 and UCC/EAN128.

The 2LP printer is suitable for weighing system applications, combined with measurement and test equipment.



3

Technical data 2LP

Printing method: Thermal line printing

Resolution: 203 dpi

Printing speed: 120 mm/sec to 140 mm/sec (high speed)

Printing area: 56 mm

Dimensions: 160x160x160 mm

Weight: 1.1 kg

## OTHER PRODUCTS

In addition, Medi Chimica International offers a complete range of barcode scanner with CCD and Laser technology. PS2 keyboard (standard), RS232, Wand and USB interfaces available.

Printer also available: 1LP without peel-off system With Bluetooth wireless technology.



	Code	Description
	CF800AS	Printing software ANCORAFILL
1	CF2LB	Desktop termal label printer
2	CF2BT	Portable Bluetooth label printer
3	CF800PRI	Printer CF800
4	CFLAS1	Barcode laser reader

4

## **FUTURO**

#### Automatic Boar Semen Collection





- 1. Sliding System
- 2. Rubber Pad o Collection Sheath
- 3. Sheath Forceps
- 4. Themos Restraint Device
- 5. Stainless Stell Dummy6. Height Adjustment
- 7. Support

The rubber pads gently fit into the boar penis, ensuring the right catch. The **FUTU-RO** collection dummy is supplied with a sliding system enabling the boar to move forwards and backwards during the collection.

After prepuce cleaning, at the beginning of the erection, the operator manually discards the first part of the collected material; immediately after, he fixes the penis to the artificial cervix by means of a special fork, connecting at the same time the collecting vat, which is equipped with a filter-provided bag.

The collection can then proceed automatically until its conclusion, allowing the operator to deal with other activities such as the preparation of the next boar.

The **FUTURO** collection system does not require any maintenance.

In designing the automatic collection system, the utmost importance was given to user-friendliness and limited maintenance requirements, as well as to the efficiency of the system over time.

#### Advantages

- Time saving up to 80% (1 supervisor every 3 collection dummies)
- Safety and comfort for the operator
- Very easy collection, even for inexperienced operators
- Abundant ejaculate
- Utmost comfort and safety also for the boars
- Lower labour costs per produced dose
- Suitable for all kinds of boars (both young and adult ones)
- Reduction of bacterial contamination

**FUTURO** is a new product for automatic boar semen collection, that allows to reduce the time needed for collection, while enhancing its efficiency thanks to an automated system suitable for all kinds of boars. It is easy to use and can be fit into existing equipment respecting the highest hygienic standards during the collection.

The height of the collection dummy can be adjusted by means of a convenient electric piston. The boar jumps on it in rest position (the lowest one), then the operator adjusts the height according to the dimensions of the boar itself by simply pressing a button.



The boar will find the ideal position and comfort to ensure abundant ejaculates.

Once collection is over, the collection dummy goes back to its rest position (the lowest one), thus facilitating the descent of the boar.

The electric adjustment of the collection dummy height makes the automatic collection system suitable for all kinds of boars, being them young or adult.

**FUTURO**'s main component is the artificial texture cervix, that perfectly simulates the natural one.

The sheath material ensures a good and comfortable catch for the boar and facilitates the initial collection stages, during which the operator puts the artificial cervix in place.

The sheath thickness and softness prevent any injury to the boar penis.



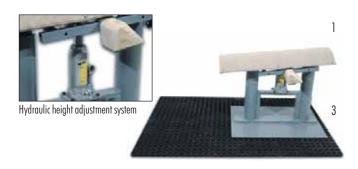
Available in 2 Versions: Plastic Coated and Stainless Steel

#### **FUTURO COLLECTION SYSTEM**

I OTORO COLLECTION SISTEM	
Code	Description
P60300	FUTURO BASE stainless stell
P60400	FUTURO COMPLETE stainless stell
P60310	COLLECTION SHEATH
P60350	SHEATH FORCEPS
P60311	SLIDING SYSTEM
P60312	Electrical lifting columns with control units
P60313	Manually lifting columns

#### COLLECTION





#### Adjustable dummy sows

Ideal for collection even with large-sized boars. They are equipped with adjustable supports for the animal's legs.

Thanks to its wide laying base, it is extremely easy to fix to the floor.

#### ADJUSTABLE FIXED DUMMY SOWS

ref.	Code	Description
1	P60200	MC Adjustable dummy sow for collection
2	P60100	Adjustable plastic dummy sow for collection







#### Rubber carpet for collection room

Anti-slip mat that ensures stability to the boar during the collection operations. Made from smocking rubber, due to its size and weight it doese not need to be fixed to the floor, allowing for a perfect cleaning of the room at the end of the collection operations.

#### **ACCESSORIES**

ref.	Code	Description
3	P60250	Rubber carpet for collection room 100x150 cm



TERMO.CO is completely built in expanded polystyrene. It allows to minimize the thermal gap during the collection (-1° each 15 minutes). Extremely light and easy to handle, it does not need to be thermostated at 37 °C before using. It is particularly cheap and can therefore be replaced after a few collections.

#### THERMO FLASKS FOR COLLECTION

ref.	Code	Description
1	P72040	Plastic thermo flask with handle
2	P72000	TERMO.CO polystyrene thermo flask for collection



These filters have a right filtering power for boar ejaculate. They are easy to use, cheap and hygienic, they make semen collection operation easier. Packaged in re-closable boxes.

#### FILTERS FOR SEMINAL MATERIAL

Code	Description
P72500	Filter round for semen, 200 pcs



Bags for collection with incorporated filters. These bags can be inserted in the thermo flasks without using any rubber. Once the collection is done, the filter can be easily removed, by pulling it out through the special hatching. They enhance work and hygiene conditions during the collection.

#### **BAGS FOR COLLECTION**

ref. Code	Description
P72431	Short bags for collection with gauze



#### **Automatic** Dilution Station



#### Avalable in three liters size: 30-100-200 liters



OASI 100 and OASI 200 are provided with a semen extender recirculation and pouring system with high-flow

OASI 100: peristaltic pump with 7 lt/min. flow rate and programmable dosing system (set the quantity to be dosed and press START)

Stand-alone unit, works without PC

OASI 200: peristaltic pump with 14 lt/min. flow rate and programmable dosing system (set the quantity to be dosed and press START)

Electronic weighing system with LCD viewer

OASI 200 consists of an electronic control unit and a scale and is interfaced with a pump. Constant feedback between pump and controller guarantees accuracy to the millilitre. Stand-alone unit, works without PC

System for automatically filling the tanks from the demineralised water

As an option, the OASI 100 and OASI 200 systems can be interfaced with the AN-CORA system







OASI 200 liters

#### Advantages

- Time saving during the most important hours of the day: the pump automatically and precisely dispenses the calculated amount of extender into each ejaculate
- New: the OASI Dispenser guarantees a maximum degree of precision in terms of dispensed extender volume and therefore very precise sperm cell numbers per dose
- The automatic calibration function makes the OASI Dispenser more reliable
- Labour saving: at the beginning of the production day, the water required for preparing the extender is already warmed up to the right temperature
- The double-wall stainless steel vat with heating system reliably keeps the adjusted temperature of the extender during the whole production day
- Weekly timer for early turn-on of the heating system, so that the semen extender is at a correct temperature whenever needed.

Control Panel provided with. Main Switch, Timer, Temperature settings and Dosages.

Electronically controlled preparation and dispensing system for boar semen extender with heated extender vat and weight controlled dispensing pump.



Easy Opening of extender Vat

#### Extender Vat OASI series: Product features

- Double-wall stainless steel vat with large surface heating elements and temperature control unit HT 50
- Temperature adjustable up to +55°C
- Mobile (provided with wheels) (only OASI 200)
- Time switch clock
- Very modest space requirements
- · Semen extender heating time: less than 1 hour

UASI		
Code	Description	
L63030	OASI 30 Extender Preparing Unit 30 liters	
L63080	OASI 100 Extender Preparing Unit 100 liters	
L63180	OASI 200 Extender Preparing Unit 200 liters	





Simple and cost-effective, the Manual Sacco Bag Welder fills and seals both Sacco Bags and other types of bags (IMV, etc.). The SACCO bags move one by one in front of the filling station. The Bag filling operation uses a disposable needle and tube from the extended semen. The semen flow is manually controlled whit a clamp.

The system allows to fill up to 4 bags simultaneously.

The output is about 200 bags per hour depending on both the operator and the laboratory procedures.

It can be easily used with the PAC.CO SYSTEM (disposable and re-closable bag for extended semen with 5-litre capacity).

#### MANUAL SACCO BAG WELDER

Code	Description
CF99	Manual SACCO

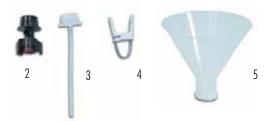


PAC.CO is a disposable reclosable bag, designed to contain up to 5 Litres, that improves the material preparation hygeinic conditions and completely eliminates the use of glassware and sterilization instruments in the laboratory. The connection cap ensures its sterility until it is used to fill Sac.co.

#### **PAC.CO SYSTEM**

Code	Description
R72050	Disposable Pac.co bag for dilution 3lt, 20 pcs
R72000	Disposable Pac.co bag for dilution 5lt, 20 pcs





Made in plastic material, it allows to handle the PAC.CO and makes the filling and weighing phases easier. Extremely cheap and handly.

#### PAC.CO SYSTEM TRAY

ref.	Code	Description
1	R1000	Tray for Pac.co system

#### **ACCESSORIES**

ACCESSORIES		
ref.	Code	Description
2	R72300	Black dispensing cap
3	R72100	Dispensing Cap for Pac.co, 20 pcs
4	R72400	Clip for Pac.co
5	R73600	MC system funnel for semen



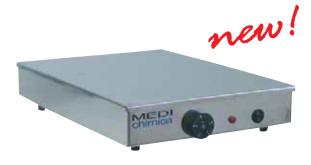
Electronic scale with 15 kg capacity and 5 grams precision. Ideal instrument to correctly assess the seminal material weight. It is used during the preparation of the extender to correctly dose the water and to check the quantity of semen optained during the collection. Evaluating the weight instead of the volume considerably improves the accuracy of laboratory activities.

#### **MEDI CHIMICA SCALE**

Code	Description	
R20000	Medi Chimica scale 15ka capacity	



plate



New version completely made in stainless steel

Thermostatic plate with **Stainless Stee**l heating and control edges to bring the extender in solution to the proper temperature inside the PAC.CO system.

It can be used also for:

- dose heating
- thermostation of cover slides and carrier slides

Thermostation stability +/-0.5 °C

#### THERMOSTATIC PLATE

Code	Description
R15100	Thermostatic plate



Stainless steel water bath tank (ref. 1) in with cover. The resistance coil located on the bottom of the tank ensures a homogeneous heating without using a mixer. It is provided with a double electronic temperature control to ensure a fast heating with the first control and a constant keeping of the desired temperatures with the second one.

Thermostation stability +/- 0.5 °C

Thermostatic unit (ref. 4) with resistance coil and mixer inserted in a plastic material tank . The temperature control takes place through an electronic display ensuring a +/-  $0.5\,^{\circ}\text{C}$  temperature stability.

#### THERMOSTATIC TANK

ref.	Code	Description
1	L62703	MC high stainless steel thermostatic water-bath 20 cm

#### **ACCESSORIES**

ref.	Code	Description
2	L62800	Cover for Medi Chimica thermostatic bath





Stainless steel support for the seminal material packaging operations from the PAC.CO system to the SAC.CO. The dosing takes place through the dispensing hoses and the apposite clip.

#### SUPPORT FOR SAC.CO FILLING

	TOR SAC.CO TILLING
Code	Description
R15000	Support for Sac.co filling





Instrument to assess the spermatic concentration. It allows to assess the number of spermatozoa in each collected ejaculate and to calculate the doses to be produced.



Concentration analysis with Medi Chimica digital colorimeter  $\ensuremath{\mathsf{SPERMDENS}}$  .

#### Features:

Handy instrument ideal for fast and accurate checks.

It is easy to use and allows laboratory measurements in any operative condition.

Equipped with microprocessor.

Automatic switch off after 10 minutes of

inactivity.

Light source: 470 nm LED Light sensor: silicon photocell

Feeding: 1 x 9 volt battery, 40 hour battery

life

Dimensions: 180 x 83 x 46 mm

Weight: 290 grams



Dosing of sample in the cuvée



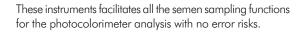
Fast and accurate reading of the concentration

## MEDI CHIMICA DIGITAL COLORIMETER

ref.	Code	Description
1	C60700	MC digital colorimeter Spermdens

#### **ACCESSORIES**

ref.	Code	Description
2	C60750	Glass cuvées for MC colorimeter
-	C60760	Black cap for glass cuvées







#### **AUTOMATIC MICROPIPETTES**

ref.	Code	Description
1	C62600	Brand automatic micropipette 200 $\mu$ l
-	C62600C	Biohit variable volume micropipette 20-200 $\mu$ l

#### **ACCESSORIES AND SPARE PARTS**

ref.	Code	Description
2	C63400A	Tips for Micropipette up to 300 $\mu$ l 500 pcs.
-	C62700	Spare filters for Biohit Micropipette

## ERGO B5 Microscope





The **ERGO B5** is a routine upright microscope with outstanding optical performance combined with ergonomic touches, incorporating a host of stunning features that take the stress out of microscopy. A stay-in-position stage handle combined with a "NEW" ergo tube ensure ideal viewing angle and produce outstanding results.

Ideal routine laboratory use, the ERGO B5 incorporates revolutionary optical system, the first routine upright microscope of its class with such an advanced optical specification. With objectives correcting both chromatic aberration and curvature of the view field, plus longer working distances and higher numerical apertures. The **ERGO B5** provides clear bright images at every magnification. The result is first-class optical quality at a modest price. Designed for a wide range of users, the **ERGO B5** is suitable for the inexperienced novice and incorporates a number of design features that protect slides and objectives from damage. When using short working distance objectives, for example, the upper limit of the stage movement can be set so that the objective

does not hit the specimen slide, protecting both from damage. Thanks to this feature, even novices or operators who need to change slides often can perform their job easily and quickly.

The ultimate in usability and comfort, the Medi Chimica ERGO B5 incorporates a host of stunning features that take the stress out of microscopy. A stay-in-position stage handle combined with a "NEW" ergo tube ensure ideal viewing angle and produce outstanding results. Novel ergo stage-the stage handle always remains in the same position, enabling easy operation with your hand resting on the desk.

Easy-access controls. Frequently used controls and switches for adjusting the field diaphragm and illumination intensity have been thoughtfully positioned on the microscope body to minimize the operator's hand movements and enable operation without having to take your eyes off of the specimen.

Phase contrast microscopy. These objectives enable the detection of minute structures that were previously difficult to detect due to annoying halos, with excellent contrast and a much wider tonal range.

#### SEMEN ANALYSIS UNIT SLIDE AND CUVETTE WARMER + MICROSCOPE HEATING SHELF



Advantages

- Avoid thermal shocks that could prevent an optimum evaluation of the semen sample, ensure a constant temperature and excellent accuracy during the analysis and the lab operations.
- Simultaneous control of both temperatures.
- Homogeneity and precision (+/- 0.5% of max. range) in terms of required temperature of the tool used for semen analysis.
- Designed so that the temperature is evenly spread throughout the microscope stage.

It ensures a constant temperature of 37°C and allows for optimum semen evaluation as well as heat-resistance analysis. The system includes 3 main independent components:

Microscope heating shelf, slide warmer, cuvette rack warmer.

The MU5000 is provided with 2 PID temperature regulators with digital display: one for the microscope shelf and one for the slide and the cuvette rack warmer.

Temperatures are regulated by two probes integrated in each shelf; the microscope heating shelf is connected to the main unit through a cable. The 2 on/off switches independently control each temperature regulator which, in turn, independently control each stage.

#### FRGO R5 SEMENI ANALYSIS LINIT

EKGO BS	- SEMEN ANALISIS UNII
Code	Description
M9000	Trinocular Microscope ERGO B5
MIR06	Panasonic Camera for Trinocular Microscope
MU5000	Semen Analysis Unit

#### Microscopes











#### Camera glass plates

Standard glass plates may be used as a valid alternative to the traditional cover slides or holder slides. The fixed height of the glass plate guarantees a careful analysis which is not affected by the size of the produced drop. This allows an "objective" evaluation.

#### Non toxicity

The samples remain vital and can be checked for many minutes after they are placed on the glass plate.

#### Monocular microscopes

Equipped with four immersion objectives, 4x, 10x, 40x and 100x, they allow the seminal material evaluation at different enlargement levels. They are provided with translation table to move the glass plate horizontally and vertically.

#### Binocular microscopes

Precision instruments to analyse seminal material, equipped with four base objectives. The binocular microscope line is different from the monocular one in the static part and in the quality of the optic groups. Both product lines include a phase contrast, an indispensable accessory for a better image analysis.

#### **MICROSCOPES**

ref.	Code	Description
2	M62000	Binocular Microscope B1
1	M62000A	Binocular Microscope B3
-	M63000A	Binocular Microscope B5
3	M61000A	Monocular Microscope B3
-	M61000	Monocular Microscope P6A
-	M71000	Microscope Nikon YS100
-	M8000	Microscope Nikon E200

#### **ACCESSORIES**

ref.	Code	Description
4	MU8000	Thermostatic table for Microscope
-	MU9000	Double thermostatic table for Microscope
5	MF2000	Medi Chimica phase contrast
5	MBL13110	Phase contrast condenser
-	MCL13110	Nikon phase contrast condenser
-	MC6020	Microscope lamp for 220V/15W
-	MC6000	Microscope lamp for MC
-	MN7000	Microscope lamp for Nikon
-	M610060	Illuminator 220V/20W for Microscope P6A
-	M610050	Ocular WF 16X for microscope P6A
6	760230	Microscope cleaning Spray 400 cc bottle

#### Easy use

Thanks to the regular and precise depth of the camera and to the specifically designed covering, there is no development of air bubbles when charging the semen sample on the glass plate.

#### Lower extension

Standard glass plates have a specifically designed ventilation intake, enabling even the most dense samples to expand completely on the camera surface.

The glass plates are disposable, do not need any cleaning, thus allowing to save time and money. A constant quality check guarantees that this product is the best one available on the market. All the batches of these glass plates specifically designed for this purpose are tested live on boar sperm to check their quality.

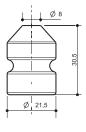
#### **CAMERA GLASS PLATES**

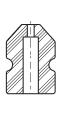
ref.	Code	Description
1	H70500	2 cameras glass plates for Microscope
2	H70600	4 cameras alass plates for Microscope

#### MEDI CHIMICA A.I. CATHETERS



High quality products at competitive prices: this is what nowadays farmers look for and this is the goal reached by Medi Chimica with its whole range of artificial insemination products. Design based on scientific research is the right approach for successful technical solutions and the constant attention to the materials used in the production cycle ensures the highest quality of our range of products.

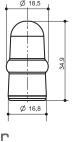






#### M Catheter

- head in foamed material
- shape developed facilitate its introduction
- reduces the leakage of seminal material during the insemination
- does not absorb liquids
- easy to model without causing damages inside the uterus
- stimulates uterine contractions in the sow





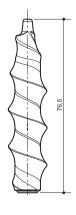
#### S Catheter

- head in foamed material
- suitable for gilts thank to its peculiar shape and dimension
- high tip flexibility to reduce lesions in the introduction phases



#### POST CERVICAL

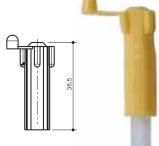
- Catheter
- easy introduction and positioning
- reduces the rejection of seminal material
- allows to deposit the seminal material directly into the uterine cavity in the post cervical area





#### T Catheter

- traditional shape
- head in flexible PVC
- · head dimensions allow a perfect adherence to the uterus



#### Connector 2

- connector with cap
- allows stimulation after the insemination
- avoids rejection after the insemination
- reduces environmental bacterial contamination

#### Connecting tube

Tube to connect catheters and autoinsemination packs

**DISPOSABLE CATHETER** 



Code	Description
M1Y2B000	M catheter with connector 2, 5 pieces package
M1Y1A000	M catheter single package
M1Y1B000	M catheter 5 pieces package
S1G1B000	S catheter 5 pieces package without cap
S1G2B000	S catheter 5 pieces package with cap
T3A3B000	Orange T catheter with connector 3, 5 pieces pack.
T3C2B000	Blue T catheter with connector 2, 5 pieces pack.
176000	Post cervical catheter, single package

#### MEDI CHIMICA A.I. CATHETER

- 3D Unigraphics design
- Quality check of raw materials
- Microbiologic tests
- No sperm toxicity
- Shore hardness measurement

#### CONNECTING TUBE

Code	Description	
182010	Connecting tube 10 pieces package	

#### INSEMINATION





#### **PLASTIC AND GLASS PIPETTES**

Code	Description
ML7000	Pasteur glass Pipettes 250 pieces package
ML7100	Pasteur plastic pipettes 3ml 500 pieces package
ML6200	Disposable pipette 1 ml - 2 ml - 5 ml - 10 ml
ML6650	Glass graduated pipettes 1 ml - 10 ml - 20 ml



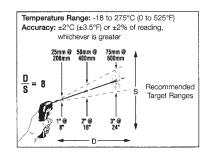
## LABORATORY PH METERS AND THERMOMETERS

ref.	Code	Description
3	LA001	Portable PH meter
3	LA065	PH 4,01 calibration solution
3	LA066	PH 7,01 calibration solution
1	R80400	Digital thermometer
2	R80200	-10 °C $+$ 100 °C thermometer



#### Infrared thermometer:

Fast and precise instantaneous surface temperature meter without contact. This instrument exploits the infrared technology. Its small size and its (optional) handy belt case allow the instrument to be used in any work environment.

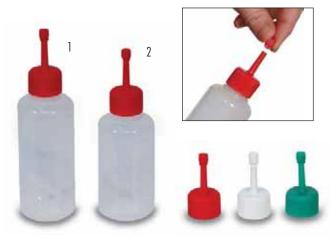


#### **INFRARED THERMOMETER**

Code	Description
R80500	MT2 Infrared ray thermometer
R80501	MT4 Infrared ray thermometer with laser pointing
R80502	Protection case for thermometer

#### INSEMINATION









#### **BOTTLES AND TUBES FOR A.I.**

ref.	Code	Description
1	170981	100 ml plastic bottles with reclosable cap
2	170982	80 ml plastic bottles with reclosable cap
3	170001	A.I. tubes



#### **STIMULATORS**

ref. Code	Description
174000	Al plastic bow



LAVA.CO, specific laboratory detergent, to be used to clean laboratory instruments and veterinary instruments (syringes, vaccinators) before sterilization.

MANI.CO, hands detergent. To be used in all the critical places in the farm and in the laboratory to ensure the biosecurity paths.

**BARRY,** disinfectant in a "ready to use" solution for veterinary instruments and laboratory material.



#### MEDI CHIMICA DETERGENTS

MEDI CHIMICA DETERGENTS		
ref.	Code	Description
2	ML9100	Lava.co 1 litre bottle, 6 pcs
1	ML9150	Lava.co 5 litres can
-	ML9151	Lava.co 10 litres can
3	ML9700	Mani.co 1 litre bottle
-	ML9750	Mani.co 5 litres can
4	ML9900	Barry disinfectant in 1 % solution









Object holder tray

Thermic container for seminal material

Instrument (needles, syringes, medicines) drawer

Wide tip-up compartment

Side containers for disposable catheters

The new AI trolleys line has been designed to reduce the overall dimensions and to improve the use handiness. The manufacture materials have been chosen so as to allow easier cleaning and long durability. The new Multi Medi line trolleys can be used also for sanitizing treatments.

They are available in the two-or four wheel versions and can be used by different operators at the same time.

#### Technical features:

- Inflatable wheels
- Wheel brake
- Removable refrigerator case
- Roll holder

#### **INSEMINATION TROLLEYS**

ref.	Code	Description
1	165002	Multi Medi trolley
2	165001	Multi Medi Plus trolley

tapioco





Non spermatoxic gel to lubricate the catheter before intserting it. It also has a bacteriastatic power, therefore it reduces the bacterial charge in the reproductive apparatus. It can be used by inserting 10



- 15 ml in the cervix after the insemination, thus reducing the risk of seminal material rejection.

#### **TAPIO.CO LUBRICATION GEL**

ref. Code	Description
1 <b>172000</b>	Non spermicidal Tapio.co AI gel 250 ml, 12 pcs
2 <b>172100</b>	Non spermicidal Tapio.co Al gel 5 lt





Non spermicidal cleansing solution that allows for a fast cleaning of the vulva before the insemination. Apply a few sprays on the part to be cleaned and dry up with a clean paper cloth. In most cases this operation avoids the occurence of ascending infections in the sow reproductive apparatus.

#### **DIS.CO DETERGENT**

Code	Description	
172300	Dis.co 1lt bottle, 6 pcs	
172330	Disc.co 5 Lt can	
172350	Disc.co 10 Lt can	









#### Portable thermostatic refrigerators

Fixed temperature instruments that are ideal to transport seminal material. They are equipped with plugs to be used also in the laboratory.

Their small size and low weight make them extremely handy in small environments.

The special thermal exchange system (Peltier cell) used in the Medi Chimica portable thermostatic refrigerators allows to keep a constant temperature in different environmental conditions.

Available in three versions: 16, 38 and 50 litres with 230 Vac operation (12 Vdc option).





#### **PORTABLE THERMOSTATIC REFRIGERATORS**

ref.	Code	Description
1	L61800	Portable thermostatic refrigerator 16 litres 17° C
-	L61050	Thermostatic refrigerator 38 litres 17°C
2	L61600	Thermostatic refrigerator 50 litres 17°C



Developed to store the seminal material inside the laboratory, they are equipped with temperature regulation display.

An internal cooling and heating system regulated by a probe allows the instrument to keep the set temperature with the utmost accuracy thanks also to an internal fan.

The 140 litre version allows for a high capacity of tubes, bottles or Sac.co.

Model 760213 which is provided with an electronic temperature control, is specific for vaccine storage.

Feeding tension 230 Vac.

500 litre capacity.





#### THERMOSTATIC REFRIGERATORS

THE REPORT OF THE RESERVE OF THE RES		
Code	Description	
L61200	75lt Medi Chimica thermostatic refrigerator 17°C	
L61300	140lt Thermostatic refrigerator 17°C	
760213	500lt Thermostatic refrigerator for vaccines 0-8°C	

## MEDISGANMini





Digital MEDISCAN-Mini, is the new contribution by MEDICHIMICA INTERNATIONAL for veterinary. It has the transducer, display and power supply integrated in one compact sturdy housing. The total unit weights 500g (including the battery)only. After u e, it can be simply be cleaned under running tap water.

#### System Feature

- Digital technology
- 3.5 inch TFT color LCD
- Completely washable
- Simple to operate
- All in one, no cable
- 3hrs continuous operation
- 2 years warranty

#### Physical Characteristic

- Size: 171x93x62 mm
- Weight: 500g, including the battery

#### Standard Accessories

- AC-adapter (110/220V)
- two rechargeable battery
- One AA battery holder
- One battery charging cable
- One carrying bag
- One bottle of ultra gel
- One hand strap



Monitor: digital 3.5 inch TFT color LCD

Probe: Multi-frequency mechanical sector probe

Scan Frequency: 2.5MHz, 3.5MHz, 5.0MHz

Display Depth: 160mm Scan Angle: 78 degree Gray Shade: 256 levels

Measurement: Distance, Area, Volume, Heart Rate

OB Measurment: Swine-HL, Equine, Bovine-BL, SL, HL, Sheep-USD

Cat-HD,BD, Dog-BD, GSD, CRL,HD, BD Permanent

Storage: 127 frames AC-adapter: 110V-240V, SO/60Hz

Battery: (1 800mAh) Internal

rechargeable battery More than 3hrs for continuous operation less than 3hrs for recharging

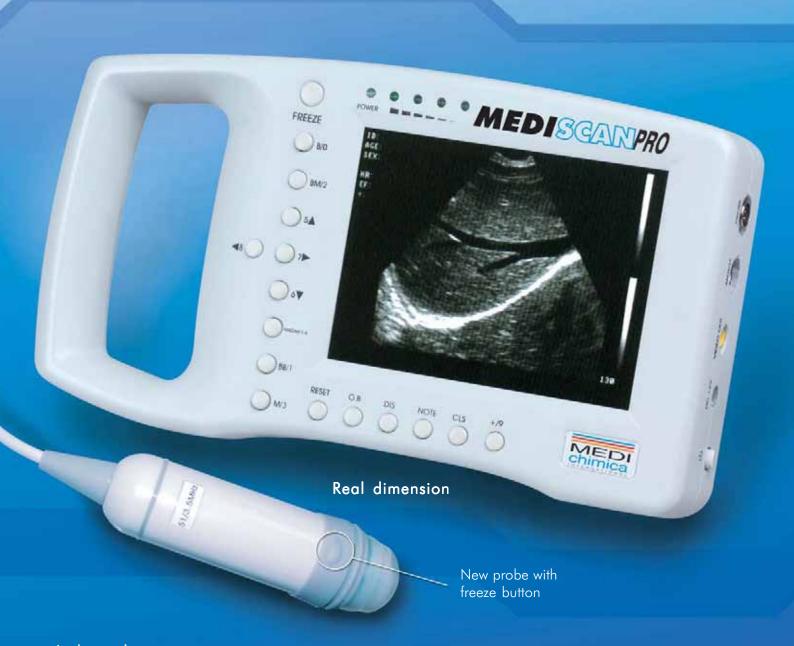




# MEDISCANPRO with handle and internal battery

Portable, battery powered hand held ultrasound system with detachable probe heads for early Preg checking





#### Lightweight

26

600 gr mainframe with small internal battery (1.30 lbs) allows for easy moving around the animals. Because the MEDISCAN PRO is extremely compact you can screen between 150 and 200 sows an hour.

#### Easy to operate

Logical and easy to reach controls make for easy operation and simple to learn to use

#### Display quality

Built-in high resolution TFT LCD display offering high quality images and excellent contrast quality.

## MEDISCANPRO with handle and internal battery

#### Easy to learn, easy to use and lightweight





#### ONLY 600 gr (1.3 lbs)

- Early Preg Checking starting from 19-20 days (lower your non-productive days)
- Checking Fetal viability
- Identifying retained piglets
- · Easy loin depth measurement
- Accurate backfat measurement

#### **NEW PROBE - FEATURES**



- Fully digital interface
- High frame rate
- High resolution
- Multi-frequency high resolution transducer
- Low noise
- Lower power consumption
- Excellent penetration
- Highly flexible cable

It is the smallest B mode ultrasound diagnose system thanks to its high integrated circuits. Adopting TFT 5 inch LCD and it is very low energy consumption.

With an exceptional quality of image fully adapted to pregnancy diagnosis, MEDISCAN PRO offers you unbeatable comfort in work for great efficiency.

#### **Model: MEDISCAN PRO**

- Standard probe: 3.5MHz mechanical sector probe;
- Scanning depth: 192 mm;
- Monitor: TFT 5.0 inch LCD;
- · Battery: 2200mAh ,continuous working 2+hours;
- Display modes: B, B+B, B+M, M;
- Gray scales: 256;
- Image magnification:  $\times 1.0$ ,  $\times 1.2$ ,  $\times 1.5$ ,  $\times 2.0$ ;
- Measurement: Distance, Circumference, Area, Heart rate & Pregnant week;
- Characters: ID ,age ,sex;
- Power consumption: 13VA;
- Power supply: 10-12V battery / AC-adapter;
- Power adapter: 110/220 VAC system power adapter and battery charger;
- Weight: 600 grams (1.3 lbs);
- Dimensions: 23,6 x 4,1 x 12,9 cm (9.2 x 1.65 x 4.8 inches).

Medi Chimica International has an international distribution network. Contact us to have the address and phone number of your local distributor or if you want to become a distributor.

Medi Chimica International ensures you an efficient after sales service.

Medi Chimica International also provides training for operators who can learn how to interpret ultrasound scanning image and how to handle the probe on different species.

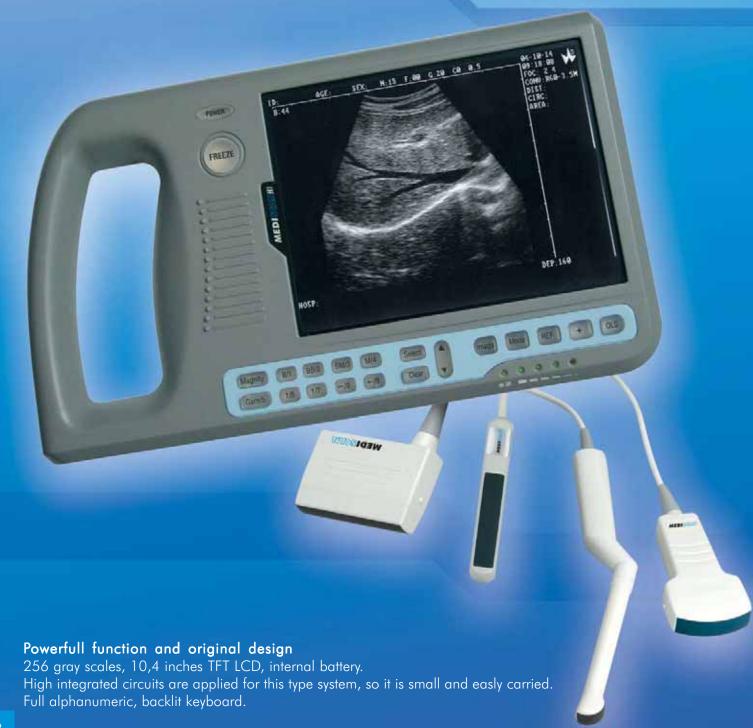
## MEDISGANHI

Palmsmart best image quality



new!

weigh only 1.8kg



28

From horses, cattle, sheep, goats and swine, high image quality and a wide range of available probes make the MEDISCAN HI an asset to any modern veterinary practice.

## MEDISCANHI scan your future





Palmsmart MEDISCAN HI is the latest model by MEDI CHIMI-CA INTERNATIONAL, weighting only 1.8kg, is distinguishable by its bright and clear image quality.

The interchangeable probes offer a wide range of diagnostic applications.

This scanner is a cost effective solution for family doctors, veterinary scanning.

The complete software and the high product versatility are available in it.





#### **Model: MEDISCAN HI**

- Scanning Method:Conves,linear triple-frequency with wide band.
- Display Mode:B,B+B,B+M,M
- Gray Scale:256 levels
- Monitor: 10.4" TFT color LCD
- Image Procession: DFS, DRF, RDA, VGA/DSC and Image Post Procession
- 206 frames for cine-memory
- Image magnification in four levels:  $\times 1.0, \times 1.2, \times 1.5, \times 2.0$  times
- Multi-step Zoom (1:2) is available in both real-time and frozen modes
- 4 focusing combination selectable
- Depth Shift is available in read-time in B and B+B mode
- Image Conversion is U/D, L/R and B/W
- 8 difference coded-color available on a external color monitor
- 15 difference kinds of body marks with defference calipers.
- Measurement is Distance, Circumference/Area,
   Time/Heart RateEF rate for heart, and
- GS,CRL,BPD,HC,FL,AC for OB/GY measurement, and Gestational Age,Fetal weight,EDD calculation.
- Characteristic showing in real-time clock, ID, Sex, Age, Focusing info and Hospital Name

Medi Chimica International has an international distribution network. Contact us to have the address and phone number of your local distributor or if you want to become a distributor.

Medi Chimica International ensures you an efficient after sales service.

Medi Chimica International also provides training for operators who can learn how to interpret ultrasound scanning image and how to handle the probe on different species.

#### PREGNANCY DETECTION







#### BACK FAT THICKNESS METER LEAN MEATER

The LEAN-MEATER® uses pulsed ultrasound to measure the backfat depth of your growing hogs, sheep, and cattle. It is designed to measure the total depth of backfat. It is a fully portable, all-metal, hand-held instrument powered by rechargeable batteries. Extensive training is not requie

The Lean-Meater Series 12 is a microprocessor controlled A-Mode ultrasonic instrument. It is designed to measure the total thickness of the skin and up to three layers of backfat. When the measurement is complete, the instrument will display the number of fat layers detected and the total thickness in millimeters with a greater accuracy than ever before.

#### **SONO-GRADER**

The SONO-GRADER is a programmable hand held computer operated A-mode ultrasound tester. It measures both total depth of backfat and loin muscle, and can also detect pregnancy in swine, sheep, goats, and certain other mammals.

The SONO-GRADER will store the test results, the identification number, and the weight of each hog. The testing procedure can be customized to fit the needs of the individual operator. The SONO-GRADER comes with a docking station. You can enter the weight manually with the keypad or use a docking station to communicate directly with many electronic scales to acquire weight. It will store up to 2,000 tests before you need to link through the docking station to a personal computer or to a printer to save or print the test results.

#### **LEAN MEATER AND SONO-GRADER**

ref.	Code	Description
1	RGF12	Lean-Meater
2	RGFSONOG	Sono-grader



#### **GEL FOR SCANNER**

ref.	Code	Description
2	E10000	Gel for scanner 250 ml bottle
1	E10200	Gel for scanner 5kg pack



#### **VASELINE OIL**

_		
ref.	Code	Description
1	172260	FU Vaseline oil 1 kg bottle
2	172250	FU Vaseline oil 5 kg tank







#### Sheathfix Universal Syringe 0,25 + 0,5

Universally suitable for all kinds of straws and sheaths. Comfortable working through ergonomic design Al instrument with best available length: only 1 cm of the sheath length is required for fixation Simple cleaning: the handle is made of only one piece. Sterilization in the autoclave (up to 180°C) No loose parts, the plunger is secured against sliding out

#### SHEATHFIX UNIVERSAL SYRINGE

Code	Description
B0000025	Sheathfix Universal Syringe $0.25 + 0.5$



#### UNIVERSAL MCI SHEATHS 50/bag, 1000 box

Suitable for all types of semen straws Absolutely tight fit with all types of straws Gentle insemination due to a soft shape of the tip.

#### **MCI SHEATHS**

Code	Description
BM000025	Sheaths 50/bag, 1000 box



#### NEW Thermostatic unit for BOVINE AI Syringes

Avoid thermal shocks that could prevent an optimum Al results It ensures a constant temperature of 37°.

The system includes 2 main independent components:

- Unit control 12V with 1 PID temperature regulators with digital Display.
- Contaniner whit rack for 10 or 20 Al Syringes

#### THERMOSTATIC UNIT AI SYRINGES

Code	Description
BMOP10	Thermostatic unit for BOVINE AI Syringes

#### Thawing Unit MCI 30/60

- Electronic temperature control
- Available whit 30 mm or 60 mm diameter chamber
- Central, built-in thawing chamber with lift
- Preset temperature setting: +37°C,
- Accuracy: ± 0.2°C
- Power supply: 230 V
- Power supply: 110 V, 12 V DC (car battery) optional

#### THAWING UNIT MCI 30

THAVING ONLY MEI 30		
Code	Description	
BM000030	Thawing Unit MCI 30	
BM000060	Thawing Unit MCI 60	





#### **MediChimica STRAW**



Very accurate production techniques and our strict quality control make sure that your demands for a high standard will be consequently realised.

Medi Chimica straws are available in transparent colours.

The benefits is more sperm cells per ejaculate available

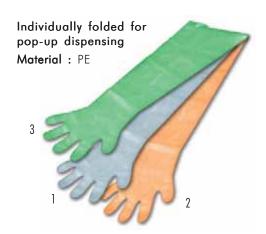
#### **MEDICHIMICA STRAW 0.25 cc**

Code	Description
BMS000W25	White
BMS000T25	Transparent
BMS000R25	Red
BMS000P25	Pink
BMS000G25	Green
BMS000B25	Blue
BMS000U25	Turquoise
BMS000P25	Purple
BMS000G25	Grey
BMS000Y25	Yellow
BMS000025	Orange
BMS000S25	Salmon

#### **MEDICHIMICA STRAW 0.50 cc**

MEDICITIMICA STRATI 0.50 CC		
Co	de	Description
BMS0	00W50	White
BMS0	00T50	Transparent
BMS0	00R50	Red
BMSO	00P50	Pink
BMSO	00G50	Green
BMS0	00B50	Blue
BMSO	00U50	Turquoise
BMSO	00P50	Purple
BMS0	00P50	Grey
BMS0	00Y50	Yellow
BMSO	00050	Orange
RMSO	00550	Salmon





#### **SUPERSENSITIVE**

A "silky" copolymer glove offering excellent tactile sensitivity. Ideal when precise touch sensitivity is essential.

#### **SENSITIVE**

Specially developed for artificial insemination, this polyethylene protection glove offers very good tactile sensitivity to make easy work of gestation checks.

#### **ECONOMICAL**

The most economical of our polyethylene gloves for veterinary purposes

#### **DISPOSABLE GLOVES**

ref.	Code	Description
1	P80100	SUPERSENSITIVE gloves 100 pieces package
2	P80101	SENSITIVE gloves 100 pieces package
3	P80102	ECONOMICAL gloves 100 pieces package



#### Medi Chimica $\beta$ -Ketone

The Medi Chimica  $\beta$ -Ketone sensors can read blood  $\beta$ -Ketone levels between 0.0 and 8.0 mmol/L.

The blood  $\beta$ -Ketone test measures Beta-Hydroxybutyrate ( $\beta$ -OHB), the most important of the three ketone bodies in the blood .

Normally, levels of  $\beta$ -OHB are expected to be less than 0.6 mmol/L. Level up to 1,0 mmol/L detect a subclinical ketosi in bovine.

#### Advantages:

- HI analytical accuracy
- Rapid and easy test on field
- Only 10 second for analysis
- HI correlation and accuracy whit laboratory test

#### Medi Chimica $\beta$ -Ketone

Code	Description
BMK0000	Medi Chimica $eta$ -Ketone



# HEIFERPLUS™ increase 25% more FEMALE

# **♦ BULLPLUS**increase 25% more MALE

## Sperm sexing agent

- High fertility
- Low cost
- Use with any semen
- 25% more heifers
- Simple to use





#### **INDICATIONS**

For increasing the percentage of heifer calves in dairy and beef cattle.

#### DOSAGE

One unit (0.25mL or 0.50mL) of semen per vial.

#### NOTICE

This is not a restricted drug. HEIFERPLUS is a non-prescription biopharmaceutical agent. Federal law does not require that this product be used by or on the order of a licensed veterinarian.

#### DESCRIPTION

HEIFERPLUS is for sexing a single unit of semen. It is packaged in kit form for easy onfarm use. Rehydrate by adding semen directly to the HEIFERPLUS vial. After incubating for 20 minutes, inseminate as usual.

#### **MODE OF ACTION**

Gender of the calf is determined by the sex-chromosome complement of the sperm at fertilization. HEIFERPLUS increases motility of only the X-chromosome bearing (female) sperm and slows the motility of the Y-chromosome bearing (male) sperm. When inseminated, the sperm are sorted in the reproductive tract of the dam and more ova are fertilized by the X-chromosome bearing (female) sperm. The percentage of heifers is increased by an average of 20-25%.

#### KIT INSTRUCTIONS

- Warm HEIFERPLUS vial to 95-98.6oF (35-37oC) to prevent cold shock to semen.
   Thaw semen as usual.
- Cut the end of semen straw as usual.
- Puncture the top septum of HEIFERPLUS vial with sterile 14G needle.
- Insert the cut-end of semen straw through the puncture in the HEIFERPLUS vial septum.
- Add semen to vial by grasping both the vial and straw in the palm of the hand and shaking downward 3 or 4 times (similar to shaking a glass thermometer). Be certain all semen is in vial.
- Mix semen with contents of vial.
- Transfer enriched semen from the vial back into the straw. Do this by grasping vial and straw in an inverted position and again shaking downward 3-4 times. Be certain all semen is transferred to straw.
- IMPORTANT: Incubate the enriched semen in water bath for 20 minutes at 95-98.60F (35-37 °C).
- · Load into insemination gun and inseminate as usual.

Note: During incubation, keep vial attached to the straw. This will protect semen from exposure to air and water.

#### **INSEMINATION**

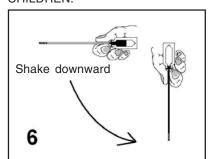
- When breeding from a natural or synchronized heat: Use frequent heat detection (5-12 times/day) when using this product. Inseminate according to AM-PM guidelines (12-14 hr. following first standing heat). Note: With less frequent heat detection (1-2 times/day), breed at 0-6 hr. following first heat.
- When breeding using OVSYNCHR: Breed 12-14 hr. after the last GnRH injection.
- When breeding super-ovulated heifers and cows: Inseminate at 12 hr. and 24 hr. following first standing heat.

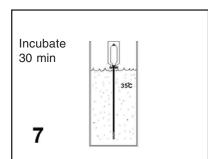
#### STORAGE CONDITIONS

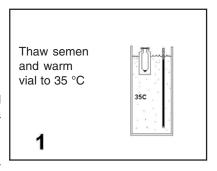
Store product in refrigerator (5oC) for up to 1 yr. For long-term storage keep in freezer (-20oC). Avoid sunlight.

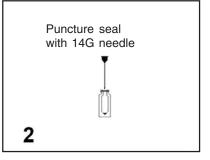
#### **WARNINGS**

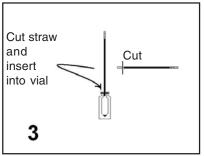
FOR ANIMAL USE ONLY. NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN.

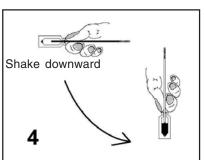


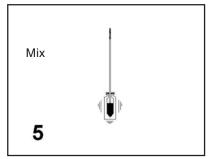


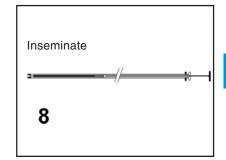












# THE FIRST WEAR-RESISTANT BOOT



Resistant even on abrasive surfaces (gravel and stones)

# High biosafety level guaranteed for 8 hours of use!

new!

Thanks to its reinforced sole, it can be used all day long with no risk of wearing.

It can be easily worn thanks to its large size and to the elastic it is provided with.

Available in the extra-large and jumbo versions.

Biosafety level equal to that of rubber boots.

Available in a new easy-dispensing box. Folded individually.

BIOSAFETY BOOTS		
Code	Description	
BB1000	Biosafety Boots X-LARGE	
BB1100	Biosafety Boots JUMBO	





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